BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. UNDOCKETED

In the Matter of

HEDGING AND PORTFOLIO
MANGEMENT WORKSHOP
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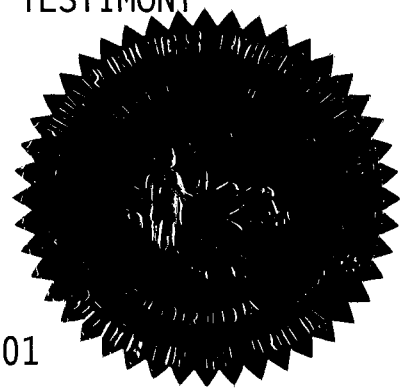

PROCEEDINGS:	WORKSHOP
CONDUCTED BY:	COCHRAN KEATING
DATE:	Wednesday, August 8, 2001
TIME:	Commenced at 1:30 p.m. Concluded at 3:44 p.m.
PLACE:	Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida
REPORTED BY:	JANE FAUROT, RPR Chief, Office of Hearing Reporter Services FPSC Division of Commission Clerk and Administrative Services (850) 413-6732

IN ATTENDANCE:

DAVID FAIRLEY, Director, East Power Trading, Enron.

COCHRAN KEATING, FPSC Division of Legal Services.

JOE JENKINS and BILL McNULTY, FPSC Division of Safety and Electric Reliability.

MATT BRINKLEY, FPSC Division of Economic Regulation.

P R O C E E D I N G S

MR. KEATING: I would like to welcome everyone this afternoon to this undocketed staff workshop on the subject of risk management for fuel and wholesale energy transactions. I believe there is a sign-in sheet that will be going around the room, if you would sign your name in, let us know who is here today.

This workshop was established to provide an opportunity for interested persons to make presentations to the Commission staff and other interested persons concerning risk management policies and procedures related to fuel and wholesale energy transactions. And I believe our notice for the workshop gave fair warning that Commissioners may be present, as well, and we do have two Commissioners present at this point, Commissioners Palecki and Deason.

I am aware of only one party who is here to make a presentation today, and that is Enron. If there is anyone else in the room who has prepared a presentation, or would like to make a presentation today, now would be a good time to let us know so that we cannot cut this off too soon. Okay.

Well, seeing no one, I will turn things over to Enron. And their presenter today is Mr. David Fairley, who is the Director for East Power Trading for Enron. And the microphone is yours.

MR. FAIRLEY: Thanks for the opportunity to be here.

Welcome, everyone, on behalf of myself and Enron. Director of East Power Trading that sounds a little bit inflated. What I really do is I'm a long-term marketer for -- long-term power marketer for Enron. My region is primarily in the southeast. I've spent a lot of time in Florida through the years. My first few years out of college I worked for a large gas utility, engineering, rates, regulatory, and marketing. So I got a good sprinkling of the more important areas.

And since that time I've been on the unregulated side of the business, spent a lot of years doing gas trading and marketing. And over the past three years focused totally on power marketing and projects.

The subject matter here is pretty broad. You could fashion a four-year college degree on this subject and still not know enough. But there is tremendous opportunity for companies that want to avail themselves of hedging and risk management products and techniques. What I did is I tried to focus on my own personal area, which is power marketing and power risk management. And I wanted to specifically do that rather than focus solely on fuels.

The issues are the same. You can transfer these techniques from commodity to commodity to commodity. They are all the same. Many of the -- many companies will do agricultural, energy, interest rates. You can walk around Enron and you can go to a different floor and we have got

traders doing currency trading and interest rate trading just to manage those positions for our company, and six months later they may transfer over to gas or power trading. Very transferable.

But I wanted to focus on power because power risk management is not as liquid as fuels. It is much more difficult to do. You have to focus on some of the issues more. And I thought it would be more appropriate, because, you know, we are not a group here of power traders or gas traders who have been doing this for years. We are going to talk about fundamentals here.

The first thing I wanted to do is kind of set the tone. I guess everybody has got the presentation. If you will flip over to the bright yellow chart, it's about the third or fourth page, recent influential events, the California crisis. What better subject. Everybody is an expert on this.

What I tried to do was take several items that we feel contributed to the situation in California. You know, number one, demand increasing faster than supply. And you can see over on the right, I picked two other areas. The New York ISO, which is somewhat of a viable market. They do have an ISO in place, power is in traded, rules are in place. And in Florida, which is more of a traditional market. And, you know, if you go down this list of items, and I'm not going to try to go down and analyze each one of these items individually, but

if you go down this list of items, there is a point here to make. California, check-off on almost everything. And Number 10 on the check-off may happen yet. It is certainly moving in that direction with transmission, perhaps generation is next.

In New York, almost a duplicate of California. And when you get down to some things like the liquid market, price caps, those sorts of things, in many ways identical to California, and very serious problems in those markets. People in New York spend half their time trying to figure out how to get around the rules so they can transact, and so they have created a very distorted market there.

Now, if you would look over at the Florida list, you know, you have got a lot of boxes checked off there. We have a lot of boxes checked off there. And I realize some people may read over this and may agree or disagree with some of these things. This is rather subjective. But the point here is we have to ask in Florida how far away from California are we, and think about even more important how easy it would be. People are talking about change. The market is changing, all the participants in the energy industry are changing and trying to learn how to accommodate these changes in the market.

A few decisions are going to be made at the Florida Public Service Commission in the next months and over a year or two that could easily move Florida more in the direction of California despite what the IOUs may want to do or not do, or

companies like Enron, or what have you. And I put this slide in the front just to kind of set the tone that there are pretty serious issues here. When you make -- when you start delving into this area of risk management and hedging and doing things that affect pricing and changing the way that the utilities do their business.

Now, I want to tell a little story. My first personal exposure to hedging. It happened and for quite a few years I did not appreciate what I even saw. This happened to me about 25 years ago. I was working for the gas company. There was a purchasing agent and a serviceman who had sort of a hobby business on the side. They raised soybeans. And they each had about 40 acres, and this was kind of an afternoon/weekend type job, and they had made a little bit of money doing it. One day we were in the coffee shop talking, and they were discussing booking their beans. And I asked a question, "What do you mean by booking your beans?" Because I was thinking about tractors and planting and that sort of thing.

What they did is they went to the co-op, this was before they ever planted a field, they went to the co-op and they presold their beans. They would watch the futures prices for soybeans in the newspaper and when the prices got to a level they liked, they would go to the co-op and essentially sell forward their beans.

And I thought, well, how smart. Everybody knows during the harvesting season, soybeans, cotton, any agricultural product, the prices come way off because the market is flooded with the product. So they were doing something pretty smart. Well, then I asked some more questions. I said, "Now, what do you do if you have a crop failure? What if there is a drought or something happens to your 40 acres? You're going to owe the co-op a lot of beans." And they said, "Well, we have got crop insurance." And I thought, you know, federal crop insurance, I thought that is pretty smart. If there is a hurricane, or a drought, or anything, they are covered.

And, you know, they basically knew what it cost them to plant their crop; chemicals, fuel, repairs to their equipment, that sort of thing. They knew what it cost to produce a bushel of soybeans. They presold those beans, they locked in their margin. They knew they were going to make money. And it was not a pure science, it was not penny for penny on every bushel of beans, but they had very good certainty that they were going to make a lot of money on those 40 acres.

Well, over time these people grew to the point that they had family members and neighbors and everybody else doing this. They had a good thing going, and they had a lot of fun. It was hard work and they had a lot of fun doing it. But they

were hedging. That was 25 years ago. These are guys that were -- neither one of these gentlemen had college educations, they weren't really educated. Like a said, a purchasing agent and a serviceman, yet they had figured out how to hedge their soybean farming process.

And, you know, the utilities weren't doing this, the energy business wasn't doing it. And, of course, it took years later before I realized this was hedging. And it took 15 years later before I realized their crop insurance was nothing but a weather hedge, and that's all it was. And so, over the years I have often thought back to that and I have told that story to illustrate, you know, as much as we all think we might know, there is a way to lock in profits and to protect from the disasters that can happen in any business.

A couple of the fundamental components that are very important to think about in risk management and hedging, in this next section it's called hedging volatility. And I apologize to everyone for not having a PowerPoint presentation. We had some logistical problems. So if you would just do the extra work and follow along in the slides.

But if you will go over to the page hedging volatility, there are two columns there, hedging and speculating. I know it's probably very clear to everybody in this room, but I always try to emphasize it anyway when talking about the fundamentals of risk management. There is still a

big misconception in the energy marketplace about hedging and risk management. Hedging is not speculation. Hedging should not be risky. If a hedge is properly done, there is an offsetting position. You will gain on one, you will lose on the other, but in total you cannot lose. You can't lose the whole house. It just can't happen.

Lots of people -- and, of course, it has been publicized greatly, you know, companies and municipals who have used derivative products and hedging techniques, and they have lost a lot of money doing -- utilizing those products. They were not hedging, they were speculating. They were trying to hit home runs. They thought interest rates were going to go in their favor, they thought various things were going to happen in their favor depending on what market they were playing in. And they took positions, they bought swaps, or options, or various things and they lost a lot of money.

That was speculation and that is no different than any of us going down to one of the casinos and betting money. If you are lucky, if you have it figured out, you are going to make a lot of money.

