FEDERAL TRADE COMMISSION

MARKET POWER AND CONSUMER
PROTECTION ISSUES INVOLVED
WITH ENCOURAGING COMPETITION
IN THE U.S. ELECTRIC INDUSTRY

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C O N T E N T S

INTRODUCTORY REMARKS

By Susan S. DeSanti -- 5

By Chairman Robert Pitofsky -- 9

SESSION I: RETAIL COMPETITION IN PIONEER STATES

PANEL A: WHAT APPROACHES DID PIONEER STATES TAKE IN PROMOTING RETAIL ELECTRICITY COMPETITION?

Introductions:

By Commissioner Sheila F. Anthony -- 15

Panel Discussion:

By P. Gregory Conlon -- 17

By Paul B. Vasington -- 27

By Nora Mead Brownell -- 39

By Herbert H. Tate -- 50

PANEL B: ASSESSMENT OF THE RESULTS TO DATE OF PIONEER STATE REFORM EFFORTS

Introductions:

By Michael S. Wroblewski -- 71

Panel Discussion:

By Irwin A. Popowsky -- 73

By Alfred E. Kahn -- 80

By John A. Anderson -- 95

By Thomas M. Lenard -- 107

SESSION II: EXISTING MARKET POWER IN RETAIL MARKETS

PANAL A: HOW HAVE STATES ADDRESSED EXISTING MARKET POWER?

Introductions:

By Charles D. Gray

By David A. Balto -- 135

Panel Discussion:

By Nora Mead Brownell -- 136

By Herbert H. Tate -- 144

By P. Gregory Conlon-- 153

By James E. Doyle -- 163

PANEL B: ASSESSMENT OF STATE EFFORTS TO ADDRESS EXISTING MARKET POWER

Introductions:

By John Hilke -- 186

By Jade A. Eaton -- 187

Panel Discussion:

By Paul L. Joskow -- 189

By Richard S. Shapiro -- 201

By John L. Thilly -- 208

By Albert A. Foer -- 219

SESSION III: HOW DOES WHOLESALE COMPETITION FOR GENERATION AFFECT RETAIL ELECTRICITY COMPETITION?

Introductions:

By John Hilke -- 239

Panel Discussion:

By Kevin Kelly -- 242

By Daniel M. Adamson -- 245

By Craig A. Glazer -- 251

By Jerry Ellig -- 263

By Jan Smutny-Jones -- 275

P R O C E E D I N G S

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INTRODUCTORY REMARKS

MS. DESANTI: Good morning. I would appreciate it if everyone would take their seats. We want to try to start as promptly as possible here.

Let me introduce myself. My name is Susan DeSanti. I am Director of Policy Planning at the Federal Trade Commission, and I'd like to welcome all of you to this FTC workshop on market power and consumer protection issues involved with encouraging competition in the U.S. electric industry.

I first want to very much thank the speakers and panelists who have agreed to participate in this workshop. We have a very distinguished group who have agreed to be here, and we're honored to have them. I think it is a reflection of the distinguished panelists and speakers we have for you today that, in fact, we have a greater number of people who wanted to attend the workshop than we had originally anticipated.

This leads to my next thank you, which is to Georgetown University Law Center, which allowed us to use this wonderful facility on such short notice so we can have everybody in the same room for the discussions that we anticipate will be part of this workshop.

I have just a few more thank yous and some housekeeping details, and then I will introduce our first speaker, FTC Chairman Robert Pitofsky.

I also want to thank our co-sponsors, the National Regulatory Research Institute and the National Council on Competition and the Electric Industry, who have been instrumental in planning and implementing this workshop. They are also providing the refreshments, a very important component of the workshop.

Georgetown has asked us to ask you to please not bring food or drink into the auditorium, and your cooperation on this is appreciated.

I have some housekeeping details. I want to introduce Sula Miller, who is the person upstairs who gave you your materials, she's doing the registration -- and if they are here or whoever among these three are here, there are three people -- and Timothy Slavin from Georgetown I would ask to stand up; John Hilke from the FTC and Michael Wroblewski from the FTC. These are people to whom you should turn if you have questions about the facilities or the workshop.

More housekeeping details, the restrooms are located upstairs, just outside the glass doors, to the right and the left, and the telephones are also located upstairs, outside the glass doors, to the right back

behind the chapel on the right side.

Now, with respect to your workshop materials, I just want to alert you to two items that you may find particularly useful. These are the materials that you picked up along with your name tag this morning.

Behind the first tab in the handout is a chart that was prepared by the National Regulatory Research Institute, and it describes the basic features of the restructuring plans of the four pioneer states, California, Massachusetts, Pennsylvania and New Jersey.

Now, the issues covered in this chart include mandatory rate reductions or rate caps, shopping credits, policies governing standard offers, default service, stranded cost recovery, market power mitigation strategies, information disclosures and consumer protection issues, and you may find it useful to refer to this during the panel discussions.

Now, on a more practical and mundane level, to assist in your determination in where to have lunch, look behind the last tab in the handout, and you will find a list of restaurants and places to grab a sandwich, and all of the places that are listed are within a short walking distance of the Georgetown University Law Center.

And the last detail, I would like to thank in

particular two people who have worked tirelessly to make this workshop as valuable as possible. They are Michael Wroblewski, the FTC advocacy coordinator, and Sula Miller. They have worked behind the scenes to make sure this workshop goes as smoothly as possible and is as valuable as possible for all of you.

Now, let me introduce the Chairman of the Federal Trade Commission, Robert Pitofsky. Bob Pitofsky became Chairman of the FTC in April of 1995, and at the time he was nominated for that position by President Clinton, he was a professor of law at the Georgetown University Law Center and Of Counsel to the Washington, D.C. law firm of Arnold & Porter.

Of course, he was no stranger to the FTC at that time, having been a Commissioner at the FTC from 1978 to 1981 and before that director of the Bureau of Consumer Protection from 1970 to 1973.

Now, honestly, I would take up all of his speaking time if I tried to list all of his many honors and accomplishments. I'm going to mention a couple. He chaired the Defense Science Board Task Force on Antitrust Aspects of Defense Industry Downsizing in 1994. He's been a member of the Board of Governors of the D.C. Bar Association, and he's been dean of the Georgetown University Law Center.

His publications include legal case books on both trade regulation and antitrust law.

And with that I will close and hand you over to Chairman Pitofsky.

(Applause.)

CHAIRMAN PITOFSKY: Thank you very much. Thank you, Susan. You could have taken more time with honors and accomplishments. What's our rush?

It is wonderful for me to be back here in my old school and building. I must say, as I walked in, there's hardly anything that has welcome -- is the same. The building's been changed. This wonderful room is different. I knew when I stepped down as dean that things would go well, but this is really disconcerting this morning.

I, too, want to welcome you to the Federal Trade Commission's public workshop on market power and consumer protection issues relating to competition in the United States electric industry, and I want to thank and acknowledge, as Susan did, the National Regulatory Research Institute and the National Council on Competition and the Electric Industry who are co-hosts and helped us to prepare these sessions. And I also want to acknowledge John Hilke, Michael Wroblewski, who have done a fantastic job of putting what I think you

all will agree is a remarkable program together.

We stand at the very early stages of a great national enterprise. The goal is nothing less than to inject competitive incentives into the electric industry, which historically has been heavily regulated by the Government and where vertically integrated companies have controlled all segments of that industry, including generation, transmission, distribution and retail marketing.

The states have been on the front line in bringing competitive forces to bear in electric power generation and in some cases to the retail marketing aspects of the electric industry. We want to learn from the experience of the states and what they've done so far, and we want people from the states to have an opportunity to talk to each other and share their experiences in this challenging matter.

The last 20 or 25 years have seen extensive deregulation of formerly regulated industries supported by a broad, bipartisan consensus in the country that competition creates incentives for efficiency and innovation that cannot be duplicated by government regulation. We have largely eliminated price and entry regulation and restrictions on airline transportation, railroad traffic, trucking traffic and

telecommunications.

Not every aspect of deregulation has gone smoothly, but looked at broadly over a long period of time, there can be little doubt that consumers have profited from the introduction of competition. Just think of the headlines two weeks ago when AT&T dropped its prices on long distance telephone traffic to meet the initiatives of MCI and Sprint. The idea of a price war in long distance telecommunications was inconceivable just 10 or 15 years ago, and what we now have is a situation where prices are down, innovation is up, and competition is a healthy element in this sector of the economy.

Competition in electric generation and marketing, the idea that consumers would actually have a choice on which company they buy their electric energy from, is almost as inconceivable today. The resources at stake, as this group knows, are huge. Total industry revenues are estimated at $200 billion a year, and total capital investment at $700 billion a year, almost 10 percent of the total capital investment in this country.

If we can deregulate -- and I believe substantial deregulation, maybe not everything, but substantial deregulation at some future point in time is

inevitable -- consumer savings and improvements in technology can be as great or greater than that achieved in deregulating these other industries. The challenge of making deregulation work is equally huge. It will take coordinated action by state and federal authorities, and most important good judgment, to ensure that consumers benefit from electric industry restructuring and that the program is fair to all players in that market.

Transition periods from total regulation to a total free market usually encounter great difficulties. We already begin to hear complaints that the transition leaves some firms better off than others, and we hear comments about the absence of a level playing field. Often those complaints have a good deal of validity to them.

One point that I would emphasize, and I've said this before in other contexts, is that where the goal is to introduce a level playing field, the strategy ought to be, where feasible, to deregulate those elements in the economic sector that are still regulated rather than reregulate or introduce temporary regulation to even out competitive opportunities.

The primary purpose of this workshop is to discuss experience under state policies that have

encouraged retail competition. We want to learn and discuss topics that bear directly on the mission of ensuring that the nation's markets function competitively and are free of undue restrictions. We want to hear about how the states have evaluated and addressed existing horizontal market power and vertical integration, and we will during these sessions deal with exceptionally complicated questions of discrimination and cross-subsidization.

We're also interested, FTC in particular would be, about how consumers have reacted to deregulation and restructuring, how do new entrants advertise sales of electric power, and what information disclosures have been mandated by the states. What consumer protections have the states found to be necessary to ensure that consumers get the benefits of competitive markets.

Outstanding government business, consumer and academic figures are here to participate in this workshop. We're hopeful that the conversation on these issues will prove useful, because policies adopted at the early stages of deregulation are likely to have an immense impact on the pace and acceptance of restructuring.

As this group well knows, the devil is in the details. Deregulation is the right way to go, but we

must choose the right approaches to get there.

Let me now introduce the moderator of the first panel, my colleague, FTC Commissioner Sheila F. Anthony, who will introduce a panel of state officials who will discuss the approaches they have taken to restructuring the electric power industry in their states.

Thank you.

(Applause.)

SESSION I:

RETAIL COMPETITION IN PIONEER STATES

PANEL A:

WHAT APPROACHES DID PIONEER STATES

TAKE IN PROMOTING RETAIL ELECTRICITY COMPETITION?

COMMISSIONER ANTHONY: Good morning. We are leading off the workshop by hearing from representatives of the four pioneer states, California, Massachusetts, Pennsylvania and New Jersey. Each will make opening remarks, and then, if time permits, there will be a question and answer period.

First we will hear from Mr. Gregory Conlon. Mr. Conlon served as Commissioner on the California Public Utilities Commission from 1993 to 1998 and was president from 1996 to 1997. During his last two years at the California Commission, he was the coordinating commissioner for its electric restructuring efforts.

He was deeply involved in developing the Commission's electric restructuring policy decision issued in December 1995 that first allowed retail competition in the electric power industry in California. He continues to monitor and speak on electric power restructuring issues both nationally and in California.

Next, we will hear from Commissioner Paul

Vasington of Massachusetts' Department of Telecommunications and Energy. He was appointed to the commission by Governor Paul Cellucci in February 1998. While at the Commission, Commissioner Vasington has focused on issues related to the introduction of competition in the telecommunications and electric power industries.

Third to provide opening remarks will be Commissioner Nora Mead Brownell. Commissioner Brownell was appointed to the Pennsylvania Public Utility Commission by Governor Tom Ridge for a five-year term ending March 31st, 2002.

During her tenure at the Commission, Commissioner Brownell has been an outspoken advocate of ensuring that new generation suppliers have the correct incentives to enter the market that both attract consumer protec -- consumer participation and permit electric utilities to maintain system reliability and quality of service.

She also has been highly concerned that utilities provide detailed consumer education to ensure that consumers are informed and educated about retail access.

Last, but certainly not least, we will hear from President Herbert Tate of the New Jersey Board of Public

Utilities. He was appointed to that post and designated by president -- and designated president by Governor Christy Todd Whitman in January of 1994.

Mr. Tate has spearheaded the Governor's initiatives to create an open, competitive marketplace within the state's electric, natural gas and telecommunications industries. He is recognized as an architect of the 1999 New Jersey Electric Discount Energy Choice Act, which deregulates both the electric and natural gas industries for residential and business consumers.

We're delighted to have all four of you here today, and as -- Mr. Conlon, as representative of the first state to provide retail access, we'd like you to begin with your opening remarks.

And audience, as our panelists share their ideas with us, be thinking of questions that you may wish to ask them on the material we cover this morning.

MR. CONLON: Good morning. I'm honored to be here in Georgetown Law School. Since I've spending a lot of my time in law school myself, I have three classes tomorrow, so I'm very anxious to be back, but I'm normally studying torts and evidence rather than restructuring.

But I spent six years with the Commission. I'm

no longer with the Commission. These comments I'm making this morning are strictly mine based on my regulations and my observance since coming off the Commission. My term ended January 1 of this year, so I'm trying to stay active as an interested observer and going to law school at night. So, I'm -- and sometimes during the day, but a part-time basis.

So, let me get started with California's experience. I guess as being one of the first if not the first state to take the plunge, so to speak, I think it's important to realize that the rationale for that start was primarily necessity. I don't think you'd make the dramatic change that we made without some compelling necessity, and I think that's -- it was a customer-driven necessity primarily, the large customers.

If you recall, we started in -- I walked in the Commission in -- February 15th of 1993, the day that the Yellow Book was issued in California defining the problem, and the problem was basically high rates, we're 150 percent of the national average, we were 200 percent of the surrounding states, and the larger energy-related industrial customers were truly irate.

They -- I talked personally to over 50 percent of the representatives of the large industrial customers

in California. They had personal anger at the Commission, because they primarily felt that it was the Commission rather than the economic circumstances -- which I think was the primary reason, but be that as it may -- they felt that we, the Commission, were the problem. And I'm sure John Anderson can give his view of that at the -- at the hour, because his clients were some of the leading forces behind our change.

And I think that the Yellow Book and then the Blue Book and then the process was a lot of turmoil, a lot of change, people were very uncomfortable, but we out of that process came up with what we felt was a realistic approach to deregulating the market, restructuring the market, and I think the primary goals were to give customers choices.

Similar to your example this morning of the long distance, I mean, it's amazing. My son lives 25 miles from me. Four years ago, it cost me 22 cents a minute to talk to him. Today I talk for four cents a minute, and I have calls continually to make better deals. So, you can see the price drop that's happened in the local toll market, let alone the long distance toll market. So, it's an example of what happens when you allow choice.

And I think the thing that hasn't happened in

California that will happen next year is the visibility of prices on an hourly basis. If you look at our primary decision we issued in December of '95, half of that was built on the hourly prices of energy. I think that's got lost in the shuffle.

And I think the strongest statement I've heard for this came out of Justice Department at a conference a couple years ago with the electric committee when they mentioned the best mitigation of market power is hourly prices in electricity, because if someone has control of the market and they unrealistically raise the price, that if price signals are truly there, if electricity is 22 cents a kilowatt hour or 40 cents a kilowatt hour or $10 a kilowatt hour and people are paying that and they see that and they have the ability to adjust their use, they will, particularly the larger customers, even the larger industrial customers.

People are getting ready now. California has deregulated the metering and the billing, and the metering market is going to be like the cellular market. I'm sure that four years from now they will give you a meter that reads your usage by the hour and customers will -- and I think the primary sellers of that will be the oil companies. I still think that Shell Oil, Chevron and players like that will come into

the market, because they have the billing systems today, they have the customer base, and they will take that retail market away from the people that are in it today, because, you know, the -- what's the statement, the big dog gets the -- what do they accuse you, John, of all the time? The big dog, the big motor company?

Well, the big oil companies I think will come in and be the retailers of the future, and they will make this thing happen, and they will make it happen on an hourly basis. Now, others will compete, and others will make it just like in the long distance market, but I think that's where this market's going.

But I want to emphasize today the importance of that hourly market. That's been -- that's been hidden, because we've had a program of six years of rate freeze. That freeze has ended for San Diego Gas & Electric. It will end for PG&E I think by January, because once they get this hydro sale figured out, that the gain on that sale -- I told them that I would personally buy those hydro assets at three times book value as a right of first refusal, because I felt it was such a good deal. So, if they get three or four times book value, their recovery of their stranded assets will end, their rate freeze will end, and prices will go to an hourly basis, just like we intended.

But we haven't seen that yet, because it's been -- the Legislature came along and froze prices for five years. It was supposed to end in April 2002, but I think it will end in January of 2000 and for Edison probably sometime later in that year. So, by the end of 2000, the end of the first year of the millennium, we will have a truly competitive market in California for the first time, because up until now it's been a -- nobody knows what's happening, because rates don't change. Rates are frozen. So, it's only when the rates are no longer frozen and the price signals come through.

And you could open The Wall Street Journal today and see the price of electricity in California not by the hour, but you can get it off the web, calpx.com, every day you can check the prices of electricity in California, and on August 10th, I think they got up to 22 cents in the afternoon. I'm sure many companies in California that are operating, highly -- the air companies will think twice about operating their plants at 22 cents a kilowatt hour on a hot summer day. So, I think that that's one of the main points I wanted to make.

I wanted to give you a -- I will talk this afternoon about the market power issues on the ISO and

the PX and the divestiture of generation, but I think I will wait until then to cover those points. But I do want to show you the status of today, where we are on customers, and I -- in your book, in the first page, it shows the -- the number of customers, but it doesn't show the volume. You know, it shows -- I'm sorry for the small size, but it's in the first page of the notebooks, of your Session I, I believe, the first tab.

You can see under California, the first column it shows you the 12,000 -- the 12 million customers -- where are they? I've got 10 million here. I'm not sure where they got their 12 million, but anyway, the 153,000 customers who have switched -- which doesn't seem like much. It's only 1 and a half percent of the residential market. It's only 3.8 percent of the under 20kilowatt hour commercial market, but it's 14 percent of the large commercial customers, 26 percent of the industrial customers.

But the point that didn't show up in our -- in the book is it's 20 percent of the number of customers, but it's 26 percent of the industrial load, and I think by the end of this year that 50 percent of the load on the industrial customers will have switched, and I think that they've switched probably as sort of a cherry-picking, cream-skimming, 5 percent discount

thing.

You know, the marketers are coming along saying I'll charge you 5 percent less than the utilities, and they say "Deal," but I think the thing that they've missed is they should be taking everything that moves, every meter that moves on their property, and having it all figured out for 8000, whatever number of hours it is a year, and manage each meter to cut those bills.

And I think they can cut them by 10 or 15 or 20 percent if they do a good job of load management of their use. And I think the industrial customers that have average bills of over $200 a month can do the same. The smart houses, where everything -- every appliance in the house will be on your PC, and you can measure its usage and you can automatically adjust it on based on the price of electricity, I think IBM has the software now to do that and with ultraviolet transmission to each appliance, that you will have the ability to -- especially if two people are working at home and they have their air conditioning coming -- going, a waste of money. And when the price of electricity is on an hourly basis, it's worth your while to shut it off or to reduce it to where you save money.

But the point I wanted to make is that the large industrial customers, you have got 20 percent of the

customers at 26 percent of the load have already switched, and I think that will be much higher at the end of this year.

And four years from now or five years from now, when we get down the pike -- I think the AT&T has been 14 or 15 years now since it's happened, but you can see it's happening much faster here than it did in telephone, long distance. The dollars are bigger. This is a $200 billion market. The big players will come in.

I mean, Enron is here this morning. As I say, I think Shell has set up a company, and they're in Alabama or Georgia with their subsidiary, but I -- they assure me that when the time is right, they will be in California. And I think the time is right when the rate freeze is off and the prices come through on an hourly basis.

So, I think I'll just say that the best things that happen in California is the rate freeze is going to end early. It was designed to end in April of 2002, and it's going to end I think in April of 2000, which is two years sooner, and the power exchange price -- the average price for the power exchange was 2.4 cents last year. California's embedded rate is 5.5 cents. So, once the rate freeze ends, you've got a three cent

reduction, not three-tenths of a percent, but three cents reduction in energy prices on average during the year.

In the winter months the reduction will be almost five cents, because the energy cost in California during January, February and March is going to average about a penny for energy, where in the summer it's going to average three and a half to four cents, and every month your bill will moderate for the energy portion only, which is close to 50 percent of the bill once the CTC is gone. So, I think that that's the -- that's the real good news.

We never thought the PX price would be as low as it is, we never imagined that stranded assets would be recovered this soon, and we think that the -- the big news, which I'll get into this afternoon, we have got $5 to $7 billion of new investment at the Energy Commission to be sited and approved. We have got over 10,000 megawatts of new energy investment coming into California.

And if you recall, one of our objectives during the '93-'94 recession, depression, was to get new investment in California. So, we're very excited and happy to have -- at least I am, as an individual -- to see $5 to $7 billion sitting in the Energy Commission

waiting to be sited so that they can build those plants in California and compete in a market, and I don't know how they are going to do it at 2.4 cents an average price for energy, but they evidently feel they are. They are getting money from banks to finance them, so there must be something there that they see that I don't, but we are very satisfied with that progress.

So, with that I'll stop and talk to you again this afternoon on the market power issues.

(Applause.)

MS. ANTHONY: Commissioner Vasington from the Massachusetts Department of Energy and Telecommunications.

MR. VASINGTON: Good morning. Thank you, Commissioner Anthony and Chairman Pitofsky and the other commissioners and staff of the FTC for inviting me here and having this workshop this morning.

You'll probably get bored with this, but I have to give the standard disclaimer, that being on a five-member board, any opinions that I give of our restructuring plans are my own.

What I'd like to do is first just give you a brief, very brief history, of the process in Massachusetts, how electric restructuring came about, and then I'll describe a little bit about what I think

worked well in Massachusetts and what I think didn't work well in Massachusetts to date.

The details of the Massachusetts restructuring plans and the processes are in your handout, so I won't go into that.

Similar to what Commissioner Conlon said, the initiative to restructure the electric industry in Massachusetts and introduce competition was really customer driven and also in particular by the industrial customers, Raytheon in particular, which was the largest -- one of the largest private employers in Massachusetts at the time.

In February 1995, the Commission -- we were then the Department of Public Utilities, we are now called the Department of Telecommunications and Energy -- but the DPU started an inquiry into whether or not retail competition should be established as a goal in Massachusetts.

In August of 1995, an order was issued by the Commission laying out goals and principles for the introduction of competition. I think that was a very important step in the process.

The objective laid out by the Commission was reducing costs over time for all consumers of electricity as the primary objective. The overall goal

was to develop an efficient industry structure and regulatory framework that minimized costs to consumers while maintaining safe and reliable electric service with minimum impact on the environment.

Now, also as part of that order there were seven principles that were laid out by the Commission and also a couple of key issues were resolved early on, the most important of which was that the Commission decided that as a policy matter -- not as a legal matter, they didn't get into the constitutionality of the question -- but as a policy matter it was appropriate to allow for an opportunity to recover all nonmitigatable stranded costs. And the reason that was important was it then led to settlement discussions between the Attorney General, the Division of Energy Resources in Massachusetts and the affected electric utilities.

Once those major principles were resolved by the Commission, that set up the framework for the settlement discussions, which then came in with settlements filed with a couple of the largest electric companies in mid to late '96 and early 1997, and these settlements provided the basis for the legislation that was to follow. You'll see the details of the legislation in your handout, but they follow pretty closely along with what had already been settled between the Attorney

General and the utilities.

In fact, the legislation provides that when we approved and evaluated restructuring plans for the utilities, we had to give deference to those -- to those earlier filed settlements, that those were taken as they were.

After the settlements were filed, then as I said, the legislation followed up closely on that. It was passed in November of 1997. It was really a soup to nuts piece of legislation in Massachusetts. It did everything from rename the agency to changing it from a three-member board to a five-member board, which allowed me to take on my current position.

The legislation also provided for the start of competition on March 1st, 1998 and laid out all -- in excruciating detail all of the requirements and processes for the introduction of competition. It also streamlined the siting process and provided for consumer education and rules for switching carriers and for providers who want to enter the market.

Now, what worked and what didn't? To a large extent, it's really too soon to tell. We're only 18 months into the process, and if the example from the telephone industry is any guide, where we've got over three years now into the process, and it takes a long

time for seismic shifts in industries really to play themselves out, especially when you don't have the infrastructure in place to really accomplish competition and on a wholesale basis. I use "wholesale" generically, not in the industry terms.

In particular, we had our ISO markets only opened up this past May, on May 1st. Seven markets opened up where the ISO is now monitoring those and we are monitoring them, as well. Unfortunately, the markets opened up just before probably the worst summer we have had in a long time probably for heat, and the capacity situation was very close on numerous instances in the summer, particularly right after the 4th of July where we came very close to having blackouts.

So, the ISO really had to shift most of its attention to monitoring and making sure there was enough capacity for the region during these crisis situations and at the same time try to work the bugs out of the markets they had just introduced, and it was a difficult thing for them to do, and we have had some potholes in that process.

The ISO had to go back and revise prices after the fact on numerous instances, and that's really gotten many of the participants upset, and the ISO has committed to working out those problems and has made

some filings with the FERC to try to correct that.

As I mentioned, one of the things that worked was laying out the principles early on in the process, which got everyone out of the litigation mode and into the collaboration mode.

Another thing that was a major success for us was the requirement for divestiture. In your handout it says that companies may divest their facilities, the distribution companies divest themselves of their generation facilities. In fact, every distribution company has undergone the process of divesting itself of all of its owned generation, and largely because the stranded cost recovery is much more favorable to them if they divest.

And, in fact, we've even gone farther than what the Act requires. The Act requires only the divestiture of non-nuclear, and we've already had the first in the nation finalized divestiture of a nuclear power plant. Boston Edison sold its Pilgrim station to Entergy, which is a New Orleans company.

Now, what divestiture did that I think was very good was first it allowed an evaluation to reduce stranded costs. The value of the non-nuclear units in New England, and Massachusetts in particular, we have gotten anywhere from one and a half times book to six

times book value. I know Commissioner Conlon mentioned he would be willing to offer three times for the --

MR. CONLON: For the hydro.

MR. VASINGTON: -- for the hydro, and Northeast Utilities just sold its hydro for six times.

MR. CONLON: That's why I offered three times.

MR. VASINGTON: It's a shrewd offer.

I don't think an administrative valuation ever would have approached those kinds of numbers. Just by the nature of it being a regulatory process where it's hashed out in the hearing room really isn't as good as testing it in the marketplace to see what the generation is really worth. And it's really allowed us to reduce stranded costs quite a bit in Massachusetts.

Another thing that divestiture does is it completely separates the wires business from the competitive generation business. All of the distribution companies in Massachusetts are now completely out of the generation business, except for standard offer, and I'll describe that in a few minutes.

In fact, several of our largest utilities don't even have affiliates marketing energy. They originally set up affiliates to do this, partnering with other companies, but then early on in the game, they dropped

out of that largely because of the restrictions on their activities between their distribution company and affiliate. Really they weren't -- they couldn't really take any advantages into the competitive market, so they chose not to participate.

There are a couple companies that are. One has been very successful, Northeast Utilities. Select Energy has been very active in the marketplace.

But by separating the competitive function from the monopoly function, it really allows for a real deregulation, because where -- we now don't have to monitor as closely as we would have the relationship between a company that could use an essential input, a monopoly input, to its advantage in the competitive marketplace.

I can tell you from experience in the telephone industry that having to regulate that relationship is regulatory to the extent, the likes of which I've never seen. We called the Telecom Act in '96 a deregulatory piece of legislation. I can assure you it's not. Regulating monopolies looks easy compared to regulating monopolies that also participate in the competitive market.

Also, our divestiture allowed for the promotion of new investment. We have got a lot of new plants

being planned. I don't know the exact numbers for megawatts, but I don't think all of it will be built. I think it's actually -- if you look at everything that's been proposed, it's 125 percent of the existing peak generation in Massachusetts. So, I don't think all of it will be built but certainly enough of it will that we'll see a real economic benefit from that, including environmental benefits from newer gas-powered plants replacing older, dirtier plants.

Securitization has been another strong point of the Massachusetts plan. So far, we have only had one company pursue it to its completion. We have got another company considering it. Boston Edison securitized stranded costs resulting from the sale of the Pilgrim unit to Entergy.

In fact, as we speak, the Commission is being briefed on the final outcome of that securitization. So, I can't give you the details. They are being given to us right now but essentially securitization allows for lower capital costs.

Once you've made the decision to allow for the recovery of stranded costs, doing it the cheapest way possible I think is a prudent course of action. And I can think of an analogy of what securitization is. It allows you to take higher cost capital financing and

replace it with lower cost.

If you currently have a car loan with a bank or with your car dealer, it's probably at a higher rate than a home equity loan, and you can take out a home equity loan to finance the purchase of a car, and you get savings in two ways. One is you probably get a lower interest rate, and the other one is you're probably -- you're able to deduct on your taxes the interest that you're paying.

Well, it's similar with securitization. You can replace higher cost debt and equity with lower cost debt, and at the same time your debt payments are tax deductible. So, you get savings in two ways, and I'm hopeful that we're getting a briefing right now that shows that our capital costs are a lot lower.

We had rate reductions in Massachusetts that were both a blessing and a curse. We had 10 percent initially, and now just on September 1st we had 15 percent rate reductions that went into effect. And essentially what the Legislature did when they mandated these rate reductions, they mandated an advance payment on future benefits.

You don't have the benefits of competition right away. It's not like turning on a light and getting light. It happens over time, but because we had this

imperative need to get short-term rate relief, we got an advance on what we think will be the benefits down the line, which will then be paid back over time. But hopefully the benefits of competition will equal the payments that we'll be making and, you know, the consumers will actually be receiving those rate reductions on an economic basis.

What didn't work so well? Well, the flip side of the rate reductions is the standard offer. The rate reductions were put in place through a standard offer which the distribution companies were required to provide through 2005, and what the Commission did incorrectly, in my opinion -- and unfortunately for me I wasn't on the Commission at the time, so I can say this -- is it factored in the mandated rate reductions through the generation price, the component that's now subject to competition.

I think that that was a big mistake. I think that if you are going to have competition, the generation component has to be priced at the -- the generation component in a default service, in a standard offer service, has to be priced at the cost that the distribution company incurs to provide the service, no more and no less.

I think that if you have to have a mandated rate

reduction, the place to put it is on the stranded cost charge, because that -- you can change the amortization schedule for that over time without affecting the competitive market. I do believe the companies should have the opportunity to recover their stranded costs, but I don't think there's any entitlement to recover them in a specific short time period. I think that that can be manipulated in a way that allows you to have a generation price that reflects cost and also have the mandated rate reductions.

Another thing that I think we maybe did not as well as we could have was unbundling. There's an effort to unbundle all the components of your bill and to show it to customers, what your unbundled components are. Well, our bills are I think more confusing now than they ever were before. We show the standard offer price, we show the transition charge, we show the distribution charge, we show a transmission charge, we show a renewables fee, we show a demand side management fee.

And now for Boston Edison, with securitization, we have a cryptic little line in the bill that says, "A portion of your transition costs are being allocated to a special purpose entity." Try explaining that to consumers when they see that on their bill.

There really is no value to consumers in knowing

how much of their cost is transmission, how much is distribution. There is a value in knowing that for regulatory purposes, but I don't think it's necessary to show that in your bill. There is no action that a consumer can take on the basis of that information.

