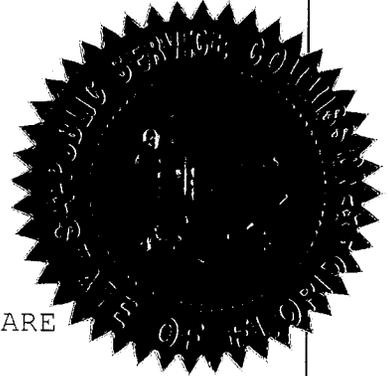


BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. UNDOCKETED

In the Matter of  
RENEWABLE PORTFOLIO STANDARDS.  
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PROCEEDINGS:                   STAFF WORKSHOP

DATE:                            Thursday, September 27, 2007

TIME:                            Commenced at 9:43 a.m.  
                                  Concluded at 3:13 p.m.

PLACE:                          Betty Easley Conference Center  
                                  Room 148  
                                  4075 Esplanade Way  
                                  Tallahassee, Florida

REPORTED BY:                   MARY ALLEN NEEL, RPR, FPR

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## 1 PARTICIPANTS:

2 BILL ASHBURN, Tampa Electric Company  
3 CLAY BETHA, Buckeye  
4 MARTHA BROWN, FPSC Staff  
5 JOHN BURNETT, Progress Energy Florida  
6 SUSAN CLARK, Radey, Thomas, Yon & Clark  
7 JEFF COOPER, Lake County  
8 BEN COWART, City of Tallahassee  
9 MARK FUTRELL, FPSC Staff  
10 BOB GRANIERE, FPSC Staff  
11 ANNE GREALY, Florida Power & Light  
12 JUDY HARLOW, FPSC Staff  
13 CAYCE HINTON, FPSC Staff  
14 CHRISTY HERIG, FlaSEIA  
15 RYAN KATOFISKY, Navigant Consulting  
16 ROGER LEWIS, Lakeland Electric  
17 BOB MCGEE, Gulf Power  
18 JOHN McWHIRTER, McWhirter Reeves  
19 BARRY MOLINE, Florida Municipal Electric  
20 Association  
21 JON MOYLE, Moyle Flanigan  
22 JENNIFER SZARO, Orlando Utilities Commission  
23 BOB TRAPP, FPSC Staff  
24 KAREN WEBB, FPSC Staff  
25 RICHARD ZAMBO

## P R O C E E D I N G S

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MR. FUTRELL: Okay. Good morning. I think we're going to get started. I'll ask Martha to read the notice.

MS. BROWN: Why I'm not sure. Pursuant to notice, this time was set for a staff workshop to discuss renewable portfolio standards in Florida. The purpose of the workshop is set out in the notice.

MR. FUTRELL: Okay. I'm Mark Futrell with the staff, and I would like to welcome everybody to the workshop today to continue our dialogue on renewable portfolio standards.

We tried to do a little different setup to afford parties more opportunity to come to the microphones, so feel free. If you want come and want to speak, find a microphone. We've got several over here. If you don't intend to speak, if you'll make sure a microphone is available for the folks that do want to participate. But again, hopefully this will -- we may have to do some handing back on the mikes here, but hopefully this will be beneficial today.

Again, today the focus of the workshop is to look at in more depth compliance and enforcement issues associated with a renewable portfolio standard. And before we get into our discussion today, we want to have

1 two presentations. We've had -- Ryan Katofsky with  
2 Navigant Consulting is back with us. He was at our last  
3 workshop. Again, Ryan is over here. He is here on  
4 behalf of -- as part of the EPA's outreach program to  
5 assist states as they explore these kind of issues. And  
6 he will be followed by Judy Harlow with our staff to  
7 kind of tee up the questions that we're going to be  
8 discussing today.

9 And if some of the staff would like to come up  
10 to the table, that might make more room for folks to  
11 come to the microphone.

12 So at this time, if Ryan would come up, he's  
13 got some remarks, some prepared presentation. His  
14 slides are available behind on the bench, and the other  
15 documents are back there that we also circulated to the  
16 distribution list.

17 Ryan?

18 MR. KATOFSKY: Thank you, Mark. Good morning,  
19 everybody. It's a pleasure to be here.

20 I was asked to provide some overview of three  
21 areas that relate to renewable portfolio standards. I  
22 was asked to talk about renewable energy certificates,  
23 sometimes called renewable energy credits, green tags,  
24 and there's some other terms used; to talk about  
25 compliance mechanisms that are used in existing RPS

1 programs; and also talk briefly about some enforcement  
2 issues as they relate to compliance with RPS.

3 So let's sort of jump right in and talk about  
4 how a REC is born. You know, the first time that  
5 someone introduced this topic to me, the idea of an  
6 attribute that you could buy and sell, it took me a  
7 while to kind of get my head around it, but it's a  
8 pretty well established concept today, and it's in use  
9 in a number of markets.

10 The idea is that you have a renewable energy  
11 generator, and whereas before there was this concept of  
12 RECs, they basically had one commodity to sell, which  
13 was the power, now they have two commodities to sell.  
14 They have the power, and they have the certificate, and  
15 what the certificate embodies is the attributes of that  
16 electricity. So the concept is that not all electricity  
17 is created equal, and there are many, many attributes  
18 that you can track.

19 For example, in Massachusetts, I get a  
20 quarterly sort of content label with my electric bill.  
21 It's kind of the equivalent of a nutrition label that  
22 you see on food, and it tells me the product mix, it  
23 tells me the emissions, and it even tells me how much of  
24 my electricity was produced with union labor, and it's  
25 an example of the attributes associated with the

1 electricity that is sold to me. And that's essentially  
2 what a renewable energy certificate embodies. It  
3 embodies a range of attributes.

4 It also would embody whether or not a  
5 particular generator is qualified under one RPS or  
6 another. So if you have multistate REC tracking  
7 systems, you can see whether that REC qualifies in one  
8 state and not the other based on its attributes. And  
9 part of this whole notion of RECs is the idea that the  
10 generators have to be registered and certified under  
11 various RPS programs, so that's an aspect of REC  
12 tracking. I'll talk a little bit more about that later.

13 And once you've sold the REC or once you've  
14 separated the attributes from the power, then the power  
15 that is sold from that facility, if it's sold separately  
16 from the REC, it has no attributes. It is referred to  
17 as null energy, residual system mix, or other things.  
18 Essentially, it is -- that electron is now just like any  
19 other electron, because I've separated the attributes,  
20 and I've actually put a value on those attributes.

21 That's the concept of a renewable energy  
22 certificate, and it has some value in simplifying how  
23 transactions and how compliance are treated, and it also  
24 has implications for voluntary programs.

25 So if you take a look at, just furthering that

1       topic, how the RECs might be used in various markets,  
2       you have a renewable energy generator. They can produce  
3       what is sometimes referred to as bundled renewable  
4       energy, so that is the energy with the attributes, and  
5       then that can be sold, for example, as a green pricing  
6       or a green power product to customers. So that top row  
7       represents what we typically think of when we think of,  
8       say, a green pricing program, where the energy and the  
9       attributes are sold together.

10               The middle row, you take the REC and you  
11       separate it off from the energy, and you can do the same  
12       thing. You can sell a REC-based product as a green  
13       power product, so where the customer doesn't change the  
14       way they purchase electricity, but in addition to, say,  
15       the electricity they buy, they're also buying RECs from  
16       a generator. And that's something that's available in a  
17       range of states. I actually do it in Massachusetts. I  
18       actually buy Massachusetts RPS-eligible RECs for my own  
19       purpose. And the purpose of me doing that is to  
20       increase the demand for RECs in the marketplace and  
21       drive more renewable energy development, just like any  
22       other customer who belongs to a green pricing program.

23               The other thing that RECs obviously are used  
24       for is for RPS compliance, and that's the focus of what  
25       the subsequent slides will be about. In that case, an

1 obligated party under the RPS will purchase RECs equal  
2 to their obligation, and then they will retire them. So  
3 they're taken out of circulation once they're used for  
4 compliance, and then they would charge their customers,  
5 or the cost of that REC will be included in the price  
6 that they charge for electricity to customers.

7 MR. MOLINE: Ryan?

8 MR. KATOFSKY: Yes.

9 MR. MOLINE: Do you mind taking questions?

10 MR. KATOFSKY: How do you want to -- I'm happy  
11 to take questions as we go or wait till the end.

12 MR. MOLINE: Just to clarify, so when you're  
13 buying RECs at home -- Barry Moline, Florida Municipal  
14 Electric Association. When you're buying RECs at home,  
15 are you then competing with, for example, the utility  
16 for those same RECs?

17 MR. KATOFSKY: In effect, yes, because I'm  
18 just another -- I'm another buyer, yes.

19 MR. MOLINE: All right. Thank you.

20 MR. KATOFSKY: I don't buy that many, but -- a  
21 couple of megawatt-hours worth.

22 This slide kind of addresses some of the  
23 issues that relate to RECs in the market. I think  
24 there's two key issues addressed here. One is, what is  
25 the price or the value of that REC? What determines

1 that price? And then there's the issue of eligibility  
2 of that REC.

3 So if you think about -- you can look at a REC  
4 in a couple of ways. One is, you say, "Well, it's the  
5 above-market price of that renewable electricity  
6 relative to conventional generation." So it's the extra  
7 money we have to pay to support that renewable  
8 generation. So that's sort of a cost-based view of a  
9 REC.

10 The other way you can look at it is, it's the  
11 premium that somebody would be willing to pay for those  
12 attributes, so it's a -- it's someone who says, "Well,  
13 that REC is worth -- that electron is worth more to me  
14 because of its attributes." So you can look at it in  
15 two ways. You know, the first way is sort of the  
16 compliance version, and the second way is more of the  
17 voluntary version of a REC. But the end result is that  
18 the renewable generator receives additional revenue for  
19 their output.

20 If you look at compliance markets, what would  
21 set a REC price? Well, it's just going to be supply and  
22 demand for those RECs, subject to a range of market  
23 rules, which may include price caps, or there may be a  
24 ceiling price on how high a REC, a compliance REC will  
25 go. There may be credit multipliers in place for

1 different types of technologies, and there may be what  
2 we call shelf life. There may be banking provisions, so  
3 if there's a particular -- if an RPS has banking  
4 provisions and there's more RECs available than are  
5 necessary in a particular year, if there were no banking  
6 provisions, then the price of those RECs you would  
7 expect to fall because supply would exceed demand. But  
8 with banking, you can roll some of those RECs over, and  
9 then that would have an effect on the current price.