In my company, Enron, we are a big company, a lot of people think we're giant speculators and that Enron takes on huge risks. We don't really do that. The vast majority of the portfolio of our energy business is fully hedged. It is the only way to do it. There is no way that we could guarantee our

stockholders long-term earnings stability if we didn't hedge all of these things. There is no way that we could do long-term deals with utilities all over the country and guarantee them that we are going to be able to service the contracts without having those deals hedged.

But moving to the slide, hedging versus speculating. Hedging, specific objective driven. You have a transaction, or you have a position, a group of transactions if you are short power, you need to buy, you are long power because you are a generator and you are going to do some offsetting hedge to achieve some particular objective.

Speculating is purely profit driven. And if you don't really need 500 megawatts and you go out and buy 500 megawatts because you think the market is going to go up, maybe it will, maybe it won't. That is speculation. If you use a derivative product to attain that same 500 megawatts of length, you are still speculating. It is not physical power, so you are not going to have to sell the power, but there will be a financial settlement. Hedging, I already mentioned, offset by a position; in speculating there is no offsetting position.

Hedging reduces volatility exposure. The prices that we all hear about, the outrageous prices -- and, again, this is where power is a good example because power is so much more volatile everywhere you go. Hedging can take the volatility out of the particular market, whether it's a transaction or a

position that a company has or a portion of a position. Speculating however, is volatility driven. And in our company, when we periodically take positions in our commodity business, we are speculating. If we think hot weather is going to cause prices to go up in an area, we may buy power a day ahead and expect to sell it and make a profit. That is a speculative position and we do some of that.

Hedging reduces likelihood of large losses and gains. And, again, the next point, stable expenses. With speculation -- and largely people will use risk management techniques and products because largely they are financial and you don't have the physical aspect to deal with. You do increase the likelihood of large profits, but you can have huge losses, too.

And we have all heard the stories about companies going out of business in the energy business the last few years, and marketing companies, trading companies, and utilities taking huge earnings hits because they speculated, they were not hedging. And they did not predict, you know, their crystal ball didn't work well enough, and they didn't predict the market well enough.

If you will flip the slide over, PJM on-peak energy clearing price. I use this slide, the PJM power market, it's a functioning viable market and a lot of people talk about it. It is touted because it works. It's not an easy market, it's not perfect, there are lots of problems with that market. And

if you talk to someone who buys or sells power in that market, you will hear lots of horror stories about what goes on in that market. And you can see largely prices in PJM over this couple of year period are pretty stable, didn't vary all that much, but you can also see some tremendous spikes along there, June, July, August of '99, giant spikes up to $600.

Now, what is not on this chart, but I will tell you, yesterday PJM hit 1,000 bucks, $1,000 a megawatt hour. And it was only for, I think, one or two hours. Most of the other on-peak hours were in the hundreds of dollars, but still those are tremendous prices. And any company who desires to speculate and try to make a lot of money, that's fine, they can do that. But a company whose job is a load-serving entity or has an obligation to sell power to a load-serving entity, that sort of thing, the primary business is to provide good solid reliable power supply.

If they took positions in that market knowing the hot weather was coming, maybe the prices would go to $1,000, maybe they don't, but in any case with hot weather, and it has been extended hot weather in the northeast, everybody knew that the prices were going to be volatile. And anybody who had an obligation to serve, again, whether as a utility or serving a utility and pursued that business without being hedged, that is foolhardy.

And I can tell you there are some companies who lost

a lot of money in the last two days in PJM. I spent some time yesterday before I left town talking to our traders who trade in that market, and I'm not going to mention any names, but I was surprised there were a couple of names that were trading up there that, you know, probably at the end of the quarter you are going to hear some earnings hits on a couple of utilities and a couple of trading companies, trading houses, marketing companies, just because of a couple of days in PJM. Just to pinpoint that one relatively small region. So even in a market as viable as that you have got a lot of risk and you have reason to hedge that risk.

If you will flip to the next page, another quick example of volatility. You have got Treasury bonds, NASDAQ stock market, NYMEX Natural Gas, all pretty stable and most people don't think of natural gas as being all that stable, but relatively speaking it is. And then the green line there, the spot price of power in the California power exchange. It says peak weighted, that is just on peak. You can seen the volatility.

Now, this chart does not chart prices, it is charting percent of volatility. Outrageous volatility. Huge spreads from min to max on pricing. And is it any wonder that the utilities in California have had so many problems when they really cannot in their day-to-day business just go out and buy large quantities of power forward at fixed prices. They are at

the mercy of what is going on hourly and daily in that market and they just have to pay these prices.

The next section, forward markets. And I hope just these few examples illustrate just how volatile the market can be. Fuels and natural gas are not as volatile, but they are volatile. And in the quantities that utilities in Florida and around the country buy fuels, that volatility can make a huge difference in cost. Which eventually goes on to all of us, the ratepayers.

Forward markets. Probably the most important consideration, the most important thing that everybody should have their eye on no matter whether they are a hedger or not a hedger, a public service commission or anything, is a forward market. That is the most important tool that we all have. You know, we hear it discussed and debated in the RTO discussions about trying to set the market model in such a way that we can have a viable forward market without impediments, without constraints.

I would mention there was an article, and probably some of you saw it, it was in Baron's in the last couple of days, and it had to do with potential electricity supply glut in the country and the impact on utilities, electric utilities and non-utility generators. And the author several times through this article mentioned forward markets. The reference largely was that the question of whether looking at forward

markets, you know, we have a forward market in PJM, Florida, what have you. Everybody has somewhat of an idea of what prices are going to be, but that's not a real forward market that everybody agrees on.

And the question was is it the right decision to build all the generation that is being built. In many parts of the country, the forward market as it exists, what prices for power are really trading at and fuel, natural gas for that matter, they don't really justify building the plants. Now, there are regions of the country that -- exclude California, but if you go to New York or up in the northeast there is a lot of areas up there with a forward market and -- I mean, what prices are really trading at doesn't really fully justify building generation. But everybody knows they have got to build some generation in New York City and in large parts of New York.

The other thing was in this article it was pretty clear that the Wall Street analysts are looking at forward prices for power and fuels, but primarily natural gas, and they are judging all of these generating companies, whether they are utility companies, IOUs, or non-utility generators and judging them and making recommendations on whether to buy or sell their stock. That is a huge input in their analysis.

So we may choose to ignore the concept of forward markets, we may choose to do things that impede forward markets

in a new RTO, or in the current market, or what have you. We may choose to impose rules that don't allow utilities to participate in a forward market fully and, therefore, there is not a viable forward market, but Wall Street is going to do it. Other people, other segments of business in the country are going to use those forward markets to judge the electric industry. So it is important.

Flipping the page over. Importance of forward markets and liquidity. And I wish I had a better subject than this to talk on. This is not the most exciting subject in the world, especially at the fundamental level like this. But forward markets, if you have a good strong viable forward market that means you are going to have liquidity. Liquidity means you can go out and transact; buy, sell, and do hybrids of buys and sells at will. Plenty of willing counterparties, not unrealistic price premiums for certain hybrid products.

Forward markets are good for a planning tool and that is what the Baron's article was emphasizing, was the value of forward markets. The Wall Street analysts are using those forward markets whether we like it or not to value our utilities.

The next point, a requirement -- a forward market is a requirement to price more sophisticated hedging tools and it is primarily talking about options. If you are working with risk management products and techniques, you are going to be

using options. Physical power, physical gas, transacting in those two commodities, there is a fair amount of call options that are bought and sold. Some put options. You need a forward market. The first bullet there, the underlying market, that is the forward fixed price market. Time to expiration, well, that's just the days left in the month. Volatility and a strike price. Volatility, the more volatility you have, of course, the more premium you are going to have on a product.

If you don't have a viable fixed price market, a viable forward market, the options that trade -- that are necessary to trade, to hedge, or to speculate, or just to go and buy power or gas, there is going to be perhaps an unrealistic premium in the price built in. If the forward market has a measure of uncertainty or great uncertainty about it and, again, it's simply how many trades are happening, how many deals are getting done. And if only the very basic deals are getting done to be able to trade power supply back and forth just to satisfy loads and get rid of excess, and to buy and sell gas and fuels that are just absolutely necessary, that is not enough to have a liquid viable forward market. You don't have enough prices, you don't have enough price transparency.

And if you have a good viable forward market, it's not a bad technique to use for measuring the success of utilities in their buying and selling of fuels and power. Now,

I will mention here most utilities will -- and this is all across the country -- they judge themselves and they are judged based on the index. Buy gas for the month below index, buy gas for the day below index. If you can do that, you have won.

But think about it this way. If the hourly prices yesterday in PJM were $1,000, and you bought $900 power, did you really do a good job for the ratepayers? $900 power. If you are the ratepayer, you say no. And probably if you are management of that utility, you are going to say no privately. But beating index by a hundred bucks is not good enough, that is not a good job. So the rule of thumb to beat index just does not work in the volatile markets that we have today.

Flipping the page over, increasing liquidity reduces market volatility. Florida is a good example. I have been working in Florida for years, and I know the power and the gas market, the fuels market extremely well in Florida. And this statement, currently a 100 megawatt transaction can move prices against you. If you go out and make one phone call, buy 100 megawatts and nobody knows about it, you will probably get a price you are satisfied with.

If you broadcast very much that you are looking for 100 megawatts, prices are going to move against you significantly. And I realize significantly, that is kind of a subjective thing to say. And Florida is not such a big market that you have so many players that there are that many secrets.