I think we would be better off showing two things: Power and delivery of power. And if you want to put details underneath that to show what the detailed components of the delivery of power are, then I think that's appropriate, but it can be done in a way that it makes it more understandable for consumers.

I'll be happy to answer your questions, and I thank you for your time.

(Applause.)

COMMISSIONER ANTHONY: Commissioner Brownell, Pennsylvania Public Utility Commission.

MS. BROWNELL: Thank you. I'm delighted to be included among pioneers. My children would look at me and say, Mom, as a pioneer, you're just old, but I think what you're going to hear here today, and I think it's really important to keep in mind, is some very different approaches, not any one of which is better or worse than the other but reflect realities of different state approaches.

And I think only history will tell whether we

were right or wrong, and I think it's really extraordinary the degree of cooperation among the states in sharing information about what's worked and what hasn't. So, I encourage you to keep that in mind, because there's always a tendency to want to give report cards to people.

I'm going to talk a little bit this morning about the process, give you the highlights of what the Pennsylvania model looks like. Although NRRI is trying to do I think what a lot of utilities have been trying to do for years, make commissioners superfluous to the process, their summary is probably better than the one I could give you.

And I want to reflect a little bit about what customer reaction has been, because at the end of the day, this is, in fact, all about money and, in fact, all about delivering something that's better for consumers. And I'm sometimes stunned at our Commission when we have endless discussions about detail and policy and nobody ever talks about what the consumer might respond or think or need, and I think that's important to keep in mind.

Like the other states who preceded me, in Pennsylvania, it was all about money. Our costs were about 15 percent above average statewide, and there were

huge disparities throughout the state. In fact, you could pay 100 percent more simply by living a mile away from someone in the west. So, we thought that if rates were brought down to at least the national average, savings would be between $1 and $1.5 billion directly back in the economy of Pennsylvania.

There was a confluence of events. Of course, FERC issued Orders 888 and 889. Tom Ridge, our Governor, really believes in competition and asked the PUC to lead a stakeholders process to come to some consensus legislation. I think the stakeholders process is of enormous value and continued to be of enormous value when we got to settlements, because everyone was represented, and while the industrials and the large users certainly led the debate, at the stakeholders' table, everyone was treated equally.

So, that developed consensus legislation that, in fact, passed in three days. I think one of the secrets was the Governor called all of the utilities to his home for breakfast and went around the room and said, Okay, who supports this legislation? Only one company was dumb enough to say no. They have regretted that forever. But it got everybody on board, and, in fact, the legislation did indeed pass in three days.

Some of the key provisions are licensing

provisions of all new entrants. That seems basic to you, but that's incredibly important to consumers. Rates were capped for a minimum of 54 months; that was later expanded in the settlement talks. A massive consumer education program was envisioned. And there was a lot of decisions left up to the PUC itself, including stranded costs. Provider of last resort was called for. And the Commission was given very clear authority to investigate market power.

It also envisioned a pilot program under which 5 percent of the consumers could participate in what I call the great science experiment, and I'm going to talk a little bit more about that, because that's incredibly important and we learned a lot.

So, on a very close timetable, the Commission issued a series of restructuring orders, all of which, of course, we thought were brilliant; all of which everyone disagreed with. There was wrenching of garments and gnashing of teeth, and we used the stakeholders process to bring everybody back to the table to negotiate a settlement to avoid ongoing litigation, and frankly, to give certainty to the companies themselves, because -- I haven't talked about our commitment.

Our commitment was to be sure that all consumers

had some benefit, but we also wanted to keep our companies stable and able to compete, and to the extent that they were exposed in their capital markets to a lengthy process, we thought that was unhealthy.

The rule of the stakeholders process at all aspects was that people signed confidentiality agreements. So, we weren't negotiating this in the headlines. That would have made it impossible. That if you walked away from the table, everything you negotiated went with you. Whether it was good or bad, it was off the table. Interestingly enough, of course, no one walked away, and I think we came to settlements where everybody benefitted.

The period over which we collected stranded costs was, in fact, expanded. We agreed on a process, a model that we used called the shopping credit. Everyone has some variation of it. Ours is more of a reflection of the fully loaded retail cost than just the wholesale cost. We believe that that gave a fairer representation of what those costs were and allowed more competitors to come into the market.

We went from a three-year phasing of competition to two years because we wanted to give more people the opportunity to participate, and while we did not have mandated rate cuts in the settlements, we have slight

rate cuts in years one and two, slight because we wanted to give a balance. If we made those rate cuts too high, we felt that would be a disincentive to people to shop.

We did extend the rate caps, and I think Sonny Popowsky is going to talk a little bit about that, and we did create sustainable energy funds. I think one of the benefits other than price of a competitive market is certainly that proliferation of technology, and we're hoping to actively encourage that in Pennsylvania.

So, we awarded $12 billion in stranded costs out of -- what was asked for was $17 billion, and all I can tell you is I hope that the companies put the creativity into the new market that they did in defining their stranded costs. There was a lot of interesting things there.

What have we seen? Well, first of all, customers are a lot smarter than I think anybody gave them credit for. In our pilot program, we had room for about 250 participants. Almost a million people applied to participate, and we had to go to a lottery. We did that in about six weeks. So, interest was very high.

We learned that none of us were ready. Our phones rang off the hook. Frankly, the greatest entertainment during the pilot program was calling everybody's call centers to find out what they were

saying. I learned a couple of things. Commissioners think they're important. No one recognized my name when I called every day. And there was a lot of interesting information being put out.

What happened was everybody out-sourced their call centers and forgot to monitor them. So, occasionally I would call one company who said, No, the PUC doesn't want you to participate in the pilot because they think there's going to be chaos in the market. I said, Gee, could I speak to your supervisor, assuming that this was simply one person who was being creative. No, that was apparently somehow part of their script.

So, one of the things we learned was that you need to have instant communications, and I think Greg Conlon talked about resisting the urge to reregulate. The instinct of commissions is to say, Oh, my gosh, there's a problem, let's do some long, complicated proceeding and let's make a whole bunch of rules.

Well, by the time you're done with the proceeding -- I no longer believe in due process, by the way -- the market's already spoken, and, in fact, the market has come to some conclusion.

The second thing is we don't want to reregulate, that is not an open market, and while I do think in this transition there need to be some transitional rules, I

don't think we need to create a whole bureaucracy around this.

We created two groups, the PIC and the PIG, one for communications and one to deal with operational issues, and there was representation from the EGS and the EDC community so that we could solve problems quickly. And we could see problems in our call center. If a company was not giving information or was giving inadequate information, we could tell within an hour from our call center.

So, while customers may not understand the language and shopping for energy might not be the most exciting thing they do all day, they are interested, and they do have expectations, and you better be prepared to meet them.

So, we have in Pennsylvania -- and Sonny is going to go into some detail about the numbers and the breakout -- but we have about a half a million people shopping in the first eight months since the introduction, January 1st, 1999.

We think consumer education is important. We think you need to keep it simple, and we think you need to drive people to a place where they can get details. So, we have a state-wide campaign. Television is important, but it drives people to either our 800 number

or the EDC's 800 number or to community-based organizations where they can get information from people they know and trust and work with on other issues everyday.

And that's -- I think empowering customers is important. About 90 percent of the customers in Pennsylvania show an awareness of the fact that they can choose, but that's not the only measure we need to use. They may be aware of it but not understand the process, and in year two of our customer education, we're really focusing on the process, because until they get comfortable with that, they're not going to take that risk and go out and shop.

So, at this point that number's at about 40 percent, and we've redesigned, as I said, our consumer education program to get more detail and get people to understand that and empower them.

A couple of things that we've learned in addition to the fact that consumers are smarter than we are is that you really need to pay attention to the details and get as many of the rules of the road in place before you start the market. Because this is all being done in a compressed time period, that's difficult to do, but to the extent that people understand the rules, they're going to be better able to compete.

Secondly is those niggling little details like EDI and call centers are unbelievably important. All of us, I think, on this panel were taken by surprise at the lack of preparation to deal with the exchange of customer information. I don't say that critically. I just don't think anybody really fully understood the complexities involved there, and it's very important that you deal with that detail early. Otherwise, it can delay or confuse the implementation, and you want customers to be happy and make this as seamless as possible.

I chose the only company who really was not ready. I haven't received a bill in eight months. So, I think it's -- while I'm thrilled, I'm not looking forward to that day that it arrives.

A truly independent ISO is just incredibly important, and you must support that. We have the PJM in the east, and I know Herb Tate is going to talk, he's played a real leadership role there, about that. We do not yet have one in the west, and I think that we are seeing some market differentials because of that. So, I would encourage you, if you don't have one in place, to really do everything within your power to encourage that and to make that happen.

Emerging markets are very fragile. You don't

declare competition open one day and expect that it will happen. You need to pay attention, and while you do not need to reregulate, you do need to make sure that for the transitional period, which I would define as that in which stranded costs are being recovered and new entrants are playing, that you must do what you need to do to make sure that that playing field is equal.

The power of the incumbency is enormous. The power of the brand is enormous. And while we did not force divestiture, we did put in place a number of provisions, which we'll talk about more this afternoon, to make sure that there was not unfair advantage, but some of those advantages are very difficult to see and difficult to monitor, as Paul said, but it is important that you do that, because if the market doesn't work in the initial stages, I dare say it will not work at all.

So, thank you for the opportunity. We'll all be happy to take questions and share our insights with you, but once again, I would say that this is a new process for all of us, and I think we're all learning from each other, and we're learning as we go.

Thank you.

(Applause.)

COMMISSIONER ANTHONY: President Herbert Tate, New Jersey Board of Public Utilities.

MR. TATE: Commissioner Anthony, how much time do I have?

COMMISSIONER ANTHONY: About ten minutes.

MR. TATE: Ten minutes?

Nora, thank you. You went through about an hour's worth of material in less than ten minutes, and I'm going to see if I can talk as fast and keep up as quickly.

The one disadvantage obviously of going last is when you have a number of learned colleagues and pioneers, as you have heard from California, Massachusetts and Pennsylvania, they can pretty much cover the gamut and the ground. The advantage of going last, as a former prosecutor, is that anything that they said I can correct or I can change or I can try to give you a last impression on, and not much time, if I follow my ten-minute program, will be left for anybody to counter me, except for the next panel, which I understand is going to be devoted probably to the remarks that we've made here in this first panel.

What I should tell you is that it seems to me that the logic to the progression of the speakers today was pretty much in order of date in which they began the process and actually implemented deregulation. Commissioner Conlon was right when he first came on the

board, I guess it was 1994, in March, there was the issuance of the Yellow Book.

I happened to be over at Solomon Brothers taking a course on financial matters in the utility industry, and this was my third week on the job. So, I was sitting there in the very beginning of our sessions in the morning reading The Wall Street Journal where the issuance of the Yellow Book was touted as having depressed the stock equity of their three major utilities by $2 billion.

And I all of a sudden recognized why I was there taking this course, because the policy set at public utility commissions can have a huge effect, a huge effect on the financial investments, on the economy, not only of utility companies but of your state.

And as a result of watching the pioneers in California and Massachusetts and Pennsylvania, I really had the luxury of being able to take and learn from their experiences in order to try to craft a law which we thought would work for New Jersey.

Now, our law was passed in February of 1999 with a start date of competition of August 1st. Already, as you've heard from Nora, we have experienced what every other state has experienced in terms of the problems on EDI. We have had to delay our date for retail choice

until the middle of November, because the suppliers' and the utility companies' computer systems are unable to interface with each other. They are unable to process mass volumes of customer orders, primarily for the residential market is what we're talking about, but also for small business customers, and those problems have been one of the major and most obstreperous issues that we have had in the telephone industry, which is called OSS.

For many, many years now, since -- well, I shouldn't say many, but since 1996, OSS, operational support systems, have been a huge problem for the opening up of the local market for residential customers and getting approval -- 271 checklist approval for ILX or the incumbent local telephone companies.

We are now experiencing that problem, but we are beginning to solve it a lot quicker than the telephone industry has. But it is an issue that everybody has to keep an eye on no matter what state enters into the retail marketplace, because it will affect whether or not you are able to reach the residential marketplace.

New Jersey embarked on this program four years ago. We embarked on it because we, as a number of states in the Northeast and California, were really in the throes or coming out of the throes of a recession.

Our business community was really strong about getting lower electricity and power rates. We were all competing for businesses to locate, not to leave our states, and the call for deregulation of the power industry became one of the mantras about economic recovery.

We were 50 percent above the national average in our pricing, and this was touted as a huge political problem. When we embarked upon this, we knew we were never going to get to a national average. Living in New Jersey, the cost of living is such that I don't care if it's housing, gasoline, oil, whatever you talk about, it's not going to get down to the national average, but what we did recognize is that we had to do something in order to bring immediate rate relief to business as well as residential customers.

So, the hallmark of our legislation was electric discount. We did not discount when we opened up and unbundled the gas marketplace, which was available for large industrial and commercial customers since 1994, but because of the political realities that we learned, lessons that the telephone industry -- even though you are hearing that costs and competition have, in fact, gone down, the idea of the competition reaching the local marketplace has been somewhat frustrating for many

state as well as federal commissioners in trying to make that happen.

To avoid that public persona and that problem or that public perception, that we did not deliver to residential customers any immediate benefits, it was a political requirement in New Jersey that we start our legislation off with a discount. Now, our discount went from beginning at 5 percent on August 1st, which was not delayed in spite of the EDI problems, the discounts went into effect automatically, and we gave our utility companies roughly three years to get up to a minimum 10 percent.

After the Act was passed and the Board made the decisions about each company, PSC&G, our largest utility which serves over 2 million customers in the state, had a final discount of about 13.9 percent. GPU Energy, which is in both Pennsylvania and New Jersey, had a discount ratcheted up to three years that finally got to 11 percent.

And Conectiv, which is in three states, Delmarva -- it used to be Delmarva, but it was in Maryland, Delaware and New Jersey -- I'm not sure if Pennsylvania has any part of the Delmarva territory -- but they had gone from the 5 percent to the minimum 10 percent.

In addition to those discounts, New Jersey one

year before or two years before had passed an energy tax reform act. We were the first state in the country to take a look at our tax structure in terms of the imposition of taxes on consumers and where they got their power from. We recognized that our gross receipts and franchise tax, which was pretty common from state to state, imposed a tax only on those customers that were served by the utility companies.

So, therefore, if you were going to embark upon a competitive marketplace and you imposed that kind of a tax and left it that way, you built in a 13 percent margin, because 13 percent of every dollar of money paid on a kilowatt went to the gross receipts and franchise tax, which in most states is a very big chunk of money and is used generally for municipal relief. So, we had to go through about a year and a half to two years of how to levelize and equalize that tax, and finally we were able to accomplish that in 1997.

As a result of that tax reform, we were able to spread out the tax liability on both new market entrants as well as the utility companies but at the same time over a five-year period reduce those energy taxes by 45 percent, so that in the end, rather than paying 13 cents on a dollar, you would wind up paying about 7 cents on the dollar; 6 percent sales tax and the 1 percent

corporate business tax.

So, the combination of the discount and the energy tax reform got PSC&G customers after a three-year period a 19 percent discount, GPU customers a 16 percent discount and Conectiv customers about a 15 percent discount.

Again, the difference in New Jersey from perhaps the Massachusetts and the Connecticut -- California models is that we didn't start with these high discounts. We started at the 5 percent level and moved gradually up to these ceilings, which had to be maintained for a year.

The other issue and the reason why I use that as the beginning point to really kind of define our act is because it caused us to recognize from the stakeholder process that we were involved in that in order to give out-of-state market suppliers or other suppliers an opportunity to compete against those discounts, we were going to have to have shopping credits, shopping credits that would be put in place to give them an ability to have discounts above and beyond those that were state mandated under the legislation.

And as Commissioner Vasington said, when he kind of looked at the way the Commission in Massachusetts had structured their shopping credit, they took it all out

of the generation portion. Well, we learned from that, and we did not use our shopping credit primarily from looking at the distribution and the generation piece. We looked at the idea that our discounts primarily had to come out of the distributions portion of the business and the stranded cost issues that were derived from and that the shopping credit then would have to be a true price to compare against the generation piece on both energy and capacity. If that comparison wasn't lined up, there wouldn't really be anything left for marketers to really have to compete against the price of power in the state of New Jersey.

So, when we took our discounts, it went across the board through all component parts of the bill. There was some deferred accounting on the stranded cost issues, because again, after having gone through the experience that California went through on its Yellow Book, we recognized that our legislation did have to provide utilities with the 100 percent opportunity to recover stranded costs. We had no problem with that. The idea was trying to get the number right.

A number of approaches were, as you've heard, to order divestiture of all or a portion of those sets in order to get a true market value reading. We did not take that approach in New Jersey. We went through

administrative proceedings based upon filings from the utilities. We indicated that they were free and voluntarily could go out in the marketplace and divest.

And because of that, two of the three utility companies, in fact, decided to divest themselves of their power generation and were already going out for auction bid on that basis, which would then produce us with a price that we could reduce stranded costs by if, in fact, they realized above and beyond the book value.

But in this whole idea of selling generation assets, there has to be a clear distinction that there are winners and losers. Winners are probably fossil generation, hydroelectric, those kinds of plants, those particularly that might be gas-fired or low cost in coal and have the right kind of pollution controls on them.

However, the losers are the nuclear power plants. If, in fact, that is a large portfolio of a particular company and that has to be sold, the marketplace has not been very kind to nuclear power plants in terms of using the standard of book value, and that has generally been the biggest problem and the biggest area of stranded costs that has to be derived when we go about trying to assess what the recovery process is.

I cannot give you a definitive what the

difference was from the requests of the companies to what the Commission did, but I can tell you that there probably was a discount from what the requests were to what the Commission actually ordered in the neighborhood of 35 to possibly 40 percent of what they had actually asked us for on stranded cost recovery.

We did back and support the idea and the use of securitization, bonding stranded costs, to lower that cost to the consumer. It was indicated that if utilities wanted to avail themselves of securitization, that they were going to have to make in their filings a showing that they could go above and beyond the minimum requirements of the law with a discount so that the savings that were garnered from the securitization would have to be 100 percent passed on to consumers in the idea of higher discounts.

This meant that we were looking at the companies for the most part to be able to go to the 5 to 10 percent as much on their own but that securitization would be allowed as a measure for them to enhance the level of discount to customers.

We have just begun our first process with PSC&G in that regard, and the possibility of a deal may happen sometime later this fall in the neighborhood of $2 and a half billion. We just followed on the Boston Edison

deal that you heard Commissioner Vasington talk about.

The last point I think I'd like to make before we close is to talk about something that Nora brought up that's very important, and that is a lot of you are going to try to determine whether we did this right and whether we've set the right kind of rules, the right kind of balance, between suppliers, marketers, utilities and a whole host of other types of groups that were involved.

We went through a stakeholder process which was probably three and a half years in the making. We issued a master plan report, a green book, before we were pretty much allowed through the Legislature and by the Governor to formulate the initial draft of the legislation.

That draft that we proposed to the Legislature was pretty much left 75 percent, 80 percent intact, primarily on most of the major issues. There was -- there were some variations on issues of labor and competitive services that got changed, but for the most part the bill that was initially drafted by the Board of Public Utilities made its way through the Legislature.

That process was key, I think, to us being able to really get this into a successful track for passage. Even though we spent three years working focus groups,

working with constituency groups, trying to build consensus around certain issues, the more important part of it was that we kept our Legislature looped into the process so that all the key chairs and the leadership understood and knew what we were doing, and they were well prepared for all the arguments when they started getting them when the legislation actually hit.

Our process, although we spent ground work of three years doing this, when we introduced the bill, which was somewhere in September or October of 1998, final passage did come about in February of '99. That's about four to six months, which is certainly not close to the land speed record that Pennsylvania gave, but it's still pretty fast in terms of tracks as you'll see from around the country.

What we did is good in terms of educating people, educating those who are stakeholders and part of the process, but what we're going to find out very soon is that if we do not know what customers want, if we do not know how the public is reacting to this and to this new marketplace, we very well may be back retooling and retinkering all over again. And what we've been doing in following the lead of Massachusetts, California and Pennsylvania, is that we made a pretty aggressive consumer education program.

But in our program, not just delivering messages but also retrieving information back and reports and documents, surveys, about what are people seeing, what are people feeling. And it will surprise you that the learning curve that people have to go through for electricity is almost like going from kindergarten to graduating college.

People want this, but they don't always know why they want it. People have a feeling that this is something good for them, but yet they have had two to three years of possible bad experience on the telephone industry, and they're not really sure whether this is going to repeat itself.

People's expectations of what this will bring them are astronomically higher than what the realities we're bringing them; however, I think that in the end, that if we're able to make people aware of what this industry is about, I think that if we're able to get them comfortable with new terminology and thus understand some of the basic structures and fundamentals.

The goal of the Board was not to deliver electrons to customers at a cheaper rate. That was not our goal. Even though that's what the immediate benefit of that act or statute talks about, that's really not

our goal.

Our goal was to deregulate in order to bring about a competitive market so that the industry and all those others that want to participate in that marketplace will bring about new product services, innovation, research and development, unleashing economic forces so that things that we haven't even thought about, things that we don't even know about today, will be brought to the consumer, something to improve and enhance the quality of their life.

Deregulation of telephone, nobody could have known the effects that research and development, Internet access, cell phones, pagers, all the things now that we are looking at as combinations of quality of life products and services, would have happened when we first started.

We look at the electricity industry in the same way, because to an extent this is a service, a product, that really encompasses an entire household as well as businesses. It brings to the family, it brings them comfort, it brings them security. What we're looking for in the deregulation of this industry is that beyond that, in maintaining that, that it will also bring them a higher quality of life in terms of products and services that they heretofore probably have not seen.

If that occurs, then we have been successful.

Pricing I think will take care of itself, because if you try to judge pricing today as to what it might be ten years from now in terms of the type of usage, the way people are going to look at these kind of products and services, it may be comparing apples and oranges. I mean, you may be able to look at this realtime use, the permitted use and all those kind of nice little factors, but that's really not what the deregulation of this industry is all about.

It's about unleashing economic forces so that products and services will be available to people that heretofore we haven't even thought about or that are on the drawing board like distributive generation is right now.

So, with that, I'd like to thank you and open it up for any questions or bring it back to the Chair. Thank you.

(Applause.)

COMMISSIONER ANTHONY: We have gone a bit beyond our question and answer period, and perhaps those of you who have questions, if you would just stand where you are and ask a very brief question and I will ask our panelists to give as brief an answer as may be possible. We will take about two or three or four

minutes to do that.

If you would like to go ahead and start your break now, please feel free to do so, but the second panel is supposed to begin at 10:30.

Question up -- yes? Go ahead.

MS. DAVIS: Good morning. My question is for Commissioner Brownell from Pennsylvania. I want to ask you, what were some of the benefits realized or the lessons learned from your pilot program and how did you make the transition from the pilot program to -- (inaudible) -- of free choice?

MS. BROWNELL: Okay, among the lessons learned were that there were a lot of details that we had not -- in the industry and supplier participants had not anticipated. EDI was one of them. Staffing up call centers was another. People were demanding information, and no one was staffed to deal with it.

There were a number of operational details, and I talked about two groups that we formed. A critical group was the Pilot Implementation Committee that continues to meet, and in the early stages of the pilot, they met sometimes two or three times a week for hours and hours at a time so that they could deal with operational glitches quickly and so that there would be no perceived problems in the market that would cause

people to stop.

We learned -- in fact, this group talked about that you need to monitor responses of consumers, you need to keep a very close touch on that they're thinking and what they're hearing, because we don't want them to hear something that would cause them to not take advantage of the opportunities.

Among other things, we saw some marketing materials in the early stages that played on people's fears that reliability would be compromised if they chose an alternative supplier. We have a memorandum of understanding with our Attorney General, so we referred a number of cases to him in the early stages.

And we learned, frankly, that you need to work cooperatively and have vast opportunities to resolve disputes, if I said anything else. And as I said before, we learned that we need to have greater respect for the consumer, who may or may not understand all the details but who definitely wants the opportunity to participate in choice. And we're hoping that this experience, by the way, translates and empowers consumers to more actively participate in other aspects of choice.

I'm sorry, I've forgotten your second question.

MS. DAVIS: The phase-in from pilot

program --

MS. BROWNELL: Phase-in went right in. If you were in the pilot program, you were automatically in the first phase, January 1st, 1999.

And I've taken more than my two minutes. Sorry.

COMMISSIONER ANTHONY: Do we have another question from the audience?

Yes, back row.

MR. TALBOT: My question is to Commissioner Conlon. You mentioned something about the role of energy price and stranded cost recovery, but isn't it true that in California the structure is set up so that recovery of stranded costs is only possible if you have a developed energy price, and if that is true, that in your opinion, that low energy pricing will -- will be sustainable?

(Speaker did not approach microphone; could not be heard well.)

MR. CONLON: Well, I'm not sure that I understand completely, but our stranded asset recovery was based on the differential between the present rates and the PX price or the market price, and as I said, that's around three cents a kilowatt hour today. So, I think that three cents an hour for four or five years

was supposed to generate over $20 billion to recover the assets, and I think it's what's happened.

Because the sale of assets has been very profitable, it's going to be recovered in three years instead of five, and then it will be gone, and then those energy prices will be on your bill every month for your energy or every hour, depending upon your choice.

COMMISSIONER ANTHONY: I think we have time for one more question. Over here in the aisle.

MR. LOGATES: I was just going to ask very quickly, in all four states, the governors were not neutral. They were advocates of the process. I'm wondering if you think that's essential, not neutrality but advocacy.

MR. CONLON: Well, I certainly want to give California -- I think Governor Wilson was very instrumental. His office pulled together a group of all the players and got a memorandum of understanding that was very helpful in getting a consensus. You know, even though we went through 60 days of hearings, eight hours a day, I think it was close to 60 days, but his -- pulling those people together a generating memorandum of understanding was incredible, and I think Governor Wilson should be given the credit for taking the

leadership.

And I think the selection of his commissioners was the one question that he wanted to make sure that we all were, and that was favoring competition, and I don't think the Governor has got enough credit for that, and I'm very disappointed that he's not in the game to lead this country in the same way.

MR. TATE: Can I just add to that?

I gleaned over our stakeholder process and how the Board got central to this, but that was in no small measure to the fact that Governor Whitman, Christy Whitman, had, in fact, had discussions with the legislative leadership and had, as a former president of the Board of Public Utilities, understood these issues and the importance of it and gave her credibility and her support behind the entire process for the Board to lead this over a three-year period.

So, we started with the energy tax reform and then went to the electric discount legislation, but the Governor's office was very proactive and basically gave its authority over to the Board of Public Utilities to handle the matter as an executive branch function, and that's key.

COMMISSIONER ANTHONY: Thank you, panelists, for an enlightening morning session. We will break now and

head back in at 10:30.

(Applause.)

(A brief recess was taken.)

SESSION I:

RETAIL COMPETITION IN PIONEER STATES

PANEL B:

ASSESSMENT OF THE RESULTS TO DATE

OF PIONEER STATE REFORM EFFORTS

MR. WROBLEWSKI: We would like to get started now. I'd like to welcome all of you to Panel B of Session I, Assessments of the Results to Date of Pioneer State Reform Efforts. My name is Michael Wroblewski, and I'm the Federal Trade Commission's advocacy coordinator.

I'd like to introduce our four panelists before they give their opening, ten-minute remarks. First we will hear from Mr. Irwin A. Popowsky, who has served as a consumer advocate for Pennsylvania for nearly a decade. During his tenure, he has worked to ensure that ratepayers in Pennsylvania receive the benefits of electricity and telecommunications deregulation and restructuring.

Mr. Popowsky served as the president of the National Association of State Utility Consumer Advocates, NASUCA, from 1996 to 1998, and he was previously chairman of the NASUCA Electric Committee. He also serves a one of the two consumer representatives

of the Board of Trustees of the North American Electric

Reliability Council.

Next we will hear from Dr. Alfred E Kahn. Professor Kahn is the Robert Julius Thorne Professor of Political Economy, Emeritus, at Cornell University, and he is a special consultant to the National Economic Research Associates, Inc., NERA.

Professor Kahn has played a key role in the national regulatory debate that started with airline and trucking deregulation. Professor Kahn is a noted scholar and prolific author and is here today on behalf of the Edison Electric Institute, the Association of Shareholder Owned Electric Companies.

Third we will hear from Dr. John A. Anderson, executive director of the Electricity Consumers Resource Council, ELCON. ELCON is a national trade association representing large industrial electricity consumers. ELCON's 37 member companies own and operate manufacturing and other facilities throughout the U.S.

Dr. Anderson joined ELCON in 1984 and was named executive director in 1988. He has presented papers and spoken extensively on a wide range of electricity issues of importance to large industrial firms.

Finally, we will hear from Dr. Thomas M. Lenard. Dr. Lenard is Vice President for Research and Senior Fellow at the Progress and Freedom Foundation, a

Washington, D.C.-based research organization providing public policy analysis relating to the computer, communications and electricity industries.

Dr. Lenard joined the Foundation in 1995 as senior fellow and director of regulatory studies. Prior to joining the foundation, Dr. Lenard was vice president of a Washington, D.C.-based economics consulting firm. Dr. Lenard has also served in senior government positions at the Office of Management and Budget, the Federal Trade Commission and the Council on Wage and Price Stability.

We are delighted to have all four of you here today. Mr. Popowsky, when you're ready to begin.

MR. POPOWSKY: Thank you very much, and thank you for having me here today. It's a great honor.

I am the consumer advocate of Pennsylvania. For those of you who aren't familiar with our office or type of office, we are a state office, and our job is to represent utility consumers before our state public utility commission and other state and federal regulatory agencies and courts.

Our primary focus is on residential consumers. That was the main goal of our office, to make sure that residential consumers who previously weren't perhaps fully represented would be in the future.

We have been called on here at this panel to assess the results of the pioneer state reform efforts that you've heard about already this morning. For better or worse, I and my office, the Consumer Advocate Office of Pennsylvania, we've been involved in just about every aspect of the Pennsylvania electric restructuring program.

Now, we have been asked to address a few specific questions regarding the percentage of customers who are shopping, what services are being offered, what prices, and I will do that shortly, but -- and there are some materials in the handouts today that I've presented that cover those areas.

But before I get into that, I would like to start with a general assessment about how I think that Pennsylvania consumers, including residential consumers, have faired as a result of the electric restructuring process that began when our legislation was passed in 1996. And my bottom line is I believe Pennsylvania consumers have done pretty well.

Now, the reason I say that is because while many Pennsylvania consumers, as you've heard this morning, are starting to see the benefit of participating directly in a competitive market for electric generation supply, all Pennsylvania consumers, I believe, continue

to be protected under the Pennsylvania restructuring scheme from some of the adverse consequences that may have occurred had we been less careful in our restructuring process.

Let me just repeat that. While I think that many consumers have seen a direct benefit by participating in the competitive retail electricity market, what's very important to me is that all consumers -- I think all consumers in Pennsylvania have been protected and I think have benefitted somewhat through the restructuring process.

Now, the most important provision in the Pennsylvania electric restructuring legislation and in our various settlements from my perspective -- perhaps you'd be surprised to hear -- is the rate cap provision. With the rate caps, that is, caps that keep our rates from going higher than they were, at least in 1996, those rate caps stay in effect several years into the future, through 2005, in some cases even 2008.

Those rate caps prevent the kind of cost shifting that I had been worried about where perhaps a few large customers -- some people from ELCON, perhaps -- would have left the electric system and left costs behind, and those costs would have simply been put upon smaller customers, and they would have actually seen

rate increases. With the rate caps, at least, we know that customers will not be seeing rate increases.

And also, with rate caps, the way I look at it is, what it means is that the game is being played in my opinion on the right side of the field. That is, unlike what I did for the last 20 years or so basically trying to prevent utilities from raising rates of Pennsylvania consumers, now I get to spend a lot of my time negotiating rate decreases and working on rules that will make it possible for competitors to allow additional savings to customers who participate in the competitive market.