10 MR. MOYLE: You mentioned price caps, at the  
11 top end a ceiling -- (inaudible; not at microphone) --  
12 fall below a certain price.

13 MR. KATOFISKY: You want to come up to the  
14 microphone?

15 MR. FUTRELL: Jon, we're trying to transcribe  
16 this. And I think if we can have a quick answer --  
17 maybe we can hold off on questions until the end and  
18 then have a Q and A period with Ryan, let him get  
19 through his slides. But if you want to go ahead and  
20 answer Jon's question --

21 MR. KATOFISKY: I'll go ahead and answer. The  
22 question is if there are also floor prices for RECs and  
23 not just ceiling prices. I believe that the way the RPS  
24 rules are written, they generally are focused on caps.  
25 There are other things going on in the marketplace where

1 people may be guaranteed a floor price for RECs, and I  
2 can think of two examples off the top of my head.

3 One, there is a -- I believe it's just a  
4 proposal where in New Jersey a utility is going to be  
5 guaranteeing a -- they're doing a forward purchase of  
6 solar RECs from customers. This is not in place yet,  
7 but they want to do that, and then they're guaranteeing  
8 a floor price to that customer for that solar REC. So  
9 there's a ceiling price set by the rules, and there's a  
10 floor price set by their arrangement with the customer.

11 In Massachusetts, the Massachusetts Technology  
12 Collaborative, which administers the state's renewable  
13 energy trust fund, has become a participant in the REC  
14 market as a way to help that market get going, and they  
15 execute contracts with generators that include various  
16 price guarantees. They do collars or floor prices or,  
17 you know, contract for differences, various ways to  
18 guarantee a minimum price.

19 So in voluntary markets, you know, the price  
20 of these RECs is really driven by what people are  
21 willing to pay, so that's the flip side of that. And in  
22 that market, there may be differentiation. There may be  
23 customers willing to pay more for, let's say, RECs from  
24 a new facility versus an old facility or pay more for  
25 RECs from a solar project than a landfill gas project.

1 So there's actually differentiation of price in the  
2 voluntary REC market based on the type of REC that it  
3 is.

4 In terms of eligibility, some factors that  
5 you'll need to consider going forward relate to the  
6 ownership of RECs. So, for example, if an RPS is passed  
7 and then an existing generator becomes eligible and that  
8 existing generator has a PURPA contract, that PURPA  
9 contract probably didn't say anything when it was  
10 written about the disposition of RECs, so you need to  
11 figure out who owns those RECs under that circumstance.  
12 If there are customer-side resources subject to net  
13 metering, you would have to determine who owns the RECs  
14 under those circumstances. And then if there are state  
15 incentives involved, you may need to look at that as  
16 well.

17 The other very important issue is the  
18 relationship between the mandatory and the voluntary  
19 markets. And what has emerged as the best practice  
20 really, and that goes to my example I gave earlier, is  
21 that voluntary purchases typically are in addition to  
22 any RPS requirements, so they're not used for RPS  
23 compliance. And this relates to issues of property  
24 rights and what the intent of voluntary programs are.  
25 So I acquire the title to the RECs if I purchase them,

1 and therefore, the utility doesn't use them for  
2 compliance purposes.

3 And then another thing that is going to become  
4 probably more important in the future as various  
5 emissions cap-and-trade systems get put in place,  
6 particularly for CO<sub>2</sub>, because that's considered an  
7 important attribute of renewables, being low or zero  
8 CO<sub>2</sub>, is how are these -- you know, to the extent that  
9 renewables get involved in various cap-and-trade  
10 programs, how is the REC going to interact with other  
11 policies, other programs, and just making sure that all  
12 those things work together. Some of that is still being  
13 worked out.

14 Just a quick slide on REC tracking systems.  
15 This is basically the idea -- this is just the  
16 accounting system for following a REC from the time it's  
17 created until the time it is retired. And I'll actually  
18 skip to one of the bullets near the bottom that says  
19 these are not trading platforms for certificates. These  
20 are tracking systems, so these are -- you cannot execute  
21 transactions with these tracking systems, but you can  
22 record and follow transactions with them. And they're  
23 policy neutral, in the sense that a single REC tracking  
24 system can work with multiple states, multiple programs.  
25 So they're just really, you know, at the basic level, an

1 accounting system for following RECs.

2 In some cases, the REC tracking system is part  
3 of a broader -- what are sometimes called generation  
4 attribute tracking systems. That's the GATS in the PJM  
5 region. In New England we have something called the  
6 generation information system, the GIS. These track  
7 attributes of all generators in the region, and as part  
8 of that tracking, they include issues relating to  
9 renewable generation and RPS eligibility. In Texas they  
10 have a REC tracking system that is solely for the  
11 purpose of their RPS compliance. It doesn't track other  
12 generators. It just tracks generation for RPS  
13 compliance.

14 And then on the right-hand side there, you see  
15 some functions, but basically this is an accounting  
16 mechanism and a verification mechanism to make sure that  
17 RECs are not being used twice, to make sure that -- you  
18 know, that everything kind of adds up in the end.

19 So that's the five or so minutes on RECs, and  
20 now let's look at how they're used and what other  
21 approaches are out there for compliance with RPS. And  
22 there are three basic ways that RPS programs look at  
23 compliance. One is the use of RECs, and that is by far  
24 the most common way that states have pursued compliance  
25 with RPS, and it's an attribute-based system.

1           The other is to look at the contract path. So  
2 in this case, you have basically what we referred to  
3 earlier as the bundled renewable energy being sold to  
4 the obligated parties, typically the utilities, and  
5 they're buying both the power and the attributes  
6 together, and California is probably the best example of  
7 that approach. And in California, that's typically done  
8 with PPAs between the generators and the utilities. It  
9 could also be done by utilities building their own  
10 renewable generation if that were the way a particular  
11 state did it.

12           And then the third option, which as far as I  
13 know there's only example, New York, is the central  
14 procurement approach, where it's actually a state agency  
15 that acts as a single obligated party for the entire RPS  
16 program. And we'll talk more about each of these in a  
17 minute.

18           The reasons why you have compliance  
19 mechanisms, one, of course, you want to create a viable  
20 market. This market should stimulate investment in  
21 renewables, and yet control overall costs to ratepayers.  
22 You want a compliance mechanism that can ensure proper  
23 tracking and compliance with the targets, and then you  
24 want to verify that only eligible resources are being  
25 used. Every state essentially decides what types of

1 resources they want to include in their RPS. For  
2 example, some include hydro; some do not. Some have  
3 restrictions on the type of biomass that may be  
4 eligible; others do not. So every state has its own set  
5 of eligibility criteria, and you want the compliance  
6 mechanism to be able to help you with the verification  
7 of that.

8 So let's look at each one of those real quick.  
9 First, looking at REC-based systems, given that we've  
10 talked a little bit about RECs already, you can kind of  
11 understand how this one would work. Basically, an  
12 obligated party, typically a utility, or what are  
13 sometimes called load serving entities or LSEs, would  
14 have to purchase RECs equal to their obligation, and  
15 then we have the REC registries that contract this. And  
16 as I said earlier, you have REC registries that track  
17 this for multiple states, PJM in New England being a  
18 very good example of where multiple states use the same  
19 system.

20 What are some of the pros of this kind of an  
21 approach? Well, it's fairly easy to track compliance by  
22 following the RECs.

23 It allows for flexibility mechanisms like  
24 banking and early compliance.

25 And it facilitates the use of credit

1 multipliers. So, for example, if you had technology  
2 tiers or you had placed preference over one class of  
3 technologies versus another, you could create separate  
4 markets for those tiers or apply multipliers to certain  
5 technologies.

6 It addresses the issues of transmission  
7 constraints, so -- if you're following the contract path  
8 approach, you have to be able to physically deliver all  
9 that power to the obligated party. Here you can  
10 separate those two functions, the delivery of the energy  
11 and the delivery of the RECs.

12 And it's a way to incorporate customer-side  
13 resources. If customer-side generation is included,  
14 they can also generate RECs, and then you don't have to  
15 worry about how that power flows into the system.

16 Some of the cons, the main one is that you  
17 have to create this whole new market that didn't exist  
18 before, so you have to set up the rules, and you have to  
19 make sure that it functions. And we have examples where  
20 they functioned well and others that have been off to  
21 slower starts. So it's not a guarantee that if you  
22 create a REC market, it will instantly function as you  
23 expected it to.

24 And because of this notion of separating  
25 attributes and tracking attributes and paying for

1 attributes, if there are other policy regimes that also  
2 involve attributes such as emissions, you need to make  
3 sure that all the systems work together.

4 And some examples, Texas has a very successful  
5 REC-based RPS. Massachusetts has an RPS that I would  
6 say is becoming more successful as time goes by. It's  
7 taking time for it to get going. And then all the PJM  
8 states use this system as well.

9 If you look at the contract path approach,  
10 it's less common, but more consistent with how things  
11 are generally done in vertically integrated states such  
12 as Florida. In this case, you enter into PPAs or build  
13 capacity, and you're buying both the power and the  
14 attributes together. The terms of those power purchase  
15 agreements and the pricing of those are going to be  
16 subject to RPS rules and potentially approval by the  
17 Public Service Commission or other -- whoever  
18 administers the RPS.

19 And as I mentioned, you know, there are  
20 examples where utilities can build their own as opposed  
21 to having to enter into agreements with third-party  
22 generators. Here again, the obligated party is the  
23 utility or the load serving entity.

24 The pros of this system is that it tends to  
25 work within the existing structure, so if you have

1 competitive RFPs for generation already in the state,  
2 this would just fit right in with that.

3 And it provides -- because you can typically  
4 get long-term contracts under these RPS programs, this  
5 provides a measure of certainty for the generators, and  
6 that helps them get financing. That, for example, has  
7 been an issue in some states, where the load serving  
8 entities were not willing or able to enter into  
9 long-term contracts, and then that made it difficult for  
10 generators to get financing. In California, you know,  
11 these contracts are long-term contracts, and it helps  
12 them get financing.

13 I think I mentioned the issue of transmission  
14 constraints. That would be a key issue here, that if  
15 you had significant transmission constraints, you would  
16 have to address that. Texas did address that as part of  
17 their RPS, where they had a lot of wind going in in west  
18 Texas and didn't have the ability to move the power.