If somebody is out buying much size at all, that market is going to move against you. If you have more liquidity in the market, you won't have that situation. The volatility won't goes against you simply because you are out there trying to buy.

And the bid offer spreads will shrink. Frequently the prices that you see in the market for power -- and this is true for gas in a lot of situations -- the bid offer spread, the price that people are willing to sell at or buy at, those spreads are huge. Now, in our company's on-line trading system, we force our traders to keep very narrow bid offer spreads. And they lose a lot of money maintaining that discipline at times, but it's the only way that we can keep lots of trading going on in that on-line system. We force liquidity into that on-line system, and it works and it is manifested in more trades getting done.

Let's flip over. Drivers of a forward market. And I'm not going to try to go into all of this in detail because it is pretty dry. Expectations and uncertainty, what might weather be doing, generation, transmission, fuel cost, these are the sorts of things that happen. And there is a brief example there of a generator who wants to sell forward, but he is not sure if his unit is going to run or if he can get fuel. He is going to charge a little bit of a premium to maybe the generic forward market because he is taking a bit of a risk

there to sell forward.

And looking back on indexes is not an appropriate way of judging what that generator did. That generator should charge a bit of a premium because of the risk that he is taking on.

Forward market distortions. I think this is pretty important, and this is where at the regulatory level it is pretty important to be careful what happens. In New York they have a 60-day rule. Essentially on those days when the market is not capacity short, extremely hot days or a significant unit outage is going on, a generator is not allowed to sell at a price higher than his previous 60 days of prices. It is more complicated than what I'm describing, but essentially it is a price cap.

Now, you know, my personal point of view, it's not fair, that is not a fair constraint to put on a generator, a restraint to put on a generator. If the market is willing to pay a higher price, the generator still can't sell at the higher price. Well, what happens is everybody in that market that is affected by that rule spends an awful lot of time trying to figure out ways to get around that rule so that they can operate, make the money that they are supposed to make.

California price caps, we have all heard a lot of that. Very controversial. But ultimately you put yourself in the shoes of the generator, would you want to have price caps?

If you are selling a vehicle to your neighbor, do you want a rule out there that says you can only sell that car for half the price you paid for it originally? That would seem so unfair, but it's the same thing. If the vehicle is worth more, you should be able to sell for more.

Now, debating the issues of whether price caps are moral, or reasonable, or not, that is really for a different time and place. But the fact of the matter is price caps severely effect forward markets. They severely effect liquidity. And all of these constraints on liquidity and markets manifest themselves in making it more difficult to hedge what you are doing. And if you are unhedged, more volatility is created artificially that ultimately is going to cause higher prices.

Any price control mechanism, especially complicated price control mechanisms, you can't define value and it scares people there. There are times that Enron, as sophisticated as we think we are, we will just back away from certain markets because the rules or the constraints are such that we just don't know if we can go into that market and play and make any money and provide reliable service, which is as important to us as making money. And so we just back away and we disappear from a market. And at times people ask us, well, why aren't you active in this market or that market, and that's why. If it is not a viable market, and we can't perform reliably and

make money we won't be there.

Developing a risk management program, if you will flip over a couple of pages. You know, if you decide you want to have a risk management program, and you have crossed that hurdle and you have convinced yourself that this is the thing to do, there is value there in the case of the power business, utility business, or in fuels, there is benefit for ratepayers, you then have to determine what are your objectives. Do you just want to reduce fuel prices; do you want to try to make sure that you have as much low-priced power as possible, you don't give any of that up, but you insulate your company from peaks, put yourself in a situation where you are never paying the $1,000 PJM type prices. You want to determine your objectives.

In Houston, my electric utility is Reliant Houston Light and Power, and I hedge with HL&P. I signed up for the level-pay program, so I pay the same price every month. I mean, that is a hedge. It doesn't help me on price, but it sure does help me on my cash flow. It is a hedge, and it is made available. Now, there is no way that the utility in the current environment can get down to my level as a homeowner and give me any control over the prices I'm paying. If they would, I would form a strategy and go about figuring out how to avoid the high summer peak in prices.

A whole list of things here. You have got to prove

prudency in a risk management program both to management and to the Commission. The third bullet here, capturing existing embedded optionality in a contract to maximize value. That word embedded is misspelled. I have corrected that and it keeps coming back misspelled. I guess this thing is haunted.

You can use certain risk management techniques to extract value from existing -- embedded value from existing positions that every utility has. An example, a dual fuel power plant. The fact that that power plant can switch fuels at will, mechanically switch fuels, if you go to a derivatives research guy and tell them you have got a 1,000-megawatt power plant that you can switch from Number 6 oil to gas at will, they go crazy. There is huge value in that.

But that capability is needed by utilities to provide reliable service. The objective there is not to make money out of the fuel switchability, it is to provide reliability, and yet with certain risk management techniques you can extract a lot of that value. And I wish we had the time and a white board so I could draw some of these things on the board. They are pretty interesting.

The fourth point there, secure energy requirements at better than index. Again, you want to beat index, but every time you make a decision simply to beat index, you are doing it at the expense of a fixed price projection. You are subjecting yourself to that example I used of paying $900 for power in a

$1,000 market. You beat index, but did you really do a good job for your company. And I'm not going to go through all of these, but these are -- these are generally a list of things that accrue to a company when managing a risk management program and they are considerations that have to be covered.

Flipping over. Quantify. These are the things -- if you are going to put a risk management program together, a few things that you really have got to do. You have got to quantify your exposure, look at your load, look at your generation, look at your contracts. What are the characteristics, how firm are they, nonfirm, that sort of thing. Is this price exposure pass-through or is it not? In most cases with the utilities it is pass-through. And then the political risk threshold, which is a fancy way of saying prudency questions.

And the worst case is to do nothing. For a person at a utility to realize that even though there are things they might do to improve a pricing situation, and we talked a little bit about this before the meeting started, the decision generally is don't do it. There is no mandate to do it. No one is asking you to do it.

And on hedging, you know, there is always a winning side and a losing side on a hedge. Not between participants, but on a hedge. If you sell NYMEX and buy physical gas, one or the other is going to lose money, but that's okay because

overall you didn't lose a large amount of money, you just lost a slice. But it can be viewed that that loss on a hedge was a bad thing.

And in a utility if the auditors come in and review what was done there and it was deemed that, well, if you hadn't done that hedge at all that money would not have been lost, maybe in total not a lot of money, but on the hedge it looked like a lot of money, and it could appear to be a very risky thing to have done. It looks bad and serious questions could be asked.

So what happens? The utility is not going to take this risk. They shouldn't take that risk. And years ago when I worked for a utility and I was a fuel buyer, I wouldn't do it, either. There were things that I knew I could do that nine times out of ten were going to be big wins for the utility, for the fuel portfolio and for the ratepayers, but I couldn't do it. And I would go sit down and talk to my boss and we would analyze the situation, and generally we would decide not to do a lot of the things that were available. Even back, you know, 15 or 20 years ago, much less what is available these days.

The next bullet, assessing management's risk tolerance --

CHAIRMAN DEASON: Excuse me, may I interrupt for just a second?

MR. FAIRLEY: Yes, sir.

COMMISSIONER DEASON: That last point, I understand exactly what you are saying, and I guess my question is in your opinion what do we, as regulators, do to encourage utilities to prudently go after opportunities that are reasonably there without them feeling like they are going to be unduly harmed if they make a mistake, when as you indicated on average there are going to be net benefits derived? Have you had any -- have other states addressed this, do you have any experience as to how -- or any thoughts as to how regulation should be implemented to provide the correct structure and incentive for companies to aggressively manage their portfolio?

MR. FAIRLEY: That's a great question. I think the most straightforward thing to do would be to give each utility the opportunity to develop a risk management policy which essentially would be a picket fence around what they can do. Trading limits. The exact same risk management policy that any company who is performing a sizeable risk management function ought to have internally anyway. Develop that risk management policy, bring it in front of the Commission and get it blessed. Basically a set of rules that protect from getting too far out of bounds. We have that inside Enron.

And I guess the best way that I could explain it is that, you know, we have a lot of traders at Enron, power and gas traders. And with a trader -- and it's no different at a utility, but in essence, you know, with what they are doing,

buying and selling gas, power, what have you, but at Enron we are not a load-serving entity, so we are buying and selling the commodities strictly to make money or to do things that we need to do to satisfy our long-term contracts and obligations.

You never want to put a trader in a tentative situation. If you put a trader in a situation where they are going to get second-guessed, where there is going to be a lot of armchair quarterbacking going on, they are not going to do deals. What you can do is encourage them, incentivize them to aggressively pursue transactions, but you also put the picket fence around them so that if they do make a bad decision on a trade or a series of trades they cannot lose very much money. So you have basically given the trader a parachute, a safety net, and it is very effective.

And I think that would be my answer to your question, to have a utility develop a risk management and trading policy, to bring it forth, get it approved, and then it's up to the management of the company to make sure that the employees follow the policy. If it is too restrictive, not much gets accomplished. If it is too broad, you still don't give the safety net to the individual employees who have to carry out the business of buying and selling power and fuels and such.

COMMISSIONER DEASON: Is the goal of doing that to minimize the impacts of price fluctuations so that you have a relatively stable price, or is the benefit actually lowering

what otherwise would be the fuel cost level, lowering on a long-term basis overall fuel costs?