So, what have been the results so far? In 1999, we negotiated a total of $450 million in short-term rate reductions. We also negotiated substantial increases in our programs to help low-income consumers. Our universal service programs increased to a level of about $100 million a year statewide within existing rate levels. Again, that was without raising anybody else's rates.

In addition, customers in Pennsylvania have begun to shop for competitive alternatives. In the handout that I gave you, you'll see that our office has been collecting statistics in Pennsylvania. They show that about 450,000 Pennsylvania consumers, including

350,000 residential consumers, actually did switch electric suppliers during the first six months of 1999 when our full-blown program was in effect.

The percentage of customers who switched certainly varies from as low as 1 or 2 percent for companies like Allegheny Power, which has very low rates and very low price to compare, as Commissioner Brownell talked about earlier, to as high as 15 percent of our customers shopping for a company like PECO Energy, which went into this with very high rates and for which the price to compare or shopping credit is very high and giving people a greater reason to shop.

You'll see in those statistics, by the way, that for some customer classes, such as some of our larger commercial and industrial class, that as much as 50 percent of the customer load has left a couple of our utilities, such as PECO.

Now, what products are being offered and at what prices? Again, in the materials that I included in the handout is a electric shopping guide that we just put out to the public which shows basically what the offerings are in each of our major electric service territories for residential customers, what prices are being charged and whether the product that's being offered is Green-E certified, and I know you'll be

talking about that later, as to whether these are renewable resources.

And again, what that shopping guide shows is that at least in our major service territories, we do have some marketers who are trying to offer residential service at some savings to consumers. The savings vary from a couple dollars per month to as much as five or ten or more dollars per month depending on how much electricity you use and who your electric utility is.

So, in addition, what that shopping guide shows is that we have at least one marketer in each of our service territories who's providing Green-e-certified renewable energy resources. Typically those are at rates higher than the utility's standard offer service, but the important thing is at least there's somebody offering that service, and at least from the trade press that I've been able to see, because these numbers are not public and we don't know what they are, but it appears that about one-quarter to one-third of the customers who are shopping in Pennsylvania are looking at green products.

One note of warning, as Commissioner Brownell was asked about the pilot program this morning, if you look at that list of services that are being offered and the companies offering them, you'll see that some large

companies are not there, are not yet serving residential customers, like PP&L Energy Plus was a major participant in our pilot program, Enron was a participant in the pilot program. They are not serving residential customers in Pennsylvania today.

And the companies that are serving residential customers are doing so at a price that's about a penny per kilowatt hour higher than the prices they were charging in the pilot program. That indicates perhaps a couple of things. Perhaps it shows that the wholesale prices are higher than they were during the pilot program. It also shows, I think, that the retail transaction costs that are being incurred by the marketers are probably higher than at least were anticipated in the pilot program. And now that the real competition has started, those prices are showing up in the offering.

But as I said, at least in Pennsylvania, I think residential customers do have a choice of electric suppliers. They can save some money by shopping. They can buy -- they can choose the type of power.

Now, does that mean that Pennsylvania is a success and other states, where perhaps there's been less shopping, is a failure? No, I don't think so. I agree with the comments this morning that each state has

taken an approach which I think offers something to those of you out there who are looking at this both at the federal level and at your state levels.

I think you can get many of the benefits of competition at the wholesale level through something like the California Power Exchange price. On the other hand, if you want to get greater retail benefits, you might want to look at the Pennsylvania model and the -- which I think has been adopted in large part in New Jersey, which is designed to encourage retail shopping as well as wholesale competition.

But with that, I would only just close with the comment by Justice Brandeis who said that, "It is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a laboratory and try novel social and economic experiments without risk to the rest of the country."

I think the laboratory is working on this issue in the United States, and I hope that what we've done in Pennsylvania can be of assistance to you, and I'll be happy to answer any questions you have.

Thank you.

(Applause.)

MR. WROBLEWSKI: Professor Kahn.

MR. KAHN: I thought I was going to have to

apologize to you for my lateness. It turns out that only I had been deprived of the ability to attend the first session. Therefore, I was going to offer the -- what should have been an ironclad disavowment of responsibility for my lateness. My plane was an hour and a half late. The sardonic laughter of a few of you may suggest that you think that doesn't exempt me from responsibility.

(Laughter.)

DR. KAHN: One other introductory remark. I don't know who whom a citizen turns when the Federal Trade Commission itself is guilty of misleading advertising. According to the program, this session is on assessment of the results to date of pioneer state reforms, and I've done absolutely no work in that area. Mr. Wroblewski assured me that it would be all right if I talk about what I think I know rather than what I don't know, but still, the advertising is yours.

Finally, I observed with a certain amount of chagrin but also satisfaction that I'm listed in the program as representing the EEI. I knew that EEI had suggested my name to the Federal Trade Commission, and I went through an agonizing period of trying to decide whether in those circumstances, do I appear pro bono, since it's the FTC that asked me, or charge EEI for it?

You have got the best of both possible worlds.

I proceeded on the assumption that I was here pro bono. I was talking to the FTC, and I wrote my talk totally without reference to whether I might charge the EEI. Now you've given me the authorization to charge them. So, it's one of these rare cases in which you really have praedo optimatility, I think.

The state of my thinking on the subject can be really quite readily summarized. The process of deregulation presents regulators with very strong temptations and the opportunity to micro-manage the process, and in particular, temptations to produce quick results for which they then can claim credit. I speak with a certain amount of inside information since I am a former regulator.

Until fairly recently, the principal opportunity for doing this, for producing particularly large rate reductions at the expense of utility companies, was, of course, the controversy over the recoverability of costs that would be stranded under competition, and that is where the big bucks seem to be, and in footnote 10 of my little book Letting Go or Deregulating -- the Process of Deregulation that I published last year, I cite an authoritative estimate of the savings to consumers from deregulation, and it turns out that under various very

competently run scenarios, 90 percent of the savings to consumers comes out of the pocket of the utility companies. That is the assumption that competition would be permitted to strand costs.

I'm not interested here in discussing the merits of that issue but only to point out that that was the first area or place in which you had what I referred to as temptations of the kleptocrats. In point of fact, I think regulatory commissions generally, having administered a system under which companies were more or less entitled to recover more or less those costs they might have demonstrated to be imprudent, I think regulators have resisted that temptation generally and have achieved kind of political-like settlements which seem to be the proper type of resolution of that issue, which is, after all, only an issue of dollars.

Increasingly in the last two years or so, however, the focus of that temptation to show quick results has shifted to the protection and nourishment of competitors. This opportunity has arisen in two contexts. One, setting codes of conduct.

Now, there's no quarreling whatever with the need in the transition to deregulated industries for some sort of regulatory control. I mean, in a sense it could be turned over to antitrust, but I think that

would be quite unrealistic in view of the ubiquity and pervasiveness of the problem.

Regulators can probably not disavow responsibility for antitrust-like protections. That is to say, to make sure that the incumbent franchise monopoly companies do not make abusive use of their authority, their power, stemming from their monopoly to prevent efficient competition with them.

The obvious examples would be denial of equal access to essential facilities, with a definition of "essential" being very much up in the air, whether it's to be the antitrust kind of definition or somewhere in between now that the Supreme Court has remanded the Iowa Utilities Board case. Set aside that -- those very important issues of definition, no one, I think, can deny the danger of the denial of fair, nondiscriminatory access to essential facilities and also other kind of antitrust abuses.

Indeed, this is one of the rare areas in which cross-subsidization is really possible. That is, to the extent that the rates for the monopoly service are regulated, it does, indeed, become possible theoretically -- a possibility, by the way, diminished to the extent we actually move to rate caps, we've divorced regulated rates from the costs of the companies

-- but it does become possible theoretically to have rates charged in the competitive services indeed, actually, cross-subsidized at the expense of the monopoly services.

So, there's no doubt that there is a need for a code of conduct. At the same time, people at the Federal Trade Commission will recognize the age-old antitrust dilemma of how do you draw the line between the protection of competitors from advantages unrelated to efficiency -- that is to say, the actual preservation of competition -- from the protection of competitors from more efficient competition?

And I can tell you on the basis of my -- with more authority, I think, than anybody else in this room, because I think I'm older than anybody else in this room, that this was an issue in the 1940s and may well have been an issue in the 1890s, except I don't pretend to have personal knowledge of that, and indeed my second book was called Fair Competition in which Joel Dirlam and I attempted to see to what extent the antitrust agencies enforcing the Sherman and Clayton Acts were, indeed, going over the line between actual preservation of competition into the preservation of competitors for their own sake.

Since codes of conduct are the subject of

sessions tomorrow, I am not going to go into that now except to say that I have done a lot of work on the subject, and I am absolutely convinced that many of the codes of conduct do err on the side of protecting competitors from efficient competition. That is, competition in which the incumbents do have advantages of economies of scope and scale when operating in the unregulated areas, and so do their likely competitors, and the question, if one were to concentrate on the preservation of efficient competition, one would not incorporate some of the provisions that are now in those codes of conduct.

That leads me to the second area which I propose to concentrate for the remaining few moments, and that has to do with the second context in which regulators are subject to the temptation to produce real, live competitors rather than merely to open markets to fair and efficient competition, and that has to do with the process of setting the shopping credit that was the subject of the first session and that to my regret, because of the jerk who deregulated the airline, I missed.

I think the first thing to understand, and it's made very clear or will be in a monograph that my colleagues at NERA, David Caton, Ian Meaton and Ann

Seldy (phonetic) are writing, is that the process of setting the shopping credit, that is, the credit from the regulated price that will go to the people who leave the incumbent utility company and go to competitors, is the same process, the identical process, as the one of setting the charge by the utility company -- the regulated charge by the utility company to the customers who remain with it.

That is, the charge for standard offer service or the charge to default customers or the customers who for whatever reason do not choose to move, and they are really the same process, and the results are identical, as I hope to point out before we are through.

The price, the credit that goes to the people who depart from the utility company is the same as the process of setting the price that will be paid by the people who remain as default customers. Put it another way, the default customers have an option of paying the price for this continued service that is regulated and will be charged by them. In so doing, they will not obtain the shopping credit. The shopping credit, therefore, is the price that they are sacrificing if they stay and buy the default service.

I'll try to describe that identity in other ways that may be more readily intuitively grasped, not really

by you but by me, but the reason it takes the form of a shopping credit is that in setting the standard offer price, that is to say, the price of the service to the people who remain with the company, the regulated process, that is typically the mode also for resolving the stranded cost issue.

That price therefore includes two elements. One, the price for the energy service that will continue to be purchased by the people who stay with the incumbent company; and second, the contribution -- within a rate that is typically frozen for some period of time -- the contribution toward the recovery of stranded costs.

Now, setting that ceiling price to recover those two elements has the inevitable consequence that if every customer is to pay its fair share of the stranded cost contribution, then that portion of the price cannot be escaped by the people who go to a competitor. They must continue to pay that. So, the inducement to shift takes the form of a discount or a credit from that rolled-in price, the price of the service to the people who remain, plus the contribution to stranded costs.

The credit is equated to, since they will continue to pay the stranded costs, the price that you get if you shift, the credit is the price that you would

otherwise pay if you remained with the regulated company, the regulated price.

So, the question then becomes, how much of the rate charged customers who remain can be avoided or returned to the customers who depart? As I say, by the same token, the shopping credit is therefore the price that the customers who remain, in effect, pay for the service that they continue to get from this company, because that's the -- what they would get if they left. That's the opportunity cost of staying with the regulated company.

The setting of the shopping credit, therefore, provides an obvious opportunity to succumb to the temptations that I have identified. That is to say, one, to artificially -- I've given up a long time ago worrying about split infinitives -- to artificially encourage competitors to enter, and I think Pennsylvania has clearly admitted that it deliberately set a credit that would in its opinion be large enough to produce a rate reduction sufficiently large to encourage people to shift. They talked about 5 to 15 percent. I've seen references to 10 percent and in other instances 15 percent.

So, it was picked on the basis of what it would take to get people to shift. And, indeed, I have read

testimony by one of its commissioners who boasted that a result -- as a result, more customers shifted to competitors in Pennsylvania than in all the other states in the country combined.

That reminds me of the story of the reindeer who came into a bar and ordered a martini and drank the martini and said I guess I'll have a second, and he said what will it cost, and the charge was $20, and as the reindeer started to leave, the bar tender said, excuse me, he said, you know, we don't often have reindeers come into this bar and drink martinis, and the reindeer said, small wonder, the prices you charge.

Small wonder Pennsylvania succeeded in getting more people to shift. They have a big enough credit inducement to shift, of course you get more competitors.

And, second, and this is my concluding observation -- but it may take me a few minutes -- to succumb to the temptation of, number one, was to produce live competitors. Number two, to kleptocracy, because you have to ask the question -- an economist has to ask the question -- if you set a credit deliberately large enough to induce people to shift, who's paying for it? That's an elementary principle of economics or at least a question that an economist raises.

Now, clearly, in terms of simple economic efficiency, the credit should be equal to the costs that the incumbent utility company will avoid when people shift from it. The obvious component, for example, would be the wholesale pool price, which is presumably a competitive price. It presumably will include some costs of retailing to the people that -- who depart, the costs that will be avoided. That's simply an incremental cost test.

But, observe, it will not include marketing or customer acquisition costs, because these are the customers who are not being marketed for -- the utility company is not supposed to solicit that business, it's not supposed to market and try to sign up customers. These are simply customers who are unwilling to shift or, because of lethargy or lack of information or because they rate their dinners higher than other people rate their dinner time, the people who did not shift.

So, in terms of simple economic efficiency, efficient competition is competition on the basis of incremental costs. And, therefore, if you're talking about what is the margin within which competitors should be forced to operate if they are to compete and take people away from the incumbent company, it's the avoidable cost of the incumbent companies.

Now, of course, you'll recognize that that may leave very little opportunity for competition. The competitor will say, Yeah, but we have customer acquisition costs. We may have retailing costs that the incumbent utility doesn't have. Well, in terms of efficient competition, the technical response is TS. If customers -- if competitors cannot attract customers under a shopping credit system where the credits are equal to the incremental costs of the incumbents, that is to say the avoidable costs of the incumbent, then they don't deserve to survive. It would only be because they are less efficient in providing that service or because -- and this is the more important consideration -- the bundles of services that they offer to provide customers, particularly risk management, which may be very valuable in protecting customers against volatility, and associated energy services, which is likely also to be important, are not worth the incremental cost of supplying them.

Anyhow, that's what I believe an antitrust agency would understand.

Now, why and how does a credit larger than avoidable costs, as I say, offer a temptation to kleptocracy? Well, the amount by which the shopping credit decided upon exceeds the avoided costs of the

incumbent company, it can come from only two places.

One, from the incumbent distribution companies themselves, since the larger the credit, the less what's left over toward the recovery of their stranded or strandable costs. If anything -- nothing else has changed, it will come out of the recovery of stranded costs.

Now, Pennsylvania, as I understand it, recognized that. What it did in principle, at least, was to say, we want a credit large enough to attract -- to get people to move -- willy-nilly to get people to move, but we recognize that that larger credit higher than avoidable cost will come out of the company recovery of stranded costs. Therefore, we will extend the period of recovery sufficiently to make up for it.

Now, that's not 100 percent true, as I understand it, in at least one of the settlements, they also reduced submarginally the amount of total stranded costs that they wanted to permit to be recovered in order to enable them to have a larger shopping credit, but that's one way it could conceivably come out of those companies and, indeed, there have been statements by some people in Pennsylvania that higher shopping credits mean more saving for consumers than lower shopping credits.

Now, if by consumers you mean all consumers, then it can only come out of the company. The only other possibility is that it will come out of the default customers, the customers who remain. Why? Recall my pointing out that the shopping credit is, indeed, the price that the residual customers who remain are paying for the privilege, or for avoiding the costs of shifting, for the privilege of remaining with the company. The larger the credit, the more it costs the customers who remain with the Disco, because it's -- those are the default customers who are paying for the service of continuing to be served by the utility company, whereas the ones who shift do not pay that cost.

Therefore, the larger the credit, the more -- if it doesn't come out of the company -- it comes out of the default customers.

If, then, the distribution company is kept whole, is permitted to recover its total estimated stranded costs over whatever period of time necessary, then the only possible source is the customers who remain, and then it raises an interesting question: Is it good social policy, is it good economic policy, is it good humanitarian policy, to give larger credits to the customers who are likely to be the higher income

customers, the more knowledgeable customers, the ones that are less sluggish in shifting, at the expense of the probably smaller, generally lower income customers who are less trustful or willing to expose themselves to the market process? I submit that it is neither good economic policy nor good social policy.

Thank you.

(Applause.)

MR. WROBLEWSKI: Thank you, Professor Kahn. Dr. Anderson.

MR. ANDERSON: Thank you very much, Michael, and the FTC for the opportunity to be here today. Let me tell you that it is a difficult job to follow Professor Kahn, but one I think I would like to emphasize at the outset though, is that there is a big difference.

I appear before you today knowing precisely who I represent with no disclaimers. Our handful of members, in only 30 members, represent more than 5 percent, though, of all of the electricity in the United States today. We can argue all day about theory, but what we care about is the actual implementation, and that's what I'll try to share with you today. Later today, I will post on our website written comments, which I'll refer to several times.

At the outset, we want to emphasize that we are

very much aware and appreciative that the FERC staff has intervened in -- FERC -- the FTC staff has intervened in more than two dozen electric related proceedings over the last four years. We compliment the FTC staff for these actions and we find ourselves agreeing with the staff's position in nearly every case. I urge you to look at them and look at these comments very carefully.

However, much more is needed. We strongly urge the FTC to take much more aggressive actions to protect consumers from discrimination in the exploitation of market power. In our view, competition is clearly coming to the electric industry. In fact, as of June of 1999, 24 states have taken final actions or endorsed retail competition in one form or another. Roughly 60 percent of the population of the U.S. lives in these 24 states, and we're beginning to see some results. Some states have mandated across-the-board price reductions, which you've heard about today, often 10 percent or even more, for consumers, and usually that's for residential consumers.

Many marketers, including regulated utilities, unregulated affiliates, are offering electric service at lower prices than those offered by the regulating utility.

Large consumers and groups of consumers who are

able to aggregate loads are negotiating even greater price reductions. And my written comments give specific examples of several of these.

While competition is impacting prices, the other real tangible results of regional competition, though, will involve new products and service offerings, and this was mentioned in the first panel several times.

In the past, monopoly utilities offered one-size-fits-all packages of bundled products and services that in reality fit no one. The introduction of competition has had a dramatic impact on product offerings. With competition, electricity suppliers are actually trying to find out what customers want and then meet these needs. Again, my written comments give specific examples of several of these new product and service offerings, several of which have been mentioned.

Again, my written comments relate to -- mainly to large customers, but there are some benefits that are arriving to small customers, also, and Sonny Popowsky has already covered them and I'm not going to go into them here, but I urge you to look very carefully. Small customers are benefitting and we think that the small customers have a tremendous opportunity to benefit, once we get to real competition.

But while competition introduced in the electric industry to date clearly has produced some positive results, the fact is that we really don't have competition, real competition, anywhere in the U.S. today, and I cite a couple of specific examples.

In my view the acid test of real competition is the proportion of customers who actually switch to alternative suppliers. For a variety of reasons, the number of customers who have actually switched to alternative suppliers is negligible in 23 of the 24 states. In fact, the only place where significant switching has occurred is in Pennsylvania, which you have heard about from Commissioner Brownell and also from Sonny Popowsky.

Even in California, which has certainly received tremendous publicity for opening its markets, switching has been minimal. Theoretically, California gave all 10 million or more of their electric customers the right to shop for alternative supplies on April 1st of 1998. However, more than 15 months later, the statistics I have show that only 1.3 percent of the customers have actually changed suppliers, and Commissioner Conlon has given you some reasons why that is the case.

Other states have committed to move to competition either have not yet actually opened their

markets or have established barriers that preclude shopping.

Pennsylvania is the one exception. Pennsylvania disallowed significant proportions of utilities' claims for stranded costs and then spread the recovery of the remainder over an eight-year period. This created a situation where customers clearly could save significant amounts by shopping. The results were dramatic. Nearly one-quarter of all eligible customers switched suppliers in just the first six months of the program, as has been mentioned.

But while Pennsylvania is a success story, because so many customers have actually switched, it still is in our view an artificial market. As long as some costs are forced on customers, the full potential benefits will not be realized. In fact, we will not see the full development of innovative products and services until we have real competition in the electric industry. Lessons from the telephone industry will highlight this.

Prior to competition, as many of us remember, you could have any kind of telephone you wanted, as long as it was black, it had a rotary dial, and it sat on a horizontal surface. Of course, you had to rent the instrument from the monopolist, because privately owned

devices we were told would cause reliability problems.

Monopoly utilities thought it was a great intervention to offer pass tell-colored princess phones, admittedly at exorbitant rental charges. Since then, competition has produced a relative smorgasbord of products and services, both to meet the existing needs of customers as well as to create new wants and desires. Monopolists would never have been so creative.

While real competition has been achieved, the trials and tribulations experienced in the states are instructive. It is now quite clear that in most states the transition to real competition will not be either quick or easy. The Federal Trade Commission must take an active role to help protect customers both during the transition as well as in the competitive end state.

The introduction of real competition in the states has been delayed by several barriers, and I point out in some detail in my written comments eight barriers.

First, stranded cost recovery, which in and of itself, is the antithesis of competition, regardless of the recovery method.

Two, securitization, which benefits inefficient incumbents to the detriment of more efficient competitors.

Three, mandatory rate reductions, which reduce the potential for savings through shopping and thus serve as disincentives to new market entrants.

Four, low shopping credits or back-out rates which disadvantage potential competitors.

Five, discriminatory access to customer data and information.

Six, discriminatory access to transmission.

Seven, mandatory monopoly power exchanges which restrict the options available to the citizens of that state and thus reduce competition.

And eight, inadequate mitigation of market power, which to us is the most significant barrier to competition.

Today, incumbent utilities possess tremendous vertical and horizontal market power. Further, these incumbent utilities are preserving if not increasing this power with tactics such as creating and maintaining bottlenecks, leveraging their monopoly status in potentially competitive markets and merging and forming partnerships in ways that reduce competition.

Since vertical disaggregation of the electric industry is happening on only a very limited scale, the industry will continue in this hybrid state for some time, with antitrust laws limited as they are, expected

to fill regulatory gaps.

So, what should the FTC do to encourage real competition? We think that the FTC faces a great opportunity to protect customers, avoid discrimination and further competition as the electric industry transitions to competition. Without the FTC's help, monopolies and their monopoly power may very well prevail.

We recognize that there are significant resource limitations; however, in spite of the resource limitations, we strongly urge increased involvement by the FTC as the electric industry becomes more competitive. And I mentioned seven different areas then very briefly.

First, the FTC should continue to monitor market power and offer constructive means by which it is mitigated. We believe that market power issue singularly is the most important challenge to competition today. We have a paper put forth, and it will be attached on our website, also. We compliment the FTC staff for your vision and foresight that you have expressed so clearly in various filings on market power. We urge you not only to continue advocating these important positions but to increase your efforts. Specifically, we urge the Federal Trade Commission to:

One, take a strong position opposing stranded cost recovery mechanisms that have anticompetitive consequences.

Two, increase its involvement in mergers which have very significant market power implications.

And, three, support a petition that a group of us filed on March 25th, 1998 at FERC to say to get on with the competition.

The second general area we urge FTC to move on is to continue opposition to transco as RTOs proposes. The FTC staff filed comments in both Mississippi and at FERC raising significant concerns with the proposed Entergy Transco proposal. In that filing, the FTC staff criticized Transco for a variety of reasons and recommended that FERC approve alternatives, such as ISOs or RTOs. Unfortunately, FERC seems not to be heading in this direction.

We compliment the FTC staff both for taking specific actions and for the content of those comments. However, support appears strong for the creation of Transco's inappropriately designed RTOs and ISOs. More aggressive FTC intervention is an essential for consumer protection.

Three, we urged you to challenge incumbency advantages that are allowed by states UPCs. It was

mentioned by several commissioners in the first panel. Some states are recognized these tremendous advantages; others, though, have not recognized it, as well, or found it to deal with.

The FTC staff has filed comments on several occasions relating to relationships between incumbent utilities and their affiliates. We compliment the staff for these comments; however, we strongly urge you to broaden your advocacy.

Fourth, we urge the FTC to investigate utility actions to refunctionalize transmission assets, it's called. Several electric utilities are in the process of refunctionalizing or recategorizing costs. They're taking what are now transmission assets and they're now redefining them or recalling them distribution assets. This changes the regulatory authorities and creates tremendous problems for regulators and customers, and we urge you to look at it very carefully.

Fifth, we urge the FTC to begin to scrutinize NERC activities. The North American Electric Reliability Council, or NERC, is an industry group that was formed by electric utilities after the northeast blackout in 1965. NERC's owners are the ten regional reliability councils which themselves are dominated by incumbent investor-run utilities.

NERC is setting the rules of road for transmission, and in that FERC is giving some deference to NERC, and we urge the FTC to look very carefully at this whole process.

Sixth, we urge you to continue your antitrust enforcement. There is a big difference between the transition and the competitive end state. We anticipate continued regulatory oversight, albeit often inadequate oversight, throughout the transition. The need for antitrust enforcement will increase throughout the transition and be substantial in the competitive end state.

We believe that the antitrust enforcement should increase commensurate with the pace of deregulation. Thus, as regulatory safeguards are relaxed in the electric industry, the new deregulated business functions become subject to the same antitrust scrutiny faced by other competitive industries today.

However, we also emphasize that antitrust is only an after-the-fact measure, it's very time consuming and very expensive. Therefore, it is not a substitute for the establishment of truly competitive market structure at the outset.

And seventh and last, we urge the FTC to help design and focus market monitoring criteria. The F --

the Federal Energy Regulatory Commission has -- acted as -- highlighted the idea for market monitoring in its RTO profile recently. In that RTO -- in that profile -- excuse me, FERC is requiring RTOs to monitor markets for transmission services and similar services and bulk power to identify design flaws in market power and to propose remedial actions.

ELCON believes that the FTC's expertise on competition in markets should be applied to this effort, and we encourage the Commission to share that expertise with FERC.

In conclusion, the end state of real competition will provide consumers lower prices, increased product offerings, increased customer service and innovation. Unfortunately, it will take a long transition to realize these desirable objectives.

Individual state actions have extended the transitions significantly. These actions include things like requirements for the collection of full stranded costs, securitization, mandatory rate reductions, low shopping credits or back-out rates, discriminatory access to customer data and information and discriminatory access to transmission, as well as the implementation of mandatory power exchanges.

The FTC can take significant steps to protect

customers, avoid discrimination and further competition, both in the transition accident the competitive end state.

In the transition, we believe FTC should take aggressive actions such as the seven that I've set forth today. We believe that regulatory safeguards can be relaxed in a competitive electric industry. The new deregulated business functions would then be subject to antitrust scrutiny, as other industries are; however, we emphasize that antitrust is only an after-the-fact method and not a substitute for real markets.

Again, we appreciate the opportunity to be here and I look forward to your questions.

(Applause.)

MR. WROBLEWSKI: Thank you, Dr. Anderson.

Before Dr. Leonard starts, the filings that Dr. Anderson mentioned a listing of them that the FTC staff put together is listed in the very back of your handout materials, it is a two-page handout of all the filings which the Commission staff has made so far.

Mr. Lenard?

MR. LENARD: Thank you. It's a pleasure to be here. Thank you, Michael. It's a pleasure, also, to follow John and provide a little bit of contrast.

I'm going to talk about some of the things that

have already been talked about, obviously being the last person on the panel, but hope to provide a little different twist.

Since December 1995 when California became the first state -- the California PUC became the first to mandate competitive restructuring, almost 25 states representing about 65 percent of the GDP of the country, have instituted similar plans, competition has already started in four states, and by that I mean California, Pennsylvania, Massachusetts and Rhode Island, which covers about 20 percent of the economy, and obviously others, New Jersey and others, are scheduled to start very soon.

Interestingly, the states that have moved first have been the high-cost states, where the benefits of competition are the greatest, which is obviously a good thing.

In keeping with their role as laboratories of democracy, the states have adopted different approaches, but all within basically a common framework of a competitive generation sector, a jointly owned, independently operated, but highly regulated transmission sector, and locally regulated distribution companies that have exclusive territories, as they do currently.

The creation of competitive generation sectors is clearly for the good, but the wires component of the emerging model is, I think, troublesome, and in particular, a highly regulated transmission sector has the potential to undermine the potential gains that we could get from a competitive generation market.

The introduction of retail access has produced gains for consumers, price reductions for all classes of consumers, as a result of the competition and partly also as a result of mandated the price reductions. The states have adopted pricing restrictions that are not typically characteristic of competitive markets.

The great majority of state plans, including plans for the four states that I've already -- where retail access is already underway, include some form of price cap, either a price freeze at existing levels, as in Pennsylvania, or mandated reductions, as in California and Massachusetts. Those price caps or freezes or reductions have real economic consequences and real costs.

The value of the Pennsylvania and Massachusetts price -- they are essentially options to buy electricity at a fixed price, and they have been estimated, for example, in Pennsylvania to have a value of 9 percent of the present value of market revenues and in

Massachusetts to have a value of about 7 percent. So, those are real transfers from producers to consumers of those commodities.

As Frank Kahn has gone into a lot of detail about, the majority of the states have also instituted a shopping credit as part of their plans, which determine the circumstances under which it is in the consumer's interest to switch suppliers. Where the shopping credit has been set relatively high, as it has in Pennsylvania, the switching rate has been high.

In other states, such as Massachusetts and Rhode Island, both the shopping credit and switching rates have been low, and in these states it's obviously the switching rate is a function of an administratively determined price, which may or may not reflect underlying competitive conditions.

In California, in contrast, the shopping credit is determined by the PX price, which is a market price, because it's relatively difficult to beat the market-determined PX price, switching rates in California have been low.

On the surface, at least, I don't have a detailed study of this, but eyeballing the data, there does not appear to be a close correlation between switching rates and price declines. Declines in

California, for example, have been significant, while switching rates have been low.

I think both price caps and administratively determined shopping credits can best be viewed as transitional devices designed to insure that consumers enjoy some savings and that some competition develops during the transition periods while the IOUs are recovering their stranded costs.

Whatever their merits in the short run, in the long run, they obviously are not consistent with the development of a competitive electricity market.

All of the state restructuring plans and corporate measures that reflect market power concerns, and obviously there's going to be more discussion of this in later sessions.

In some states these concerns have produced provisions specifically designed to disadvantage incumbents. These provisions may also have the effect of disadvantaging consumers by preventing them from obtaining the lowest prices attainable.

A number of states have placed restrictions on utility affiliates, some of them quite severe. This morning reference was made to rules in Massachusetts that essentially seem to have discouraged the Massachusetts utilities from having market affiliates.

California prohibits a utility from using its facilities jointly with an affiliate, thus effectively preventing the utilities and their customers from enjoying any economies of scope that might be present.

Affiliate restrictions frequently include some sort of limitation on the use of the utility's brand name, and there is a proposal in the Pennsylvania Legislature that would outright prohibit affiliate use of the utility's brand name, thereby depriving consumers of a potential source of information, something which should be of particular concern to the Federal Trade Commission.

Some states have gone even further. In Maine, there is absolute numerical limitation on market share. Affiliates are limited to 33 percent of the total kilowatt hours sold within the service territory of their transmission and distribution affiliate.

Most of the states plans require functional separation of generation from transmission or even divestiture of generation, and states that do not require divestiture often make it an attractive option, and in the four states where competition is already underway, a substantial amount of divestiture has taken place.

In California, all three of the IOUs have

divested all of their non-nuclear generation facilities.