19 And you also have to make sure that these  
20 contracts are auditable and it can be verified that they  
21 are compliant with the RPS. Examples are California, as  
22 I mentioned earlier. Colorado permits this. It's  
23 interesting to note that Colorado also permits the use  
24 of RECs, so you can do it either way. And if you go  
25 back a number of years, Xcel Energy in Minnesota -- this

1 is before the current RPS in Minnesota was put in place.  
2 Xcel was under a mandate to purchase a certain amount of  
3 wind and biomass power, and that pretty much fell into  
4 this contract path type of compliance approach.

5 The third is this idea of centralized  
6 procurement by the state. And again, New York is the  
7 one example that I'm familiar with. In this case, there  
8 is only one obligated party. It is the state agency  
9 that purchases the -- essentially, the RECs. So how it  
10 works in New York is that the state agency issues RFPs  
11 for essentially what amounts to renewable energy  
12 certificates, although the certificates are not traded  
13 or tracked like they are in other jurisdictions. The  
14 state is essentially buying just the attributes, and  
15 then the power from those contracts is sold into the New  
16 York ISO, either onto the spot market or through  
17 bilateral contracts. And as we talked earlier about the  
18 difference between renewable generation that does or  
19 does not have a REC associated with it, that power is  
20 devoid of the attributes.

21 So the pros of a system like this is that it  
22 does use attributes, but doesn't require you to  
23 establish a REC market. The state uses competitive  
24 solicitations, so that ensues that there should be  
25 competitive pricing, and it's got a fairly simple

1 tracking and compliance mechanism.

2 What happens after the state issues their RFP  
3 and gets their bids for the various projects, they then  
4 determine how much each of the utilities or the load  
5 serving entities need to charge their customers to cover  
6 the costs of their contracts with the generators, so the  
7 state agency determines what that surcharge is. The  
8 utilities collect it and transfer it back to the state  
9 agency, who then pays the generators.

10 The one issue I think with this approach might  
11 be that, you know, the state will get what it gets in  
12 these RFPs, and there is no automatic mechanism for  
13 compliance if they fall short of their target, so then  
14 the state would have to issue additional RFPs, and the  
15 generators would have to submit additional bids. So  
16 there is no automatic way to sort of -- if the market is  
17 falling short on capacity on bids for the RFPs, it may  
18 take some time for those signals to get worked into,  
19 say, the next round of RFPs, and so on. And we'll talk  
20 about compliance in a minute, and you'll probably get a  
21 bit of a better sense of what I mean there.

22 Moving on to the issue of enforcement, I think  
23 it's important to separate enforcement into two key  
24 areas. One is this notion of alternative compliance  
25 mechanisms, and the other is penalties, and I think most

1 of the focus is typically on these alternative  
2 compliance mechanisms. And what these are, as the name  
3 suggests, this is an alternative way for a utility to  
4 come into compliance with the RPS if there are not  
5 sufficient quantities of eligible generation to be  
6 procured or eligible RECs to be procured. So by making  
7 these alternative compliance payments, the utility  
8 actually is complying with the law, even though the  
9 targets themselves are not being met. And they're  
10 typically subject to cost caps to control the overall  
11 cost to the ratepayers.

12 Penalties are really there for market  
13 participants that essentially don't play by the rules.  
14 So they either falsely report their eligibility or their  
15 generation, or if they're shown to have not made a  
16 good-faith effort in compliance, those kinds of things  
17 would be the subject of actual monetary or other types  
18 of penalties that could be imposed by the entity that  
19 administers the RPS.

20 So let's look at each of those two areas a  
21 little bit further. If you look at the alternative  
22 compliance mechanisms, they're there to do three basic  
23 things: One, ensure that the RPS functions, so if  
24 there's a shortage of RECs, the alternative compliance  
25 mechanism kicks in, and the obligated parties will make

1 payments to the state, effectively, as a substitute for  
2 buying eligible renewable energy certificates or  
3 eligible renewable power.

4 And as I mentioned earlier, it ensures that  
5 this system is working, but it also means that there's  
6 not enough renewable electricity out there, so that  
7 leads to the second point, which is, by these  
8 alternative payments kicking in, that should stimulate  
9 project investment. It sends a signal to the market  
10 that there's not enough renewable energy produced, and  
11 those payments should be high enough such that it would  
12 encourage generators to come in and build more  
13 generation as a more cost-effective means of complying  
14 with the RPS.

15 At the same time, the issue of cost control is  
16 very important. You don't want the prices for these  
17 payments to go too high, because you want to be able to  
18 control the overall price impacts to customers.

19 So if you look at some what you might call  
20 best practices associated with these compliance  
21 mechanisms, setting that ceiling price, it should be  
22 high enough -- I put in quotes "significantly higher  
23 than the expected cost of compliance," so that paying it  
24 -- if it's being paid, it sends a strong signal to the  
25 market to come in and build more generation, but then

1 again, low enough so that it's not too burdensome on  
2 ratepayers.

3 A couple of examples here, in Texas, the  
4 alternative compliance payment is either \$50 a  
5 megawatt-hour or twice the average price of credits in  
6 that year, so it's high enough to spur development.  
7 Again, this is just for the renewable energy  
8 certificate, so this is over and above the actual price  
9 for the power from the generators.

10 You can subject these to inflation  
11 adjustments. Massachusetts is an example. There are  
12 others. So it started off as \$50 a megawatt-hour in  
13 Massachusetts. Now it's up to 54, \$56, adjusted for  
14 inflation.

15 And if you have solar set-asides or other  
16 carve-outs for specific technologies, solar being the  
17 one that it's done for most commonly, the alternative  
18 compliance payments for those solar RECs or SRECs, you  
19 would expect that to be quite a bit higher than the  
20 ceiling price for the bulk of the market. And New  
21 Jersey is the best example probably of a state that has  
22 done this with solar RECs. They initially set the  
23 compliance payment for solar RECs at \$300 a  
24 megawatt-hour, and I believe it has even gone up.  
25 They've just recently set that price for the solar RECs

1 for the next few years. That information should be  
2 available through their website.

3 The other issue that's important is the  
4 question of cost recovery of alternative compliance  
5 payments. And I would say it's common that these are  
6 subject to cost recovery, because they are considered a  
7 means of compliance. However, they're not necessarily  
8 automatically subject to cost recovery, and I've given a  
9 couple of examples here. In Delaware, the RPS rules  
10 state that they can be recovered in rates as long as  
11 they're the least cost measure, or if there's not enough  
12 conventional or renewable generation to meet the RPS.  
13 In Pennsylvania, they are specifically not subject to  
14 cost recovery, and in that sense, they actually would  
15 act as a penalty if they kick in.

16 The other question that comes up is, well, if  
17 we start collecting these alternative compliance  
18 payments, what do we do with them? And generally the  
19 idea would be to reinvest those funds in renewable  
20 energy development in the state. Again using  
21 Pennsylvania as an example, they have specific language  
22 that says it has to go to the sustainable energy fund  
23 and can only be used for developing additional  
24 alternative energy sources, although a certain  
25 percentage of it can be used for administrative

1 purposes.

2 Just looking quickly -- I think this is my  
3 last slide, just quickly at the issue of penalties.  
4 Just looking at two different parties that might be  
5 subject to penalties, one would be the renewable energy  
6 generator. Under what circumstances might penalties be  
7 levied? Well, if they falsely reported either the  
8 eligibility or, say, the production levels coming from  
9 their facility. What are the options? Well, you could  
10 fine them, or you could actually, you know, revoke their  
11 qualifications as a means of penalizing them.

12 If you look at the obligated parties that are  
13 purchasing or complying with the RPS, they could -- you  
14 know, what are some of the triggers there? Well, they  
15 may fail to acquire sufficient renewable energy or RECs,  
16 or again, they may falsely report or fraudulently  
17 report, say, resource eligibility criteria. You can  
18 levy fines, you can disallow ACPs in cost recovery as a  
19 penalty, or in restructured markets where you have third  
20 parties that are delivering energy to customers, you can  
21 bar them from taking on new customers, or you can  
22 actually revoke their operating license.

23 You know, I haven't looked into this issue of  
24 penalties in great, great detail, but I don't think  
25 there has been a lot of precedent yet for actually

1 applying penalties to various parties. In some states,  
2 the penalties may be automatic, in which case there  
3 might be an appeal process if someone felt that they  
4 were unfairly penalized. In other cases, the  
5 application of penalties is discretionary.

6 And the last point, you know, there may be  
7 force majeure considerations in the levying of  
8 penalties.

9 I think that is the end. Yep. That's me. So  
10 do we have a few minutes for questions?

11 MS. HERIG: I can't remember what slide, but  
12 on the value -- and I know there's not a lot of data out  
13 there.

14 MR. FUTRELL: Excuse me. If you would  
15 identify yourself for the court reporter, that would be  
16 very helpful.

17 MS. HERIG: I didn't hear you. What did you  
18 say?

19 MR. FUTRELL: If you would identify yourself.

20 MS. HERIG: Christy Herig, and I'm here  
21 representing the Florida Solar Energy Industries  
22 Association.

23 In states where the ACP is actually a penalty,  
24 don't the REC values often track below that, sort of  
25 close below that? I mean, the last time I looked,

1 Maryland was around \$42 a megawatt-hour, but New Jersey  
2 was 218.

3 MR. KATOFSKY: Well, the 218 in New Jersey  
4 you're referring to would be for the solar.

5 MS. HERIG: Right, but it's because your ACP  
6 is so high there too.

7 MR. KATOFSKY: Yes. So if a market is  
8 functioning as you would expect it to, you would expect  
9 that the actual market price would be below the ACP.  
10 Even if there were a shortage of RECs, they might still  
11 track a little bit lower because there would be some  
12 administrative, you know, back office costs in procuring  
13 RECs as opposed to just paying the alternative  
14 compliance payment.

15 MS. HERIG: Right. But my observation is,  
16 they do seem to track just below it.

17 MR. KATOFSKY: Yes, and that really would  
18 depend on supply and demand.

19 MS. HERIG: Yes.

20 MR. KATOFSKY: I mean, in Texas, the Texas  
21 RECs historically have been far below the ACP because  
22 from the get-go, they had abundant quantities of RECs,  
23 whereas in Massachusetts, they've had several years of  
24 deficit, and if you look at spot prices, effectively,  
25 those are tracking very, very close to the ACP.