MR. FAIRLEY: Both of those, and the third would be extracting embedded value in assets that exist. Contracts, generation, what have you. So there are really three objectives that can be achieved. Probably the first and most fundamental is just lower prices if you can.

The second and maybe the more important is provide the insurance you need to avoid run-ups in prices. And then the third, extracting embedded value, that could be tremendous. And, of course, all of that value can be plowed back to the ratepayers or split somehow between ratepayers and shareholders.

Let the company -- I think there should always be an incentive for the company to try to do a better job than they are doing. And I think the utilities do a great job. But there are things that utilities everywhere -- and I spent a lot of years in a utility, and I know there are a lot of things that utilities could potentially do that could improve the lot of the ratepayer.

COMMISSIONER DEASON: If a utility were to come forward with a plan and we reviewed it and we indicated that it looks like a reasonable approach that we think that there are benefits to be derived, and there has to be a period of time that you implement it and get some experience from it, not

engaged in Monday morning quarterbacking, but let things operate, at what period of time do we look back and see if the program has been successful? I'm not talking about individuals trades and whether it was a good deal or bad deal, I'm just talking about over the long-term, what period of time should we let things -- let the market operate. And when do we go back and look to determine if it has been a reasonable plan and if we need to make changes to it? And how do we judge it to see if it has been successful?

MR. FAIRLEY: Judging it is easy. Has value been provided or not. And that value is really manifested in two ways, savings or profits, extracted value. How long? That's a tough question. I think the first real look at a program, maybe after six months, but not a deep look. You're always going to audit any program like this probably monthly or quarterly, but a cursory look at six months and a serious look at a year. Because to integrate a risk management program into a utility's business, it's a big business, it's a complicated business and it is going to take some time.

And it could be a bank who wanted to expand their risk management program. It would take some time to fully implement the program and become proficient within the program. Because everybody is going to be tentative at first because everybody wants to do the right thing. Nobody wants to do the wrong thing. So people are going to be cautious and tentative

at first. And once the individuals begin to feel their way in and learn how to apply some of the techniques in their everyday business, more and more can be done.

COMMISSIONER PALECKI: In a period as short as six months or a year, wouldn't it be purely a matter of luck as to whether you see savings or not, and aren't we talking then about speculation rather than hedging?

MS. FAIRLEY: I think there is always an element of luck in anything you do and especially in something like this, which is relatively new, a new paradigm in a long-lived traditional business. It's not speculation, I would not say that. If the program is set up in such a way that large uncovered positions are not allowed, there is no speculation there. Am I answering your question? Okay.

There should not be -- and that's why I kind of opened this thing up talking a little bit about comparing hedging versus speculation. It's not necessary to speculate, it's not necessary to use risk management tools to speculate to make money to benefit the ratepayer. That is not necessary. There are a lot of -- there are many, many things that can be done. Some speculation may be allowed and maybe should be encouraged, but that should be a small part of it.

As it is at Enron. Enron is a trading company. It's a huge company and it's heart and soul is a trading company, and yet, like I had said earlier, the vast majority of the

business that we have on our books is hedged and it will always be hedged. It has to be, because there is too much volatility. Enron is moving -- Enron trades as much gas on a daily basis as the whole country physically moves. There is no way that you could speculate on that total quantity and control it. You are either going to make giant dollars or lose giant dollars, and that is not fair to shareholders and it should never happen in a company in this country. So you have to hedge 99 percent or the vast majority of your business.

And that's where the policy is so important, and where management has to see that the policy is carried out. I recently did a transaction with a small -- relatively small municipal utility where we were optimizing some of their assets. They are a load-serving entity, they have their own generation and we put a very small risk management policy, trading and risk management policy -- although we struck the word trading to satisfy the city commission -- small, brief, about a five-page risk management policy in the back of the contract. The city saw no need for that. They said, "We trust you guys. You know, you are going to make recommendations and we are going to give you a thumbs up and a thumbs down on everything that you recommend, but we trust you. We think it will be okay." And we said, "No, we want this policy in there. We want it very clear to anybody involved, or anyone who may question this transaction, or may look into this transaction,

we want people to see that certain limits on hourly power, daily power, what have you, will be adhered to."

And we said even beyond that, if we come up with a trade that clearly the policy says you are going to have to go to your general manager or perhaps to your commission before that particular trade or that particular transaction could be conducted, we want that rule set out there so that everybody who is involved with this contract knows that is something that is serious in its consideration. And if such a transaction comes forth, we want it very clear to everyone involved that Enron is not going to make the decision, and we don't want our contact at this utility making the decision, and we don't want the general manager making the decision, we want the city commission making the decision.

And after we went through the philosophy a little bit, they said, you know, this is really good. This is a good discipline, and we may not do a lot of these longer duration or more complex transactions, but at least if we do everybody sees the rules that Enron expects to live by in getting such a transaction approved. Was it a waste of time? It took a lot of, you know, legal work to get that risk management trading policy written so it was satisfactory to both sides, and understandable, and all of that.

And probably, you know, two and a half years from now when the transaction is over, 90 percent of what is written in

that policy will never be utilized. But when we do encounter those particular transactions that Enron believes are beneficial for that utility, we will have a rule in place to cover that situation and there won't be a debate -- there may be a debate, but there won't be a debate over who should approve or what have you. We'll expect in some cases the city commission to bless the transaction. That is for everybody's protection.

You know, as a dealmaker, in some ways I kind of like it that it is wide open. I can do what I want. But really after doing this for years, you don't want that. You want your dealmakers to know they are protected so they can be as aggressive as they need to be or want to be, but yet they know what their limits are.

COMMISSIONER DEASON: One followup question. Even within the confines of this picket fence as you indicate which gives some comfort both to the utility and to the regulators, should there be some type of an incentive mechanism for a utility to aggressively pursue opportunities within the confines of that, or do we just put that policy in place and leave it to them to pursue opportunities within that without -- and I guess my question is should there be an incentive, and if there is, how do you structure the incentive so that it is appropriate both for the risk that is being taken on and to protect ratepayers in the long-term?

MR. FAIRLEY: Should there be an incentive? I think that is a simple answer, yes, there should be an incentive. Aside from the technical aspect, it's human nature if the utility management knows that doing this extra work and effort can benefit the ratepayers and the company, it's going to work better, it's going to work better. Someone does a good job here, they get reviewed at the end of year, they get a raise, they are motivated. It's human nature and it's basic business. So, yes, I think there should be an incentive.

How to structure the incentive, that is an extremely difficult question to answer. I think examples work well sometimes. In this transaction with this small municipal utility, the way we did the system there is that whether Enron figures out ways to save this utility money or to do things to make profits, we have a 60/40 split of the value. If Enron doesn't figure out a way to make a dollar, Enron makes no money on that transaction. If Enron figure goes out a way to make a lot of money on the transaction, Enron is going to get 40 percent of that transaction.

And the proof is in the pudding. In the month of May, which is the first month of this transaction, and I will probably say too much -- and this is not in Florida, so I don't think anybody here probably would guess who I'm talking about -- but in the first month of this transaction, the month of May, the average load for this utility was 38 megawatts.

That is tiny. They saved almost $500,000 in the month of May. You know, they had their way of doing business traditionally. It was not --

COMMISSIONER DEASON: Now, how do you determine that savings? What do you compare? And is it something that can readily be agreed upon and is obvious that that indeed was the savings from that period of time?

MR. FAIRLEY: It was a calculation, and it was based on the way that they had been doing business.

CHAIRMAN JACOBS: Did you make an assumption that they would have had to buy on the spot market or they would have had to buy in some other transaction and used that as a guiding price to determine the savings?

MR. FAIRLEY: That is partially what we did. In the past they ran their generation most of the time, very seldom bought power on the market. And as a big power marketer and feel like we really have our finger on the pulse of the market, and they were very comfortable that we could always buy power in the market and deliver it to them reliably. They let us do that. So a lot of the savings came from not running generation and buying power in the market.

Now, a lot of utilities would say, well, we do that already. But there were many nuances about how we went about doing that. Buying several days at a time, buying a few hours at a time. Many, many subtleties that really extracted the

bigger value, not just turning off generation. And there were times when we did both. We bought forward and ran the generation and sold, so they made a profit selling the generation and they were saving money on the power purchases.

That's just an example. I think you really have to look at the individual utility what their makeup is, generation and load, how they are doing their business, and look at a few ways to structure incentives. It's not that difficult. It's not that difficult fundamentally. It can get complicated in the monthly calculation of what you are doing.

Let's see. I want to skip over a little bit. There is a page here under developing a risk management program that has blue arrows. This page, if you could flip over to that. This is one that you may go back to later and think about. And the point here is that there are certain things that you can do that are relatively inexpensive to do, but yet leave the highest possible risk with the utility, or marketing company, or whoever may be using risk management.

Over to the right side of the page there are more complex and more expensive techniques to be utilized, but which deliver the lowest possible risk at the end of the day for the utility. Ultimately how much risk do you want to remove from the utility, how much protection do you want to give the ratepayers. And if there is an incentive involved, you know, how much opportunity do you want to give the shareholders to

make some money.

Over to the left, just blocks of energy. Things you can do. Hedging blocks of energy. Just hedging on-peak power is a good technique. It doesn't do anything for the peaks and it doesn't do anything for all the periphery things that can go on.

And moving across you just gradually develop the complexity, shaping, what have you. And, again, a lot of the things that I wanted to impart here are pretty fundamental, but the idea is to give you some perceptions to think about in looking at a risk management program and how you go about.