In Massachusetts and Rhode Island, we've got the same situation, and even some of the nuclear generation has been divested, and in Pennsylvania, some of the major utilities, Duquesne Light and GPU, are in the process of selling their power plants.

Because the principal legacy of regulation is an inefficient and costly stock of generating capital, the restructuring discussion generally has focused on introducing competition into the generation -- into the generation sector and on efficient pricing in that sector.

If, however, one of the principal goals is to rationalize the power industry's capital stock, then the structure and efficiency of transmission is also of critical importance, because the relationship between generation and transmission is a close one.

Transmission and generation are obviously -- are obviously compliments, but they are also increasingly substitutes, and the pricing of -- the pricing of transmission can determine long-run investment decisions both for transmission and for generation.

As a corollary of restructuring, most of the states are either requiring or strongly encouraging

their transmission owners to turn control of their networks over to independent system operators, and the Federal -- and the FERC, obviously, which has jurisdiction over the trance -- over transmission, has also been promoting this concept.

The ISO framework is designed to constrain market power and ensure nondiscriminatory open access to transmission facilities, and this is achieved by separating ownership of the transmission network from its operational control.

As indicated, however, the -- most if not all of the states already are requiring functional unbundling, and many IOUs have divested their generation facilities and become essentially transmission-owned companies.

In addition, FERC orders 888 and 889 also address the open access this issue, but we basically have the situation where transmission-only companies are turning their assets over to ISOs for the ostensible purpose of separating -- of separating the ownership control of the transmission.

The ISO framework, which has developed into the somewhat more flexible and preferable regional transmission organization model, which also includes transcos, represents a risky regulatory experiment. Requiring asset owners to transfer operational control

of their assets to third parties is rarely, if ever, done in our economic system and has not been done for other major regulated industries, such as telephones, airlines, railroads, and trucking.

In the ISO model, the ISO is supposed to be independent of all interests, but no one really knows what incentive structure is going to guide the ISOs. There is neither empirical evidence nor theoretical analysis to suggest that institutions designed like ISOs, that is in which ownership and operational control are separated, are likely to produce efficient pricing usage or investment decisions.

Indeed, we don't have any experience with institutions like ISOs. Both government ownership and economic regulation represent to different -- to varying degrees separation of ownership from control, and our experience with neither of these institutions has been encouraging.

The ISO/RTO concept is fundamentally flawed because it approaches the regulation of transmission markets as if it were a series of engineering problems to be solved and ignores the critical role that institutions and incentives play in determining economic behavior.

The states, together with federal regulators,

are in the process of creating economic institutions with unknown incentive structures and, therefore, unpredictable economic outcomes.

What, for example, will be the incentives of an ISO when it comes to maintaining and expanding the grid? Will decisions be made on the basis of economic or political criteria?

There is no reason to -- there is no reason to know we know how to operate a centralized regulatory system for the transmission network any better than we do -- than the current regulatory system has been operating. And as one commentator has noted on the issue of the incentives facing the ISOs, if the British -- this is Alex Haney in a recent Electricity Journal, if the British experience is any guide, motherhood injunctions to be good achieve little, and this issue will rapidly come to the fore.

In conclusion, after the current transitional period is over, it will be desirable to simply eliminate barriers to entry, remove as many regulatory intrusions as possible and let the market go.

In the generation market, regulatory prices of all kinds should be eliminated, and regulators should also refrain from attempting to bias the market in favor of new entrants.

Incumbents should not benefit from any artificial advantages, but they should also not incur the costs of any artificial disadvantages.

And, finally, both state and federal regulators should be especially concerned about the new regulatory layers they are adding for the transmission sector without any evidence that they will produce desirable results.

MR. WROBLEWSKI: Thank you.

(Applause.)

MR. WROBLEWSKI: In the remaining time, we have about 25 minutes or so before noon, before we will break for lunch, we would like to take some audience questions, but -- and when we take the questions, we have two microphones that are right down here, if you will come on down, introduce yourselves and your affiliation, and then ask your question of the panelists.

I'm going to ask two questions first to start off to the panelists and then please just come on down.

First, I'd like to follow up on a theme that the Chairman noted in his opening remarks about evening out competitive opportunities.

Assuming a first mover advantage in the generation market goes to the incumbent utility, what

sort of mechanisms should state public utility commissions adopt to ensure that this advantage doesn't prevent the market for generation services from ever becoming competitive?

For example, there are many mechanisms, such as -- that can be implemented, such as the use of shopping credits; requiring the divestiture of generation assets; turning control of transmission assets over to an independent operator; consumer education and advertising campaigns; forced consumer choice of generation suppliers; prohibiting customers from receiving a rate discount if they don't switch suppliers; or even auctioning off supplier of last resort or default service responsibilities.

Which of these options, if any, or any others, do you think are necessary to ensure a competitive market, and which do you believe have been most effective so far in the states that have gone first, the four pioneer states.

And, then, as kind of a follow-up to that question, do the answers change for those low-cost states? There are a number of low-cost state representatives here in the audience today, and do the -- do the dynamics change a bit?

I'll open up it up to the panel, and whoever

would like to go first, please go ahead.

MR. ANDERSON: Would you restate the question? I -- sorry, sorry about that, I had to.

MR. KAHN: Well, the first mover advantage is real, unquestionable. The question is to what extent should public policy deliberately bias the competitive process thereafter in order to offset it?

What you really are raising is infant industry or infant company arguments that companies may lack an initial period of which they really require some special preference in order to have a fair opportunity to prove themselves.

Well, the consensus of most economists, which, of course, means you must all agree, is that one ought to be very suspicious of that argument, that the best thing you can do is equalize competitive opportunities.

Mr. Anderson, I think, will be surprised at how thoroughly I agree with so many of his recommendations. I agree strongly that the -- we need very strong antitrust enforcement, and anybody who has seen my interventions on behalf of the Department of Transportation, which has similar authority, it has Section 5 authority, just like the Federal Trade Commission, will understand that I by no means mean we shouldn't have vigilant enforcement of the antitrust

laws.

Once you go beyond that, infants rarely grow up. It is very dangerous to succumb to a pressure to bias the competitive process, and particularly without actually looking at whether or not there are real first mover advantages that may be offset by corresponding economies of scale and scope available to Montgomery Ward or Sears Roebuck or Dupont or Minneapolis Honeywell -- that shows how old I am, it's Honeywell now.

So, don't proceed on the simple assumption that everybody loves his local utility company and therefore nobody's ever going to depart, and this isn't really an opportunity for fair competition.

I think the main thing you can do is give competition a chance to work and enforce the antitrust laws.

MR. WROBLEWSKI: Mr. Popowsky?

MR. POPOWSKY: Yeah, we did not -- well, first off, I guess the answer to your question depends on what your goal is. If your goal is to get maximum retail competition and generation services, I suppose the divestiture route is probably the -- would have been the best way to go, because then you're basically taking away from the company -- from the monopolist that is already providing the distribution service, their

ability to just sort of add on generation service as a -- as an easy complement to their distribution service.

So, if you -- if that's your goal, is to maximize competition in generation services, probably divestiture is the best route.

That still leaves open the question, though, of supplier of last resort, which I guess is still the -- I think hangs over this whole discussion, because if you think that there's going to be a supplier of last resort, then the question is, who is that going to be, and what price are they going to charge? Is it going to be whatever the market will bear? Does that make sense? I don't know. Or is it some sort of a regulated price, and if it is, who's going to provide that?

Now, again, if you want to maximize competition, you should probably auction that supplier of last resort service off rather than simply have it fall onto the incumbent. You probably will get more bang for your buck if you had some sort of an auction of that supplier of last resort service rather than simply let that stay with the incumbent.

MR. LENARD: Yeah, I think -- I mean, I'm not exactly sure what is meant by maximizing competition, but presumably the goal -- the goal of competition is to

get a competitive solution. It doesn't really make any -- which is a competitive price and competitive bundle of services. It doesn't really make any difference.

I mean, counting competitors is not -- is not -- you know, that's not the way to necessarily determine whether -- you know, whether the competitive outcome has been reached. And it seems to me what you want to do is you want to -- you just -- competition is created both by actual and potential competitors.

So, you basically want to have free entry and, you know, any -- I think as Fred was saying, I mean, any attempt to give artificial advantages to -- to new competitors is just -- really runs the risk of creating inefficient competitors who -- actually who will not be able to sustain themselves in a really free market, and then you have an additional public policy problem with what to do with them.

MR. ANDERSON: I'll make a few comments. First, I mean, what I'd like to see, ideally, is that you go out and you separate the industry into generation, transmission, distribution, merchant, billing, every other one -- physically separate them, make them competing companies, and immediately you've reduced a lot of the problems. Don't give anybody any guaranteed customers at all. Don't have a monopoly default

service. We don't have a default service -- we don't have a supplier of last resort for bread or milk or anything else. We don't need it for electricity. Take care of low income people just like you take care of them with other social service programs, and then go out and educate, then do a role for education.

But that's ideal, and it ain't going to happen. That's up in the clouds. That's back in the days, you know, when I was a professor, I'd love to talk about this for great lengths.

So, in reality, what are we going to do? We are not going to have an ideal situation. It's going to be messy. Competition is messy. It always is in every other industry, and it's going to be in this one.

So, therefore, if you're going to err, in my view, you err on the side of getting people to shop. That's going to be the way they are going to educate themselves more than anything. The reality sets in when they actually are out shopping. So, you err on that side.

You recognize that you're starting with an entrenched incumbent utility that has tremendous amounts of benefits, and you're not going to order divestiture, so you order operational unbundling, functional unbundling doesn't go enough, and we don't want to get

into the details of what all that is. Separate as much as you can the components that have the potential for cross-subsidization. Work for nondiscriminatory access on the essential monopoly facilities, and there will be some of them left for a long time, certainly transmission and the wires to the house, and then educate.

These things, I think, working together will come out. Here's where I compliment Pennsylvania so highly. If there is an error, it's erring on the side of getting people to shop, and I think the citizens of Pennsylvania are learning much more rapidly than anywhere else.

MR. WROBLEWSKI: Thank you.

The second question that I have is -- I'm glad you went last, is following up on -- you've talked about competition has brought for large industrial users substantial price discounts because of their substantial buying power. What policies do you favor that state regulators, if any, should they adopt to ensure that consumers get the benefit, the same benefits, that the large industrial consumers are getting? Anyone can answer that.

MR. ANDERSON: Yeah, I guess let me start. Let me say that I hear a lot of times about discrimination

and that the price per kilowatt hour or price per kilowatt for large customers is lower than it is for smaller customers, therefore there has to be discrimination. Think about that a lot. I mean, if you buy milk by the tanker truck load, you are going to get it at a lower price per gallon than if you buy it in a half pint container in the local 7-Eleven. And even if a residential customer buys it in a half pint container instead of buying it by gallon, you get a different price per ounce or per gallon or whatever else. So, you have to look very carefully.

I think the FTC has a real opportunity here to look very carefully and start defining are you comparing apples with apples? Are you comparing the same product with all the services that go with it between the two?

I don't think there's anywhere near the amount of discrimination out there that a lot of people talk about, but then more specifically, what do you do to make sure that these benefits come to the small customer?

Well, you have to make sure that they have a real opportunity to shop. You know, the bad news about California was that they collected stranded costs over a four year period or five year period, I can't remember which one it was, and nobody gets any benefits for

shopping, and so, therefore, they didn't shop. I mean, 1.3 percent of the California folks have shopped.

The good news for California is that at the end of that four or five years it's going to be over and we ought to be able to really see some shopping going on, and as Commissioner Conlon is saying, it's really going to be only a three-year period.

Make the opportunities out there for the customers to do and make it available for marketers, and they'll come in and provide those products and services for the small customers. That's where the real advantages are.

MR. POPOWSKY: Yeah, I think -- I hope people realize there's a fundamental -- what I consider a fundamental principal question here between the difference between the -- I call it the California model and the Pennsylvania model, and I think when you say how do you get benefits to consumers? I think there are two ways to do it.

One is to try to get consumers the benefit of the wholesale power exchange price. Give customers direct access to that wholesale power exchange price, which I think is the model that Dr. Kahn is arguing for, and I think that's the model in California -- I'm not quite sure what happens at the end of the rate freeze

period, is anyone obligated? Is a utility obligated to continue to provide that PX price to the consumers?

MR. CONLON: Not by the California Commission. Under FERC, under their market-based program, it required them at least for a while to continue.

MR. POPOWSKY: Okay. And as long as that happens, you still have competition. Now, I still -- but that's okay, because you're getting the -- in other words, if the marketer can't beat the PX price, you are not going to have marketers come in in California, which is a -- like I said, that's one way to get the benefits to consumers, is by giving them direct access to the wholesale market price.

The other way is to try to go the Pennsylvania route, which I think has been adopted somewhat in New Jersey, which is to essentially start with the utility's embedded price, reduce that by the stranded cost -- by the way, the utilities get full stranded cost recovery in Pennsylvania. If anything, they're over-recovering. But in other words, use the retail shopping credit methodology as a way of creating a -- the ability for -- for marketers to get into the retail market as well as the -- as the wholesale market.

And I think there's a good debate going on across the country as to whether the additional benefits

of innovation and other benefits of -- at retail competition, new products innovation, will outweigh the additional costs. But I think that's the fundamental debate here.

MR. KAHN: I'll try to answer it very briefly. Number one, I think I would worry much less than your question implies about so-called discrimination, that that road leads right back to reregulation. We will have to rely on competition, and I certainly agree with the implication of Mr. Anderson that competition -- at that level, stands the greatest chance of being effective. That's number one.

Number two, however, when he says and other people say, you have got to give people incentive to shop, you are playing God. You give them the incentive to shop by having a shopping credit that is equal to avoidable cost. Then you leave it to them.

I mean, I'm a strong supporter of the First Amendment to the U.S. Constitution. I don't believe in establishment of religion, but I think every regulatory session should begin with the Lord's prayer and emphasizing, and lead us not into temptation.

MR. ANDERSON: One comment on that, and while I agree with the theory of Dr. Kahn, there is absolutely no doubt about it, I think we all have lived through

about 15 years of avoiding cost calculations, and let me just say from a regulatory process, a calculated avoiding cost is a very, very slippery slope that I don't want to go back down again.

MR. KAHN: Yeah, but you are talking about a regulated credit, and, therefore, what do you propose as the method of determining that regulated credit if it's not avoided cost? It's either that or playing God. At least in the case of avoided cost, you're looking for something that is proper. When you start playing God, you're -- now you are violating the First Amendment of the Constitution.

MR. WROBLEWSKI: Thank you.

Do we have any audience questions?

MR. KAHN: And, besides, the avoided cost is the pool price, which is an objectible, observable price.

MR. WROBLEWSKI: If there aren't any more questions from the audience, I am going to ask one more. I touched on it in the first questions in terms of the problems that -- the states that have moved so far up in the high cost states, and what problems do you foresee in terms of low cost states moving forward, and what is part of their reluctance to move forward?

MR. POPOWSKY: You know, just -- yeah, I think it's no coincidence that the people on the first panel

were all from states with above average prices, and I think that's generally true. That's one of the reasons that I'm very frightened about any kind of federal legislation that would mandate retail competition in low cost states. I think they should be very careful to make sure that there are some benefits to consumers before they simply just assume that -- that they will be better off.

So, I think that low-cost states -- you know, I think in the long run there are going to be benefits to having competitive generation markets. I'm glad that the next plant's being built in Pennsylvania will be built under market pressures rather than going into a rate base like the $7 billion we put in for Lemerick (phonetic).

So, I think that's going to be true in every state. But as to whether every state wants to go quickly to retail competition, I think there's a -- that low-cost states need to be careful.

MR. ANDERSON: I have trouble with understanding what a low-cost state is. I mean, and as soon as we go down the slippery slope of saying that anybody that's less than the national average is low cost and anybody above the national average is high cost, I think that's a little difficult.

I'd rather take what the power costs that come out of the new combined cycle combustion turbine or something along that line and say that's the market price now, that ought to be the market price, and anybody that's below that is low cost, and there are a couple of states, by the way, whose average rates are certainly below that. I'd put Idaho in that category. I mean, I think Idaho has very, very low costs, but almost everybody else is higher than that.

I think at least that competition will bring about tremendous innovation on the supply side -- on the production side, and that will have benefits even for many states that say that they're low cost today. And I say the southeast is one of these where it's just a fallacy for the southeast to stand up more righteous than ever and say, We're a low cost area, so therefore we don't need competition.

I think competition will come in and not only give the new products and services that we talked about the equivalence of all the things that Commissioner Tate mentioned, I think it was -- and on the telephone side, the faxes and cell phones and all of this, a multitude of different technological innovations that no one knew about, will come to the electric side. But on top of that, we will have low cost generation installed, and

that will drive the prices down for all customers.

So, I think we have an awful lot to go. I think we, customers, have let this issue get away from us, like we've let a lot of them, and not called people on what low cost really is.

MR. WROBLEWSKI: Anybody else?

MR. CONLON: I have a question.

You know, California has got 2.4 cents as the power exchange price and energy price. Now, what states have lower energy prices than 2.4 cents other than 100 percent hydro? I mean, assuming that it's not hydro, I mean, who has a lower energy price than 2.4 cents? I --

MR. ANDERSON: I look at delivered prices. My members have to pay a bill. You know, I mean --

MR. CONLON: Well, no, but I mean it costs more to go through a downtown San Francisco than it does to a rural area, the cost of distribution has got to be more. So, it depends where you're -- if you're out in Timbuktu, I'm sure your distribution and transmission rate would be lower, if your plant's right next to a transmission line. So, it depends where you are, but the energy price I think is going to be hard to beat 2.4 cents, if that's what the PX price is.

MR. ANDERSON: It might be the case.

MR. KAHN: I take it the big difference is the recovery of stranded costs. I think we have to agree with Mr. Anderson, what he says, the recovery of stranded costs, how did he say it, is the antithesis of competition. Of course that's true. No one -- you wouldn't recover stranded costs if you had a completely competitive system, but what that simply passes over is the fact that that's a heritage of the past period regulation, and how you decide on the recoverability of that, which admittedly would not be recovered if you had an openly competitive system, to what extent is there an obligation that carries over from the past, and to what extent can government agencies change the rules of the game, opportunistically, all of those are familiar and in large measure political questions.

MR. ANDERSON: And Commissioner Conlon, I think that that's correct. Once the CTC's gone, once the stranded costs that are allowed to be recovered are over and your PX stays at 2.5 cents, and delivery costs are reasonable, and I know that's a lot of ifs, you may have one of the best markets around.

MR. CONLON: Former Commissioner.

MR. ANDERSON: I understand, I understand, but some people get the respect no matter what it is.

MR. WROBLEWSKI: Okay, well, I think that's

going to wrap up this morning's session. We will start again back at 1:15, Session II, Panel A, on how states have addressed existing market power.

As Susan DeSanti mentioned in her earlier -- in her introductory remarks, in the back of your handouts is a list of places to go for lunch that are close by. So, we'll hope to see you back at 1:15. Thanks.

(Whereupon, at 12:00 p.m., a lunch recess was taken.)

AFTERNOON SESSION

(1:15 p.m.)

SESSION II:

EXISTING MARKET POWER IN RETAIL MARKETS

PANEL A:

HOW HAVE STATES ADDRESSED EXISTING MARKET POWER?

MR. BALTO: Good afternoon. It's our afternoon session of our program on consumer protection and market power issues in the electric utility industry. I'm David Balto and I'm co-moderating today's panel. I am the Assistant Director of the FTC's Office of Policy and Evaluation. I wanted to put in a plug for my office. Our office, besides being the think tank of the FTC, which means we're just a small part of the think tank, is also sort of a case generation unit. As industries deregulate, there's an increased need for antitrust enforcement, and should any of you think that there's a need for antitrust enforcement involving any particular practice or area, please give us a call and we'll be glad to look at it.

Second, I wanted to remind you that at the back of your written materials are a list of all of the FTC comments that have been filed over the past few years on electricity deregulation issues. I think these provide

an excellent and comprehensive perspective on some of

these issues we're going to deal with over the next two days, and you can find them all at the FTC's website.

I have the privilege of introducing this afternoon's panel. Three of the speakers we already know. Greg Conlon is the former President of the California Public Utilities Commission. Nora Brownell, who will be the first speaker, is the a Commissioner on the Pennsylvania PUC, and Herb Tate is a member of the New Jersey Board of Utilities. Let me spend a minute introducing our fourth speaker, the Attorney General of the State of Wisconsin, Jim Doyle. Jim Doyle has been the Attorney General of Wisconsin since 1990. In the electricity area, he's known for his work, most recently as the immediate past president of the National Association of Attorneys General. There, he spearheaded a task force on electricity deregulation that held a number of important hearings which grappled with some of the issues we are going to deal with today. We look forward to hearing General Doyle's remarks.

With that, let me turn this over to Commissioner Brownell, who will be our first speaker.

MS. BROWNELL: Thank you. They actually are letting me go first because two of the distinguished attorneys from our Commission, John Lovett and Kirkhouse, wanted me to share with you the fact that

regardless of what I said this morning, I really do believe in due process, and we would like you all to come to court when somebody brings that up, and I do believe in democracy. It's hard, but -- so, guys, in the interest of full disclosure --

MR. BALTO: We gave Nora a quiz on the Constitution over lunch and she passed with flying colors.

MS. BROWNELL: I would like to make just a couple of observations before I start, and just a reminder, 96 percent or 95 percent of incumbent Legislators are re-elected, and in spite of some comments made this morning that the savings are coming out of the hides of utilities and presumably their shareholders, our experience in Pennsylvania and I think pretty much everywhere else is that after the settlements, the stock price goes up, in one case 70 percent. So, I'm hard-pressed to see that the incumbents are, in fact, suffering in any meaningful way under the new advent of competition.

The thing that we also concluded at lunch other than my passing the constitutional muster was that none of us can really define market power, and I think that's going to be a huge challenge going forward. Will we know it when we see it? Will we be able to define the

abuses? And you're going to hear various aspects of it I think from all of the speakers, but also a plea I think that I have made to the FTC and to our Attorney General is that we really need to focus on this, and we need to make sure that each of us is fulfilling our responsibilities and we know what our responsibilities are. And I think that's going to be an enormous challenge but an important one going forward.

I'm going to talk a little bit about our legislation and then some of the things that we've set in motion, and certainly this is a work in process. In our legislation, structural separation is permitted, but it is not required. At the end of the day, I think that's going to be something that people may want to revisit. Incumbent utilities must provide jurisdictional transmission and distribution service to retail customers and all electric suppliers, including affiliates, on rates, terms of access and conditions that are comparable to the utility's own use of the system.

The Commission is charged with monitoring the market for signs of unlawful use of market power, and we are authorized to initiate investigations regarding market power and refer findings to the appropriate state and federal agencies for further action, and I talked

this morning about several marketing -- potential marketing abuses that we referred to the Attorney General's office.

The legislation expressly provides that this is not limiting any other remedies that private parties may have and certainly may utilize. In Pennsylvania, we provided for semi-annual reporting requirement for each incumbent utility and EGS in the first two years of electric competition. The requirement begins in July of 1999, and to show you how on top of it we are, we have just deferred that until February of 2000. Provides for the following information from each utility and supplier. Customer usage and megawatt hours for each customer class, and each utility is also required to provide utility megawatt hour sales for each customer rate class and megawatt hour sales by each of the top five suppliers serving on that utility's system. The information is to be provided on a county and zip code basis. That is also being negotiated as we speak. The reason for that inclusion was to make sure that there is not evidence of red lining. There may be other ways to make that determination without the collection of that data.

Interim codes of conduct have been established pending formal regulations, which should be completed in

the next six months to the year, which set forth rules for affiliate dealings between an incumbent utility and its retail generation arm. Competitive safeguards are provided to set forth the rules of the road for dealing with between -- for dealings between incumbent utilities, their retail affiliates and suppliers, and as I mentioned this morning, there's an accelerated dispute resolution process, which is critical to the process.

The competitive safeguards include that neither the incumbent utility nor its affiliate supplier will receive any unreasonable preference regarding generation services. We saw some suggestion of that, nothing that we were able to prove, but that's something to be looking out for. Tariff generation services will be provided to the retail affiliate in comparable manner as though tariff services are provided to the affiliate. For those of you who have been watching the war of the local telephone competition, that is a big issue.

Affiliate transactions will not involve any anticompetitive cross-subsidy. That is very, very, very difficult to prove and to monitor. Something that I'm not sure our commissions have either the skill sets nor the manpower to deal with and something that going forward we hope that other agencies will begin to take a look at.

According to our settlement, some retail affiliates of the incumbents cannot participate in their own marketplace for some period of time, and some utilities must prove monthly reporting on generation transactions with the retail affiliates, which apprise the Commission of amounts, pricing and other terms and conditions.

Under the codes of conduct, the incumbent utility shall not provide any preference to its retail affiliates regarding goods and services, including information, complaint processing and responses to service outage. There's a prohibition to tying arrangements. There's a prohibition to joint marketing. Once again, very difficult to prove.

I'll give you one example. I was watching television recently and noticed that an incumbent had clearly done the major media buy for an hour-long sports show. The incumbent was running ads, but their affiliates were -- their affiliate was also running ads, and presumably got the benefit of the discount that the incumbent enjoyed by buying the hours worth. Is that cross-subsidy? Is that tying them together? I don't know, but it looks like that to me.

Some settlements provide for asymmetrical pricing. My friends in the gas association would have

some comments on that, and affiliated transactions to prevent cross-subsidies. Some agreements call for functional separation of employees in the retail and utility functions.

One of the keys to our early success, I think, is the existence of one of the best ISOs in the country, and Joe Roring is here, and I would encourage you to meet him at the break, and I know my colleague, Commissioner Tate, is going to talk more about the PJM, but they also have a market monitoring division which will cooperate and has, in fact, cooperated with our commission and others in providing information relating to the market.

One facet of the PJM is the emerging transparent energy market. If you can see all the transaction and pricings, as I think Commissioner Conlon mentioned, market power is less easily exercised. The fact that it is an independent ISO, and it is truly independent, has a great influence.

Information is essential, probably the best market monitoring process we have is suppliers watching each other. All of the complaints have generated from the participants in the market. And frankly, customers who begin to perceive what they believe is an abuse of market power. I referred this morning, for example, to

letters that customers received from the incumbent that basically told them that the only way to get the mandated savings was to stay, that choosing was confusing and, in fact, reliability could be at risk.

Customers were absolutely outraged to receive that letter. They were more outraged when they suspected that they were paying a -- for it. So, I think that there are formal mechanisms, and certainly we need to get those in place, because we don't want to disadvantage the incumbent. At the same time, the power of the incumbency is enormous.

We need to look at some of the more difficult things to define, not only sheer numbers but those subtle messages that consumers get, and certainly we need to be very clear, both with our ISO and other mechanisms, to make sure that access to the system is, in fact, being provided for on an equal basis.

Functional separation, as I mentioned earlier, is very, very difficult to monitor, and I don't know what the right answer is. There are days when I think divestiture was, in fact, the right answer and may prove to be down the line. Structural separation is certainly a lot easier to deal with than functional separation, and I think that's something you want to take a look at going forward, because I believe that if in a couple of

years there's only one dominant player in the market, we can say we've introduced competition, but we do not get the benefits from competition. We know that from a life-long experience in many markets. If there's one dominant player, there's no incentive for innovation, which is ultimately the best opportunity in restructuring, and certainly there's no pricing pressures. So, it's not enough to say that one player with a couple of niche players will do it. Competition means lots of players and lots of interplay that bring all the opportunities.

Thank you.

(Applause.)

MR. BALTO: Thank you, Commissioner Brownell. By the way, I forgot to introduce my co-moderator, Chuck Gray, the General Counsel and Executive Director of NARUC, who many of you are very familiar with.

Now it's time for Commissioner Tate from New Jersey.

MR. TATE: Well, again, following Commissioner Brownell is not going to be easy for me to do, because she did cover a wide array of issues that State Commissioners have to face, and since we're here at the FTC, my role has been to try to integrate what we do over on the State Utility Commission side with what you

are trying to ascertain as a role in the future on a marketplace which is yet to really develop or mature.

Market power means a lot of different things to a lot of different people. When we -- when we talk about it traditionally at the first level, you know, we're thinking of price manipulation. How can somebody have so much power in a marketplace that they can manipulate price on customers and artificially manipulate it, inflate it to levels that a real marketplace wouldn't allow for it to happen?

In other words, they are an unregulated monopoly. They are exercising power where there is really no competitive pressure. But there are other types of market power in a competitive marketplace that we really have to be mindful of, as well, and that is the perception or the belief of customers that they have opportunities, that they can, in fact, make changes, that they can switch.

If you were here this morning, I mentioned that we've been doing consumer education programs, we've been amassing data back from focus groups and surveys of people, and it's interesting to see that people have a much different view of what's going to happen to them in deregulation than we, the regulators, initially thought. 63 percent, nearly two-thirds of the people

that we polled in the state of New Jersey -- and our surveys were of sample groups of about 5000 to 7000 people, so these were not small groups -- indicated that they thought that choice would allow them to switch their distribution companies.

In other words, they had no conception that there's a difference between a generator and a distribution company; a supplier or a deliverer of the service. They thought that choice meant that they could change from their utility.

There were about 60 percent of the people who were concerned, though, that if they did make a choice to switch from the utility company, that they would be punished for it in terms of fees for other services that they may not have changed, for other things that could happen regarding the reliability of the system. And then there were people who felt that, well, if they switched to a supplier, well, how do they get the electrons from Arizona to New Jersey, and what do I do when they don't deliver my electrons to my house, and how do I get back at them? Reliability of the system. What happens when I have a billing dispute? What happens when I have a customer complaint? What happens when I need that interplay?

Now, I've taken some very raw examples in

dealing with what is a very heady topic here, but really when we're talking about market power, we're talking about not just price manipulation, whether it be on the wholesale or the retail marketplace, but on a power over customers that makes them feel that they can exercise a choice, want to exercise a choice, that they won't be confused, they won't be manipulated.

I mean, there are varying degrees of the kind of issues that we have to grapple with when we're talking about fostering a new marketplace for robust competition or mature competition, and in and amongst these topics about customer perception, we have the one -- the one issue that was brought up at the -- at the earlier meeting, at the earlier session, which has to do with basically what we call supplier of last resort.

A supplier of last resort is no small issue, whether you -- it be looking at it as a pure marketplace issue for competition or whether you're looking at it from a political standpoint or a social standpoint as a regulator, because for the most part, as I indicated in my first speech, the leverage on customers or the belief of leverage that customers have about them is this is their home. This is what their home emanates from, electricity, power; natural gas, electricity. This is what makes us safe. This is what, you know, makes our

home run, makes it work.

Now, when people think about that, it's very difficult to start alluding this to bread, milk, eggs, other things in the marketplace, because people don't view this commodity, which we shy away from calling it a commodity. Even in the electron portion, because it's an essential service of life, and when you get to that, that's a perception the customer has about what the influence is of the person or the group or the company that they're dealing with.

So, when you talk about supplier of last resort, on the one hand, for the suppliers, the benefit here is that they dramatically -- when you -- let's say, Well, we are going to put this out for competitive bid, it's great because it reduces their acquisition costs on customers. As you heard before, there were some different ranges that were given about marketers and suppliers having to go out and actually get customers and what it costs them.

Well, when you do a competitive bid like this, you're basically -- if all the predictions are right, you may wind up getting 60 to 80 percent of a marketplace without having to do any marketing whatsoever. That's why you will see from state to state bigger and bigger pushes for a situation called

aggregation, municipal aggregation, all right? That's another short tool to get past marketing costs for acquisition of customers.