1           MR. MOLINE: Barry Moline, Florida Municipal  
2 Electric Association. I have three hopefully quick  
3 questions.

4           One is, are national and state RECs based on  
5 the attributes of what is defined as renewables in that  
6 state versus what might be defined as renewables  
7 elsewhere, so therefore you can trade something --

8           MR. KATOFSKY: Well, there is no real -- I  
9 mean, in terms of national RECs. So each -- if a state  
10 has its own RPS, then there is a definition of what  
11 qualifies in that state. For the voluntary market,  
12 which is effectively a national market -- a good example  
13 would be, federal government agencies have renewable  
14 energy procurement requirements, but they don't have  
15 constraints on where they can get those from, so they  
16 can acquire RECs from out of state, from across the  
17 country, and so on. So in that sense, there is a  
18 national voluntary market. There are independent bodies  
19 that will certify those RECs in various ways, the  
20 Green-e symbol, for example.

21           MR. MOLINE: For example, if we have waste  
22 energy as an option, that may not be an attribute that  
23 is attractive to another state or region, so that REC  
24 may be defined differently.

25           MR. KATOFSKY: Correct, correct. And even

1 within a -- going back to the -- New England is a good  
2 example, because it has multiple states within the same  
3 control area, and they have multiple RPS. A generator  
4 in Maine may qualify for Connecticut with its biomass  
5 facility, both not in Massachusetts, because they have  
6 different definitions within those two states.

7 MR. MOLINE: So there are different types of  
8 RECs in those states.

9 MR. KATOFSKY: Yes, or different attributes,  
10 or different eligibility. But they're all tracked under  
11 the same single tracking system.

12 MR. MOLINE: Okay. The second question is  
13 about REC tracking. You gave the examples of PJM and  
14 ISO New England. Are there any issues of  
15 confidentiality? I mean, FRCC, for example, has issues  
16 of confidentiality if we chose that route. Have they  
17 addressed those?

18 MR. KATOFSKY: I'm not aware. It could be  
19 that they've been addressed. There are certain things  
20 that the tracking system will track and certain things  
21 that it won't.

22 MR. MOLINE: And then finally, sort of one of  
23 your last slides about the alternative compliance  
24 payments, how do utilities prove, in our case, to the  
25 PSC, that there's not sufficient renewable energy

1 available to then therefore meet the cap and not a  
2 penalty -- I mean, I guess the penalty would be no cost  
3 recovery, but how would we prove that?

4 MR. KATOFSKY: I don't think there's a lot of  
5 experience with that yet, so I'm not sure what the exact  
6 mechanism would be for demonstrating, say, you know, we  
7 did to our best, but we just couldn't get it out there.

8 I mean, if it was an RFP-based process, then  
9 you would just look at what came in from the request for  
10 proposals, and you would see if there was either  
11 sufficient renewable energy offered up in those  
12 proposals or if the pricing was, you know, below the  
13 ACP, or maybe some of the other terms within those  
14 contracts just didn't pass muster.

15 MR. MOLINE: Okay. Thank you.

16 MR. TRAPP: Jump in, Susan.

17 MS. CLARK: I was going to ask a question on  
18 the --

19 MR. TRAPP: Could you identify yourself?

20 MS. CLARK: Oh, Susan Clark.

21 I was going to ask a question on the  
22 registering and the certificates, and there are entities  
23 that do that. Are you noticing that when states start  
24 an RPS program that they're using existing registrars or  
25 tracking systems? Are there some emerging as people who

1 do that in many states, or does each state sort of  
2 create their own tracking register, certificate, or  
3 whatever?

4 MR. KATOFSKY: There's only three or four  
5 existing tracking systems that are sort of -- you can  
6 think of them as multi-regional. There's New England,  
7 there's PJM, there's -- the Western states have one, and  
8 then there's a Midwest, so there's really four. And  
9 then there's Texas, which is its own system.

10 So those systems grew out of these -- as these  
11 states started to go down this path, these registries,  
12 these tracking systems were created. And then as  
13 additional states -- so PJM might be a good example. As  
14 additional states passed their own RPS programs, they  
15 just -- as part of that, they said, "We will just use  
16 the existing PJM generation attribute tracking system as  
17 the means of tracking our compliance." So, you know,  
18 you have in these regions the -- essentially, the  
19 infrastructure was there for many of these states. The  
20 early states, you know, that were doing this, that's  
21 where these registries were first created.

22 And they weren't just created for RPS  
23 compliance, for example, this issue of labeling. So if  
24 you want to be able to track the attributes of all  
25 generators so that you can make consumers aware of where

1 their power comes from and what its attributes are in  
2 terms of emissions and fuel mix, these tracking systems  
3 allow you to do that. So it wasn't just for RPS that  
4 these tracking systems were created.

5 MS. CLARK: And how are they funded? Is it  
6 funded by those people who want the certificates? In  
7 other words, there's a cost for registering?

8 MR. KATOFSKY: Yes. And there could be  
9 surcharges, like, say, per REC you have a small  
10 surcharge that helps fund the system. But it would be  
11 sort of a collectively funded activity.

12 MR. TRAPP: Could I jump onto that --

13 MR. KATOFSKY: Yes, please, yes.

14 MR. TRAPP: -- question and ask -- you know,  
15 we're the PSC, and we're used to regulating utilities  
16 and not necessarily putting together other companies,  
17 organizations, or whatever, for tracking or whatever.

18 I'm Bob Trapp with staff, by the way. I  
19 violated my own rule.

20 Could you share with us to what extent these  
21 REC programs are being self-administered at the utility  
22 level, where utilities actually go and verify the RECs,  
23 account for the RECs, possibly with some state auditing  
24 or something like that? Or are most of these programs  
25 being developed at a kind of statewide level outside of

1 a PSC type authority?

2 MR. KATOFESKY: Well, I mean, the PSC may be  
3 the -- the registries themselves are created by -- you  
4 know, you basically hire someone to set it up, establish  
5 it for you, and the question then becomes who runs it.  
6 All right? Is it a state agency? Or you could actually  
7 outsource the running of the registry to a third party  
8 as well.

9 I don't believe that the -- you know, the  
10 utilities themselves wouldn't necessarily be the ones to  
11 do the auditing. I think they would want to verify. So  
12 if there was a generator, say, of a wind farm and they  
13 registered with the tracking system and they got  
14 certified for the various -- you know, they would be  
15 independently certified as being eligible for, you know,  
16 RPS programs A, B, and C in this region. Then that  
17 information would be available to the utility, so the  
18 utility would know that if they bought RECs from this  
19 entity, that this entity was properly registered and  
20 accredited for that RPS program. And then you could  
21 have -- the PSC or some other state agency could serve  
22 the auditing function, so going in and looking at the  
23 transactions, verifying that facilities that say they're  
24 eligible are actually eligible and so on.

25 MR. TRAPP: So in order to have a uniform

1 system, you really couldn't have 55 separate utilities  
2 defining their own RECs. You basically would have to  
3 set up some kind of central authority to do that  
4 function.

5 MR. KATOFSKY: I think it would be more  
6 efficient to do it that way. Now, there are examples of  
7 states where -- I think Colorado is one that comes to  
8 mind where the obligation to be in the RPS is based on  
9 the size of the utility. But then they gave municipal  
10 utilities and co-ops the option of opting out, but then  
11 self-certifying. So there are examples of that out  
12 there.

13 MR. ASHBURN: Ryan, Bill Ashburn with Tampa  
14 Electric. I assume the generator that's a renewable  
15 generator sort of qualifies into one of these tracking  
16 systems, saying, "I'm renewable," and they check it and  
17 so forth.

18 MR. KATOFSKY: Right.

19 MR. ASHBURN: Do these tracking systems talk  
20 to each other to make sure that the REC that generator  
21 sold in, say, New England isn't being resold again into  
22 Texas, and how do they do that?

23 MR. KATOFSKY: That's right. There has to be  
24 the ability to ensure that the same REC is not sold in  
25 multiple jurisdictions.

1 MR. ASHBURN: Right. So do these tracking  
2 systems all talk to each other and trade information, or  
3 what happens?

4 MR. KATOFISKY: You know, I'm not an expert in  
5 that area. Typically -- I mean, generally speaking, you  
6 know, Texas to New England is an example of where  
7 there's no physical connection, so --

8 MR. ASHBURN: Right. But the REC is not  
9 subject to transmission or anything. It's just an  
10 attribute.

11 MR. KATOFISKY: Right. But if someone tried to  
12 buy -- if someone in Texas tried to buy a -- you know,  
13 they couldn't buy a New England REC in Texas because a  
14 generator in New England couldn't register with the  
15 registry in Texas.

16 MR. ASHBURN: Okay. So the registry in Texas,  
17 for example, excludes all generators outside of their  
18 footprint.

19 MR. KATOFISKY: Right. So that registry would  
20 say, okay, you're eligible or you're not eligible.

21 MR. ASHBURN: Okay.

22 MR. KATOFISKY: It gets messier when you have  
23 adjacent control areas.

24 MR. ASHBURN: Right.

25 MR. KATOFISKY: So, for example, a wind farm in

1 New York can sell to the NYSERDA, which is the state  
2 agency that does the central procurement in New York,  
3 but they can also register for RPS eligibility in  
4 multiple New England states. Provided they can deliver  
5 the power to New England, then they can also sell the  
6 RECs in New England. So you would have to -- in that  
7 particular case, you would have to verify that (a) they  
8 didn't sell the attribute to NYSERDA; (b) if they sold  
9 it into New England, that they also had a contract for  
10 delivery of the energy to New England; and (c) that they  
11 only sold it to one entity in New England.

12 MR. ASHBURN: Do you know if these separate  
13 tracking systems are talking to each other or  
14 coordinating --

15 MR. KATOFSKY: You know, they probably are  
16 coordinating to some extent, particularly in the  
17 Northeast, but it's not something I know a lot about,  
18 unfortunately.

19 MR. ASHBURN: Okay. Thank you.

20 MS. HERIG: I'm not certain, but I think they  
21 have a unique identifier so that once sold, it gets  
22 retired. It can't be sold again.

23 MR. KATOFSKY: It's retired, so it's out of  
24 the system, yes.

25 MR. TRAPP: Let me ask about that, if I could.

1 I'm Bob Trapp with the staff. If you have multiple  
2 attributes that you're trying to take advantage of in a  
3 REC system, such as CO<sub>2</sub> reduction, and then promotion of  
4 renewables, economic development, fuel diversity, all of  
5 these multiple reasons for doing this, is there any  
6 reason why you can't count a REC twice?