If you will now flip the page over, developing an execution strategy. If anybody else has any questions, please speak up. I would rather be answering questions than going over this presentation, frankly.

A couple of things that you have to do if you are actually going to execute a strategy. You have got to identify what are the difficulties or the impediments. Florida is not a very liquid market for power. Everybody knows that, so if you are going to try to execute a risk management strategy you have got to keep that in mind. You can't expect miracles. You can't expect the kind of transaction flow or results for power in Florida, or for that matter even gas in Florida as you could, say, for gas in Louisiana. Gas in Louisiana, not power.

And then the other thing, you know, you are

identifying weaknesses in the market when you look at impediment and difficulties. You also have to look for the strengths and you have to focus on the strengths, the strong points in a market, and make sure that you are taking advantage of all of those.

This next page, identifying market difficulties that must be considered. Illiquidity. Fundamental stuff, cannot execute large size because you moved the market. Sometimes you can't even deal without moving the market. In some situations certain financial products are not even available and not actively traded.

Two points, index postings are not reliable yet for most of the Florida power market. They are getting there, but they are not there yet. And there is no basis market yet at all.

The first thing we have got to have --

COMMISSIONER DEASON: What do you mean by basis market?

MR. FAIRLEY: Basis?

COMMISSIONER DEASON: Uh-huh.

MR. FAIRLEY: Basis. If you look at the index, any index for power, say, in Georgia, and on the same day or the same hour look at an index for power in Florida, you are going to see a spread. In most cases power in Florida is more expensive, a bit more expensive. There are reasons for that.

That is basis. That is one form of basis.

In natural gas, those kinds of spreads are actively traded. When I used to be a gas trader, I did many, many transactions trading basis. And with basis I didn't really care whether prices went high or low, I was strictly looking at the spread between different locations that people needed to be concerned about. Gas in Louisiana versus gas in the northeast, that is kind of a gross example, but eventually we have got to get to a point that we have a good viable basis market, because hedging price is one thing, the basis also comes into play, however.

The next bullet there, market difficulties, lacks Florida Public Service Commission and management clear signals. I put that in there, and I don't want to incense anyone, but there is not -- you know, there is not a mandate, there is not a set of rules out there that a utility can operate under to go and utilize -- broadly utilize risk management techniques. And that is important, that is very important.

And that's why even though the Public Service Commission is not a hedger and you don't trade power and gas, your involvement in the process is critically important. There are other parts of the country where there are utilities that aggressively use risk management techniques on fuels because they are allowed to. They don't do anything on power because the commission has never allowed them to do so. And it is

amazing the huge differences. I have seen utilities -- probably the best example I ever saw was a utility in New York during a winter period when gas was trading around $4 and something, they paid 60 cents for their gas one winter. They hedged their basis, they hedged their fixed prices, and ultimately the fallout from that is when they wrote their checks at the end of the month they were paying 60 cents. And this was under a long-term contract with Enron. We made our same profit on the transaction, yet they only paid 60 cents for gas in a $4 market. That is pretty remarkable. That is an extreme example.

COMMISSIONER PALECKI: The Commission is going to be determining prudence of a hedging plan. What are the factors the Commission should look towards to determine whether we have a prudent or imprudent plan?

MR. FAIRLEY: Well, first, speculation versus hedging. How much of a position can be taken that is not a purely hedged position. After all, a load-serving entity cannot predict what their customers are going to use in any given hour or day or what have you. You can get pretty close most of the time. Utilities are very good at that, but never perfect. So there is an element of speculation there when you are trying to predict what the load is going to be and you are trying to operate from that. That is pretty tough without actually sitting down and laying out some things.

COMMISSIONER PALECKI: Well, the reason I ask is that none of us, as Commissioners, have the expertise in hedging, for example, that you have. Would we need to bring in an outside consultant every time we had a prudence review to work for the Commission to advise us as to the prudence of a utility's plan?

MS. FAIRLEY: And you are asking about the plan, not the results of the plan, but start with just the plan?

COMMISSIONER PALECKI: I think earlier in the slides, I thought I had seen a slide that said that the Commission should do a prudency review at the outset.

MR. FAIRLEY: Right.

COMMISSIONER PALECKI: And that is before the plan becomes effective, I would assume.

MR. FAIRLEY: I think the Commission would possibly have to bring in a consultant to review a plan. In the case of the small utility that I talked about, they brought in a consultant to look at the risk management and trading policy that we developed. I mean, we all knew in that case that that policy was developed more so to protect Enron than to protect the customer. They trusted us. They didn't even care if we had the policy or not.

We had it and we felt it was the prudent thing to do, and we felt like we needed it to protect ourselves. But they brought a consultant in to review the plan, and the consultant

liked it and thought it was very fair. So I think you would have to bring in a consultant to look at the plans on the front end. And then periodically when reviewing the results of the -- if you are reviewing the results of a risk management program, performance is going to be pretty clear, because it is dollars and cents. That is going to be pretty cut and dried.

If you want to get deeper into the transactional nature of what happened, how many positions, how many hedge positions performed in certain ways, you would probably want to have a consultant involved in that process. It won't take very long. It won't take years, it won't take very long for staff members to understand the programs and to be able to view the programs, what is happening under the programs and largely be able to make pretty reasonable judgments of whether the policy was followed or not and how effective it was.

COMMISSIONER PALECKI: Well, this Commission's policy is generally against what we call micromanagement of our utilities. How do we avoid the pitfall of finding ourselves getting a little bit too much involved in the hedging plans?

MR. FAIRLEY: I don't think you really need to. The results will speak for themselves. If the proper incentive program is in place, the utility will probably aggressively pursue the plan. If there is no incentive there, they will be probably less -- I would think less active and more cautious about what they do. If the results are good, I don't think you

have to go very deep into all the transactions that took place. If there are problems, just in anything that any auditor is looking at you would want to go deeper and figure out what was the problem and fix the problem so that it doesn't happen again.

COMMISSIONER PALECKI: What type of incentive mechanisms have you seen? Have you seen any in other states?

MR. FAIRLEY: I am really not equipped to answer that question.

CHAIRMAN JACOBS: I have heard that California has one for fuels, but I'm not sure.

MR. FAIRLEY: You know, I see those things, I hear about them, but I don't really get very involved in them as a dealmaker. There are not that many -- where I come into contact with incentive programs like that are where somebody wants to buy gas, buy power, what have you, but they want to do some customizing of the transaction so that it satisfies the incentive program or doesn't violate some policy. And I see those. We could do some research for you and come up with some background on that, but I'm probably not the best person to try to answer that question.

COMMISSIONER PALECKI: Well, generally are we talking about types of sharing mechanisms where any savings would be shared between the stockholders of the company and the ratepayers, something along that?

MR. FAIRLEY: Yes, some split in that regard. Some percentage division of the value between the company and the ratepayers versus the traditional method of moving all the value back to the ratepayers.

Let's see. I'm going to skip over a few more pages.

MR. BRINKLEY: I would like to ask a question before you skip over. When you mentioned some of the complications with illiquidity, you didn't specify which commodities or what time frames you're talking about, and at the bottom you say hedging with gas is more liquid. I'm interested to know how many months out could an average to large-sized utility hedge a good portion of its natural gas needs before they move from being a price taker to a price maker? In other words, when do they move the market?

MR. FAIRLEY: And your question --

MR. BRINKLEY: I am assuming that if they are just purchasing in near term, like a one month out futures contract, that they are not going to be able to move the market, even if they are large. But six months, 12 months out there is a point where they are going to move it.

MR. FAIRLEY: Right. Physical or financial?

MR. BRINKLEY: Financial.

MR. FAIRLEY: Financial. I don't think -- there are no utilities in Florida that could do so much financially using generic or general techniques that they would move the market.

The natural gas market is so big now with the funds involved, it's a multi-billion dollar market. I suppose given the right set of circumstances, size, duration of term, on certain days, the day before a holiday if a utility tried to put on a huge position they would move the market. But that would be a foolhardy thing to do.

MR. BRINKLEY: I have another question while I'm here. Do you have any idea over the long-term, at least ten years out, has there been a premium paid or earned for those that are purchasing energy, financial hedged products? And if so, do you know how much in a percentage basis.

MR. FAIRLEY: I don't quite follow the question.

MR. BRINKLEY: I'm not sure if I worded that correctly, but if you are looking at someone who just runs along ten years solid and they are just buying at the spot monthly for their consumption versus someone who is hedging out 12 months at a time on a rolling monthly basis, what is the price differential between the average price?

MR. FAIRLEY: I couldn't give you a dollar amount, but I would say it is very significant.

MR. BRINKLEY: Positive or negative, which one costs more?

MR. FAIRLEY: Not hedging, definitely not hedging. We are on the other side of too many transactions where we see people hedging a portion of their positions and not hedging

another, maybe a larger portion. And we see the balance and it makes a huge difference.

MR. BRINKLEY: Thank you.

MR. McNULTY: I have a question along those same lines. Considering the market for natural gas in the middle of 2000, the summer of 2000, would you say that there was a compelling argument to hedge an appreciable amount or percentage of your natural gas portfolio at that time knowing what the supply and demand and the different characteristics of the market were?

MR. FAIRLEY: Are you looking at a point in time prior to the run-up in prices?