Now, acquisition of customers, market power, entry, to provide choices for customers, you know, how does all this interrelate in terms of what we have to deal with on the issue of marketplace? Well, it really is the crux of the game. It's really how do the benefits outweigh the costs of trying to get entry into a marketplace? I mean, we will hear all things about delivery of price to transmission and distribution networks, and those things are going to be really important, and a lot of marketers will look at this as, Well, the time isn't right because we have these stranded costs that have to go away. They've compressed the margins, depending upon how the states have structured their shopping credit, how they've structured their discounts, about being able to kind of deliver a price, but again, it -- this is all that this game is about, that is, delivery of cheap electrons, that's your entry into the customer-based marketplace, well, then, we've narrowed our issues on market power. We've really looked -- we're looking at a very narrow window here in terms of what is going to be the competition and what is competition going to be about.

What I really think that we need to keep an open mind on are some of the issues that Commissioner Brownell looked at, and that is the advertising issues, the issues of cross-subsidization of leverage of brand name, of looking at how a utility company and its affiliates are interfacing in terms of the public in the way it's putting its persona across and how it's using those two entities to leverage off of each other. Those are the affiliate relations standards which are very important from state to state.

I am in a precarious position right now, because we have these standards in front of our board at this very time for a vote. So, I'm going to have to be very careful about what I say, because I do believe in due process, as Commissioner Brownell has mentioned. But what you really need to be sensitive about in terms of, I think, regulator decisions is, Well, you need to have a supplier of last resort in this marketplace. All the Universal Service Fund talk is not going to work in terms of who are the people who are most vulnerable and at risk?

Right now, the consumer information is showing us that those who are really the hungriest about wanting to know about how this new system works are low income people. They want to know whether or not there's a deal

out there for them. But at the same time, that -- this is the group that is least knowledgeable about how electricity and electric markets work, and they are the ones that are more apt to answer the questions wrong about what currently exists today, but they do have a hunger to know to see whether or not there should be a switch.

And it's interesting, because the supplier of last resort concept is designed to provide a seamless network of supply to customers so that they would not feel intimidated about switching. Now, that -- that may seem antithetical, but having a supplier of last resort, and initially it's with the incumbent utility, is designed to give people a feeling that they can switch and that if things don't work out, they have another system that will back them up for supply on a continuous nature.

Now, the fact that the supplier of last resort is under a state mandate to provide a certain level of discount, in some cases, as it is in New Jersey, and has certain requirements as a regulated service, BGS, basic generation service is a regulated service, you know, it smacks of all the bells and whistles of regulation, but in essence, when you look at what customers are asking about, the concern, the trepidation about entering into

this marketplace and looking as to whether or not they can switch or not, once they find out that they have a backup so that they can experiment, then they feel freer to leave. They feel freer and more comfortable to go out and really experiment.

Now, that's why, you know, we -- you can debate a lot of these things on a theoretical basis, but one of the things that we always have to get back to is basically customer-based information. You have to have information and data on customers, whether you be a public utility commission, whether you be an independent power producer, a utility, whether or not you're a consumer group advocate, you have got to have consumer-based information at your fingertips, good, reliable information, because everything that we're talking about here, despite the fact that California's been doing it for maybe four years and Pennsylvania's been doing it for two to three, we have very little experience in terms of what customers' reaction is to all of this, and that's where we've tried to start out with at the very beginnings of our marketplace, is to track customer perceptions, customer inquiries, customer reaction, misperception about what we've done and what we are about to do, because it's very difficult to talk about theoretical entry into this marketplace from

supplier side and the acceptance of that from consumers unless we really know what's on people's minds.

So, I hope I didn't confuse everybody even more here, and I know that you've been looking for some gems on maybe some specific regulatory issues, but I thought I'd just try to bring to you a more expansive view on what we grapple with on the state level when it comes to issues on market power.

Thank you very much.

(Applause.)

MR. BALTO: President Conlon.

MR. CONLON: Well, my comments this morning were -- I tried to stay away from market power, so I am going to try to finish up with that today, and I did prepare a paper for this -- the two subjects combined, and they tell me that it's going to be -- that the paper will be on the FTC website. Ftc.gov, because there's a lot of stuff that I'm skipping around and probably missing, but I want to cover the highlights of what I'm trying to say.

And I think that market power was the number one issue that we struggle with in California, because without mitigation of market power, we could have saved our efforts. Because I think we saw in the UK, we spent two weeks over there, two Commissioners plus a group of

staff and other interested parties from the Legislature and elsewhere, and I think we came back with a clear understanding that they had not mitigated market power in the UK, that the generation, particularly the horizontal market power, of National Power and Power Gen, and they each had 40 percent of the market, and the pool was not producing competitive prices and that, you know, we had to do something different in California if we really were going to go through all this ordeal.

And it's interesting, we had the draft of the blue book with us. So, as we read that blue book and realized the dramatic proposal that was being made, that we focused clearly over there that this was a serious matter, and we had to come back with a serious answer. So, I think that it -- and we had the opportunity to talk to all the players in the UK, and I think the most memorable conversation that I had coming back from the UK was meeting with the Minister of Energy during the -- Margaret Thatcher's cabinet at the time, Cecil Parkinson (phonetic), and we asked him why they only had two generators, because it just seemed apparent to everyone that that was not enough.

And he said it was very political and very practical. They had -- they were not only mitigating market power, but they were privatising government

entities. This was one vertically integrated government entity. So, they had to not only de-aggregate it, but they had to privatize, and the problem was they couldn't get five entities privatized quickly enough before the next election. So, it was a very pragmatic approach when they wound up with two when they wanted five. I said, how did you get five? And they just-- you know, they felt that if no one who had more than 20 percent of the market that that would in effect be sufficient to mitigate market power. And that was, you know, that was my education in economics 101 on that the firing line and it just seemed to set well with me that if you never have more than 20 percent in any one holder, that that was going to mitigate market power, because it -- it's just, I think last week, National Power announced that their market position is now 20 percent of the market. So, it took them nine years to go from 40 percent down to 20 percent. So, I think just this last week, they finally have a situation in the UK where no player has more than 20 percent of the market. So, I think that that -- that was a predicate that we needed to do in California restructuring, and that's -- and that's -- that was our primary driver in market power, was to mitigate horizontal market power into generation but also vertical market power of -- and there I think it

was more the lack of trust of the major customers, the independent power producers, and the utilities. I mean, it was so bad that in our hearings, you know, as I mentioned, we had -- I'm guessing, -- 50 or 60 days of hearings, eight hours a day, and this was a continual battle between these parties, that they did not trust the utilities at all. Not somewhat, they didn't trust them at all, that they would somehow, no matter what we did, if we let them to continue to operate the transmission grid, that they would do something to, you know, congestion would appear where it hadn't appeared before and things would not happen that would normally happen. So, I think, again, we got the clear message that we needed to mitigate market power on the transmission system and then on the remaining customers that the utility was going to maintain, how they were going to buy their power, and then on the horizontal, the generators.

So, just going through those, on the vertical market power on the transmission, again, we felt I think that something had to be done and, you know, I believe that looking at the UK model that divestiture would have been the ideal solution, and we -- but our problem is we were under a political process. No Commissioner has been re-appointed in California in over 20 years. So,

we were under term limits. There were five of us, we had six years. Two had four years, one had two years, and two of us had six years when we started this. So, we had to get done in five years. Somebody said, Well, you can't do overnight. We said, Well, we have to get it done in six years or it may not get done. So, that was our predicate, we had to move quickly.

So, divestiture, I think, the IOUs convinced me, anyway, that we could not do it in five years. If nothing else, they couldn't find the bond holders to get the bond holder approval to divest the assets that quickly enough that we could have divested -- now, in hindsight, I'm not sure that they -- because it's less than 10 percent of their assets. You have got to remember, the transmission is less than 10 percent of the assets of these utilities, even though it's a billion dollars. Their balance sheets are $20 to $25 billion. So, when they divest their transmission assets, they are not giving up their first child. I mean, this is less than 10 percent, for sure, of their assets.

So, I think that I -- again, I want to emphasize, I'm not a Commissioner, I'm no longer with the Commission. My comments are strictly mine, and I want to emphasize that if -- you know, if they had it to

do over again, I would have personally favored divestiture, but I don't know whether we could have got three votes to do it, and I -- and because of the time considerations, it really wasn't considered. So, the ISO was a second choice, and it was a nonprofit instead of a profit, and I think that was pragmatic. Two of the Commissioners wanted to have a profit scenario, but again, we thought the time constraints were such that a nonprofit entity would be better. And again, this is trust element, and the Chairman of the ISO will be here this afternoon, I believe, Jan Smutny-Jones, you can get his view on this, and his view will probably be different. He's still the Chairman of the ISO, so he can speak with more authority and more realism, but -- and I filed my comments last -- a couple weeks ago with FERC advocating Transcos, and I went through the same logic I just went through with my comments, and I think the comments are still -- there are still some on the outside, and they are also on the FERC website if you don't want to carry a lot of paper around.

But there again, I made the point that Transcos would be better than ISOs, but again, because of the issues of reliability, you have got to -- I mean, their issue at FERC is they have got to do it soon, not because they won't be re-appointed but because there's a

reliability problem in this country, and experts are saying that there's a reliability problem, and they need to move so that they get this done in a reasonable length of time.

So, I think on ISOs, that was our -- we adopted ISOs. It was our -- it was my second choice. If we could have got done sooner, I don't know whether we could have got three votes or not, but I certainly would have tried.

The second issue is the -- what happens to the customers who don't switch? Like in California, that's 98.5 percent right now still have not switched. So, how do you mitigate the market power of the utility from using their own generation? And I -- I haven't talked about the divestiture of generation yet, but assuming that they had some remaining generation, we were concerned about their using their assets before the market assets and so on. So, we felt that the power exchange, one of the benefits of a power exchange or a pool would be to make sure that all of the customers got the benefit of a, quote, "wholesale price," by establishing a power exchange that the utility would have to sell into all its assets or buy out of. And without that requirement, we saw the opportunity for cream skimming, that the best benefit of the PX is to

protect the small residential customer from cream skimming, and what I mean by that is, in all due respect to John and his group, I mean, there they have got all the benefits of size that will attract the lowest rate, and we just felt that if we were going to make this thing happen, that the smaller customers had to be protected, that they would get the same price for electricity that the larger customers do. So, the power exchange does that. Otherwise, the low cost generation assets would be sold to the larger customers and the high cost generation assets would be left, the dregs, to the smaller customers. So, with a power exchange, that the utilities had to sell all their generation into and buy all their power out of, that was mitigated. And I think that was -- that was the primary benefit of the power exchange.

Now, there was other benefits that were equally as important -- or not equally, but as -- certainly as important, and one of them being that it provided a liquid cash market that would allow a futures market to develop, which would allow new investors to come into California and make that $5 to $7 billion investment I talked about this morning that's sitting there at the Energy Commission waiting for siting. Evidently the PX price does give them enough comfort that they know what

the price of electricity is going to be today, they know what it was the last 15 months, and they know a good estimate of what it's going to be tomorrow, so that they cannot only hedge some of their investment -- how much I don't know, but I'm sure there are hedgers out there that will lay off some of the risk of their new power plants to not only mitigate their -- mitigate some of their financial risks, but to encourage them to build. So, the power exchange does several things, and I think that it's one of the lost jewels, if you will, of the restructuring process, because I don't think in many other states that the power exchange is seen other than as a facility to clear a price on excess power, as it has been in the past, but I think there's more there than just that. So -- excuse me, I want to make sure I haven't skipped over something that's important.

But both my paper at FERC and the one at the FTC cover this in more detail, more in depth as to the why these issues at the PX are important, but I think that -- I did want to add one comment that I forgot this morning, because they asked us to answer what were the best things that happened and some of the worst things, and I think the best things I covered and I left off the worst. So, I wanted to at least be fair and the due process and all those things you worry about, but I

think the worst thing that's happened in California is we don't have any demand elasticity in our power price. And I think that goes back, again, to the necessity of having a power exchange that gives hourly prices, that can come through to the market, and I want to give credit to -- to the gentleman here, Milton Marquis from the Justice Department who made this comment clearly to me two years ago or three years ago, at NARUC, at a NARUC meeting that I had never realized before, that the hourly prices not only provide price signals for conservation of energy, but they mitigate market power in the end result. I mean, if prices go to 40 cents a kilowatt hour or 50 cents a kilowatt hour and people are on a realtime price hourly basis, I know they will shut down their operation. So, you don't have to -- you don't have to interrupt them on an interruptible rate. They will interrupt themselves, because I know. We've got some of the -- for the first time, we had to interrupt customers in 20 years about three years ago, and we got some of the most irate letters you have ever read, customers who said even though I was on an interruptible rate, why did you interrupt me? And they were mad, and I'm just say that the cost that they bore of not interrupting was so great that they -- you know, if they had it to do over again, they would have shut

down. So, I think if the price spikes of the mid west and the price spikes that we had in California briefly are serious enough, customers will react, demand will drop, and market price will -- and market power will be mitigated.

So, with that, I think I'll stop and wait for any questions that you may have after the next speaker.

Thank you very much.

(Applause.)

MR. BALTO: And now we have General Doyle.

MS. DOYLE: Well, thank you for this opportunity. It's always humbling for me to be here with so many experts. I learn this stuff, you know, like many people for a few days, it's goes in my head, I sort of learn it and then I go on to other things and then I have to come back and learn it again. So, this has been a good opportunity for me to sort of relearn some of the basic issues. But I thought I'd mentioned a couple of the aspects of this from an Attorney General's point of view and then specifically from the Attorney General of Wisconsin's point of view.

On the question of market power and how do you address existing market power, and I'm talking from the perspective of a state that does not have retail competition and I would say has moved in a very halting,

some would say orderly process, towards that, but it -- and I want to -- and I want to talk a little bit about -- in a moment about sort of where we are in Wisconsin, but generally, for Attorneys General across the country, we come into this from a couple of different directions. Some of us have within our offices quite well-developed advocacy groups that appear before commissions representing the public. Others of us, as in Wisconsin, do not. We have to look for other kinds of little grants of authority in the statutes and so on to come forward in front of commissions, but we always -- there are two ways that I would say we do come in.

One is when a large-scale merger gets -- somebody comes in, a fairly typical scene is the president of a major utility in Wisconsin will say that he wants to come and speak with me, and we'll set up a meeting. I can almost be sure of what it is, and he comes in, and what he has to do is lay out the wonders of what is going to happen with this great merger that is now proposed, and I hear about all the wonderful aspects and all the new capital that will be there and all of the great investment that will be made.

And the concern, of course, is that we are going to flex our antitrust powers. In Wisconsin, we have a broad antitrust statute, giving the Attorney General

very broad powers. We work very closely with the FTC, and I thank them for all that they have done. And one of the interesting things in this area that I have found is that when we are trying to define market and trying to go through the kind of traditional antitrust analysis of one of these mergers, we are talking about some prospective future market that doesn't even exist today. So, we are -- these mergers -- and I will say this somewhat in sympathy with the utilities that are looking for them -- are having to be tested against a market -- at least in Wisconsin -- that doesn't currently exist but one in which we are trying to figure out what all of the future components of it will be and how this merger might actually affect a market that might come into being sometime in the future if either the federal or state government or both work to pass certain kinds of legislation and restructure this industry in a certain way.

So, I have had heads of utilities say to me in great frustration, Look, we are an entirely regulated industry today. We must -- we have all of our rates approved, and whether this merger happens or doesn't happen, tomorrow, we are going to be exactly the same industry. And I say, Yeah, but what about five years from now? And they say, Well -- he said, Well, we'll

see what five years from now looks like.

But in -- at least in the case of the largest proposed merger in Wisconsin, it did not go forward after the Federal Trade Commission and the State of Wisconsin, the State of Minnesota, raised some -- various issues, and it was -- and it was withdrawn.

The second time that these comes forward to Attorneys General is that often a very well-developed piece of legislation in which a lot of insiders have worked out a very carefully balanced piece of legislation to restructure the industry in some way or another suddenly lands on our desk, not because we are members of the Legislature, but in most states we are perceived as the -- as the spokes -- as the spokesman for the consumers of the state and as the antitrust enforcers, and so we are now asked to analyze and to give an opinion on a piece of legislation which, again, has usually been very carefully worked out by a certain group at the exclusion of other groups who now want to be heard, consumers and others.

And so we get thrown very, very quickly into the political mix on these issues, and why I bring these -- what I want to really emphasize of these two ways is we don't come into these issues with months and months and years of preparation and work on it, as those of you who

are in -- on commissions or in -- or in businesses that -- in utility businesses. We come on them very suddenly, and I think you will find around the country a very unevenness in the AG's offices on what kind of expertise is there to analyze these kinds of issues and how helpful an Attorney General's office really can be.

We -- several years ago, when I was the president of the National Association, really -- I highlighted based on surveys of our members of two or three issues that they wanted to focus on in that year, and utility restructuring was at the top of the list, which is a little unusual, because usually it's crime and fighting crime and so on that we get elected on, and so the thought that utility restructuring would be at the -- would be that high on the list was -- was very interesting.

And we held a series of hearings across the country -- I see a number of people here who were part of those, that were very helpful and tended to educate Attorneys General on these issues. It was in the wake of California -- right at the moment that California was converting over, and there were a lot of consumer issues that were already emerging, phoney claims of environmental protection and conservation and so on that were being made and other kinds of consumer claims, and

many of us in our own state legislatures were facing a lot of very strong movement towards restructuring.

In Wisconsin -- and I don't know if this is typical, but I would say that that movement has cooled significantly, and I'll -- and for a couple of reasons, I believe. One is, and I think this point was very abley made by the Commissioner from New Jersey, is that for all the talk about restructuring and all of the wonderful discussion that will go on in this room and elsewhere, it doesn't really reach out there to the public, that the concern of the public is am I going to be able to turn on my lights and not get -- have to pay rates that put me out of my home in order to make sure that I get these basic services? And all the talk about retail wheeling and spinning off generation and setting up ISOs, you know, is -- has very little play out in the political world, the that Legislatures and Attorneys General often respond to.

The second thing is that I think we went through a -- we always rushed through, and in Wisconsin it was certainly true and then the United States Congress, rushed through telecommunications deregulation so rapidly and in a way that I think of the great enthusiasm, the great promise of all the competition that we were going to see by this new world of

telecommunications, didn't happen immediately -- I would argue it really hasn't happened yet many years later in Wisconsin -- and the utility -- the move politically in Wisconsin -- and I think this is true nationally -- the move towards restructure really was following in the wake of the telecommunications. And I understand that they are two very, very different industries and all kinds of differences that can be made between them, but I would have to say, again, from a Wisconsin perspective, the -- the cynicism that developed over the great benefits of restructuring and how competition was going to be wonderfully -- new technology and very, very low rates, well, we have yet to see it, and we are wading through all of the issues that are very much at the center of restructuring in the utility of cross-subsidization and who gets access to the local grid and all of those kinds of things, we as Attorneys General are in the middle of all of those kinds of fights, and I think that -- I think that the experience there tended to cool the move towards restructuring of utilities.

The other is that in Wisconsin, at least, where we have some sort of unique geographical problems, because we are surrounded by the Great Lakes, and so the transmission lines either come in from the west or from

the south. We really don't have transmission lines that can come in from all around the state. The fact is we have suffered shortages for the last several years, quite dramatic in southeast Wisconsin, the most populated area of the state, and those shortages really changed the legislative focus from worrying about restructuring and competition to worrying about reliability and making sure that there was enough power.

Now, we have had a number of -- we have, as I say, moved haltingly, but I think with some purpose in Wisconsin, but what interests me is politically the way that I see this movement go to restructuring is it's kind of -- that the restructuring, at least in Wisconsin in the two major pieces of legislation, one that was enacted and one that's currently pending, came about because there was certain leverage created on the industry by factors other than restructuring, and so the need to meet those other factors was a way in those pieces of legislation to start the movement towards restructuring.

Our first concern, like many places, was transmission and the fact that the transmission -- the limited transmission lines in Wisconsin were owned by the five investor-owned utilities, and there was a lot

of concern about access to energy. After the energy shortages, the electrical shortages, the Legislature moved to try to deal with that in the future, and in that legislation, they did start the process of significant restructuring in Wisconsin.

They required that all -- this was in 1997 -- required that all Wisconsin utilities that owned transmission facilities be in an ISO by June of 2000. So, it simply became a directive that the PSC was to require that. They approved -- they enacted a provision that required fast track approval by the PSC for construction of independently owned merchant plants, an attempt to try to break up the high concentration we have in generation and to develop, as was mentioned in California, before we moved to the next level of -- to develop a broader range of ownership in generation.

Perhaps most -- with -- from the point of view of an Attorney General, we required the PSC to develop rules governing ownership of the wholesale merchant plants by utilities and to have rules that set up -- that -- that were based on the anticompetitive effect that came from utility ownership, and we're in the process of trying to develop those rules, which are very, very difficult, from -- and I -- and we've already heard discussion of states that have gone forward with

those.

And finally, they directed the PSC to study the means of relieving some of our shortages on transmission, and the PSC came up with a proposal that -- of a new transmission line. Now, these transmission -- it shows you how these different worlds -- and you all know this -- from an Attorney General the different roles that we have come into play. That new transmission line may be absolutely essential to supply power needs, it may be essential as we move into a new restructured world. On the other hand, it still is a transmission line that is going to cut through beautiful woods in northern Wisconsin, going from Duluth, Minnesota to Wausau, Wisconsin, for those of you who know that area of the world, and -- well, I wouldn't lay bets on that transmission line being built in Wisconsin, which will, of course, exacerbate all of the other kinds of issues that we are dealing with today.

Let me finally conclude by saying that -- and again, let me say, on that piece of legislation, it came about because the -- not because anybody saw the great need -- I shouldn't say anybody. There were people, including Roy Thilly, who you are going to hear from later, who have had the bigger picture in mind in Wisconsin, but the Legislature wasn't going to act, I

don't think, on anything dealing with utility restructuring except for the power shortages in southeast Wisconsin. They had to appear that they were doing something, so they did some things, and in the course of doing some things, other parts of that legislation led to hopefully some efforts to break up the ownership of the transmission lines.

Well, the same thing has happened in our current budget. By chance, the utilities in Wisconsin 15-20 years ago had a limit imposed on them of saying that they couldn't own more than 25 -- no more than 25 percent of their assets could be in nonutility-related businesses. Well, over the last 20 years and particularly as people -- as businesses have boomed in the 1990s, that percentage of their business has gotten -- has -- they claim has bumped up against the 25 percent cap, and they desperately need relief from the cap. So, needing relief from the cap was the opportunity for people who have wanted to spinoff generation -- spinoff transmission the real opportunity to get that in exchange for cap relief, and that is what has happened in the proposal that's currently before the Wisconsin Legislature, is the creation of a Transco company that would then join the midwest ISO and a number of other provisions but that are the condition

upon which the utilities can get relief from the 25 percent asset cap.

So, it's interesting to see that these changes have not come along politically, because anybody really on -- because the Legislature has said it is time for restructuring. It has come upon because there have been other pressures placed on the utilities, and as a result of the leverage because of those pressures, we have moved in the direction of restructuring.

So, thank you very much.

(Applause.)

MR. GRAY: I guess we have a little bit of time for questions, if you have a question, if you could move to the microphone and identify yourself, please.

MR. JOSKOW: I have a question for Commissioner Tate. I live in Massachusetts, and we have a law that allows for municipal aggregation with a negative option. So, if a municipality enters into a contract with a supplier, that's your supplier unless you opt out, and I didn't think much of that until my town started to think about doing this, and I realized that if there was one entity that I wanted less than Boston Edison to supply me with electricity, it was the town of Brookline. They had already demonstrated their skills in contracting for cable television service and garbage

service and so on. So, I guess -- I guess I'd like your comment on that, especially whether -- it's the negative option part that I don't like.

MR. TATE: What's your name? Joskow, Paul Joskow.

MR. TATE: Paul, thanks for the softball, Paul.

MR. JOSKOW we return to my town as the People's Rep of Brookline.

MR. TATE: Well, that's fine. Thanks for the softball. Our legislation, as I had told you earlier, had gone pretty quickly in most time frames, except for the Pennsylvania time frame. The one issue which caused us almost a month and a half to two month delay in getting it passed was the issue on municipal aggregation.

The municipal aggregation, where municipalities will contract on behalf of all of their citizens, to me and to the Board and to the executive branch was a critical issue as to whether or not you had voluntary and affirmative actions of people to enter into this new marketplace. Aggregation was seen as a tool by which to lower marketing costs, acquisition costs, and getting a large number of residential customers for the sake of moving people from one supplier to the next, not akin to balloting in the telecom area, but pretty close to it if

you could have the town governing body, five, seven, nine votes, whatever it is, determine that 40, 50, 60, 100,000 people would automatically have their suppliers switched unless they had to do something. And while I take it in your case -- because I happen to have dual residence. I have New Jersey and I also happen to be a homeowner up in Massachusetts. So, I knew that this was coming two years before it hit New Jersey.

What we did in New Jersey was to require -- and I've looked over some materials, not everybody calls it right, but we had to actually affirmatively and voluntarily have each resident accede to the idea that their town wanted them to go into an aggregation pool; that is, even after the vote, every -- any supplier that was given the contract had to get the written consent of each residential customer, saying that yes, they were willing to go with that. So, what they really got was a supplier, but still the supplier had to go about taking the steps to -- to getting to the customers in the municipality.

Now, a lot of people, you know, may be opposed to that, but we recognized that there -- that things could happen pretty quickly on a municipal level, a lot before people were really knowledgeable and ready with the consumer education program, and we did not want

those kinds of decisions to overtake people where all that they were supposed to do to get out of it was to -- they -- the onus would be on them to respond as opposed to the onus being on the municipality or the supplier to get them to respond to going along with that, so...

MR. GRAY: Anyone else on aggregation?

MR. CONLON: Well, we in California did not want the restructuring to be a form of municipalization, so we also required that each customer in a particular city has to individually approve whatever switches that are made so they can get -- if they want to aggregate it and get individual approval, they can do that.

MR. GRAY: Any other questions?

Yes, sir?

MR. KELLY: Mr. Conlon, why didn't in California you wanted to -- the state legislation to prevent municipalization. Why did you do that as an option?

MR. BALTO: Could you identify yourself?

MR. KELLY: John Kelly.

MR. CONLON: Well, I think in all due respect, I think looking at the UK experience, I think there was a belief that municipalities necessarily were not going to do a better job than private enterprise, so I think it was the bent of the Commissioners, that we felt that a private enterprise would be the right answer if you are

going to go into complete divestiture and a free enterprise system.

MR. GRAY: Other questions?

Well, we have a few minutes, so I have some.

In the states that have restructured, do you have a quick response or hotline systems for handling competitive complaints? I know FERC has had that for years, and often by the time a Commission acts, the problem that the competitors identified has either come and gone or is out of business. Do you deal with those kinds of things?

MS. BROWNELL: Yeah, and I talked a little bit about that this morning. We have our consumer hotline, and we monitor it, and we have a couple of informal committees that basically deal with complaints, so that there -- there were certainly days in the early parts of the pilot where we were on the phone with companies three or four times a day, and we don't think the standard process works. I mean, the market has moved on. The problem has either exacerbated or solved itself. So, our intention is to handle them quickly. We also have a quick negotiated opportunity for people to sit down at the table under a settlement process. You have to be fast or you're superfluous.

MR. TATE: Yeah, we've set up a number of

mechanisms. One is a call center, which is akin to the consumer education program, to not only give information but also to take concerns of people so that we have the data going forward. The Board has a hotline to both the energy division and to the consumer relations division to take complaints on any activity. Now, we're still before we've got to the switching part, so there hasn't been a lot of activity other than requests for information. Our deadline for beginning switching is not until November, mid-November of '99, but we are using working groups with both suppliers and with utilities that are working out mechanisms for dispute resolution. We have a dispute resolution mechanism in place so that we don't have to go through the formal regulatory process to handle these kind of complaints, and I think that's important. You need something that's swift and certain but also has I think the market participant's involvement.

MR. CONLON: I think on the lighter side, we had two of the best advocates from market power in John Anderson from ELCON and Jan Smutny-Jones from the independent marketers association. Jan Smutny will be with you this afternoon, so you can get his view of the life, but I'm sure that those two kept us on our toes all the time, but we did do a lot with customer

education. We spent $87 million -- "we" in the sense that we had the utilities do the programs, the Commission approved them, but it was an education program, and it was also a call center that we set up for the first 12 months, and then the Commission has taken over that role, has an 800 number. So, we now run the -- I say "we" -- they, the Commission, mans the 800 numbers and the websites for all complaints, whether they be market power or customer complaints of any kind on electric restructuring. So, that's how we do it.

MR. BALTO: I have another question for the commissioners. In the last panel, Professor Kahn was sort of critical of some of the state efforts, and he suggested where the states were sort of giving a comparative advantage to new entrants to sort of jump-start the competition, they were confusing, you know, improving competition and, you know, really what they were doing was just increasing the number of competitors, and that wasn't necessarily improving competition.

Do you have any response to that?

MS. BROWNELL: Eighteen years in a convent school tempers my response to that. We respectfully disagree. Followed to its logical conclusion, Professor Kahn's argument would lead you to believe that the only

competitor who could be efficient would be the incumbent. They own the lists. They own the systems, albeit rate payer paid for, so that there would be no way that a competitor could come in, and lacking competitors, I don't -- you know, you can declare competition there, but it doesn't really work that way, and I spoke of that in my remarks earlier.

Secondly, when we unbundled the rates, and it certainly is a less than perfect science, as anyone who has been through that exercise will testify, but there are other costs that were associated. I thought one of the most creative moves -- in one of the restructuring cases that we found in transmission and distribution, all of the costs for the executive management of the incumbent agency, all of their advertising costs and all of their marketing costs.

Now, we found that interesting, because I don't know about you, but I haven't seen a lot of T&D advertised recently. So, I think of -- Professor Kahn has outlined one way one might do it. On the other hand, I think that what his conclusion would lead you to is there will be no competitors in the market. There's lots of other arguments in terms of efficiencies and things like that, but plain and simple, one competitor does not a market make, and I know that Herb is going to

speak much more eloquently than I on this.

MR. TATE: I hate to disappoint anyone, but I agree with everything -- no, we see it similarly, that there is a need when you start a fledgling marketplace to provide a jump start. This was done in the wholesale power market with independent power producers, for better or for worse, whether you feel that PURPA served its purpose or not, you know, you do have a competitive wholesale market place. Was there a price to be paid for that? Sure. Are we having to grapple with it at the state level right now? Absolutely, nonutility-generating contracts, stranded costs, huge, second big stranded cost issue that we had, billions of dollars.

But there was a concern that we did not have a competitive wholesale generation market at a certain time and that it was necessary to do that. Right now, there is pressure that we have to help other organizations to get a foothold. Now, the question that I think -- I think one of the things that we have to look at is, you know, giving a helping hand but for creating an institution for this and whether or not there's a subsidization issue here. We've seen sometimes that government can go too far. Sometimes industries that crop up become so dependent that they

never mature to the point that I think Professor Kahn was talking about where they can be left on their own to compete. And that's a concern. We have that on energy efficiency DSM programs in the state of New Jersey, where certain companies wouldn't allow us to -- or not really not allow us, but they got upset because we wanted to start to tinker with the rates and change rates on energy efficiency programs because we were paying $230 million a year. The only other state that paid more than that was California, and they had 30 million people and we only had 8, but yet these were issues that we tried to set up to create new industries.

We're doing it again in the area of renewables and trying to find new power sources for -- that are environmentally clean. So, government and regulators have played a role of trying to help to jump start markets. There's no question about that. The question is how far do you go and for how long and how -- and how dramatic do the rules have to be?

MR. CONLON: I assume that Dr. Kahn this morning was supportive of what we did in California in that we have the PX price, so that anyone who doesn't elect to choose a different supplier would default back to the PX price and would get the wholesale price, if you will, of

electricity. Now, the problem is how do the infant companies that Dr. Kahn was talking about succeed?