7 MR. KATOFSKY: Have your cake and eat it too?  
8 This is an interesting issue. For example, in some  
9 states, there are set-aside allowances for emissions  
10 trading programs, so the state administers an emissions  
11 cap-and-trade system for, say, SO<sub>2</sub> or NO<sub>x</sub>, and they say,  
12 "We're going to take 5 percent of all of those  
13 allowances, and we're going to give them away for free  
14 to eligible renewable generators that are non-emitting."  
15 So they've essentially given the renewable generator  
16 something that they can then sell into the market, so  
17 it's additional revenue to the generator.

18 That is separate from a REC, but some have  
19 argued that if you sell off essentially that set-aside  
20 allowance, then your REC is not whole anymore. It's  
21 less of a REC, because you've sold the emissions  
22 attributes to somebody else. So there are -- I think  
23 people would fall on both sides of that argument.

24 MR. ASHBURN: Does that make it a wrecked REC?

25 MR. KATOFSKY: A what?

1 MR. ASHBURN: A wrecked REC.

2 MR. KATOFSKY: A wrecked REC. And just to  
3 make things more complicated, my initials spell the word  
4 "REC."

5 So those are things that need to be addressed  
6 as you go forward. You know, you could say in that  
7 particular example, you know, if the goal is to promote  
8 these renewable generators to the greatest extent  
9 possible, then why not give them a set-aside allowance  
10 and allow them to maintain their eligibility, full  
11 eligibility under the RPS?

12 But others may fall differently. If you tried  
13 to sell that REC in the voluntary market, you know,  
14 someone like a Green-e, which is the Center for Resource  
15 Solutions, they do this independent Green-e  
16 certification, they may say, "Wait a minute. You've  
17 sold off the CO<sub>2</sub>, and you've sold off the SO<sub>2</sub>, and this  
18 REC doesn't have all the attributes it used to have."

19 So this is a definite issue that, you know,  
20 you need to deal with. And if your goal is to promote  
21 renewables to the greatest extent possible, you might  
22 have one philosophy. If you're really trying to make  
23 sure that all the property rights and all that are fully  
24 accounted for, you may come out differently.

25 MR. TRAPP: But there's nothing inherently

1 wrong with -- I mean, this is a fictitious financial  
2 instrument. There's nothing inherently wrong with  
3 making it a multiple coupon certificate where you tear  
4 off the left corner to meet a PSC RPS requirement, and  
5 then you tear off the right corner to meet some other,  
6 maybe a DEP environmental requirement.

7 MR. KATOFSKY: Yes, you could do that, because  
8 you could define the --

9 MR. TRAPP: You just have to coordinate.

10 MR. KATOFSKY: You define the eligibility the  
11 way you see most appropriate, yes.

12 MR. MOYLE: I had a couple of questions. Jon  
13 Moyle with the Moyle Flanigan law firm. And the  
14 questions I had related to markets, because I think this  
15 is largely sort of a discussion about how to set up a  
16 market that works in Florida.

17 I presume from some of your earlier answers  
18 that there hasn't developed any kind of secondary market  
19 for these property rights. Is that right?

20 MR. KATOFSKY: Yes. I mean, you don't have a  
21 hugely liquid REC market, for example, so a lot of  
22 transactions for compliance are just bilateral  
23 agreements between generators and buyers, and then they  
24 register those transactions with the registry.

25 There was an earlier question about

1 confidential information. You wouldn't necessarily have  
2 to disclose, say, the price you paid under that  
3 transaction, but you would have to disclose to the  
4 registry that there was a transaction.

5 But there isn't yet a -- you can go, you know,  
6 to evolution markets or other brokers, and you can go  
7 and purchase RECs on the voluntary market. But I would  
8 say there's not a huge -- there's not like a big trading  
9 platform where you can -- like the equivalent of like a  
10 NYMEX or a CBOT.

11 MR. MOYLE: What in your opinion is the most  
12 developed market in the country for these RECs? Is it  
13 up in the Northeast?

14 MR. KATOFISKY: You know, Texas has been  
15 functioning quite well for a number of years. The  
16 Northeast is coming along. They've had issues with  
17 sufficient quantities available, particularly in  
18 Massachusetts, and that's starting to change. But I  
19 would say the Northeast and Texas are two good examples,  
20 yes.

21 MR. MOYLE: And given the question that TECO  
22 asked about Texas and I guess the geographic issue,  
23 would I be correct that given Florida's unique  
24 geographic position, that the Texas model ought to be  
25 something we should take a hard look at, in your view?

1 MR. KATOFSKY: You know, I haven't thought too  
2 much about that. I think Texas has some unique  
3 characteristics that allows it to function pretty much  
4 as its own island, effectively. I mean, there's limited  
5 interconnection, and there's ample wind resources within  
6 the state, so they set it up that way. I'm not as  
7 familiar with that issue in Florida as to how much you  
8 could, say, wheel in from out of state.

9 MR. MOYLE: And then the final question I have  
10 is, just related to your experience and whatnot in terms  
11 of trying to establish a market that promotes renewable  
12 energy, would you mind just expanding a little bit on  
13 your views as to the compliance penalty as it relates to  
14 how that should best work? You know, recovery, some  
15 portion of recovery, what's your feelings on that?

16 MR. KATOFSKY: My feeling, I mean, you know,  
17 if investments are -- there's regulated states and  
18 there's deregulated states. And the regulated model, if  
19 you're making what you might call prudent investments in  
20 either procuring RECs, or in the absence of RECs that  
21 are available, paying the alternative compliance  
22 payment, it seems reasonable to me that you would be  
23 eligible for the cost recovery, at least partially. But  
24 I think that's the decision for this -- it's not for me  
25 to say what this group ought to decide, but that seems

1 reasonable to me.

2 MR. MOYLE: Thanks.

3 MR. ASHBURN: Bill Ashburn of Tampa Electric  
4 again. You mentioned shelf life.

5 MR. KATOFSKY: Yes.

6 MR. ASHBURN: What kind of shelf lives are  
7 being applied to RECs, and are they consistent across  
8 the various markets?

9 MR. KATOFSKY: This is the issue of banking,  
10 so can you save a REC for later. Anything beyond three  
11 years I think you wouldn't probably find in the market,  
12 but there are jurisdictions that allow banking, say, for  
13 up to three years. And it has an important sort of  
14 smoothing effect on the marketplace.

15 MR. ASHBURN: I was going to ask for the  
16 rationale for the life. I mean, what leads you to  
17 determine it should be three years instead of two or  
18 four or whatever?

19 MR. KATOFSKY: I'm not quite sure. I would  
20 think if it had too long of a -- you know, it's just a  
21 question of making sure that the dynamics of the market  
22 in terms of building additional capacity and so on, so  
23 there is a -- if there's some element of "use it or lose  
24 it," it will encourage generation to continue to be  
25 built.

1 MR. ASHBURN: Okay. Thank you.

2 MR. MOLINE: Ryan, Barry Moline again.

3 There's five states and the District of Columbia that  
4 allow energy efficiency in their RPSs. Is there a  
5 separate type of attribute for a negawatt REC?

6 MR. KATOFISKY: Yes. They call them white  
7 tags.

8 MR. MOLINE: One tag?

9 MR. KATOFISKY: White tags.

10 MR. MOLINE: White tags.

11 MR. KATOFISKY: In some places, yes.

12 MR. MOLINE: And those, how are they different  
13 than RECs?

14 MR. KATOFISKY: It would all depend on how the  
15 rules are written in a particular jurisdiction. A  
16 negawatt, as you call it, or a white tag or energy  
17 efficiency, if that's an eligible resource, then there  
18 would have to be a way of accounting for that. And in  
19 that sense, it would function similar to a REC, I would  
20 imagine.

21 MR. MOLINE: So in the state, assuming that  
22 the energy efficiency is an eligible resource, then they  
23 could be traded?

24 MR. KATOFISKY: Yes, traded or some sort of --

25 MR. MOLINE: Or purchased.

1 MR. KATOFSKY: Retired, purchased or retired  
2 as a means of demonstrating compliance.

3 MR. MOLINE: So that's allowable in other  
4 states?

5 MR. KATOFSKY: It's allowable in some areas.  
6 And it may be subject to -- you have cases where there  
7 are multiple tiers within an RPS, where efficiency would  
8 be in one tier but not another, and there would be price  
9 differentials, say, between those two tiers, or you may  
10 have limits on how much of the RPS you could comply with  
11 with the energy efficiency component.

12 MR. GRANIERE: Ryan, Bob Graniere. That white  
13 tag part, that would essentially not be the same as a  
14 REC, though. I mean, wouldn't that be -- wouldn't the  
15 white tag also apply if a state were to suggest that it  
16 would have a renewable portfolio standard and an energy  
17 efficiency resource standard?

18 MR. KATOFSKY: Yes, you can do them totally  
19 separately as well; that's correct.

20 MR. GRANIERE: Then you could do them totally  
21 separate, and then they would be -- so a white tag would  
22 be a white tag, and a green tag would be a green tag,  
23 and they wouldn't necessarily have the same attributes.

24 MR. KATOFSKY: Well, they definitely don't  
25 have the same attributes. It's a question of whether or

1 not they both -- they may both qualify. So, yes, they  
2 have different attributes, but they may both be  
3 essentially what would you call an eligible resource,  
4 yes.

5 MR. GRANIERE: Okay. I just wanted to clarify  
6 it.

7 MR. McWHIRTER: John McWhirter with FIPUG. Is  
8 there any accreditation organization that accredits  
9 white tags?

10 MR. KATOFISKY: Unfortunately, I'm not familiar  
11 enough with it to answer the question.

12 MR. McWHIRTER: It seems to me that since the  
13 consumer is the ultimate obligor with respect to most of  
14 these things, if you could give incentives to consumers  
15 for energy efficiency or avoided energy cost, it would  
16 go a long way toward educating the public. Are you  
17 aware of anything in the nation that is going along  
18 those lines other than existing conservation programs?

19 MR. KATOFISKY: I'm not familiar, I'm afraid.  
20 Sorry. There may be, but I'm just not familiar.

21 MS. CLARK: Can I ask a question about using  
22 RECs or contract path? You show on your slide 8 that  
23 Colorado also uses RECs. Can you sort of give the  
24 history of why RECs were used, and are there issues with  
25 doing both?