MR. McNULTY: Right. I mean, at that point it may have even risen a bit, but there were still certain market conditions that maybe would have argued that a higher percentage of your portfolio for natural gas should have been hedged rather than spot market based.

MR. FAIRLEY: Yes, they should have hedged. Most people you talk to on a day-to-day basis in the regulated and unregulated side of the energy business were aware of all the gas-fired generation coming on line, were aware of the increasing difficulty of buying gas in certain locations. And I will give the specific example. A lot of gas that is used in the State of Florida comes from Mobile Bay into Florida Gas Transmission.

Everybody, every dealmaker for every utility and non-utility who was buying gas recognized for many months the gradual increase in difficulty to find gas and to not pay a premium for the gas. Mobile Bay, you have got gas going to Florida, you have gas going via two different pipes to the northeast, and there are a lot of competing markets for that gas.

And in basis, in the basis market you could buy gas for a long time at a pretty serious discount to Henry Hub (phonetic) or NYMEX in Mobile Bay. Over time that basis discount began to go away. Gas buyers realized there was a problem there. You know, why was there a problem? It was clear there were too many people trying to buy too much gas at that location and driving the prices up. Pretty simple supply and demand, so it was easy to see.

And in the case of companies that don't hedge, are not allowed to hedge, or simply, you know, bury their heads in the sand, they were at the mercy of that market.

MR. McNULTY: And another question I would have is you have talked a little bit about picket fence that you could draw around a utility to say, you know, we want you to engage in hedging to some extent, but we want to limit the exposure. I'm trying to think of an example of how you would limit that exposure. One possibility would be to say that you will hedge no more than X percent of your natural gas expenditures, or

budget that you have for a particular year, and that when you do hedge you will hedge at market index and that sort of thing.

Do you think that those are acceptable sorts of ways of drawing the picket fence, and do you have other ideas for how that might be done?

MR. FAIRLEY: Well, first, a policy like this needs to be tailored to the individual utility and its portfolio from its load-serving side, and its generation side, and its contractual obligations. The picket fence, and I like to put it that way in talking about this, everybody understands a picket fence. You can get around it, you can get over it, but you shouldn't. You should stay inside the picket fence.

The idea there is to have a policy that the staff can work within and be comfortable that they have a set of rules to operate within to carry out the program. It's not there so much -- it's not intended to be a set of handcuffs, it is intended to be more of a parachute or a safety net. It is not intended -- one of the things you said was limit the amount of hedging. I don't know that I would put it quite that way, because hedging a certain portion of a gas portfolio, there are a lot of ways to hedge a gas portfolio. Some hedge techniques you might only want to use a small amount. Others you may want to hedge the whole portfolio.

And the reason I say that is some hedge techniques might take away the ability to gain when the market drops if

you are a buyer. You can hedge yourself out of the ability to take advantage of lower prices with some techniques. Other techniques leave that opportunity there for you. So, you know, if you think about it that way, do you want to limit a technique that allows you to take advantage of lower prices if you are a gas buyer? Well, probably not. Do you want to limit the amount of hedging if a particular technique takes away the opportunity for lower prices? You probably do. But at the end of the day either technique is going to remove the chance that prices may run up a lot and put the utility in a position they are paying much higher prices for fuel.

So I guess to answer your question specifically, I don't know that you would want to necessarily put a rule in place about hedging a certain portion. Probably a good thing would be to look at some risk management and trading policies and get a feel for how these rules are written and what they really do. Is that --

MR. McNULTY: That's good. Thank you.

MR. FAIRLEY: Okay.

COMMISSIONER PALECKI: It is my understanding that in California that when both fuel and power prices were at a peak, that several long-term contracts were entered into by the California utilities in an attempt to hedge against further price increases. Since that time the fuel cost as well as power prices have gone down and we have a situation where they

have -- you could say they have bought high and they are selling low. Would you say that was not a prudent transaction?

It appears that they had good intent. After the fact it's easy to be a Monday morning quarterback and say that was imprudent. It turns out it was a stupid decision because of what has happened over time. But how as Commissioners can we judge prudence in that situation when no one can predict the market?

MR. FAIRLEY: Well, first, I don't want to render any opinion whatsoever about what they did in California in terms of buying long-term power in the situation and the way they have been whipsawed with prices. That is a very hotly debated matter. That action was taken outside of any policy, any framework. At the time maybe it was prudent, maybe it was the prudent decision. Maybe it was a good decision, maybe it wasn't.

I think you can make good arguments both ways. I could make good arguments both ways. If there had been a risk management policy in place ahead of time and the utilities were operating under that policy, and they would have been allowed to hedge purchases and sales and perhaps even incentivized, that situation never would have arisen unless the policy were violated.

And I'm not sure if I'm answering your question fully, and I'm not trying to avoid your question, but that is

why you have got to have a policy, a program in place. The rules, the picket fence that are designed by the utility for their situation to be able to use tools in the marketplace to reduce volatility and extract value.

COMMISSIONER PALECKI: Could you say that those long-term contracts were an attempt at speculation, that they weren't truly a hedging mechanism at all?

MR. FAIRLEY: I will answer it both ways. It was a hedge in the fact that they needed to buy power. And there were credit issues, it was becoming increasingly difficult for people in California to buy power because of the credit issues, the price debate, price caps, all those sorts of things were problematic.

So, in order to simply buy sufficient physical power to cover their requirements as load serving entities, you could probably make an argument that it was a hedge from the standpoint that they were in the middle of a disaster and everything had gone wrong. Was it a hedge? It was not. It was probably the only thing they could do. You know, it didn't hedge any prices, necessarily. That's really -- it's tough.

I'm sure if I had one of our lawyers standing here he would tell me not to answer any of these questions about California, because people are so energized in California over all of this. But, you know, in looking ahead and not wanting a situation like that to develop in Florida -- and I don't think

we are anywhere near that Florida, but anything could happen -- we don't have all the things in Florida that the utilities had in California to deal with. But a lot of the things that happened in California that caused gas prices to run up and power prices to run up, the actions that were taken were speculative.

For example, not filling storage, gas storage prior to the winter. I mean, many people in the gas business, gas side of the business were amazed that storage levels were so low in the west. And, you know, back in my utility days, there is no way that we would ever go into a winter without filling storage.

As a young staffer, if I had ever brought up in a meeting, golly, prices are high, maybe we shouldn't fill storage, I would have been thrown out of the room. The storage is there to provide reliability, not to consider prices at all. They didn't fill storage. And this is widely publicized, but that was speculative. Three or four mild winters in a row and company after company had the bright idea that, you know, we probably don't need to spend all this money and buy all this expensive gas because we are not using it. We are having trouble getting the gas out of storage at the end of the winter season. So let's don't put as much gas in storage. Well, that was a bad decision. That was a really bad decision. It's like only buying homeowners insurance for half the value of your

home. And probably half the people in this room cut corners on that, and everybody considers it at some time. But if you -- and maybe in a small percentage it's okay. But, you know, if you live in a $150,000 house and you only insure for $75,000 value, well, have you done a good job there? Wait until there is a disaster and you will have your answer. And, of course, had a colder than normal winter in California, and that not filling storage contributed greatly to the run up in gas prices in California. That was a speculative decision. It was not a hedge.

COMMISSIONER PALECKI: Thank you.

MR. FAIRLEY: Someone mentioned the bullet here about hedging with gas, which is more -- much more liquid than power. There are some things that you can do in certain types of transactions that you can get beyond illiquidity in power and move your risk over to gas so that you are actually hedging with gas, and I mentioned that. As a consideration, if you are thinking about power and the illiquidity of power, there are ways around it.

Let's go over to the section what the PSC can do. It's pretty clear from all the things that I have been saying that we need more liquidity in the Florida market in power, in gas, in everything. And the bigger players in the market are the utilities. And if the utilities had the blessing of the Commission to enter into risk management programs, more broad,

more active risk management programs, more transactions would take place, hence more liquidity. In the development of the RTOs, we all need to try to make sure that we don't accidentally or intentionally create impediments to liquidity in the market. And, again, you are going to hear it over and over, at least from Enron, not to impede forward markets with RTO structures. That is very important.

CHAIRMAN JACOBS: What would be the aspects of an RTO that would impede forward market?

MR. FAIRLEY: In the market -- I'm probably not the best person to answer that because I'm not an RTO expert, but in the market design and they way pricing is handled, let me give an example, probably the best thing. In PJM, if I see something happening in the market and as a marketer I want to sell into that market, maybe I'm going to turn on a generator, it's going to cost so much money, it's going to cost some more money to buy transmission to get over into PJM. And so I know what my landed cost is, and I believe that market due to the hot weather is going to be very high and I stand to make a good profit. Well, that sounds really nice, but in PJM you don't know the price that you have sold your power at until the next hour.

CHAIRMAN JACOBS: That's because of the cap, right?

MR. FAIRLEY: Well, that's just timing and the way they price that market. And there are situations where you

will put together your sale and you will schedule your power in and you will believe you are going to make some good money on that trade. Next hour when the prices are revealed to you, you have lost money.

And that is a -- that market can be quite volatile and prices can go from the hundreds down to below $100 very quickly. In an hour occasionally. And I have seen our own realtime desk get hurt on some of those transactions. That is a structure that is not necessarily needed for that market to function. It would be better if a seller knew with more certainty what his price, his sales price was going to be.

CHAIRMAN JACOBS: Thank you.