I think one of the ways they're going to succeed is through innovation and creativity. I believe that the bundling of services with other services, the creativity that we have not visualized at all, like I mentioned earlier, I think the oil companies will be major players, I think anybody that does a lot of billing will be a major player. I can visualize, you know, there's a -- I think Kansas, Nebraska has a piece of software that they're now pedaling where they have eight utilities billed with one bill. You get your cable, your telephone, your cellular, your electric, your gas, your water and two Internet billings all on one bill. So, I think, you know, electricity is -- through a power exchange is a commodity, and I think that the PX is a commodity price, and if you're going to -- how do you sell chickens, you know, I mean, the difference in chicken prices are unbelievable, and they all -- they are all just chickens. I mean, it's the same thing with bread. How you package it, how you bundle it, how you transform it, how you sell it, that's what's going to be the things that you and I are not smart enough to figure out but the retailers and marketers of the world will, and that's how electricity

will get value, and that's how the competitors will take the PX price and run with it.

MR. GRAY: I guess that's going to wrap up our session. I'm told we need to be back by 2:30, but in the meantime, I'd like to thank the panel.

(Applause.)

(A brief recess was taken.)

SESSION II:

EXISTING MARKET POWER IN RETAIL MARKETS

PANEL B:

ASSESSMENT OF STATE EFFORTS TO ADDRESS

EXISTING MARKET POWER

MR. HILKE: Why don't we go ahead and get started again, if you could all take your seats.

Good afternoon. My name is John Hilke, and I'm the Electricity Project Coordinator of the FTC Bureau of Economics. This afternoon, Panel B of our discussion about the assessment of state efforts to address existing market power.

I want to just say a couple of words about why this topic is here on the agenda, and then I'll turn the program over to Jade Eaton from the U.S. Department of Justice to introduce our speakers.

In some sense, the reason we're here is because antitrust, as it exists, is not really able to reach existing market power. This is a statement that we made in several of our comments to the states. Basically, the states are in many senses on their own in trying to deal with existing market power because antitrust cannot effectively reach existing market power.

In part, this is a function of the fact that

antitrust reviews of mergers in the context of a

regulatory regime don't take into account market power which might be created by that merger. So, to interpret the sort of water-over-the-dam analogy, a lot of mergers have gone through the screening process without ever being evaluated on the sense of what kind of market power might be created by those mergers, because it was assumed that the regulatory regime would remain in place ad infinitum.

So, that's just a tiny bit of background information that I wanted to insert in terms of context.

So, Jade, do you want to go ahead?

MS. EATON: The panel before this one, we had a number of regulators and people working to establish retail competition programs in the states, and now we have an opportunity for a number of experts and academics to look at these programs and comment on them.

First, we will hear from Paul Joskow. Mr. Joskow is the Elizabeth and James Killian Professor of Economics and Management at MIT, and he's been at the MIT faculty since 1972. In addition, he is a visiting professor or has been a visiting professor and fellow at the John F. Kennedy School of Government at Harvard, and among other fellowships, he is a member -- and

responsibilities -- he is a member of the EPA's Acid Rain Advisory Committee and currently serves on the Environmental Economics Committee of EPA's Science Advisory Board. In addition, he's also served as a consultant on regulatory and competitive issues in the United States and all over the world where these problems are also being addressed.

Next, we'll hear from Richard Shapiro, who is Vice President of Enron's State Government and Federal Regulatory Affairs Group. Mr. Shapiro's activities at Enron primarily involve trying to bring competitive reform to electric and natural gas industries through state legislative and regulatory processes.

Mr. Shapiro comes to this from a perspective of having worked in the industry at utility companies, including Mountaineer Gas and Baltimore Gas & Electric.

Then we'll hear from Roy Thilly, who is president and chief executive officer of Wisconsin Public Power, which is a municipal electric company owned by 30 electric municipalities -- municipal electric systems. So, he will bring a public power perspective into play, and also Mr. Thilly has fulfilled a number of leadership roles in the NERC, the National Electric Reliability Council, and I think that his perspective from that organization will also be

important in our discussions.

Finally, we'll hear from Bert Foer, who is the president of the American Antitrust Institute. He's a former assistant director and acting deputy director of the Federal Trade Commission's Bureau of Competition and a graduate of the University of Chicago Law School. He's also been in private practice and been the CEO of a retail chain, and that gives him both the academic and the nonacademic perspective on retailing that I think will be interesting, also.

So, let's hear what they have to say.

MR. JOSKOW: Thank you, Jade.

I wasn't sure exactly what to talk about today after looking at the program. All of the sessions seemed to have the same title. And I wasn't sure whether to create something for Rick Shapiro to shoot at or not. I think what I'll do is to talk primarily about wholesale markets and market power, although I think it really makes more sense to talk about market performance more generally, and if there's time, I'll make some comments on retail competition, and during the question period, if you ask me a question, the question could be, Let me see your electric bill and comment on it, I'll talk even more about retail competition.

A necessary condition for a competitive and

efficient retail markets for electricity is the existence of a competitive and efficient wholesale market, and -- for example, in the case of gasoline, if OPEC sets the price of crude oil at $40 a barrel, the price of gasoline is going to be very high, regardless of how competitive gasoline retailing is.

As a result, I think policy makers at the -- in some states and at the federal level, in particular, have wisely focused most of their attention initially on creating institutions to support competitive and efficient, reliable wholesale markets for energy capacity and ancillary services.

And I continue to believe that for -- typically for residential customers, that a large fraction of the benefits of competition in electricity is associated with competitive and efficient wholesale markets, and that there are easy ways that are quite inexpensive to convey the benefits of wholesale competition to retail customers.

What kinds of things have been important? And here I'm going to refer primarily to the areas where there's been substantial restructuring: California, New England and PJM to a lesser extent.

First of all, the creation of independent network operators separate from market participants has

played an important role in the development of competitive wholesale markets in those jurisdictions, and I applaud the FERC's efforts in this area, including the recent NOPR on regional transmission organizations.

However, I'd observe that ISOs, as they've been structured in California, New England, New York and PJM, at least in my view, are not long-run, sustainable institutions. I think we're going to see over time an evolution to organizations that don't separate the control of transmission assets from ownership and investment decisions, and I see emerging over time the development of independent transmission companies which incorporate both ISO functions as well as ownership, operation and investment.

If you look back at California, as Greg Conlon said, and in other jurisdictions, especially in the context of mergers, participants have sliced and diced various measures of market shares and HHIs to death. We have had divestiture in New England and California and some divestiture in the PJM region.

However, I think most of us know that having good market shares or low concentration ratios is not an objective. These are just indicia that we use to try to evaluate how markets will perform, and there are no substitute for actually looking at the behavior and

performance of actual markets.

So, what are the results in those organized markets, to summarize, given the limited experience we have with them? Well, during most system conditions, these regional energy markets are quite competitive. Well, I think price equals marginal cost, the textbook definition of a perfect competition, is too tough a criterion, because very few markets meet it. In fact, during large fractions and numbers of hours during the year in those markets, prices are equal roughly to marginal costs.

Performance problems in energy markets have tended to emerge during very high load situations when demand was perfectly inelastic and supply was perfectly inelastic, and under those conditions, though there might not be any competitive equilibrium price less than infinity, and that's the time when we begin to see gaming and other market power problems begin to emerge.

And in the absence of any significant demand elasticity in the day ahead in realtime markets, I think we can continue to expect behavioral problems during situations when supply is very, very tight, and it doesn't take a genius -- actually, the New England ISO had a filing at FERC in early August, there's a wonderful picture of a supply curve that's vertical at

some point and then a demand curve that's even greater than the vertical supply curve, and the only clearing price is somewhere up in the sky, because it wasn't on the graph.

So, as Greg Conlon mentioned, the issue of how we deal with markets where there's no active demand response is a -- is a problem. And mitigating this type of market performance problem is a challenge. We need to develop an active demand side in these markets, and this is where retail competition it seems to me can play an important role in helping to improve the performance of wholesale markets as retailers go out and sell customers price-based -- realtime price-based services in which they can control their load in response to very high prices.

We also need to encourage forward contracting to mitigate incentives, to withhold capacity from the market, and again, this is a place where retailers can play a role as they make their power procurement decisions in helping to improve the performance of the wholesale market.

Network congestion and related network constraints are real. They emerge all over the place and not always during high-load conditions. They create local pockets of market power in which individual

generators may be able to raise prices to very high levels, because they know that the ISO will lead them to be local reliability problems.

The solution to these local market power problems, however, can be more costly than the disease, and here I think it can be California, with the so-called RMR contracts, the reliability must run contracts, we see how a solution to a real problem has ended up distorting the operation of the energy and ancillary services markets more generally during many hours. These contracts have wisely been reformed and other ISOs have dealt with local market power problems in less costly and more effective ways.

Ancillary service markets have been a real problem. To use a technical term, they have been all screwed up. Little deep thought was given to ancillary services and their relationship to energy markets or to one another.

In California and New England, the ancillary service markets have performed poorly, especially in high-demand conditions. PJM seems to be the only place in which ancillary services has not been a problem, although the way PJM works, it's hard to know exactly what the ancillary services prices are.

I think the problem here could be traced back to

FERC's original declaration of what it thought were ancillary service products and what it thought were not ancillary service products, and the assumption that these administratively determined products could -- were really economically meaningful, separable products which could support independent sequential markets, and I think the evidence so far is that this is a big mistake.

And here we've needed to go back to square one, since the word "optimization" is not something you use when you're a market kind of guy, people are now talking about rational buyers, and it occurred to people that it didn't make a whole lot of sense to pay $200 for ten minutes spinning reserves when energy was $50. You might as well buy the energy and not use it. It's cheaper.

And we're seeing in New England and California new protocols being developed to allow the ISO to make sensible trade-offs between energy and ancillary services so that they can provide the highest quality products at the lowest possible -- at the lowest possible cost.

As a general matter, looking back at the last few years, I would say that analysts of market power have paid too much attention to concentration ratios and

too little attention to the detailed rules that affect market performance. And here, minor issues, do you put in one bid curve for the whole day or a separate bid curve for each hour, for example? Is there a forward market as well as a realtime market? -- have extremely important implications both in the performance of the market and for the ability of entities to exercise market power.

An attention to market rules is something that those of us who have worked in organized markets that have been operating for the last couple of years realize should be much higher on the table.

Finally, entry, there's lots of generating capacity seeking to enter the markets in New England and California, which I know best. In fact, the last I saw, there were 30,000 megawatts of generating capacity expressing interest into the New England market. That's a market with a peak load of only about 22,000 megawatts. So, obviously it's not all going to get all billed.

There's interest in generators. I see the major barrier here is in developing institutions and rules for upgrading transmission networks and integrating these entities into the network. And I see a major area in which there's quite a bit of work to be done to be in

the area of investment in new transmission capacity to reduce constraints, to reduce the need for ancillary services, and to integrate new generators.

I submitted comments on my own behalf in FERC's RTO note, and one of the observations I made, something I've believed for a long time, is that when you have competitive markets, when you have decentralized decision makers buying and selling, following their own self-interests, as we expect agents to do in competitive markets, the robustness of the transmission system is very important. We need a more robust transmission system than we had in the past.

This is necessary to have smooth and efficient operations of energy and ancillary services markets and to ensure that -- that the invisible hand of the market plays the primary role and not the visible hand of the network -- of the network operator.

Let me turn to retail markets, and I'm just going to very brief -- I'm going to show you my bill. Can I turn this on?

I was in -- this is my May bill. I was embarrassed to show you my August bill, it was so large. Let me tell you where I'm coming from. My grandfather owned a factory in the garment district, and when I was a kid, he always told me, You should always

buy at wholesale. It's much cheaper. And one of the things I've been thinking about, and especially as it affects customers like me, residential customers, is what is -- where's the value added from retail? Why can't I just buy at wholesale? And it's a very easy way that I can just buy at wholesale.

Now, what do retailers do in other markets? Well, they provide convenient locations, they provide convenient hours for shopping, they provide inventories of products, they provide a full range of complimentary products and different brands. Well, that's only some of the things that retailers do, but in electricity, those traditional functions, you really don't need them. I mean, the electricity just sort of comes over the wires to my house 24 hours a day, over the distribution system. A retailer doesn't have to have a convenient location. The market's open all of the time. And there's no inventory. It can't be stored. This is not to say that there aren't some -- many functions retailers might perform, but at least for me, that's sort of where I'm coming from.

It seems to me if that's -- if that's the way -- the way one might look -- one might look at this as allowing me to buy at wholesale, we can understand my bill, and I will present for Rick to -- to comment on a

proposal for how we can harmonize the interests of retailers and poor little ignorant consumers like me.

Here's my bill at the -- and you'll ignore how much electricity I assume. There's a customer charge, ability $6 a month. That's something I pay as a distribution service customer. It's a distribution charge of 3.9 cents a kilowatt hour. That's regulated by the Massachusetts Department of Public Utilities. There's a transition charge, that's a stranded cost charge. Boston Edison has now divested all of their generating plants, including their nuclear power plant, that will come down, and it largely will reflect now the residual cost of purchase power contracts and most of the book value of their Pilgrim Nuclear Power Plant. There are transmission charges, that's about 3 mills, and that's regulated by FERC. Energy conservation, renewable energy -- this is Massachusetts, after all -- and then at the bottom is my generation service charge, the standard offered charge, which is now about 3.7 cents a kilowatt hour. And that's what people have to compete with, compete against.

My best offer, which I told Rick I got yesterday on the Internet, was 10 percent off of that for two years, plus $100. It was easy for me to compare. I just took out my bill, and I could figure out that that

was going to be about $4.40 a month for the next two years plus $100 that they were going to give me, why didn't I sign on? Because they also wanted me to take MCI WorldCom Telephone Service as a condition for taking that.

Now, here's my proposal: For the typical customer, there's a very easy way for the distribution company, Boston Edison in my case, to provide me with wholesale service, to provide me with a straw into the wholesale market. We have an organized market in New England, and I'd like to see that generation service charge reflect the price of wholesale energy, through my load profile, and this summer it would have been, I don't know, probably more than 3.7 cents, but over the course of this year, my guess is it would be in the range of 3.7 or 4 cents, and let it vary from month to month as the stock market price varies.

Then I'd add something to the bill. It would be retailing costs that a retailer, like the one I spoke to yesterday, would replace, services that the retailer would provide to me that no longer had to be provided to Boston Edison. And that would be my benchmark. I'd see the wholesale price, I'd get the benefits of wholesale market competition. The retailer can try to beat the price, if it can replace RCS services, that is revenue

cycle service, metering, billing, et cetera, that Boston Edison provides to me, they should get a credit for that. And, most importantly, since I'm a skeptic about value added, they can provide me with new value-added services and provide the kinds of innovative products that Greg Conlon mentioned before.

It seems to me that that's a good way to protect consumers. It gives them the wholesale market price. They don't have to worry about all of the things that Commission -- that Attorney General Brownell was worrying about in terms of self-dealing and so on. It's a visible price. We unbundle not only all of the charges on my bill, but also unbundle certain RCS charges that are avoided when retailers displace my utility supplier.

And that would be my proposal for dealing with lots of the problems that have been discussed today about retail markets, is to exploit the fact that we have competitive wholesale markets and have customers like you and me right on the tails of the larger guys who are in those markets.

Thanks.

(Applause.)

MR. SHAPIRO: I think my grandfather, actually, must have worked for Paul's grandfather, which may

explain the differences in our positions in the garment district, but actually, when I get to speak at this time of day, I always wished I had been blessed with the entertainment abilities of someone like Fred Kahn, but I'm not, as you will see, and -- but I'll try to compensate for my lack of entertainment skills and try to be informative.

Before I get to that, since everybody else has been issuing a disclaimer of sorts, I sort of thought I'd issue my own, and I actually do speak on behalf of the company that pays my salary. I know that's amazing. And I am generally in agreement with the company that pays my salary, although I may try, like Fred Kahn, to send my bill to EEI and see what they do.

What I hope to do in the few minutes I have, a few things. One is hopefully not retrace the steps of others who have spoken here today. Instead, try to bring you a perspective, you know, from the front lines, so to speak, of the marketplace, try to provide you a glimpse into the type of anticompetitive behavior that exists today in the fledgling electric marketplace.

And I'm going to comment on both wholesale and retail markets, you know, they're so interwoven that it's very difficult to separate out the comments. So,

I'll provide a glimpse into both.

I'll also try to offer a perspective on how well states are equipped to address anticompetitive practices and market power abuses. And finally, very briefly, offer some general suggestions on how well -- or actually, how the FTC and the DOJ can play a role in accelerating the process of creating effective competition in both wholesale and retail markets.

First I want to address an argument that seems to be working its way around this city and really, you know, throughout the debate, and I think probably in terms of who spoke today, Fred Kahn probably articulated it best, and he used a number of different ways to describe it, but essentially the argument is that you -- you needn't aggressively address or police anticompetitive practices and market power and that that's just really reregulating in the name of competition.

I think we need to be careful to not let these advocates of deregulated monopolies obfuscate the issues in order to deter necessary market oversight and enforcement activities, and I would ask you to consider the following arguments or facts, whatever you may call them, in response to that argument:

One is that given the historical and continuing

monopoly status of transmission and distribution market oversight activities are absolutely necessary.

Two, that the objective of restructuring is effective competition, not the deregulation of monopolies.

Three, that the integrated -- vertically integrated monopolies did not earn their current status. They were handed their monopoly position and attendant privileges.

It's incumbent upon all of us in the debate to make sure to ensure that in the process of creating effective markets that we don't end up with the worst of all worlds, and that is deregulated monopolies. If we do, we will never achieve the many benefits that have been articulated today, that have been discussed here today, and in the process, we will forego many of the protections that regulation provided historically in this industry. We need to make the markets work.

At this point, I thought I would shift gears a bit to the types of anticompetitive behavior and exercises of market power that we believe that we're observing and actually feeling today in the marketplace, and let me turn first to wholesale markets.

I think there are three widespread market failings that have been observable.

One is an inability to consummate transactions for which transmission capability is available.

Second is transmission owners using their common ownership of generation and transmission to routinely capture nearly all arbitrage opportunities.

Three, utilities routinely withholding large quantities of transfer capability on a transmission system under the shield of native load, preventing third-party access. Why is this behavior being evidenced in the marketplace? I think it's fairly simple, given that transmission owners are using their wires to project their power market monopolies far into the future.

Since every third-party transaction means more potential competition in power sales, transmission owners have an incentive to limit rather than maximize third-party use of their wire's assets. These obstacles to competition are made even worse or exacerbated by the absence of a meaningful enforcement program.

With respect to retail markets, I thought what I would do, instead of providing a laundry list of examples, is walk through one I think well-illustrated example. I think that it shows very clearly how the many anticompetitive obstacles that we, as a new market entrant and other new entrants, confront on an almost

daily basis.

Enron Energy Services, which is the retail energy arm of Enron, entered into -- and this is a real-world transaction -- entered into what I'll refer to as a voltage buy-up transaction, and I'll describe what that is with a customer, in the fall of '98.

The transaction provided for the ongoing energy commodity needs of a customer at their facility, as well as the construction of a new electrical substation at that facility.

This voltage buy-up, the construction of the electrical substation, enabled the customer or would have enabled the customer to pay a lower distribution rate by moving from a primary or secondary level in interconnection to a new transmission level interconnection. Many of these kinds of investments are often sufficient to pay for the cost of new equipment, in addition to delivering some real value to the customer, in addition to the ongoing commodity savings that would have been part of the transaction that we would have entered into.

As you would imagine, to get this transaction done, we had to enter into an interconnection arrangement with the distribution company. How did they respond? I think in many respects rather predictably.

They delayed the issuance of the interconnection study that they had promised to deliver us on a timely basis.

During the course of the study and our interaction with the distribution company, they unreasonably raised the cost of the interconnection. In fact, they raised it from the beginning to end of our interaction with that distribution company 30-fold.

And to cap it off, the distribution company, which had confidential information which we had to provide to them -- and I guess I would accentuate that, we **had** to provide them confidential information in order to facilitate the interconnection -- went ahead and secretly negotiated a deal with our customer and predatorially priced our transaction away.

I think this real-world example illustrates well the ability of a vertically integrated monopoly to leverage its monopoly assets and access to information and in the process severely damage the effective functioning of the marketplace.

The purpose of these examples, both wholesale and retail, is merely to highlight that the opportunities for market power abuse by vertically integrated monopolies is pervasive and real, not merely theory or hypothesis or an academic musing. So, what do

we do with the information?

I think first we have to recognize that the states alone cannot remedy these abuses. First power markets are regional in nature. They don't stop at state borders, and, as a result, states often don't have the jurisdiction to remedy the abuses that are being evidenced in the marketplace.

Second, states even where they have jurisdiction, often lack the resources and will power to effectively police their indigenous monopolies. So, the FTC and the DOJ must pick up where state and federal regulatory agencies leave off.

I think it suffices to say that the expectation that many have talked about today, that competition will produce significant consumer benefits in this industry, as it has in every other restructured industry, I think as Professor Kahn can attest to, will not be fully realized without increased FTC and DOJ oversight and enforcement.

Thank you.

(Applause.)

MR. THILLY: Good afternoon. I'm going to try to give you a perspective of a transmission-dependent utility to the market power issues that are out there.

The utility that I manage is a bulk power

utility, a wholesale utility, that supplies all the electric requirements of 30 cities, that are scattered throughout the State of Wisconsin. We operate in four control areas. We use -- we have to deliver to our member load over four different transmission systems. We own no transmission at all. And our generation -- part of it is remote from load, two transmission systems away, in northern Minnesota. And we -- on top of that, we operate within two different reliability councils.

I live in a wholesale market today that is less competitive than it was four years ago. When I would go out for bids, our utility would go out for bids for power of different terms four years ago, we would get 20 to 30 bids, many marketer bids, Enron and others. If I go out for bids today, I would be lucky to get two bids for firm power, and both those bids would be from incumbent investor-owned utilities within the State of Wisconsin.

Marketers are essentially out of our market, because of the transmission constraints that exist and the fact that they did deals in the past and have been unable to deliver and had to pay liquidated damages or other penalties, and there is no available capacity on the transmission system that -- for anyone to reserve.

Given the price spikes that have occurred in the

wholesale market during the last two summers, there are huge risks to making firm sales through the summer period, and so that the investor-owned utilities are not making sales in advance of the summer because of the risk of a price spike. So, the market has really dried up considerably.

We are seeing transmission increasingly constrained, and I think that's true not only in Wisconsin, because of its unique physical characteristics, but it's happening in various places in the country. And I would argue that that's predictable. That as we move to competitive markets, you can see that the same folks that own and control the transmission planning and construction process are the -- are -- also own the local generation that is protected by constraints. And so they are at best conflicted when it comes to the decision of investing and building new transmission.

I agree with John Anderson that resolution of vertical and horizontal market power issues is really the key issue that we face to get to retail competition. I'm going to not repeat what Jim Doyle said about the Wisconsin experience but try to elaborate on a couple points, to put a little meat on the bones, and try to identify what a state can do and what a state

may not be able to do in dealing with this issue. I think it is a very difficult issue to solve.

Attorney General Doyle mentioned that we -- well, first, let me, as background, focus on the map for a second. This is the transmission situation he was describing. We have a 345 kb loop from Minneapolis to North Appleton, Milwaukee to Chicago up through Iowa, and that is the main transmission backbone that the state relies on.

You have about 10,000 megawatts of load, roughly, in the eastern part of the state, and import capability at a maximum of about 1400 during the summer or 14 percent from the outside world.

So, that's part of the problem with the -- the reliability problems we've been experiencing. When we have generation outages in Wisconsin, there's very little support that can be gotten from outside because of this transmission situation.

The -- several years ago, the Public Service Commission was moving very quickly on the path to retail competition, and as he mentioned, it slowed down, but I think the reason for the slow-down is a little different. I think that the State began to recognize that because of the transmission constraints, it has a highly concentrated generation market, and it's very

difficult to simply declare competition and move forward under these physical circumstances.

So, what the PSC did was establish certain prerequisites to be accomplished in order to make the move to retail competition, and two of those prerequisites dealt with transmission. The first was to make the system -- to become part of a regional transmission system. Our transmission system is owned by five different investor-owned utilities with five different tariffs. So, it's highly vulcanized and there's a lot of pancaking. So, to regionalize it and then to put it under competitively neutral operation and administration.

The second prerequisite was to build additional transmission, to create the physical infrastructure necessary for competitors from outside to get into the market. That's the more difficult of the two prerequisites, frankly.

In the 1998 Reliability Act, we did get a provision that requires all the utilities to be in an independent system operator or independent transmission company by June 2000. It goes beyond what has been done at FERC in two ways that are important.

First, it applies to all transmission owners, municipal, co-op and investor-owned utilities.

Second, it provides for full unbundling. The statute says that each of the utilities must take transmission service from the ISO for all of its needs. In other words, there's no distinguishing between retail, native load and other uses of the transmission system. FERC left that issue essentially for the states, I think for political reasons, and Wisconsin answered it -- has answered it by requiring full unbundling.

However, a new problem has arisen, and that's one that John Anderson flagged this morning, which is the refunctionalization of transmission and distribution in order to avoid loss of control to the ISO -- and I would submit, in order to avoid FERC comparability requirements.

We have recently had a filing in Wisconsin that shocked many of us when we discovered that one utility suggests that the only transmission in the State is 345, and of the 345, not all of that is transmission. And that is less than 20 percent of the transmission miles that are currently under FERC tariff.

It's -- it's amusing, except that we're going to have to fight this, and it is a major battle. I see it -- after this happened in Wisconsin, I started to look around at other states, and I've discovered that this

has been happening in a piecemeal fashion very quietly, and in some cases without contest. And I think we're going to end up with a lot of inconsistent state decisions determining what is transmission and what is distribution, because of FERC's decision to allow that decision to be made in the first instance by the states and then to give it great deference.

In the telephone industry, I've heard that the fight has been over control of the last mile. In Wisconsin, it's going to be over control of the last hundred miles.

So, transmission may be only 10 percent or 15 percent of the investments, but it's a strategic asset that protects a much larger investment in generation.

The other glitch is the capacity has been reserved on the transmission system by the incumbent utilities well into the future, and then there are requests on the OASIS pending that would eat up all of the transmission capacity that certain improvements are supposed to produce.

So, there are basically -- when we talk to our large industrial customers about this, they have to understand that if they got choice tomorrow, they would be able to buy from no one but the few utilities in Eastern Wisconsin. There is no capacity to go

elsewhere.

And, unfortunately, under the FERC order 888 Tariff, once you have a transmission reservation for a year or more, there's a rollover right, which if you play your cards right, it means if you have that capacity now, you can keep it indefinitely into the future by rolling it over and keeping your competitors out.

So, the ISO is an important prerequisite, and we're moving in that direction, but it's not enough. There's the necessity to build new transmission, and I thought it was interesting that our Attorney General was pessimistic about the ability to get that line built.

My feeling has been there's a window at this point, because of the reliability problems that there has not been in the past, to get political support to build, but by the time it's completed, load growth will have put us in the position where we still only have 14 percent import capability.

But there's no way to over-emphasize the environmental and land owner opposition that will exist, the political hot seat it will put people in, and, also, the difficulty that we can't just build to the Wisconsin border and solve the problem. We would have to build into Minnesota, and we'd have to have fixes in Illinois

for the transmission capacity to be there, and there's a line pending, that's been pending for some time, an application for 12 miles into Minnesota, and we can't get Minnesota to take action on that line.

So, query -- can we get the infrastructure necessary for vigorous competitive market in the future without Federal siting of condemnation authority, and who wants to be the one to raise that? I certainly don't want to do it at home.

Utilities argue that they need an incentive, they need more money, higher rate of return to build transmission, but I would submit to you that there's a much bigger conflicting incentive at work here, that if our transmission utilities build, they expose their generation to competition from cheaper power from the west, and how do you offset incentive through a minor tweak in the rate return?

What we need instead is a structural solution that separates the transmission from the generation, which is what is pending in the bill that is hung up in the budget process right now, which would require or give a strong incentive for divestiture of the transmission into a single transmission company, not independent, because part of its stock would be owned by the utilities, but a separate corporation with separate

statutory duties that has no internal conflict for capital.

In other words, it can't -- its single purpose -- it's not looking at investing in plants in California or doing this or otherwise, but simply is there to build, own, maintain the transmission infrastructure on a for-profit basis over the long term. Because it's not independent, it would be a member of the Midwest Independent System Operators, which would make us part of the larger grid and get the independents and tariff administration.

I believe that bill will pass, and will move the ball forward on getting facilities constructed, but I also think that's going to be a long road, which leaves us in the situation of having substantial generation of horizontal market power in Eastern Wisconsin. One utility controlling 54 percent of the generation, two -- add in the two others, and you're over 90 percent.

But the problem is worse than that, because much of the generation is jointly owned plants. So, then it's very hard to compete out of the same production facility. And, in addition, the same parties control the lion's share of all the import capacity into the State.

So, to get to a competitive market, we are going

to have to deal with the divestiture issue, and that is going to be extremely difficult, because we have strong utilities that have provided good service, that have been relatively low cost, and the political will to break those utilities up in order to try to get to the benefits of competition may not be there.

And what do we do if we have divestiture and the plants were put on the market and they sell for three or four times book value? Most of the plants are efficient, low-cost coal-fired plants, and the market -- the recent experience would suggest that they will bring a price substantially above net book value. Where does that benefit go? It's the opposite of stranded cost. How are we going to get lower prices if plants are sold for four times what's in the rate base today?

Very, very difficult issues that we're wrestling with, and I think we've dealt with the transmission issues to the best that we can at this point, but the generation market power issues I would predict are going to be extremely difficult for the State to resolve.

(Applause.)

MS. EATON: If there's a Julie Koch in the audience, could you please see Mike now? There's a message for you.

Go ahead.

MR. FOER: Well, with all of the concern to confess who one does or does not speak for, before I do it, let me ask, how many employees of the FTC are in the room?

(Show of hands.)

MR. FOER: Oh, good, okay. You'll know how much I enjoy saying, as a former FTC employee, these remarks are personal and do not necessarily reflect the views of the Commission or any commissioner. I've been waiting to say that for many years.

I'd like to back off from some of the trees and tell you what I see of the forest, and do that by looking at what's going on in the world around us where a remarkably large number of countries virtually simultaneously are moving away, making the transition from centrally planned economies with regulated monopolies to market economies.

It's easy when we look at that to see the danger of applying economic theory without due regard for institutional realities. Because the U.S. electric industry is also in such a transitional phase, I think it's useful to note some of the parallels that I hope you'll find suggestive.

Somebody said earlier that transition should be viewed as somewhat coterminous with the recovery of

stranded costs. That is a far more narrow view than I would take. It seems to me that new institutional contexts are required as monopolists change into competitors, as customers learn to become shoppers, as rate regulators morph into antitrusters, hopefully.

Like a Shermanizing nation -- that's the term I'm trying to apply -- our electricity sector is going through a transitional phase on the way from regulated monopoly to free market. As John Hilke has said, as John Anderson said earlier and as others have said today, the antitrust laws, while very important, are oriented to the maintenance of competitive markets rather than to the creation of competitive markets. But monopolistic industries, like electricity, are almost by definition characterized by the presence of market power.

So, if we have any idea that antitrust alone is going to assure a competitive market, we'll be deluding ourselves and possibly subjecting the public to the worst of all worlds, minimal regulation by the public together with minimal regulation by market forces.

I'll try to focus on what I think the FTC can do, and let's begin by recognizing the movement from monopoly to competition is only partial, it is only going to be partial. The transmission stage will remain

a regulated, natural monopoly, but the FTC has already played an important role. It's already helped shape the understanding of the competitive problems that are inherent in the combination of monopoly and competition. It has been a consistent advocate for structural separation of transmission and generation, and experience indicates that the advice that it's been giving to FERC and to the states, has been correct.