1 MR. KATOFSKY: It was just, I think, for --  
2 you know, I don't know the details of how they came to  
3 that decision, but it just provides another means of  
4 compliance. If you're thinking of an RPS as having,  
5 say, a certain degree of flexibility as to how you would  
6 comply, then you can say either one would be  
7 appropriate.

8 There are some jurisdictions -- I'm trying to  
9 remember which one. I think there's one in PJM that  
10 says that, you know, if you can demonstrate that a  
11 sufficiently well developed REC market exists, then you  
12 can start to use RECs for compliance, but until then,  
13 you have to do it in a different way.

14 It's just a means of giving obligated parties  
15 more flexibility. I don't know offhand what the rules  
16 are for the eligibility of RECs in Colorado, so I don't  
17 know if they've defined a geographic constraint for  
18 those RECs or not.

19 MR. GRANIERE: Ryan, Bob Graniere. I think a  
20 follow-up on Susan's question -- this may be outside  
21 your area. I think I heard you say that it might be.  
22 But I wonder if you could answer three questions for me.  
23 They're all related to one another.

24 The first one is, about how long, in your  
25 opinion, did it take to set up a functioning REC market;

1 (2) how long did it take to set up the organization that  
2 administers in some fashion the functioning REC market;  
3 and (3) what was the cost? And I'm sounding like that  
4 guy in that movie, *Back to School*, Rodney Dangerfield.  
5 And the subquestions are, how many -- do you have a  
6 breakdown as to what were coordination costs, what were  
7 information costs, and what were transactions costs?

8 MR. KATOFISKY: Well, the first -- I think I  
9 can answer the first question, maybe the second, and not  
10 the third. And certainly I never accept subquestions.

11 MR. GRANIERE: Very wise.

12 MR. KATOFISKY: Different markets have had  
13 different experiences. So when Texas got going, they  
14 were actually in a situation where they had sufficient  
15 RECs off the -- you know, right off the starting line.  
16 So they had a market that worked well, and they had a  
17 fairly -- they had a power market that was also  
18 functioning well, so they had no trouble in meeting  
19 their obligations, and the REC market functions well in  
20 Texas.

21 In Massachusetts, we had a very different  
22 experience. Excuse me. I'm going to suck on a lozenge.

23 In Massachusetts, they had issues relating to  
24 contracting for more than a year at a time for the  
25 incumbent utilities that became essentially the default

1 service providers, and as a result, there were some  
2 banked credits in Massachusetts allowed. So for the  
3 first year in Massachusetts, which was 2003, the RPS  
4 obligation was met, but largely through banked credits.  
5 Then '04, '05, '06, and into '07, alternative compliance  
6 payments were being paid.

7 And a key issue there was the fact that the  
8 capacity was not being built, and it wasn't being built  
9 for a couple of reasons. One, it was proving to be very  
10 hard to site projects in New England, and the other one  
11 was the way that the unbundled market was functioning in  
12 terms of how the load serving entities were procuring  
13 their energy.

14 And they were -- the idea was that the default  
15 service providers in Massachusetts would be transitory,  
16 that the competitive market would kick in, so they were  
17 encouraged to pursue short-term purchase agreements, and  
18 you just couldn't take that to the bank. So now we are  
19 in 2007, and we're actually doing -- in terms of the  
20 fraction of the RPS obligation that's being met by RECs  
21 as opposed to alternative compliance, we're doing better  
22 in '07 than we did in '06, and people think that by the  
23 end of the year or into '08, we'll actually no longer be  
24 paying ACPs in Massachusetts.

25 So the experience has been very different.

1 Other states, to be honest, have much less time under  
2 their belts to see how these markets function. So time  
3 will tell, I think, to see how well these markets  
4 function.

5 And as I mentioned earlier, the Massachusetts  
6 Technology Collaborative did some innovative things with  
7 their assisted benefits charge funds to help kick-start,  
8 help encourage the contracting, long-term contracting  
9 for RECs in Massachusetts. So they stepped in. They  
10 saw a need in the marketplace to help it get going, and  
11 they did some very creative things there.

12 So that was the first question. The second  
13 question was -- on the question of how much did it cost,  
14 I honestly don't really know. The second question was  
15 on the issue of how long it took to set it up, I  
16 believe.

17 MR. GRANIERE: Yes. Excuse me. Bob Graniere  
18 again. How long it took to establish the organization  
19 that administered it. Because like in the Northeast,  
20 they all generally use the already established  
21 organization, an RTO or an ISO.

22 MR. KATOFSKY: Oh, I see what you're saying.

23 MR. GRANIERE: But I'm wondering about places  
24 where they didn't have those things, like out in the  
25 West. And even in Texas, they had ERCOT, so that was

1       okay too. I'm more or less thinking along the lines  
2       here for Florida, since there is no ERCOT, there is no  
3       PJM, there is no New England ISO or anything like that,  
4       so it says to me new organization somewhere. What's  
5       your experience with new organizations?

6               MR. KATOFSKY: I don't have a lot. I know  
7       that, for example, in an analogous area, some states  
8       have chosen to turn over their energy efficiency  
9       programs to third parties, so there is precedent for  
10      that. I mean, it's not an instantaneous thing,  
11      obviously, and it takes time to sort of set up the  
12      structure. But in terms of exactly how long and what  
13      the experiences have been, I don't have a lot -- I don't  
14      really have any information. Sorry.

15             MR. MCGEE: Ryan, this is Bob McGee with Gulf  
16      Power. A couple of questions.

17             On slide 13 where you talk about the  
18      penalties, in the middle column, the triggers for the  
19      different entities, the obligated parties specifically,  
20      you state there that the failure to acquire sufficient  
21      renewable energy or RECs might trigger a penalty in that  
22      particular case. Would it also be true, given the  
23      definition of a ACP that it's a compliance mechanism,  
24      that it would need to be a failure to acquire sufficient  
25      renewable energy RECs or ACP payments?

1           MR. KATOFSKY: Yes, you could look at it that  
2 way too. And again, this was a general statement. If  
3 the rule said yes, if you pay your ACMS, your ACPs, then  
4 you're in compliance, but if you fail to do it for,  
5 shall we say, for not making a good-faith effort -- or  
6 there may be other circumstances under which you fail to  
7 do it. So even if you were paying the ACMS, ACPs, there  
8 may be circumstances where if you were shown not to be  
9 trying to comply in good faith, they could still levy  
10 penalties.

11           MR. MCGEE: Okay. One other question. At the  
12 end of slide 11 and the beginning of slide 12, you talk  
13 about the fact that an ACP price level needs to be  
14 higher than the expected cost of RECs, but possibly low  
15 enough to control overall ratepayer impacts. I think  
16 what you're getting to there is the -- sort of a rate  
17 cap or an expense cap type of idea.

18           MR. KATOFSKY: Uh-huh.

19           MR. MCGEE: What's your opinion about the  
20 interaction between, let's say, an expense cap and an  
21 ACP?

22           MR. KATOFSKY: I think the answer may be that  
23 you would maybe look at one or the other, so an ACM, ACP  
24 works really well in, say, a REC-based system. If you  
25 didn't have a REC-based system and it was more of a --

1       it you did more of a contract path system, then you  
2       might subject those procurements under that to, say, an  
3       overall expense cap. So I don't think you would  
4       necessarily need to have both, because the alternative  
5       compliance mechanism that's based on, say, buying RECs,  
6       essentially, replacing a REC purchase would function in  
7       a similar way to a more sort of deliberate expense cap.

8               MR. MCGEE: Okay. I guess thinking through  
9       the purpose of an ACM and the desire to make it as high  
10      as possible to make it useful to run the REC market, but  
11      also, for an expense cap to be reasonable, it seems like  
12      you've got cross-purposes going on there, trying to  
13      manage an ACM at a high level, but also at a low level.  
14      And maybe the two of those might work together a little  
15      bit more efficiently where you've got one, you can set  
16      it as low as you want, and the other, you can set it as  
17      high as you want based on the criteria that you need  
18      there.

19             MR. KATOFSKY: I don't know if I have an  
20      answer for that.

21             MR. FUTRELL: Ryan is going to be with us  
22      today for the rest of the day, and there are a lot of  
23      these areas we're going to get to as we walk through  
24      some of the questions. I would like to give him a  
25      chance to catch his breath and restore his voice for a

1 minute and let Judy walk through some of the questions,  
2 and then Ryan will be here for our dialogue to go back  
3 forth, and we can ask him --

4 MR. KATOFSKY: Thank you.

5 MR. FUTRELL: -- some of the follow-up  
6 questions. Thank you, Ryan.

7 MS. HARLOW: I'm kind of in the awkward  
8 position of going after the guy with all the answers. I  
9 have questions.

10 Mark Futrell asked me to kind of frame the  
11 questions we wanted to discuss today to have a more  
12 focused workshop on compliance and enforcement issues.  
13 As we go throughout the day, if you look at Ryan's  
14 presentation and then the questions I have today and  
15 then put those together, those are really what we want  
16 to discuss. And as you move forward after the workshop,  
17 we'll have a period for written comments, and we would  
18 appreciate any further comments you have in writing.  
19 Mark will let you know the schedule for that at the end  
20 of the workshop.

21 I'm Judy Harlow with staff, and I would like  
22 to talk first about RPS compliance. There are basically  
23 two verification methodologies or compliance mechanisms,  
24 and we would like to talk about today what's the best  
25 mechanism or combination of these to use for Florida.

1           Contract path, as Ryan discussed, gives you a  
2 bundled product of attributes plus energy, and the same  
3 can be thought of for utility ownership of the renewable  
4 facility. And in contrast to that, we have renewable  
5 energy credits, and Ryan talked to us about a state  
6 where there was a combination of the two, or you might  
7 consider using one as you move forward until the  
8 renewable energy credit market is more fully  
9 established. So we would like to discuss today if the  
10 parties or the persons today have any opinions on which  
11 of these or combination you think is best for Florida.

12           So once we have a verification or compliance  
13 methodology, we need the talk in more detail about how  
14 do we make the system work. And also, as was brought up  
15 from the question and answer period with Ryan, we would  
16 also like to consider, if energy efficiency is included  
17 toward compliance, what kind of verification methodology  
18 would we also need for conservation.