MR. JENKINS: Isn't that problem with PJM because they used financial transmission rights as opposed to physical transmission rights.

MR. FAIRLEY: I can't really answer that question. I deal primarily in the southeast. And so the PJM example is one that came to mind. And I used that because there was a lot of discussion about it on our trading floor yesterday when the prices ran up and came back down suddenly later in the day, and the discussion about how much risk there was performing those hourly transactions.

Those are purely speculative because we never knew for sure what we were going to be selling our power for. And as for your question, I don't know exactly why they developed

that component of the market the way they did. I wish I knew.

MR. JENKINS: On a related question, do you know of any other commodity other than electricity where they use clearing prices where everybody gets the clearing price no matter what they do?

MR. FAIRLEY: Yes. If I had some time to think about it, I could probably come up with a lot of examples. But, for example, on the NYMEX, NYMEX natural gas, there are situations where -- well, that is not the precise example that you are talking about.

MR. JENKINS: See, I think that is the problem with California.

MR. FAIRLEY: Now, that is -- you have asked another question I can't give you a ready answer for. That is pretty unusual, though, where you bid in, as they call it, and you don't really know what your price is. The reason I said NYMEX natural gas, there are -- you can buy and sell NYMEX futures at times at the market, and you take whatever price is there. But it is not precisely what you were asking about, bidding in at a certain price. And you're going to get whatever price the market provides. I can't think of another example of that.

MR. JENKINS: See, I have seen natural gas auctions live right in this building where you not only see the clearing price, you know who the bidder is, and it changes every two seconds. And I have never seen that in the electric market

anywhere. And I think that is the real problem with this electric type of deregulation that they are trying to form. And no one seems to be aware of it, as best I can tell.

MR. FAIRLEY: Well, we are aware of it. And like I mentioned, just like yesterday in PJM, when I heard the prices getting pretty wild in PJM, I went over and nosed around with the traders, because I sit very near them, and I was curious to hear what was going on.

It is a risky proposition. I think it's probably part of the reason that some companies lost a lot money in PJM the last couple of days, because they thought they had it figured out. They didn't quite have enough -- maybe that next piece of information they didn't have and they bid in at a price and they lost.

MR. JENKINS: Okay. Thank you.

CHAIRMAN JACOBS: You indicate -- I'm sorry.

MR. FAIRLEY: No, go ahead.

CHAIRMAN JACOBS: You have a point about location of pricing. I have heard on several occasions that location of marginal pricing can have a detrimental effect particularly to independent producers. How do you view that?

MR. FAIRLEY: Well, that's true, but that is not -- that is not the fault of the pricing technique. If the generator is in a location where locationally the value for the power is low, that is the risk of doing business. He either

chose the wrong location or he chose the right location at the time, but over a period of time the market locationally moved against him.

COMMISSIONER DEASON: Excuse me just a second. You have made reference several times to what has recently happened in PJM and the fact that spot -- there have been spikes as high as $1,000, and you make reference to people that have lost money. Who has lost money in that market?

MR. FAIRLEY: For sure some trading companies.

COMMISSIONER DEASON: Trading companies. I mean, if you are a generator, I don't see how anybody is going to lose money if prices are -- I mean, you're talking about people that think that that price is going to continue and they go ahead and make a transaction and then it spikes back down, or explain to me how the dynamics work when prices are that high?

MR. FAIRLEY: If I thought I could sell $500 power, and I bought $300 power, scheduled it in, and it turned out my price was 200, instead of making a $200 profit --

COMMISSIONER DEASON: You're talking about people that are -- not actual generators, people that look at that high price, see an opportunity to make money, and they actually contract to buy power at a certain amount and think they are going to sell it an hour later at a higher amount and actually the price is lower?

MR. FAIRLEY: Right. That is kind of the gross

example where large dollars a generator can lose when they think they can sell power at a price and they go buy fuel, run their generation, move that generation through transmission over to PJM, and the power price turns out to not be high enough after the fact to support their costs. Now, that is where a generator could lose.

As far as utilities inside of PJM, I would not say one way or the other what they have done because I just don't have that information how they did or did not do over the last few days. That's a way a generator or a trading company or for that matter a utility --

COMMISSIONER DEASON: But for a generator to lose money they are going to have to be paying a lot for fuel and a lot for transmission to get it there. Even if it's 900 and it falls to 450, in half --

MR. FAIRLEY: Oh, yeah. He is not going to lose in that scenario. The generator wouldn't lose in that scenario.

CHAIRMAN JACOBS: But that brings up an interesting point, though, because I'm sure you are aware in 1998 in the midwest that was a major risk. Well, actually a major consequence of the market volatility, was that some of those marketers defaulted. At least one, one major one defaulted.

If we were to be looking at a load serving entity that is buying from such a marketer, how do they insulate themselves from that? I assume they will do due diligence to

enter transactions with these marketers.

MS. FAIRLEY: Credit policies, credit reviews, financial reviews of counterparties. And, very frankly, to my knowledge the utilities in Florida do a very good job in this regard. I know of utilities in other parts of the south and the eastern interconnect that are not as judicious as the utilities in Florida are in terms of credit reviews and that sort of thing.

But the defaults that happened in the midwest, cardinal rules of the credit process were violated. And in most -- nobody who entered into those particular transactions that you are talking about should have ever entered those transactions. Because the size and the exposure, the potential exposure to loss under those transactions was too great for the counterparty they were dealing with.

CHAIRMAN JACOBS: Thank you.

MR. FAIRLEY: I'm not going to go through all of this presentation. The last several slides have to do with certain techniques. Swaps, caps, collars, and I did not intend to go through those, they are pretty lengthy. The way that I wanted to summarize, and it is the last page before you get into the section called swap, calls, and collars, is what can the PSC do.

The PSC can encourage utilities to hedge, and based on your question, Commissioner, ask the utilities to develop

risk management policies tailored to their business and bring those forward. The Commission can always look out for anything that is happening on your watch that affects liquidity in the market, and anything that can be done to increase liquidity is good. And then locational pricing is a finer point of liquidity and forward markets, but encourage those two. And that really brings me to the end of what I had to say.

Again, I wanted to cover a few of these fundamental areas of consideration when you are thinking about looking at a risk management program. And, again, I wanted to use power as the example because power is somewhat immature as a market. You know, with the examples of no basis market and indexes not being as pure as you would like and as pure as you can find in other commodities.

And that sort of brings me to the end. If anyone has questions about the pages in the back, swaps, calls, collars, those sorts of things, I will be glad to spend time talking about those. But my intention was not to have a hedging technique session here, more to cover the broader questions.

COMMISSIONER DEASON: Let me ask you this question. Given the limitations of the electric power market in Florida, one of the primary ones being that it is fairly illiquid, I think you characterized it that way.

MR. FAIRLEY: Right.

COMMISSIONER DEASON: Do you think that we should

concentrate on trying to put together some type of a hedging program/incentive primarily on the fuel side for our load serving entities currently as opposed to trying to go the further step of including power generation, or do you have any thoughts on that?

MR. FAIRLEY: I would pursue both. But on the fuel side, the market is so much more liquid that there are many more products available. And applying hedging techniques will be easier, will be more effective, and will be less costly to implement.

COMMISSIONER DEASON: But the experience gained in the fuel side could then be transferred over to the energy side once a more diverse, more liquid market develops. Does that make sense?

MR. FAIRLEY: It does. But, again, I would -- you know, my honest answer is I would do both. You can't do a lot due to the illiquidity. But everything that happens to allow the market to become more developed, to become more liquid, and if giving the blessing to use more risk management techniques on the power side helps liquidity there, that is a self-serving thing.

But I think your analysis of using fuels as a first step before getting to power, that's not a bad approach. From my point of view, anything that can be done to increase liquidity in any market I know is going to be better for that

market. It's going to allow more transactions to take place, better transactions, easier transactions, and that is a good thing for everybody. So I would always -- and I think Enron would always advocate any approach that increases liquidity quicker and faster.

COMMISSIONER DEASON: Okay. And let me ask another question. What would you say to the statement that in Florida our utilities are already required to obtain the least-cost generation, whether self-generate or buying on the market. And given that that is a current requirement and that our utilities seem to be doing a good job in doing that, what added benefits could be derived from what you are proposing? Or the statement that there aren't that many more benefits that could be derived, how would you respond to that?

MR. FAIRLEY: It always comes back to this question, utilities in Florida and most places have the mandate you described, least-cost, the least-cost approach. And I think the utilities in Florida do a good job with that. But at the point of making that decision, on every transaction there is a potential to be questioned on prudency. And so if the least cost approach is to beat index, beat the market at the time the transaction is done, and you simply do that, you have done what you -- the utility is doing what they have been asked to do. And within that framework, they are doing a good job.

COMMISSIONER DEASON: But you are saying there is

another level we can take it?

MR. FAIRLEY: There is another level. There is more blood to squeeze out of the turnip. It's hard work, it's not easy, but if the utility instead of buying power hourly for tomorrow to fill a portion of their load, if they went ahead and bought the whole day, and they thought that is right decision and it turned out that they should have bought hourly, especially if they have been doing it the other way for sometime anyway, somebody is going to ask the question, why did you do that. And that is just hourly and daily. Those are minimal dollars.

And if you go beyond to a larger size or longer durations, you know, you would put a utility in -- if you ever went to a utility and asked the question why did you not buy power, why did you not buy 500 megawatts for a year, when looking back you could have done that cheaper than what you did do, beating index, well, that is unfair. And that would never work. That would have been a speculative position to take.