Even with structural separation, of course, which we're still far from achieving, there will continue to be antitrust issues, for which the FTC's continued leadership is going to be needed. As we move toward restructuring, many large integrated utilities are already divesting their generation assets. Sometimes it's mandatory, sometimes it's voluntary, but it raises issues that I haven't heard mentioned yet that are analogous to the privatization process occurring in many transitional countries.

In Shermanizing countries, privatization has often meant selling the natural -- the national monopoly, not necessarily a natural monopoly but a national monopoly, to the highest private bidder, who is, of course, willing to pay a particularly high price, because it's purchasing a monopoly. And this is a Faustian bargain. The state gets the highest price,

sure, but then it leaves the public with an unregulated monopoly. Some deal.

But similarly, we're watching our divesting utilities turn over generating resources to the highest bidder rather than to use this stunningly unique opportunity to create a competitive market by selling the assets in logical packages to multiple competitors.

A recent report says that just five companies bought half of the electric generating capacity sold in the U.S. since August 1997.

Now, when the U.S. sends its antitrust experts abroad to Shermanizing countries, the advice that they increasingly give is the new competition agencies should emphasize initially, at least, their role as advocate of competition. Nothing is more important during the transitional phase than to keep the pressure on governmental decision-makers to take competition into account when companies are privatized.

Now, here, there's still a lot of unsold generation capacity that will be coming on the market. I think the FTC should find ways to use its role as competition advocate to influence governmental decision-makers, to use their power pro-competitively as they shape and approve generation divestitures.

It's also necessary to look at mergers of public

utility companies in the light of transition. The wave of mergers of utility companies has washed over FERC virtually unimpeded. I don't think it's just a question of a regulatory regime being used as the excuse. The fact is if all we do is apply antitrust standard, the federal antitrust standards, and two monopolies are merging, by definition there's not going to be any overlap, and unless we get into potential competition in the analysis, which is sort of out of the vogue, there won't be found antitrust violations. That's why it's important to keep FERC in the picture.

Let me focus for just a second on the Barton Bill, which as I understand it, in its current formulation, is going to take FERC entirely out of the merger review process, leaving electric utility mergers to the antitrust laws administered by FTC and Justice. If you eliminate the public interest standard that FERC is currently authorized to employ, the Bill would remove one of the most important tools potentially -- I stress potentially -- available for structuring a competitive electric industry.

But a public interest standard that takes national competition policy into account in the context of transition to competitive markets can at least potentially be used to slow the consolidation of the

industry. Eliminating FERC's merger review authority would amount to a catastrophic cave-in to the large investor-owned utilities, which are clearly consolidating as a strategic response to the prospect of having to compete.

On the other hand, it has to be said FERC has done little to distinguish the public interest standard, using it only to extract unrelated concessions from companies that seek to merge. If the standard survives, then it would be very useful, I think, to have the FTC suggest to FERC a pro-competitive vision that would help guide a merger policy oriented toward the creation of competitive markets.

Ideally, as well, I would like to see the FTC join those who are calling for a moratorium on large utility mergers pending completion of the transition.

Now, the Commission, I think, has to be complimented for many things. It's already played a truly important role in helping to identify competitive and consumer protection issues that have been revealed by the process to date. In fact, many of you may not be aware that the huge impact the FTC has had through its letters and comments to the states and its advocacy at FERC and through speeches has been accomplished with human resources limited to approximately 1.1

professional staff years in the Bureau of Competition and the Bureau of Economics combined.

I certainly salute John Hilke, Mike Wroblewski and their compatriots for a truly heroic achievement to date, but without reflecting on them, the task ahead is far too large for 1.1 professional work years.

What more is needed, to throw a few things out here? First, the Commissioners themselves -- wish were in the room -- must become more knowledgeable about this very complex industry. They suffer from a complex that many of us have, which is how can you understand an industry like this and how can you put yourself in the position of saying anything in public about it? It's too damned complicated.

But the reality is there's expertise in the Commission right now, and they can learn what they need to learn. To the extent that they're not up to speed yet, they can get up to speed. One Commissioner could take the lead.

I think the FTC has earned FERC's respect through the advocacy that it's done thus far and that FERC's NOPR on regional transmission organizations appears to me to be a capitulation to the FTC's consistently presented view that the competition objective will best be served if transmission and

generation are structurally and not merely functionally separated.

This is certainly not the time for the Commission, the FTC, to humbly retreat, even though it's easy to pick up reasons why they might stay out of the policy kitchen. To the contrary, electric deregulation is going to be the most important sectoral deregulation that our country handles. Not only are the most dollars at stake, but the consequences of not getting it right are probably the greatest, including not only the shift of dollars from one pocket to another but the possibility of death and serious injury if things don't go well.

The American consumer needs the FTC in this and in it in a far more aggressive way than it's been. The Commission should continue to make itself felt by harping on the special needs of a transitional situation, with state level, with FERC, with the Antitrust Division, with Congress and in public speeches.

It should study the focus on building for competition rather than simply keeping markets from becoming less competitive. It should try to direct attention to structural issues, as it's been doing, with particular respect to large companies where there's a

market power concern, rather than allowing the focus to devolve onto the easier targets presented by small players and comparative minutia.

And I think they should at least triple the resources that they are committing to the competition side of this, whether Congress provides them the resources to do that or not.

To conclude -- as Alfred Kahn said, I'm almost there -- the FTC should be a gathering point of information and analysis, and it should undertake additional workshops of this type, specifically asking questions about what does and what does not work. It should evaluate experience in the field, and it should share with the electricity community what it deems to be the best practices and the worst practices.

If it identifies problems that are not being resolved, it should contemplate issuing guidelines or even trade regulation rules to define what would be violations of Section 5 of the FTC Act. The threat of this type of administrative action could be an impressive sort of Damocles, especially considering the FTC's potential influence on the interpretation of little FTC acts at the state level.

As the staff goes about its electricity business, I think it should collect information with an

eye to an eventual rulemaking, even -- even if, as I hope and I'm sure you all hope, I'm sure the FTC hopes, this would never actually be necessary. I think we should be moving on it, though, as if it's going to be realistic at some point in the future.

Experience with market power issues to date suggests that the FTC is playing a critical role in shaping the transition. It has a strong track record to build on, and it should have the self-confidence to become an increasingly aggressive advocate of the institutions that will make competition work for consumers.

Thank you.

(Applause.)

MR. HILKE: We have time for a few questions from the audience, if anyone would like to step down to the mike and ask a question.

MR. KELLY: I have a question. John Kelly from the American Public Power Association. Did I understand you correctly to say that in most wholesale markets, the marginal -- the price does reflect the marginal cost?

MR. JOSKOW: I was referring specifically to the California market, the New England market and the PJM market, and there's been quite a detailed analysis done of the prices and marginal costs in California that's

available on the University of California at Berkeley's Energy Astute Website that looks at some detail at the pricing and marginal costs, and the results are just as I suggested. During most hours of the year, it looks like a perfectly competitive market. During very high load hours, price is way above marginal cost.

MR. HILKE: Others?

I have a question, then, since we have got a minute or two.

Commissioner Conlon first brought up the issue of time-of-day metering and how important it may be in assessing or attempting to remedy both retail and wholesale marketing -- market power issues. I wondered if each panelist could sort of rank time-of-day metering from one to five or something like that, with one being the most important and five being the least important, in terms of where we go from here.

MR. JOSKOW: Start with me?

MR. HILKE: Yeah.

MR. JOSKOW: I don't know if I can -- if I can rank it. I would say that having a significant amount of load that is price-sensitive, at least in the day ahead market and ideally in the realtime market, is an important attribute of well-functioning competitive wholesale markets.

In terms of considering it, we have to consider the costs that it will incur for customers, and one of the things I hope is that in unleashing retailers, they will find opportunities to identify customers that can benefit by producing their loads when prices are high and also help to develop innovative technologies not only for metering but also for load control and communications. So, I think it's an important piece of the -- piece of the picture. I'm not sure I would rank it as high as some other things, though.

MR. SHAPIRO: I also will not attempt to rank it. I think it's clear that as customers become increasingly exposed to price volatility, that it will become a very important and valued service in the marketplace. I think, though, that you -- again, I think it gets to the whole question of sort of how do you get to an environment in which there are competitors offering innovative products and services, and it's dealing with, I think, the kinds of issues that have been articulated here today around market power and anticompetitive practices.

If you don't effectively deal -- if you don't effectively deal with those -- that kind of behavior and those issues in the marketplace, you won't have competitors and you won't see the proliferation of

innovation and technology.

MR. THILLY: Time-of-day pricing in and of itself, we have had time-of-day pricing in Wisconsin for a long time, the MGE case in the seventies, I think. I don't -- what I do think helps is to have realtime interruptible programs where industrial customers are interrupting not because they are required to interrupt and they have agreed to it way in advance, but they're responding to a price based on the market price of energy at the time, which creates some demand elasticity and helps to moderate -- would help to moderate the spikes that we've seen. So, to that extent I think it's important.

MR. JOSKOW: Could I just reinforce that point?

There's a lot of confusion on this point. Traditional time-of-day pricing where you have a different price during the day and at night is useless for these purposes. If you find out a month later that the price was high in the daytime in July, that doesn't help. It's this kind of realtime interactive pricing, and it's not just interval meters. It's actually realtime control, the ability to adapt and to respond, and that requires communications, it requires equipment in place.

And there are -- I mean one of the great

electricity monopolies on earth, Electricite de France, actually has a variety of schemes like this that they have implemented over time with two-day notices, one-day notice, one-hour notice. So, it's something that's doable, and it's one of the things I would hope to emerge as these markets sort themselves out.

MR. HILKE: One last chance for one last question or -- yes.

Could you identify yourself loud enough so they can hear you down here?

(Speaker did not come to microphone.)

MR. YOON: Sure, my name is Paul Yoon. I just have a question for the panelists. We talked about the electricity in terms of encouraging competition, and also I was wondering, if you have a physical backup transmitter capacity, obviously you need to invest in transmission lines and increase the capacity that way, but if you have a problem with the incumbent utilities holding the capacity from usage, should the Commission take on a role of encouraging, say, secondary markets where those transmission capacity is not used by the incumbent or it is to be used or sold?

MR. JOSKOW: Well, you certainly could apply a use-it-or-lose-it rule to incumbents that own transmission capacity and could use it to exercise

market power in one way or another, and one of the problems of use-it-or-lose-it rules in electricity is when do you have to use it by? Is it an hour ahead, a day ahead, a week ahead?

And without I think a more robust access system where transmission is just not withheld, period, but is fully put on the block, as is the case in the systems that I mentioned, I think you're going to continue to have problems, but clearly some kind of use-it-or-lose-it rule would be better than the status quo.

MR. SHAPIRO: I think that, you know, one response is -- and to that question specifically -- is that you don't get secondary markets until you have effectively functioning primary transmission markets, and I think it's safe to say that that doesn't exist today and that structural changes, rulemaking changes which the, you know, the FERC are considering as we speak are absolutely necessary.

You need the proper set of rules, you need properly incentivised institutions, whether they're transcos or independent system operators that will facilitate the development of primary markets, and clearly with the right set of rules, you know, secondary markets will invariably follow.

MR. THILLY: I agree with that, and it's not quite so simple as someone who's reserved a large block of capacity and isn't using it. It's the calculation of available transmission capacity in which they find none is available because of significant reservations for reliability purposes. And what we've found is the utility that reserves a significant amount for so-called reliability is one that has adequate capacity on its own system and wants to use that transmission capacity to import on a firm basis, and by withholding it from the market for reliability, it's available for nonfirm imports.

Conversely, the utility that needs capacity suddenly decides that it doesn't need reliability reservations, because it wants access to firm, and having those decisions made by market players as opposed to a neutral, independent system operator, is a recipe for continuous problems.

MS. EATON: John, can I ask a question?

MR. HILKE: Yes, you certainly may.

MS. EATON: And it really goes to both the transmission issue and some of the generation issues that we've skirted around. People want to incentivise expansions. There was a lot of discussion about appropriate transmission pricing in order to get lines

built and things expanded. People talked about entry responses to price rises.

But there seems to be a basic problem, which is that all of the additions, whether it's generation or transmission, have severe environmental limitations. It seems that we have a problem -- a public will problem, that people want to have low electricity prices, but they don't want to have the investment that's necessary to get there.

Does anybody have comments on that and either how we can overcome it or recognize it in our public policy?

MR. THILLY: Jade, that is a very significant problem, a "not in my backyard" phenomenon for transmission lines. At least in our part of the country, any line will be opposed and will be opposed strenuously, and there will be lawsuits.

We are trying in the legislation that's been proposed to provide some financial benefits to the local towns and counties through which the lines go. They have not in the past received much of any tax revenue. It's just a downside politically for them. So, there is environmental offset fee and an ongoing "in lieu of tax" requirement that has been built in to try to at least moderate the opposition. But I don't think it's going

to make it easy to do. It will just make it a little less difficult.

The incentivization, just one comment there. We have advocated that the ISO or whatever put new transmission, once it's been identified, planned, sited or whatever or alternative paths, put it out for bid. Put the return requirement out for bid. I'm very skeptical that there is not an investment pool out there that can be tapped that is looking for a 10 and a half or 11 percent solid, safe return from a regulated investment.

And so I'd like to introduce some competition into the return rather than these arguments, Well, we need some unspecified incentive in order to build. Have the people who are not generation owners build, put investment pools together, and let's see what happens.

MR. JOSKOW: I think when you talk about transmission expansion, in all of this discussion, we're thinking of major new lines through pristine areas that cost hundreds of millions of dollars, and there are projects like that, but there are lots of transmission enhancements that involve lots of small things you can do on the transmission network that don't involve any environmental impact, that don't involve any opposition, and a lot of these opportunities are lying there in the

transmission networks we have now to enhance their capability to accommodate new power plants.

And in the case of new power -- I think in New England, is anyone ever going to build a new transmission card through northwestern Connecticut or through the Berkshire Hills? It's extremely unlikely. It's not going to happen. All of the partners of Cravath, Swaine & Moore have houses there, they'll fight it to the death, and we're going to have to -- in New England and I suspect in other regions, we're going to have to build power plants in New England and rely on gas coming in from the rest of the country, and these power plants are getting sited, slowly.

There is environmental opposition, but I think we're going to have to rely on incremental investments in gas-fired generation and other environmentally benign technologies and enhancements deepening of the transmission network we have in the region. I suspect the same is true of California.

MR. SHAPIRO: Just if I could add one thing, we at Enron are a firm believer that optimization of existing assets, and I think Paul -- echoing Paul's comments, is a significantly lost opportunity when it comes to some of the environmental benefits, and we're absolutely convinced that if you have a properly

incentivised transco or properly incentivized generation companies would properly utilize existing assets in a way that would forego the need for new investments quite considerably.

And that's not even taking into account, I think, the inability to tap into all of the demand side opportunities that would come from an effectively functioning retail market. So, there are enormous opportunities out there that aren't being fully tapped because we don't have effectively functioning wholesale markets and retail markets.

MR. HILKE: Well, I want to thank the panel, and we will be moving right on to the next panel, so please don't go away.

(Applause.)

SESSION III

HOW DOES WHOLESALE COMPETITION FOR GENERATION AFFECT RETAIL ELECTRICITY COMPETITION?

MR. HILKE: Good afternoon, this is Session III that we're about to begin.

SPEAKER: You're competing with cookies.

MR. HILKE: I understand that. No, it's higher blood sugar is what we're competing with.

The subject of Panel III is how does wholesale competition for generation affect retail electricity competition, and the format for this session is different than for the previous ones, and that is that we basically have just one set of presenters. So, they get to both present the facts and also criticize them. So, that's the format for this afternoon.

I will introduce the speakers first, and then we can get right to it.

The first of our presenters is Kevin Kelly, who is the Deputy Director of the Office of Electric Power Regulation at FERC. He's responsible for analysis of major electric policy issues, advising the Commission about these policies, and participating in the management of the office.

Before coming to FERC, Kevin was the vice president of Keystone Center and director of the

Keystone Energy Program and also worked for the Office of Electricity, Coal and Nuclear Renewable Policy at the U.S. Department of Energy, and it's Dr. Kelly.

Our second speaker is Dan Adamson, who is the Deputy Assistant Secretary for Power Technologies in the Office of Energy Efficiency and Renewable Energy at the Department of Energy. This Department is at the forefront of efforts to develop clean, competitive power technologies for the next century -- the next millennium I guess we say now, don't we? That's the new twist, everything's the new millennium.

Dan has worked at the Department of Energy since 1994 and assumed his current position in October of '98. From '97 to '98, he was Special Assistant in the Office of the Secretary and led the staff -- and was the lead staff person in the administration's bill and the formation of it, and we spent long summers together working on this.

MR. ADAMSON: Quality time.

MR. HILKE: Prior to that, he was working with Congress on energy and environmental and natural resources issue.

Craig Glazer is in his second term as a member of the Public Utility Commission for Ohio. He served as Chair of that Commission from '91 until earlier this

year. He also serves on the board of directors of the National Association of Regulatory Utility Commissioners and is a member of the Electricity Committee.

Additionally, he serves as president of the board of directors of the Higher Energy Project and is chair of the Ameritech Regional Regulatory Coordinating Committee and serves as a member of the AEP Regional Regulatory Coordinating Committee.

Before going to the Commission, he worked for the Mayor's Office in Cleveland doing electric utility regulation work and for a private firm.

Jerry Ellig is senior research fellow at the Mercatus Center for the Institute of Humane Studies at George Mason University. He's also a senior citizen -- a senior citizen, yes --

MR. ELLIG: Not quite, not quite.

MR. HILKE: -- a senior fellow at the Citizens for a Sound Economy Foundation in Washington, D.C. He's previously served as senior economist for the Joint Economic Committee of the U.S. Congress, Assistant Professor of Economics at George Mason University and consultant to the President's Commission on Privatization.

And last but not least, Jan Smutny-Jones is executive director for the Independent Energy Producers

Association, and his second hat is as chair of the California ISO. So, with that, we'll begin with Kevin.

MR. KELLY: Thank you, John.

Good afternoon, everybody. It's a pleasure to be here with you.

My instructions are to talk to you about FERC's RTO NOPR, to give you an update and to keep it short, so I will try to do that.

We believe that RTOs can help mitigate electric market power in three ways. One, for vertical market power, RTOs can correct actual or perceived discriminatory conduct by transmission owners who can favor their own generation or their affiliates' generation. There have been many complaints to FERC about how available transmission capacity is calculated or determined, violations of FERC's standards of conduct, how line loading relief is conducted, congestion practices management and complaints about OASIS sites that are difficult to use. Having an independent system operator will correct certainly the perception that there's bias, and if there's an actual bias, correct that,, too.

Second, RTOs can help mitigate horizontal market power by overcoming a number of engineering and economic problems with how the grid is operated now where one big

transmission machine has many separate owners and many separate operators who act in an uncoordinated fashion. The result of that is it's legitimately hard to calculate transmission capacity where you're trying to figure out how much your part of the grid can carry without knowing what your neighbors are doing, or your neighbors' actions can cause overflows on your system.

Also, by setting transmission prices as we do today, in many small regions it becomes expensive to buy power from several utility systems away. You have to pay on average a third of a cent to go through each utility system. So, if you're buying from three systems away, you're automatically paying a one cent penalty for transmission.

By pricing in a different way, without any loss of revenues to owners, you can be able to move power long distances and hence, where you have now perhaps a few large players in a small market, those large players could become smaller players in a large market, mitigating the market power.

And third, RTOs could help mitigate market power to the degree that they carry out certain market monitoring functions, and our proposed rule suggests that should be a function of an RTO. Let me read to you what the rule proposes. It proposes a function number

six for RTOs, saying, "The RTO must monitor markets for transmission services, ancillary services and bulk power, to identify design flaws and market power and propose remedial actions."

Now, we break that down into pieces. One piece is that the RTO must monitor the market for transmission services and the behavior of transmission owners, if there are owners separate from the RTO operator, to determine if their actions hinder the RTO in providing reliable, efficient and nondiscriminatory transmission service.

Second, we said the RTO must monitor markets for bulk power and for ancillary services, at least for those markets that it hopes to set up.

Third, the RTO must periodically assess how behavior in markets operated by others, such as a bilateral sales market or a PX set up by someone other than the RTO, how those are affected by the RTO operations and whether the RTO operations could be improved so to make those markets work better.

And lastly, we'd propose that the RTO must provide reports on market power abuses and market design flaws to the Commission and to other affected regulatory entities, reports that contain specific recommendations on how observed market power abuses and market flaws

could be corrected.

Now, this last element, I might say, is a potentially controversial one. There is some legitimate questions about to what degree the RTO should simply gather information or act as a kind of quasi-regulator, taking on a sort of governmental function, and we expect to get good comments on that. We have gotten some already.

Initial comments on the rule were due on August 23rd. We're analyzing them now. Comments on those comments are due September 29th, and after we read those, we will get about the business of trying to fashion the final rule.

Thank you for your attention.

(Applause.)

MR. ADAMSON: Okay, Kevin's really set a tough example in terms of brevity that I will try to beat. I can't help but note that I went to law school here, and I don't know if I've ever been back before today, and I'm sort of in this room with these -- it's sort of strange, kind of a mixture of fondness and dread.

So, Kevin was talking about the transmission system. I'm going to go -- telescope down to the distribution system. What I'm going to talk about is distributive power; that is, generating your own power,

on-site power, small generating units in many cases, and, you know, how that relates to market power and how it is a possible remedy.

I think we're at a unique point in the history of the electricity system where people are for the first time thinking about choosing their power supplier, because of retail competition in many states, and at the same time you have a lot of technologies, microturbines, fuel cells, reciprocating engines, et cetera, getting to the point where they are close to being economic as on-site generation.

I think it's -- you know, when you make that first step to choosing your own power supplier, it's not then nearly as far a distance to take the next step, which is to say maybe I should generate my own power. And I see retail choice as the first wave of electricity restructuring, and perhaps on-site power, distributed power as being the next wave, and in many ways distributed power, if it's economic, is kind of the ultimate market power remedy.

If there's a market power problem at whatever level, you have the option of generating your own power, at least a large share of your own power, and obviously that's going to help you quite a bit in dealing with the market power problem.

In my standard distributed power speech, I have about ten pages about how great distributed power is and all of the economic benefits, environmental benefits, reliability benefits. I'll skip that and just go right to the challenge, which is that even though there's a lot of potential for distributed power to make progress, there's a host of regulatory and institutional issues that stand in the way potentially of much distributed power happening, even if that is the most economic way for some customers going forward.

Again, there's about ten different issues that I could talk about, but I'm going to only talk about one, which is interconnection. Most folks that do a distributed power technology are going to want to interconnect to the grid, and there's a number of reasons for that.

First, if the system goes down or is out for maintenance, they are obviously going to want to be able to get backup power from the grid. Secondly, if the system is not being fully utilized, let's say you have a fuel cell and it's in a business and you're only -- you know, you have a big load, about 14 hours a day or 16 hours a day, you may want to sell the power that fuel cell generates for those remaining hours. So, you're going to want to sell power back to the grid. So,

you're going to want to be interconnected.

And right now that's a very difficult thing to accomplish, because there's literally hundreds and hundreds of just different interconnect standards. There's almost as many interconnect standards in the United States as there are utilities. And so just kind of wading through that is very difficult, and to be candid, I think although there's very, very important safety issues, reliability issues, power quality issues that you have to address when you interconnect, there's also a lot of language and a lot of terms and conditions and a lot of technical requirements that utilities place on those who want to interconnect that are just discriminatory.

And it really harkens back in a way to where the transmission system was 10 or 20 years ago. I mean, the FERC has made it a matter of course that the transmission lines in the United States are for the most part open. Well, that wasn't the case, you know, as short as ten years ago, and what they did was they have people -- first we had Energy Policy Act, then we had people having to require -- being required to file tariffs, you know, a unilateral offer that qualified takers can take up on it, and I think we may need to do the same thing with distributed power.

First, there needs to be uniform technical interconnect standards, and my office is funding that through something called the IEEE, trying to develop consensus interconnect standards.

Then, there needs to also be some kind of nondiscriminatory distribution tariff that specifies the rates, terms and conditions of interconnect. And without that, I don't think you're going to see a lot of progress being made, and I'll make a brief analogy to telecom, and one of the rules I learned in working on electricity was it was really dangerous to make telecom analogies, and I've tried not to make them, but in this case I will violate my rule and make it, which is to say that until 1969, it was a violation of federal law for you to hook a phone up to the telecom network that was not made by AT&T, okay?

And then my telecom colleagues tell me that in a decision known as Carterphone, which overturned Hush-a-Phone, the FCC said that that was no longer the law. Well, that was 1969, and then it took until 1978 and a lot of subsequent litigation to the '69 decision for there to be agreement and for there to be established a universal, uniform interconnect standard for telecommunications equipment.

And that's something now we very much take for

granted, you know, you want a new phone, we want a new fax, we just go down to the store and buy it and it hooks right in. And I don't want to take that analogy too far.

Obviously this is probably a more complicated issue from a technical and safety standpoint, but I do think it points out that we need -- we need some kind of uniformity, because if you don't have uniformity, the transaction costs involved in hooking up these new technologies could be prohibitive.

I'll just mention a few things that we're doing. Obviously a lot of the technologies, be they renewable technologies or fossil technologies, are the progeny of the Department of Energy's R&D effort. So, I won't bore you with that, but we spent hundreds of millions of dollars over the years developing these technologies in partnership with industry and the labs.

We also, as I said, we're funding this IEEE effort to develop consensus interconnect standards, and finally, in our restructuring bill that we submitted to Congress this April, I was very proud that we I believe were one of the first entities to submit an electricity restructuring bill that had a very heavy distributed power component.

Included in that was the -- we would give -- we

would establish a federal uniform -- national interconnect standards that would be enforced by the Commission. We also did some tax provisions. There were some inequities in terms of how distributed power equipment is treated for tax purposes, where the depreciation schedules can be much longer if you are installing distributed equipment as opposed to central station equipment.

We had also an 8 percent tax credit for combined heat and power systems and also some almost advisory language recommending that states consider giving distributed power equipment a break when they are implementing various stranded cost regimes. So, I will just leave it at that but just to say that there's a huge potential for distributed power technologies to alleviate market power problems, but just as you have had to go through a lot of regulatory and institutional change both for wholesale competition to become a reality and now retail competition is beginning to be a reality, at the state level, you're going to have the same kind of a situation with distributed power.

Thank you.

(Applause.)

MR. GLAZER: Can you hear me?

Well, John, I have to tell you I want to thank

you for inviting me to this panel but also tell you you put me in a really tough spot. I mean, to be the middle panelist on the last program at about 4:20 in the afternoon, especially when you woke up at 4:20 in the morning to get here, it's really a tough spot. So, I want to start out with a little bit of a story just to lighten things up a bit, and I have to tell you, I was taking great exception this morning.

Fred Kahn was here, and he was taking some real hits at state regulators. He said I was taking money from the shareholders or from the default customers or distorting markets and helping competitors and not competition. I mean, he really took some hits at us, and I have to tell you that despite all of that, we as state regulators consider ourselves a very classy bunch of people.

There's a famous story about our former chairman, Mike Delvane (phonetic). Mike was -- weighed about 300 pounds, smoked a big cigar, was a former politician from Youngstown, Ohio, and Mike one day went out with a lobbyist from the savings and loan industry. The lobbyist had one of these Yves St. Laurent ties with the little YSL insignias on it, and Mike got -- looked down, looked at the tie, got very bewildered and asked the lobbyist, since when is Youngstown Savings & Loan

giving out ties? So, as I say, I like to consider ourselves a classy bunch, despite all the hits that we might take.

And I've been asked to -- we could spend a lot of time talking about ancillary services and locational marginal pricing and all of that, but I'd like to sort of cut to the chase and get to the issue of why wholesale competition and the wholesale markets are very, very important.

I do welcome the FTC's involvement and the FERC's involvement in that issue, because quite frankly, if we don't get the wholesale market right, then all of the efforts that are being done at the state level on retail just aren't going to work, and at the end of the day, we all made promises, and our state legislatures made promises to our citizens, that they are going to save money, that the system's going to be more efficient. It ain't going to happen if we don't get this wholesale competitive market working right, and that to me, quite frankly, is why I consider myself something of a zealot on this issue in terms of trying to work through these difficult issues.

Well, what's going on inside the Beltway on these issues, there's a huge debate going on over what the governance of the transmission system ought to be

and what the pricing of the transmission system ought to be. You can say, Well, who cares about that? Why is that important? It's only 10 percent of the bill. Who cares?

Well, what's interesting is that the governance of the system will affect how well this wholesale market and ultimately this retail market functions, and it was interesting that we had Alfred Kahn on this morning, because just think about it. In airline deregulation, some things went right, some things went wrong. One thing we didn't have to worry about was the independence of the air traffic controllers. We worry about their competence, we worry about their computer systems, their ability to handle the planes, but we're not sitting up in the plane saying, Gee, maybe that air traffic controller really likes Delta Airlines and he's going to let Delta's planes go through before my plane.

So, there's a -- we basically have gotten over any hangup about trust with regard to the air traffic controller. We have accepted their independence, and we have accepted that they run the system as best they can, at least in a nondiscriminatory manner.

That's the same reason why that issue is so important on the governance. I don't know if it is Kevin's -- I don't know if half the allegations are true

or not. They are very, very difficult to unravel, but the perception of monkeying with the transmission system is enough to do substantial damage and substantial wariness to investors wanting to invest.

What's the second issue? Pricing. Pricing is really, really important, because transmission pricing effectively determines the market that your consumers are going to buy power in. The size of the market is affected by the pricing or what we call this pancaking of transmission rates. I sort of analogize it to radio stations.

The FCC regulations on the various frequencies with which radio stations operate define their market, the same way the pricing structure can have a big influence on the availability of the market that the 11 million citizens in my state, the 8 million citizens in other states -- in New Jersey and others can buy power in. So, it's extremely, extremely important.

And I want to compliment FERC that they are moving forward with a national effort on this in their notice of proposed rulemaking. I wouldn't want to do it. I had my skepticism about them being able to do this on a national level, but I want to compliment them first off for tackling the issue, and I just want to pose some questions at this late hour about things that

we worry about as we look at this NOPR, as we look at the FERC effort, et cetera.

One thing the FERC commissioners have been very clear, and I was just on a panel with Commissioner Herbert, that made it very clear that he's not in the business of mandating anything. He wants to create incentives, but he doesn't want to do any kind of mandates. Basically let innovation work and let the market -- let the industry come up with innovative solutions was his message.

And I'm not here to say whether his message is right or wrong, but here's some real practical issues that we get concerned about. And I put it up there as sort of, do you have mandates, do you mandate principles, or do you take this "let a thousand flowers bloom" and let innovation take over and see what people come up with?

Well, one of the concerns, quite frankly, is that the FERC is banking on the enlightened self-interest of the industry to get the structures right. Now, I don't know, quite frankly, with this much money at stake, with this much on the table, if this -- and the diversity within this industry, if they are going to be able to come up with the right solution.

And what happens, where are we if, in fact, the

enlightened self-interest of the industry doesn't match the public interest? Where are we at that point?

The other interesting part of this is sort of a practical problem that's happening. The FERC made it very clear back in Order 888 that the states, get on the sidelines, we have jurisdiction over transmission. Yes, they said they would work with us, but they basically said this is our ballgame. We have jurisdiction and you don't.

Well, what's happening, though, is there is some interesting dichotomies that are happening. FERC has been struggling with this issue, again probably by having to come up with a national solution, but the state legislatures are moving ahead of the FERC. They are getting ahead of the game.

Legislators in Illinois, legislators in Ohio, legislators in California and others have made certain mandates with respect to transmission. They didn't care if they had jurisdiction. They didn't care what Order 888 said. They said, Here's what we want to see at the state level to have happen, and, in fact, written into our law and our state and many other states are mandates.

So, now FERC's in a difficult position. Is it going to basically tell the legislators, sorry, we don't

really care what you had to say on this issue? How do we square those two? And the longer this issue goes on, the longer we have this potential problem and conflict between not the state UPCs but the state legislatures and the FERC.