19           There are some common issues across  
20 verification methodologies, and these are some of the  
21 questions that staff has at this point in time. We  
22 would like to know what's the best way to administer a  
23 verification of compliance. In other words, should the  
24 PSC do this? Should we have a third party do this? We  
25 don't have ERCOT or another ISO system, so how would

1 that work for Florida? How would we handle the tracking  
2 function?

3 Also, should we have a weighting system based  
4 on specific objectives of the RPS? And there are  
5 several ways to do this. Ryan discussed the multiplier  
6 approach or some kind of a tiered goal approach to meet  
7 specific objectives.

8 Also, should Florida have some kind of a  
9 safety valve, such as the alternative compliance payment  
10 that we discussed earlier? If so, some of the detailed  
11 questions we would have about that is, who would  
12 administer such a payment, how would the funds be used,  
13 and should the IOUs recover alternative compliance  
14 payments, and if they don't, this acts as a penalty.

15 The last question on this page is, should  
16 self-service generation be counted toward goals? If it  
17 is, how do we do that? How do we capture those small PV  
18 systems, as an example, that are currently on people's  
19 homes without high administrative costs? And we would  
20 also want to look at our large industrial customers that  
21 self-serve, and how would that be included toward the  
22 goals. And a similar question would be with  
23 conservation. How would we count -- should we count  
24 conservation? If so, how would we do it? How do we  
25 capture the efforts of consumers behind the meters, for

1 example?

2 Also, there are some specific issues that deal  
3 with RECs alone. These are some of the questions that  
4 staff has about a REC system for Florida if we decided  
5 that that should be used. Should out-of-state credits  
6 be counted? If so, should we have some kind of a  
7 regional limitation, for example, a requirement that the  
8 energy be delivered to Florida or could be delivered to  
9 Florida? And we discussed double counting earlier. How  
10 would we track these credits so that there would be no  
11 double counting, and how would we coordinate with other  
12 regions to ensure that there's no double counting?

13 Also, what kind of flexibility measures should  
14 be included in an RPS for Florida? Ryan discussed  
15 credit flexibility systems such as banking. You could  
16 also borrow from future production of RECs, and also  
17 there could be a true-up period included to give  
18 utilities time to comply with their goals.

19 We would like to look at how often utilities  
20 should be reviewed for compliance. Many of you are  
21 familiar with our conservation goals process that we  
22 have here in Florida. The Commission sets those goals  
23 for utilities every five years. But we also have a  
24 review process that's ongoing where the staff is  
25 continuously reviewing the utility's compliance toward

1 those goals, and we have reporting requirements on an  
2 annual basis. So we would like to talk today about  
3 should we set up something similar with an RPS so that  
4 the utility's compliance could be tracked.

5 And also, what's the best way to ensure  
6 compliance? Should we have some type of an alternative  
7 compliance payment? And then you have issues with how  
8 high should it be set, what about the penalties, or  
9 should we simply have aspirational goals as we start the  
10 RPS?

11 If we do indeed have penalties, what are the  
12 specific issues we should look at with that? How would  
13 you apply penalties, when would penalties be applied,  
14 what would happen with these funds, who would administer  
15 the funds, similar to alternative compliance payments?

16 Should we have exceptions for force majeure  
17 issues? And one of the ways that we know that you could  
18 do this is by extending any kind of a true-up period  
19 that you had, or you could also reduce the obligations  
20 due to force majeure.

21 And again, just like with alternative  
22 compliance payments, should IOUs receive recoveries on  
23 penalties? Is it truly a penalty if recovery is  
24 allowed?

25 As we're looking at whether compliance has

1       been met, do we need a baseline of current renewables?  
2       And as you know from attending the past workshops, the  
3       staff has been working on this and getting your input on  
4       what renewables we currently have in the state.  And  
5       Mark Futrell later will introduce a revised version of  
6       that, and we can discuss that today.

7               Also, what reporting requirements are there?  
8       If we have a REC system, do we need additional reporting  
9       requirements, or is REC tracking sufficient to see if  
10      utilities are in compliance?

11              And finally, should there be a process over  
12      time to review the RPS itself and see if the RPS the way  
13      it is currently set is in the best interests of Florida  
14      and its ratepayers?  And one of the ways to do this  
15      would be by setting up an automatic process, such as I  
16      discussed with the conservation goals, in which we  
17      review goals on a five-year basis, and then we reset  
18      those goals as necessary.  Or should we simply have an  
19      ongoing review process with no automatic process for  
20      review set in place?

21              These are just a few of our questions, so from  
22      our point of view, there are a lot of questions, and we  
23      really appreciate everybody's input today and look  
24      forward to continuing to discuss an RPS for Florida with  
25      you.

1 Thank you.

2 MR. FUTRELL: Thanks, Judy. We would like to  
3 ask that as we walk through our discussion today that we  
4 stay within our questions that Judy has laid out and  
5 move through that. Certainly there are going to be  
6 offshoots from many of these questions, and we'll  
7 develop them as we go forward, but we would like to try  
8 to keep the dialogue within these questions. And then  
9 when you file your written comments, if you so chose, to  
10 respond to these questions, you certainly have the  
11 opportunity to embellish if you want, but if you would  
12 use this as kind of a template for filing your written  
13 comments.

14 And just to give you a heads-up while everyone  
15 is here in the room, we're looking to have a transcript  
16 available about October 5th, and you can contact the  
17 staff if you would like a copy of that, Judy or myself.  
18 We also request that comments, written comments be filed  
19 by October 16th, which is a Tuesday. That would be very  
20 helpful to us. And if there's any -- if you think  
21 there's going to be a problem with that date, let us  
22 know before the end of the day, but hopefully that will  
23 give you sufficient time to take away from today and  
24 look at the transcript and get us something in writing.

25 So we're going to start off with looking at

1 the questions about the various methodologies. I think  
2 Ryan has gone into a lot of discussion about that. We  
3 had some good questions about it.

4 I guess one question I've got that, Ryan,  
5 maybe you could start off with is on this idea of a  
6 contract path versus the RECs approach. Is there any  
7 state -- with us being a regulated state, is there any  
8 tendency you've seen in the country as far as one  
9 approach being used in regulated versus deregulated  
10 states, and what the pros and cons may be, putting it in  
11 that kind of context?

12 MR. KATOFSKY: Yes. I think there are very  
13 few examples of the contract path approach being  
14 applied, so almost every state uses the RECs. The two  
15 examples that I came up with for the contract path was  
16 California, which has sort of gone back, you know,  
17 towards regulation. They kind of undid their unbundling  
18 to some extent. And there's this example of Xcel in  
19 Minnesota, and I think Colorado allows for contract path  
20 as well.

21 But there actually are very few examples where  
22 RECs are not used. The vast majority today use RECs.  
23 So I would start with looking at Colorado and  
24 California, frankly, as two examples where contract path  
25 -- and I guess Colorado is still a regulated state.

1 MR. TRAPP: As I understand it -- and I put  
2 this question to principally the utilities here. Bob  
3 Trapp, staff. As I understand it, using a REC system,  
4 as Ryan discussed in his presentation, you would need  
5 some form of administrative system for verifying,  
6 tracking, whatever. You would need some kind of  
7 marketing system.

8 And my question to you is, is that something  
9 that the PSC should do? Is it something that the  
10 collective utility industry should do? Is it something  
11 that individual utilities should do, 55 separate  
12 programs? Or is it something that we need to look  
13 elsewhere within state government to do? Has anybody  
14 got any opinions?

15 MS. GREALY: I don't think of it as being the  
16 role of the PSC. I was thinking -- first I was thinking  
17 of the FRCC, and then I thought, no, rule that out, keep  
18 them focused -- Anne Grealy, FPL. Sorry.

19 So then the other entity that came to mind was  
20 FCG as a possibility, but I definitely didn't see it. I  
21 mean, we haven't talked about it among ourselves. We  
22 can. But I didn't really see it as a role of the  
23 regulator. You know, you would be overseeing it, of  
24 course, you know, looking at compliance. We talked  
25 about the auditing function. But administering it, I

1 didn't see that. But we haven't --

2 MR. TRAPP: I don't see the FRCC -- I mean,  
3 the FRCC has got a pretty defined role now, and --

4 MS. GREALY: Yes, I agree.

5 MR. TRAPP: -- I think the FCG has got a  
6 pretty -- but certainly their model, it seems to me, for  
7 something that could be put together as a collaborative  
8 effort from the industry working with the PSC and vice  
9 versa, to use that model to establish, you know, the  
10 tracking systems, the rules, the regulations, the  
11 trading, and even perhaps a broker, where you could  
12 centralize the trading within the State of Florida of  
13 Florida energy credits. Susan?

14 MS. CLARK: This is sort of asking Ryan to  
15 comment, but as I understood it, in the other states it  
16 is generally a third party that does it. It isn't the  
17 state that takes over the role; is that right?

18 MR. KATOFSKY: That takes over the role of  
19 administering it?

20 MS. CLARK: Yes.

21 MR. KATOFSKY: Specifically sort of the  
22 tracking system or sort of the enforcement? I mean,  
23 those are different --

24 MS. CLARK: As I understood it, the tracking  
25 and administering of it. Maybe I've got them --

1 MR. HINTON: No, that's --

2 MR. KATOFSKY: You have cases where third  
3 parties may basically run the tracking system.  
4 Enforcement typically falls to a state agency of some  
5 sort, obviously, but they wouldn't need to be involved  
6 in the day-to-day running of sort of the compliance  
7 mechanism; right?

8 MR. TRAPP: I guess that's part of my  
9 confusion, you know, what role would each party play in  
10 this. Because I think the PSC would want to have input  
11 with respect to definitions of what attributes a REC  
12 has, how those attributes could be used with respect to  
13 the RPS program versus some other programs. So I have a  
14 difficulty in my own mind thinking of it as a truly  
15 independent third-party organization that has contracted  
16 with the utilities to do this, and the PSC has no  
17 authority over those contracts, has no authority over  
18 that third-party individual.

19 Similarly, we don't have direct authority over  
20 the FRCC or the FCG historically, but we've found ways  
21 by which to get around that by using our regulatory  
22 authority with the individual utilities that are members  
23 of those systems. So I guess I'm still thinking in our  
24 historic vein of a utility member-based organization  
25 that would put together the necessary committees for

1        administrating, tracking, verifying, measuring, that  
2        type of thing, pursuant to the guidelines that the PSC  
3        would put forth, you know, in rulemaking.