And if the market had gone the other way and that huge quantity of power over that long duration turned out to be a bad deal, probably it would be a lot of grief over the decision to do that. And that is why simply viewing the approach of taking a least-cost strategy to generating and buying fuels and power, hence beating the market or beating index, that is a good technique only to a degree, but there is

much more you can do beyond that.

And, again, if you are proficiently applying risk management techniques, you are also going to be able to extract value from assets that are embedded and trapped now. For example, I used the fuel switchability in power plants. I mean that switchability can be sold and at certain times can be quite valuable. So you have the reliability of the fuel switchable plant plus the value of that spread option to be derived.

COMMISSIONER DEASON: If we engage in some type of incentive plan which rewards superior performance, how do we go about judging whether the performance has indeed been superior or whether that same level would have been accomplished under just the traditional mechanism of management which is currently being employed by our utilities?

MR. FAIRLEY: Well, I think if the incentive is based on some percentage of value derived, then that is a very fair approach. But I think looking deeper into your question, you know, did the utility do as much as they could do, that is armchair quarterbacking. And I don't know, you know, if you are -- a simpler way of looking at it, if you have a gas trader sitting there and the gas trader has done a number of trades and made money on a particular arbitrage in the market during the morning, if you go to that trader and say, well, why didn't you do twice as much? Well, maybe the trader did all they

could. Maybe they did as many trades as they could possibly do. Maybe they exhausted counterparties with which they could do the trade. But trying to armchair quarterback level of performance is just about impossible.

COMMISSIONER DEASON: But you have got to have a baseline. You know, if there is going to be -- you have mentioned sharing. If there are savings achieved, and you mentioned 60/40 or whatever the split is, you have got to determine what the baseline is, what the savings were and then how you are going to split that. Is that readily apparent?

MR. FAIRLEY: Oh, yes. If you are going to have an incentive program, you are going to have to have --

COMMISSIONER DEASON: You have to define what the baseline is.

MR. FAIRLEY: Right. Not just one, multiple baselines for different areas of the business in order to determine what value was derived.

COMMISSIONER DEASON: Should the mechanism also, to the extent that the baseline is exceeded in the sense there are savings and there are -- that split, should there also be when the baseline is not achieved and there is actual losses, would that split still be 60 percent to the stockholder, 40 percent, or vice versa, whatever, 40 percent to the stockholder, 60 percent to the ratepayer?

MR. FAIRLEY: I think that depends on how -- that

would strictly depend on how the policy were developed. And when I say -- when I'm talking about a baseline, I'm not necessarily talking about a power price that the utility would be, you know, X dollars per megawatt hour for power for the year. That is a different sort of a baseline.

COMMISSIONER DEASON: You're talking about a baseline that can be derived from market indicators, what is happening in the market generally?

MR. FAIRLEY: Right. Improvements on the market.

COMMISSIONER DEASON: Thank you.

MR. FAIRLEY: Is that it?

COMMISSIONER PALECKI: I have one more question. What can the Commission do to encourage locational pricing?

MR. FAIRLEY: As issues come before the Commission and different forms of pricing, including locational pricing are looked at by the Commission, at that point I think the Commission could support anything that provides freedom for pricing in the market to operate. And the Commission would strongly question anyone who is advocating something that impedes any pricing mechanism, an open pricing mechanism.

COMMISSIONER PALECKI: So would going to a market structure naturally promote locational pricing?

MR. FAIRLEY: Oh, yes, I think so. And generally speaking, an open market structure, something that is very open. But, again, as issues come before, questions come before

the Commission, that is where the Commission can sway one way or the other. And arguments can be made that are logical arguments to support impediments to the market, impediments to forward markets, impediments to certain types of pricing mechanism, locational pricing is one.

And locational pricing, that can mean a number of different things also, and I'm just saying generally how most people would think of locational pricing. But I can't -- I can't think of a better way to say it than I think the Commission should just always try to advocate more open pricing forward markets any time an issue comes before the Commission. And strongly question anyone who is advocating something to the contrary, some impediment to the market.

COMMISSIONER PALECKI: So in a regulated environment requiring our utilities to engage in integrated resource planning which takes into consideration transmission costs would also be encouraging locational pricing, would it not?

MR. FAIRLEY: Yes, I think so.

COMMISSIONER PALECKI: As long as every factor involved in getting the electron to the customer is considered in the integrated least-cost planning?

MR. FAIRLEY: Right. That's a good point. I agree with that.

COMMISSIONER PALECKI: Thank you.

MR. BRINKLEY: I have one other question. This is

getting back to when we were talking about incentive plans and you said that, you know, you would split the value that is created 60/40, and we examined looking at gains and losses on the hedge and splitting that. But it seems to me there is -- that that is problematic, because the producer of a fuel, he is also hedging. And according to you earlier you said that in the long run the purchaser of the fuel is getting a lower price than index, which would say that the producer is getting less than index because it's a zero sum gain.

But to him he has value in hedging and he is doing it on his own and nobody is twisting his arm, and yet he is losing money on the financial contract that hedges his needs to sell his fuel. Year-in and year-out he is losing some small sum and yet he is still creating value for himself. What is that value and how do we measure that?

MR. FAIRLEY: Well, first, I would say in the example you are giving if there are only two parties involved in the transaction, a fuel buyer and a fuel seller and there are no other parties involved whatsoever, and the trade is made and ultimately it is discovered that the price is below index, the buyer has done a good job, the seller would probably be viewed as not doing as good a job as perhaps he could have done because he sold below index.

But if the buyer and the seller transacted for their fuel, but they are employing techniques, perhaps financial

techniques completely outside -- hedging techniques completely outside of the specific direct fuel transaction, they could both derive tremendous value while their underlying transaction could go either way, either one could be above or below index.

For example, a fuel seller might buy a floor for his price, a financial product that provides a floor so that any time the index price goes below -- any time the price, any time the index price goes below the strike price of his floor he is going to be compensated. So net at the end of the day maybe the seller sells his gas for 10 or 15 cents under index, but he is going to be compensated via his floor price. So he is still selling at index or maybe even above index depending on what the payout on his floor price was. Am I answering your question?

MR. BRINKLEY: Well, it seems to me that when you say that there is value created, it is not strictly in the difference between the index price and the price that you pay having hedged. And I don't know how to measure it. You know, just talking off the top of my head, one way you would know the value of wealth created in something is if you could find a market and sell that to people.

We are in a regulated market and I don't know how we do that. But in an unregulated market your customer finds value in knowing what he is going to have to pay ahead of time and they may shop and go to you and you can -- it's sort of a

backwards way of doing it, but you have an indication as is stabilizing the price of something worth something to your customer if they can shop around.

I'm not sure how we measure the value that is created because we don't have a way of asking our customer, the ultimate ratepayer customer, is it worth it to you to know, you know, knowing what your fuel -- I mean, your electricity price is going to be next year or the year after that.

The only way we can do it is just to look at the price paid for fuel versus the index, and that is not quite the whole picture, but I don't know how to find the other part of the picture.

MR. FAIRLEY: I see what you're getting at. I think -- I guess it -- I don't think that you can very easily, and maybe it's not possible at all to go all the way to the ratepayer level to determine the value. You have to go -- I think you have to go back to the wholesale side of the business, the purchasing of fuel, the fuels department, what they do, buying and selling fuels at different times, and I think you have to apply your measures there.

And you just have to live with the assumption that if fuel cost through savings, or monetizing assets, or what have you can be reduced five percent in a year, that that five percent is going to accrue to the ratepayer unless there is some split to the shareholder. And you just assume the

ratepayer is going to gain by that five percent and let it go at that. I never heard anybody really -- I won't say it has not been done, but I have never heard of anybody trying to go all the way to the ratepayer level to determine -- I know inside of a utility, on the other hand, there are decisions that are made where a utility -- and when I worked at a utility I did this, where the company would look at the impact of certain decisions and determine what would be the benefit to the ratepayer to execute some particular action.

And I know when I worked in rates and was doing some marketing work, there are times when certain fuel purchases were looked at and we calculated the value to each individual ratepayer, and when we went before our Commission to propose certain actions, that was one of the things that we showed was if we do this. Of course, I'm talking about specific large transactions, we would show the benefit to the ratepayer. We would do the analysis and demonstrate, but that was all ahead of time, not necessarily trying to determine incentives after the fact or anything like that.

COMMISSIONER DEASON: Thank you. Staff, any final --

MR. KEATING: If there aren't any other questions, we thank you very much, Mr. Fairley, for spending your time here this afternoon.

MR. FAIRLEY: I hope it has been helpful.

COMMISSIONER DEASON: It has. We appreciate you

being here.

MR. KEATING: I guess we have -- I don't see anybody jumping up to the mike. I was going to give one final last call for anybody who wants to make a presentation. But I asked earlier and didn't see anybody, and I see the same people in the room. So with that I think we can adjourn the staff workshop, and that will be it.

(The workshop concluded at 3:44 p.m.)

STATE OF FLORIDA)

: CERTIFICATE OF REPORTER

COUNTY OF LEON)

I, JANE FAUROT, RPR, Chief, Office of Hearing Reporter Services, FPSC Division of Commission Clerk and Administrative Services, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 24TH DAY OF AUGUST, 2001.

JANE FAUROT, RPR
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