Kevin put his finger right on it, because some of the other issues we get concerned about is this whole question of market monitoring and policing. There's a lot of discussion about should we have a transco? Are private businesses better than this ISO? And we can argue that issue -- frankly, there are pros and cons to ISOs, there are pros and cons to transcos, but who's going to police the customers?

I'm a for-profit business. Am I really going to go out and police my customers and say, No, you shouldn't do that? Am I going to go rat on them to the FERC or the state commission? I don't think so.

If I'm an ISO, can I police the market? Well, actually, the assets that I'm managing are owned by somebody else. How am I going to go police them when I'm on the short string? Should we have separate power exchanges? Should we have regional reliability councils? It's not clear who really is going to monitor this market and police this market and whether we're going to do it in Washington, do it at the state level,

do it here at the FTC, et cetera, but we better figure it out somehow, because it is vitally important.

There's a lot of discussion about risk, a lot of discussion that the problem with -- the reason we don't have enough transmission is that we need more incentive. The returns are too low. Well, we ought to ask ourselves, What is the risk associated with the transmission business? Is this a high-risk business or is this a low-risk business since the assets are fairly stable and they just sit there and you don't have to do a lot to a transmission line in terms of ongoing maintenance? You mow the lawn and you clean the thing once in a while, but how, in fact, is the -- what is the risk? What is the proper incentives associated with operating the system and getting those right, and how do we deal with overcompensating and undercompensating?

And perhaps the biggest one that's giving us serious heartburn in the midwest, as Kevin well knows, is what we call the Swiss cheese problem. You decide you're not going to mandate, and there are some very good reasons why you don't want to mandate. You may get it wrong, you may step over your legal authority. I'm not making light of it, but when you don't, you've got some players in and some players out, and then you've got people falling through the holes in the cheese,

people falling through who are not receiving the benefits of either an RTO or an ISO or who are paying higher rates than they otherwise should pay.

And let me illustrate that, just taking a selfish example from the midwest, the Midwest ISO is an approved regional transmission organization. These are its members as of today. I wouldn't exactly consider that a very optimal, efficient transmission system, but this is sort of where we are at with a voluntary approach, and if I want to move power from one of the -- from Scinergy to Allegheny, I've got a difficult time doing it, because I'm not in a fully integrated structure at that point.

Well, what else do we have in the midwest? We've got a competing -- we actually have -- we went from no ISOs to two ISOs. We actually have two proposals sitting at the FERC, the Midwest ISO, which has been approved, and a second, which is called the Alliance ISO, which has been filed, but here's the interesting issue, and whether you're in Indiana or Michigan or Ohio or West Virginia, you face this issue.

Namely, there's a big line right through our states. There's a toll booth, if you will, from going from one ISO to another ISO, and that results in a -- in another charge. And I like to analogize that to imagine

if you're on an airplane and you can fly to New York or Washington or whatever, but if you go to fly to Chicago, you've got to pay each state along the way. That would quickly influence -- the fare that you pay would quickly influence your decision on where you take that airplane, but, in fact, we have suboptimal ISOs, and under the system of let a thousand flowers bloom, I don't know how we're ever going to solve that problem.

And again, as I said, the legislators are getting ahead of the FERC. So, it's an issue I think we need to spend some serious time on.

Let me close with one other issue that I just want to touch on, and I know it is late, and that is an issue that was talked about earlier, price spikes, but we know something about price spikes in the midwest. Back in 1998, we saw huge price spikes, and we issued a report about them, and our report from our Commission basically says this ain't a one-time incident. This can happen again, and this could very well result in serious disruption.

In 1999, we issued a second report because we had a second threat of price spikes going. And what is the significance of price spikes? The significance is that this, frankly, is the sleeper consumer issue, because when consumers see a huge impact on their bill

suddenly, they are going to rebel. They are going to say, All that thing you promised me about deregulation, I'm sorry, it doesn't work. It doesn't happen.

Nobody's going to tolerate in downtown Washington closing down because there was a price fight this week, and it isn't going to be sustainable. So, we have got to come up with structures in the market, and there are a couple things I think we can do.

One is the centralized reliability and RTO type structure. The second is, frankly, price disclosure. We have heard some about that today. We have gotten -- and I think this is very much an issue at the FTC. We as state regulators get bombarded by utilities saying, Keep this price secret. You can file that contract, but don't tell anybody about it. Keep it secret, because we're in a competitive market. We don't want our competitors to know.

If we start keeping this one secret, then you keep that one secret, then you keep a third one secret; in fact, there are soon no prices at all. And imagine how the New York Stock Exchange would work if you opened up the paper and looked up your prices and there was nothing there. You had to guess at your prices. It wouldn't be a very efficient market.

So, we've got to find a way to get significant

price disclosure, and with price disclosure will come an effective futures market, which will help hedge that volatility. Until we can get both of those working, I think we are going to be in some trouble in this market.

Again, let me close by saying my message to the FERC, you know, either let the states go forward on some of their initiatives, be concerned about this fact that some of the state legislatures are getting ahead of you and are mandating things and deal with it and let that happen and work with it as opposed to trying to block it.

Number two, we need to get beyond this ISO/transco debate. It's taking up too much time. We are not going to get it right, but in fact, let's just get on with it, because the bigger issue is the deregulation, and as long as that gets held up, that's where the big money is. Finally, we have to have adequate price disclosure in order to avoid price spikes and effective futures market. And fourth, let me say I welcome the FTC's involvement, I welcome having this conference, and I'll be glad to take any questions at the break.

Thank you.

(Applause.)

MR. ELLIG: Okay, the quick switch is over, so now we can get going. Well, John, I want to thank you for the opportunity to talk here today. I am always glad to get out of the university and talk to folks about electricity, because electricity has been something very important in our family.

My dad was an electrician, and when I was little, I used to always try to stick my fingers in light sockets. I'd try to put a finger in one hole, and my dad would say, No, don't do that son, that's dangerous, if you do it again I'll have to punish you. I would take another finger, try to stick it another hole, and he would say, No, that's dangerous, I am going to punish you if you keep doing that, and finally I would get my finger in the third bigger hole, and my dad would say, Okay, son, you're grounded.

Well, Craig, I would -- I was somewhat -- I was somewhat taken aback by your comment that you had to get up at 4:30 to get here this morning, but then I realized you must have driven in from Fairfax, and you brought up price spikes, and I'm glad you brought up price spikes, because I think that's the reason I got invited here.

About a year ago, our center at George Mason put out a study that I was involved with that took a look at the price spikes in the electric market that happened in

1998 and tried to figure out what happened, why did it happen and what we can learn from this. And at first I thought it was a little unusual to get invited by the FTC to speak at a workshop on a study we put out a year ago on something that happened last summer, but as I've been sitting here, I realized that what happened in the summer of 1998, which was the first time we had these big spikes and made a lot of news, what happened there can tell us a lot about how the markets work or don't work and also point the way toward things that we need to focus on if we're trying to move toward a truly competitive market in these areas.

So, I'll just briefly sort of run through what we found out and what we concluded when we took a look at what was going on with the price spikes. First off, since it was -- I mean, I can never remember anything that happened more than like two weeks ago.

What happened? Essentially on two occasions last summer, we had a couple of days in which spot electricity prices in the bulk power market went way above anywhere they had been before. Power that normally traded for less than $100 a megawatt hour was up in the thousands.

Interestingly, it happened very quickly and then prices fell back down again. So, it was not a permanent

increase, but it was big spikes for a couple of days. What the heck happened? Well, we took a look at this, and essentially we had ended up with about four or five key findings.

First off, even when electric prices peaked, a minuscule proportion of the power actually changed hands at these high prices, because in the midwestern market, in particular, you have an awful lot of power that's simply utility-owned generation. The power is sold to customers at regulated rates. The bulk power market in the midwest is a lot of odds and ends, you know, basically incremental capacity.

This is not a state like California where you have a really large independent generated sector. So, most of the generation in the midwest is utility-owned generation, and a very small proportion of it was this power that was trading on markets at very high prices.

Here's a quick comparison. It's not really scientific, but it will give you some idea of what we're talking about. If you look at peak demand and you compare that to the average amount of power that traded at prices over $100 a megawatt hour during the hours where you had price spikes, it's a very minuscule percentage of demand. It's about four-tenths of one percent.

So, when we got stories in the news media saying things like if you ran your air conditioner for an entire hour at, you know, a price of $2,000 a megawatt hour, you'd soon be bankrupt, well, gee, guess what? Nobody was running their air conditioner for $2,000 an hour. That very small amount of power, depending on how regulators handled it in various states -- sometimes the utility took the loss, sometimes it just got blended in with, you know, with the rates that all customers are paying, but it's a fairly -- it was a big amount of money to some firms, especially the ones that bet wrong on the direction of prices, but it was -- but it's a fairly small amount in the overall scheme of things.

Okay, secondly, markets work pretty well. The bulk power market worked pretty well when it was possible to move power from buyers to sellers. Here's a fundamental graph. It graphs the price of power over the summer of 1998, and you can tell where the price spikes are, fun little graph.

But you'll notice that we have solid lines and dotted lines. The dotted lines represent the prices of power in places like the midwest, the southeast and the south. It was possible during these price spike days to get transmission in order to move power out of the southeast and the south, and so prices in those regions

were pretty well linked with the midwest.

On the other hand, it was fairly difficult to get power out of Pennsylvania, New York, New England, some of the western-most parts of the midwest, into the midwest during to various transmission constraints, and you also can't get power out of Texas, because there are no wires linking Texas with the rest of the country, and that's what the solid lines are. They show that by and large, except for maybe a little bit, but by and large, the prices in these parts of the country that did not have a lot of transmission available to get power into the midwest did not move along with the midwestern prices.

That tells us that at least at the spike times, we essentially kind of had two bulk power markets. One of them was the regions that could trade; the other one was the regions that cannot trade. So, the market worked well in the sense that when you could get transmission, you could move the power in response to the high prices.

Okay, another interesting thing, the daily price patterns, if you look at prices over the course of a day on the spike days, they suggest that generation was still used pretty efficiently. What do we mean by that? Well, prices on these days of price spikes were

not high all day. The prices were only high at certain times of peak usage, and during the rest of the day, prices fell back pretty quickly to, you know, fairly -- to fairly normal levels.

So, if you look at, for instance, in June, you find that the price spikes was really prices very high for certain hours of the day when demand was very high, and then they jumped back down. This is a -- this is a pattern similar to what you see in a well-functioning generation market where prices are fairly low, close to marginal cost most of the time, then they bump up when they have -- when you have peak demand, then they bump down -- back down a bit.

Now, the way this was different from that is that the peaks are a heck of a lot higher than in a normal market for bulk power, but the low periods, they were -- the prices were relatively low. Okay, so, it looks like we had a fairly efficient utilization of what generation was available.

And then finally the other thing we found is -- well, was something we couldn't find, which is we really couldn't find any evidence of manipulation of the market by people who were -- manipulation of the market on the generation and then on the market end side. Now, you can argue about whether control over transmission was

perhaps used to influence what happened in that market, and that's a different argument, but we didn't find any evidence of, say, you know, people who had power to sell getting together and colluding with each other, so if there was a market power problem, it was created by vertical relationships involving ownership of transmission, not horizontal relationships in the sense of people getting together to collude and drive prices up.

Okay, well, what -- why the heck did this stuff happen? Look at our analysis -- by the way, I mean, the short version of this is our analysis is pretty darn close to -- well, pretty consistent with what FERC came up with. So, if you wanted some independent confirmation of what they said, maybe you've got it now. You had to wait a year for it, but what the heck.

What happened? There were three things -- three things that influenced the spikes that were pretty much uncontrollable. One was unseasonably warm weather, particularly in June. American Electric Power estimated that the odds of the temperatures that we had in June, at the time of the price spikes, was something like three-tenths of 1 percent. Three-tenths of 1 percent of the time, you could expect to have those temperatures on those days in June.

Another thing that happened was you had some power outages in Ontario, which for physical reasons that I still don't completely understand, because I'm an economist, not a physicist or not an electrical engineer, but it was more difficult to move power into the midwest through Canada. And then finally, you also had storms and weather problems that knocked out some generation plants and also knocked out some transmission.

Again, American Electric Power had 22 percent of its generation out at the time of these price spikes, which they claimed was a 1.5 percent chance of that happening. So, you had some unusual influences that led to this, some really odd combinations of weather and other things. But there were also some controllable things that public policy could influence.

The three main things were this: First of all, you had control over transmission capacity essentially allocated in a way that really didn't take into account the economic value of transmission. You had these transmission line loading relief procedures, which essentially allowed the owner of a transmission line that was overloaded to curtail transactions all over the system in order to try to reduce the power loading on the line that was overloaded.

For example, in Wisconsin, there was a power line where the owner called -- needed 30 megawatts of relief; that is, they needed to get 30 megawatts of power flow off of that line. As a result of the cuts in the -- the transactions -- the cuts that were necessary to reduce the loading on that line by 30 megawatts led to a curtailment of 1900 megawatts throughout the midwest and even more broadly than that. So, you had -- in order to take care of a transmission line loading problem over here, you had reductions in transactions all over the system just in order to take care of this problem over here.

Now, previously, these have been dealt -- this kind of a problem had been dealt with by redispatch. Essentially if a utility had a line loading problem, it was up to the utility to change power flows within its own territory in order to try to take care of that problem. Now, the utility could call on other people to curtail their transactions rather than the utility just burying the expense of doing redispatch in order to take care of the problem.

So, you know, if you're a utility, what do you do? You can curtail other people's transactions in order to solve the problem, you do it, and they did. And essentially we had a nonmarket rationing of

transmission, and there was no guarantee that the people who got any of the transmission needed the transmission most likely were actually getting to use it.

Another thing that happened, the Pennsylvania, New Jersey, Maryland power pool recalled a lot of power, so that lower cost power from there could not move into Ohio and other places further west. They essentially said we're going to keep the cheaper stuff at home rather than selling it into that high-priced market, which was good for their customers, customers in those states, but not so good for customers in the midwest.

And then finally something that I think has been alluded to a number of times today, retail pricing did not really give customers much of a reward for figuring out how to reduce their usage at peak times. Again, in the midwest, this is not like California where industrial users -- big industrial users have to take time-of-day pricing. This is not a state where you -- I mean, you have some interruptible programs where a business can agree to let its power be interrupted at peak times in and in exchange it gets a lower rate, but those aren't as prevalent in the midwest as other parts of the country.

So, you had a fairly inflexible peak demand that's partly just a result of utility practices, partly

a result of the state of regulation in the retail market, where it's not a very competitive retail market, and so you have, you know, demand less flexible than it probably could be. Then you bump up against a severe constraint in supply, and gee, guess what happens? Prices spike.

Okay, well, what's all this stuff mean? What does all this stuff mean? Well, I foreshadowed part of this. We didn't really see much evidence of market power in generation and marketing, except to the extent that the transmission constraints created that temporarily. The price spikes may signal the need for new supplies of something. Is it generation or transmission?

We emphatically said we don't know, and the reason we don't know is because transmission is not priced in a way that reflects its value. To some extent, transmission and generation are substitutes, and so we don't have any signal that tells us whether it's more rational to build more generation in the midwest or build more transmission to bring power in from outside the midwest.

You know, my guess is you probably -- we may need some of each, but what's the right amount of each? Without -- you know, without sort of rational pricing of

these things, we don't really have a way to tell. And so we have to be humble there. Again, you know, that's part of the problem with transmission capacity not being allocated based on value.

And then finally, on the retail level, you don't really have much in the way of incentives for conservation, and so you are going to make demand a lot more inelastic than it would otherwise be.

(Applause.)

MR. SMUTNY-JONES: I guess I get to go last before the cocktail hour today, so I will be brief. I wear two hats today. One is as executive director of IEP and the other is chairman of the CAL ISO, and I really am not here on behalf of either one of those organizations, but I was asked to educate you all on the issue of congestion management and the use of FTRs in the wholesale market and then its impact on retail power.

Given the fact that it's ten before 5:00, I don't want to put any of you to sleep, I will comment on that, but I want to talk about it in a little broader context, but it was brought home to me why this was a relevant topic when I arrived at my hotel today, where I had checked twice on my reservation only to find that the hotel room I had, at effective 5:00 on Friday, was

no longer there. Somehow between the 800 number and the front desk, my reservation went somewhere into the great ether.

And after spending most of the afternoon securing a place to sleep that wasn't going to be a grate, I did locate a place at twice the rate. So, those of you who don't have a place to stay -- by the way, there are no hotel rooms apparently in Washington, D.C. -- if you don't have a hotel room, I have a couch available for about a thousand dollars. So, we'll be having a little bit of an auction later on on that.

I want to talk about this in a little bit of context about what we've tried to do out west and some of the things that have worked fairly well, and I'm not going to have an adequate time to go into all of this in great detail, but just to address some things and some of the conversations I've heard earlier today.

Generally speaking, our wholesale market and the way we have unbundled it has worked extremely well in California. The major advantage to electric restructuring, and I do not use the word "deregulation" for obvious reasons, is basically the demonopolization of the electric utility sector. We have -- we have basically busted it into a competitive generation sector, a wires business and a retail business.

The generation sector, where I spend a good deal of my time, there has been an amazing amount of activity there. The utilities in California, the IOUs, have divested themselves of their generation assets, often at three to four times book value, and while the rest of the country talks about what we're going to do about stranded costs, California's almost done. As a matter of fact, San Diego accomplished that this June. So, significant impacts there.

And more importantly, what we find going on with the people who have acquired these new generators is they're competing on plant efficiency. So, we're seeing a significant amount of modernization that we would have never seen in these power plants with people coming in and repowering them. It has had a very positive impact not only on just basic efficiency but on the environment, as well.

So, there is significant -- and when I say significant, there are a large number, 26 or 27 plants currently being proposed to be built or repowered in California as we speak today.

Significant benefit, I think also, to the ultimate rate payer, and this is an important point to consider. Historically, whether one of my utility colleagues built a $5 million nuclear power plant or

whether we put contracts out to bid for the ITP industry, it was ultimately a captive rate payer that was underwriting the cost of those investments. What we don't have in the generation sector is anybody who wants to can come to California and build a power plant, and if they make money, great, and if they lose money, it's their money to lose, okay, and they can sell it to the next person at a discount, like the hotel business, eventually someone makes money on that chain. But the point is that somehow stranded costs will soon be a thing of the past.

A key component here, as well, is the creation of how we handle transmission in California, and again, we have a system where we've created a California ISO, and we operate the transmission system. Technically -- well, not technically speaking, as a reality, the utilities continue to own the transmission facilities and continue to earn a rate of return on those investments. I like to call those transcos, and they actually can invest money in transmission, which they have done, and earn a rate of return on it.

The ISO operates that system, and the ISO is involved in a significant amount of coordinated planning, too. That has created significant opportunities for competition between transmission and

generation. As I go through the next three minutes or four minutes, think about that a little bit, because often times when you see congestion or when you run into problems, the alternative may be, yes, a transmission upgrade, that may make a lot of sense, or it may make a lot of sense to build a new power plant on the other side of the transmission upgrade if you've got the incentives correctly. So, what we're seeing now is really I think for the first time some real competition between transmission and generation.

For example, my colleagues at Southern California Edison sold off their generation in the Southern California area and suddenly discovered that for $130 million, they could forego the need to rely on these units anymore for reliability reasons. They didn't come to that conclusion when they owned them, but when someone else owned them, they did. They have made those investments, and we're seeing some progress in that area, but that's a very healthy thing to see happen, and I think ultimately the ratepayers benefit from that significantly.

Getting to the discussion a little more precisely on the issue of congestion and the firm transmission rights, which I feel obligated to talk to you about, since I was asked to, transmission

constraints on a wholesale level obviously have a potential amount of impact on retail customers. I think the last couple speakers alluded to what's going on in the midwest. Obviously if you can't get product to market, it does affect price, and it also can potentially, if it happens often enough, raise some significant market power concerns.

We at the California ISO have been successfully operating a system since March of '98, and it has worked reasonably well -- actually, I think very, very well. We are -- to use the analogy that was used earlier, we are an air traffic controller. That's pretty much what we do. We don't have physical control over the transactions, we don't own the transactions, but we basically try to process them according to our protocols, and that has worked generally very, very well.

The congestion market, which we have in California is based on the following: First of all, all of the transmission rights -- the IOUs, the investor-owned utilities in California, have dedicated over all of their transmission to the IOU -- the ISO, rather, and the ISO basically, as I said, operates it in a way that it's open to all comers.

There is, however, a situation where you can run

into congestion, and what is congestion? This is basically a very simple concept, although I have 35 pages worth of charts and formulas to show you how complicated you can make it, but the idea basically is you have more electrons trying to flow over a path than can. Think about a thousand megawatt power line and you want to schedule 1200 megawatts across it, so what do you do? Obviously there is market effects of that and obviously there is the potential for market abuse.

What we have done in California on that is we've tried to go to a much more market-oriented approach there. We have a forward market using adjustment bids, that people bid ahead of time what it's worth to them either to pay more money to cross that constrained path or to take more money to cross that, and we do that with respect to our interzonal congestion.

We have a different model in California than here -- here, I mean PJM or elsewhere -- we have a zonal model, and there -- this is -- if you want to go back to sort of the religious wars, there is a religious war in zonal versus nodal. I'm a zonal. It fundamentally comes down to how efficient you want efficient -- meaning using that in an economic sense -- you want to be.

In California what we've got is you went -- if

you took a nodal approach, we had about 1500 different zones or nodes, okay. We went from 1500 to nine to five to three to two, we were very efficient, and what we're looking at electric there is areas where you see a significant amount of congestion where it occurs enough of the time, 5 percent of the time, that that area belongs in a zone, and everything else you basically internalize. So, that's how we do it there.

Elsewhere it's done it nodally, which means that different bushars may have different numbers, and there's a whole group of people that can get into the theology of all of that, and it's a fascinating area and a lot of fun.

Anyway, zonal concept also contemplates, as I said, we have got two active zones in California and we are also connected to 22 other interfaces with other people surrounding California. We are creating a new zone in California, because we found that there was congestion occurring in one of our markets, and that's worked fairly well.

As I indicated, basically the ISO charges the scheduling coordinators for using the congested path and then pays the scheduling coordinators for counter-flows. The dollars it collects for that congestion goes to the transmission owners, okay, that's

how that works.

As I indicated, there's incremental and decremental bids in that market, so people can basically control what it is they are willing to pay to cross that.

There has been congestion, particularly at an area called path 15, if you drew a line kind of two-thirds of the way down in California, that's path 15, it's kind of where Diablo Canyon is, and it is a significant area moving power north to south, but just to give you some idea, I believe last year the congestion revenues coming out of that area were somewhere in the neighborhood of about $20 million, okay, which may sound like a lot of money, but to fix the problem or to fix the congestion would cost -- would be an infusion of capital around $400 million, and we're not even sure that would work.

So, the question there is that, you know, what is that worth? So, interesting area. We're looking at it and working at it with a great deal of consideration going forward, but again, what we're trying to do is create economic signals that tell people that this body costs X amount to cross, and what we're hoping to do is create economic incentives for people to either invest in transmission or to figure out a way to build

generation, for example, on some -- to use path 15, someplace to extract some economic rent from that.

That brings us to firm transmission rights, FTRs. We're opening up our market on February 1st, 2000. This has been an area of a considerable amount of controversy. What a firm transmission right is simply it provides a hedge against scheduling uncertainty.

In other words, you've decided you don't want to -- you don't want to play in that market, you basically want to know what it's going to cost. It has some value to you to cross that path all the time, so you're willing to purchase that right. There, you can look at this as either a scheduling priority in terms of kind of the concept of a physical right or a financial entitlement.

In other words, you may not be able to move that specific amount of power across, but you get the usage charge for it. As I said, that's opening up in relatively short order. We think that will work pretty well. The one controversy in California is that we have an annual auction on these things. So, in other words, you buy them annually, and there are some concerns to some parties that that's not long enough. If you want to do a three-year deal or five-year deal, what do you do about that? We'll see how that plays out.

There is an ongoing concern internally within the ISO board of directors over one group, which I'm a part of, and it's the minority group, basically saying just put all this stuff out there, let's see what the market does, and we can monitor as we go along, and if we need to fix it later, we will, and another group saying, No, but what if somebody gets all of it, and you just kind of end up with a regulatory problem, and we need to do a whole lot more monitoring and control of this or whatever, a very kind of healthy debate that's gone back and forth and back and forth.

To make a long story short, we are going to have an auction. It's going to be out for a year, and I think we'll learn a lot by it. I think that there's -- I'm very hopeful in terms of what we're seeing going on.

We're also kind of learning some things. This is kind of interesting. Nevada, which is just across the hill from us, is opening up their market in short order, and they're handling FTRs a little bit differently, and we're looking with some interest in terms of how they're going to handle their daily FTR market. It actually may be an improvement over the way we do things. So, we're kind of -- if it works there, we'll steal it. You heard it first. So, that's what's

there.

The only other things I wanted to say on the FTRs in California is we have got a use-it-or-lose-it concept there. That means that we look very -- we're doing everything we can to make sure that as the day closes, every available -- I think all the available transmission is, in fact, utilized, and in this transition we have had, there are some inefficiencies, but the use-it-or-lose-it concept is if it's not going to get scheduled, then it gets opened up to everyone else, and again, that remains to be seen how successful that will be, but I am pretty confident we have got a lot of creative people out there that will be able to address this.

Sort of in closing here, basically there's a couple things I just wanted to point out. First of all, I think it's extremely important, as these markets continue to evolve and as other regions begin the process of restructuring their electrical sectors, it's extremely important to create incentives and mechanisms for transmission and generation to compete.

There were a couple speakers earlier today talking about the, you know, people will invest in transmission. I think that's true. I think it's very important to, you know, to make it a viable business,

but I also think that we need to incentivise, again, a process where you have transmission and generation competing.

We've created a situation in California, we call the LARs process, local area reliability, where we actually have started. Basically the ISO will announce on an annual basis, this is what we need electrically to keep the lights on. Who can give us the best deal? And it's open to generation, it's open to transmission, and it's also open to the demand side. We're hoping to see much more activity in that area.

Second, create some opportunities as these FTR markets and congestion markets open up are self-policing. My concern is that we start trying to over-regulate something that we don't really understand yet. So, I think that leads to my second issue, is also be flexible, however, in what you create. You don't want to give people a 30-year FTR and then find out that, in fact, you've created something that's going to turn around and haunt you in the market.

I can guarantee you, having spent four or five years now involved in this whole business, you are going to get it wrong. So, I mean, you know, forget about, you know, agonizing over getting it perfect. You're going to get some of this wrong, so you want to be

flexible there in being able to respond.

And last but not least, and this is very important, is that, you know, as I indicated earlier, I believe that the primary benefit of electrical restructing has been the demonopolization of the system. I think there were reasons that created energy there and a lot of capital flowing to things that really make a lot of sense, but we're far from over.

We're kind of midstream right now, and I'm very nervous that people are trying to push us back in the wrong direction, and the only worst thing than where we came from is to end up with unregulated monopolies, okay, and that would be a horror story.

So, with that, I'm done, and we'll -- we'll move on to questions or however you want to spend the rest of the afternoon.

Thank you.

(Applause.)

MR. HILKE: Just one real quick question before you get away, how far in advance does the use or lose capacity occur?

MR. SMUTNY-JONES: Daily.

MR. HILKE: Daily.

We are ready to take questions from the audience if you'll come down and let us know who you are.

Absent that, I will ask a question or two myself, so that's the threat.

MR. SMUTNY-JONES: Lock the doors.

MR. HILKE: Lock the doors, right.

I guess this is the $64,000 question for Dan. How long are we going to wait before you think that the distributed generation is really going to make a big difference?

MR. ADAMSON: If I knew, I think I'd get out of the government and go and buy some stock. I don't think it's really clear. I think it's -- with the technology, some of it still has a little ways to go. I think within the next five to ten years.

And then -- I spend my day now not with folks like you but with a bunch of technologists, and what I have to keep on explaining to them is you can get the technology right, but if you haven't dealt with the regulatory and institutional issues, you're not going to see anything. So, you know, five to ten years if we get both the technology and the regulatory process right. That's a guess but not a very formal one.

MR. HILKE: I guess this should go to Ken first -- or Kevin, rather. With the extent of the RTOs being -- sort of the question of how big is big enough, do you have any insight from what you've heard from FERC

so far or what you have on your own as to what we're looking at in terms of optimal size, and I guess included in that question is the technical difficulties of bringing large area under a single control area.

MR. KELLY: I have my own thoughts on it, but we, and I mean society, not just FERC, but we have many aspirations for RTOs, and the different goals that we want for them would come out at different sizes. Just a few examples.

One is to internalize loop flow. Since it's late, I won't go into that. I think at least half the audience knows what that means. If you really want to do that, you need to do it on an interconnection-wide basis to do it properly, and if that were the only goal for RTOs, you would want RTOs to be as big as an interconnection, which means basically all of North America, east of the Rockies, west of the Rockies and then Texas separately.

Another goal for RTOs that some people have is to have them be control area operators. That's not something that FERC proposes in its NOPR, but that's a goal many people have. And right now there's something like 144 control area areas.

If they were to consolidate them at some point,

it's unclear technologically how few you could have or how few you could have at a reasonable cost, but let's just say, to pick a number, it was 20, then you'd have 20 RTOs with that size.

There are intermediate goals that call for RTOs of intermediate sizes, goals relating to having a single transmission operator, not a control area operator, for a fairly large region, in which case you may have -- and this is just a ballpark number -- you know, you could get down to as few as five to seven.

There are goals of having RTOs set up markets and, you know, have a PX associated with an RTO, and that might get to a different size of RTO, perhaps three or four or up to ten, depending on what you think.

So, the point is that we do have many goals for RTOs, different goals determine different sizes. I think we might get around that by letting RTOs form where they can of a -- at a -- of a decent size, I'm not going to define decent here, but with good rules for coordination between them --

MR. HILKE: You know it when you see it, right?

MR. KELLY: Right, but good rules for coordination between that allow groups of RTOs to act as if they are a single entity, with an open architecture

provision that allows them to coalesce if that becomes cost-effective as times goes on.

MR. HILKE: Ohio's version of the midwest price spike report was somewhat different than Jerry's or FERC's. Do you have any comment on that?

MR. GLAZER: Well, let me make two comments on that. First off, I think Kevin raised some interesting points as far as what the goals are, and one of the things which we've been toying with, because we're sort of so fed up with this split on the ISOs, would be some kind of reciprocity tariff to link RTOs, because I think if it's suboptimal size and you've got pancaking, I think you've still got a significant market barrier, but there may be bridge mechanisms. We actually proposed one in the AEP merger case, which we hope that FERC takes a look at.

In terms of the price spikes, we did take a less rosy picture of it. We thought it can happen again for all the reasons that were talked about here. If we don't get the wholesale market and we don't have large enough RTOs and deal with some of these transmission constraints, that those are things that drive up price spikes, and it could happen again.

MR. HILKE: One last chance for the audience? Okay, if not, thank you very much.

(Applause.)

(Whereupon, at 5:00 p.m., the workshop was adjourned.)

C E R T I F I C A T I O N   O F   R E P O R T E R

DOCKET/FILE NUMBER: V990001

CASE TITLE: ELECTRICITY WORKSHOP

HEARING DATE: SEPTEMBER 13, 1999

I HEREBY CERTIFY that the transcript contained herein is a full and accurate transcript of the notes taken by me at the hearing on the above cause before the FEDERAL TRADE COMMISSION to the best of my knowledge and belief.

DATED: 9/27/99

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SUSANNE Q. TATE, RMR

C E R T I F I C A T I O N   O F   P R O O F R E A D E R

I HEREBY CERTIFY that I proofread the transcript for accuracy in spelling, hyphenation, punctuation and format.

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