4                MR. GRANIERE: Bob, could I sort of get you on  
5        that one?

6                MR. TRAPP: Yes, Bob, go ahead.

7                MR. GRANIERE: Basically, I think what you're  
8        talking about here, Bob, is setting up a REC RTO.

9                MS. GREALY: Oh, God.

10               MR. TRAPP: Don't use that word, though.

11               MR. GRANIERE: I know, but that basically is  
12        what that model is. It's essentially an ISO or an RTO,  
13        or whatever you want to call it, that handles RECs, and  
14        that's what it is.

15               MR. ASHBURN: Yes. It's a REC tracking  
16        organization.

17               MR. GRANIERE: Yes, that's right, a REC  
18        tracking organization. I mean, basically, that's what  
19        it is.

20               MR. TRAPP: As long as there's no federal  
21        regulation involved.

22               MR. GRANIERE: And then you would go through  
23        the whole thing. And that was the new institution that  
24        I was talking about when I asked the question to you.

25               The question that I also have that's related

1 to that, out of all of the REC programs that you have  
2 out there that you're familiar with, because I'm not  
3 familiar with all of them, apparently, because one of  
4 the things I've never seen is a state that is  
5 traditionally regulated that has a REC program at the  
6 present time.

7 MR. KATOFISKY: Yes. I mean, almost every --  
8 almost every single state uses RECs. Again, the only  
9 one that I can think of that would allow them would be  
10 -- you know, Colorado does allow them. Other states  
11 have provisions to look at it in the future as REC  
12 markets evolve.

13 MR. GRANIERE: But are those states  
14 traditionally regulated, or are they restructured?

15 MR. KATOFISKY: I think they're traditionally  
16 regulated. I don't have -- there's 20 some odd states  
17 now with RPS. I don't have them all off the top of my  
18 head, but --

19 MR. GRANIERE: Because what I'm thinking right  
20 now is that to move RECs into a traditionally regulated  
21 state would be cutting edge area stuff and not something  
22 that you're going to learn a whole lot from from looking  
23 at some of the other states that have the restructured  
24 and these other mechanisms available to them which are  
25 not available to a traditionally regulated state.

1 MR. KATOFSKY: I would tend to agree.

2 MS. HERIG: In colorado, it is a traditionally  
3 regulated state, and the reason they did go with two  
4 paths was because of that, to allow -- and Ryan got to  
5 that, to allow the flexibility for individual consumers  
6 to make the investment, as well as the utilities,  
7 because they really did expect the initial investment to  
8 happen with the utilities. And I would say Florida is  
9 most like that.

10 I would also point out -- you know, Ryan's --  
11 it would be his third slide. It had really sort of a  
12 complicated flow chart, but if you look at it and sort  
13 it out, the path that really applies to Florida is just  
14 the renewable energy generation, the RECs in the RPS  
15 being sold to the obligated party. So I just wanted to  
16 make the comment, let's not get too complicated right  
17 off the bat.

18 MR. TRAPP: Well, one of the observations --  
19 again, Bob Trapp, staff -- that I would make is that so  
20 far in our discussions, we've been talking about three  
21 areas that I think have been contemplated counting  
22 against the RPS goals, and they're basically -- we've  
23 talked about whether conservation, energy efficiency,  
24 however that is defined, may count. We've talked about  
25 customer-owned renewable generation that is either sold

1 by a purchased power arrangement, or it can be a  
2 conservation measure, actually, being defined as  
3 counting, and we've also talked about utility-owned  
4 generation counting toward the RPS.

5 And I just throw this out. It seems to me  
6 that if we can develop a system of assigning a REC for  
7 each one of those program areas, that's the simplest,  
8 most efficient way to be able to account for everybody's  
9 input into this system. Then it's just a matter of  
10 managing each component, how do you deal with a bunch of  
11 residential, small kilowatt-hour RECs, and then how do  
12 you deal with large cogeneration type RECs, and then how  
13 do you deal with utility-owned and rate-based RECs.

14 I guess we can do that without RECs, but we  
15 wind up with a myriad of programs. And it just seems to  
16 me that if you put them on a common basis of issuing  
17 everybody a kilowatt-hour piece of paper for what  
18 they've produced that can be counted, that's one  
19 simplifying step in the process. So I would be  
20 interested in your reaction.

21 MS. CLARK: As I understand -- this is Susan  
22 Clark with Radey, Thomas, Yon & Clark. I apologize. I  
23 haven't been saying that. As I understand it, what you  
24 are proposing is the way -- a common denominator for all  
25 those things. And I think we heard Ryan say that by

1 having RECs and contract path, you increase the  
2 flexibility. And I certainly think that's something  
3 that we want to do, at least initially, is to have the  
4 maximum amount of flexibility in how -- if there's an  
5 RPS established, how to reach that. So initially I  
6 think that's a good idea.

7 MR. TRAPP: Would you generally agree that  
8 that entity that produces the renewable kilowatt-hour is  
9 the entity that should get and own the REC?

10 MS. CLARK: You know, Bob, I would say yes.  
11 My hesitation to some extent is thinking if you have  
12 other programs that are designed to promote renewable or  
13 promote a specific type of energy or address some other  
14 issue, how do you -- you know, how is that allocated?  
15 What is the fair way to allocate it?

16 But generally, I think as I understand RECs,  
17 you count it as it's generated, so it would make sense  
18 that it's part of whoever is generating it. But then  
19 you can have, I would say, a variety of legal  
20 instruments or legal ways of treating that.

21 MR. TRAPP: But I'm really -- yes, I agree  
22 there's legal ways of submitting property rights, and  
23 you're, I think, generally free to do that. I'm trying  
24 to think at the policy level, though. And I agree,  
25 there may be other policies that have gone before the

1 one we're trying to create now that may complicate the  
2 picture, but I'm trying to think in terms of -- let's  
3 think as if we're using a clean slate here and just look  
4 at RPS, design a good RPS system that maybe acts with  
5 tradeable RECs, and then if we have to go and adjust  
6 other policies or see how they fit with regard to this  
7 one, we can do that. But I'm trying to start with basic  
8 policy principles.

9 And to me, if you generate it, you should own  
10 it. If you own it, you can go into the market and sell  
11 it. That's how you get the money to incent you to  
12 generate it in the first place. That's just my little  
13 simple logic that tells me that should be the basis for  
14 our policy.

15 MR. MCGEE: Bob, this is Bob McGee at Gulf.  
16 And I have one comment about that as it related to  
17 customer-sited generation that might be net metered, for  
18 instance. And I know there's another workshop series  
19 associated with that, but let's just take that as an  
20 example.

21 A customer may own a generation system on-site  
22 behind the meter, and by your description there, own the  
23 RECs. But I could also see an argument that said  
24 because they are net metered and there is a subsidy  
25 associated with the net metering, those RECs might

1 belong to the general body of ratepayers that are  
2 subsidizing through the net metering arrangement.

3 There's also another issue at hand there, and  
4 that is incentives, significant incentives that might be  
5 paid from the state level for a particular generation  
6 type at somebody's location behind the meter. Does that  
7 then allow the State to take possession of the RECs for,  
8 let's say, statewide REC compliance?

9 MR. TRAPP: You mean like a conservation  
10 program or --

11 MR. MCGEE: Let's say -- let's use the example  
12 of PV, which is given a rebate of \$4 a watt, which is  
13 essentially half the cost of the installed equipment if  
14 they get it installed and are awarded the rebate. Does  
15 the State then have any claim to -- and I think you said  
16 it correctly. It's a property rights issue. Does the  
17 State then have any claim to the renewable energy  
18 attributes of that by virtue of the fact that they've  
19 just spent some money on that particular facility?

20 So those are a couple of issues that I think  
21 need to be talked about. I don't think I would agree in  
22 general that anybody who owns the facility would then by  
23 default own all of the renewable energy credits  
24 associated with it. And those are two examples.

25 MR. GRANIERE: Bob.

1           MR. TRAPP: And again -- let me just finish  
2 the thought, Bob, and then we'll come to you. Again, my  
3 basic difficulty with this is, when those programs were  
4 established, they were established in the vacuum of no  
5 RPS. Now we're dealing with an RPS. Should the RPS be  
6 tweaked to conform with those old policies, or should  
7 the old policies be changed to conform to the RPS?

8           An example, with respect to, okay, net  
9 metering, well, how much is net metering worth? What  
10 kind of subsidy are you getting from net metering? I  
11 mean, should we just take increment of subsidy there and  
12 subtract it from what we're trying to provide in the  
13 RPS? You're getting into arguments like that.

14           With respect to the government incentive  
15 program, did the law say that the State wanted to keep  
16 those attributes? I don't think it did. Do we want to  
17 go back and change the law where it does now capture  
18 those property rights?

19           I think it is important that we take that into  
20 consideration as we design and perhaps issue such as  
21 set-asides, multipliers, and things of that nature.  
22 Maybe if solar needs a 5-to-1 multiplier, as was  
23 discussed in the last workshop, maybe if you count out  
24 the current state subsidies or incentives and net  
25 metering and other things, maybe that multiplier only

1 needs to be 3-to-1, and maybe that could be a  
2 consideration here.

3 But I just kind of want to start with the pure  
4 base of, if I generated it, it's mine, if I can sell it  
5 in the market and get some price for it, it incents me  
6 to build it. And then I guess we need to work on the  
7 devilish details.

8 I think Bob Graniere wanted to --

9 MR. GRANIERE: I would just like to respond to  
10 your scenario, because I think it's not quite as  
11 complicated as you're making it out to be. Bob  
12 Graniere.

13 The situation that you put out said that the  
14 person would be net metered. That's the equivalent of  
15 selling a bundled renewable to the utility, because  
16 basically you're selling the renewable and the energy to  
17 the utility. So at that point, it would be -- the REC  
18 would move along with it to the utility.

19 The fact that the net metering is pushing the  
20 meter backwards, it's essentially the utility buying it,  
21 so it seems to me that that's just the sale of a bundled  
22 bit of renewable to the utility at the retail rate,  
23 which is what is generally considered to be the fair,  
24 just, and reasonable rate because it's the fair, just,  
25 and reasonable rate. So therefore, that REC would move

1 its way into the utility's pocketbook.

2 But that would only be for the REC that --  
3 that would only be for the REC that actually found its  
4 way into the distribution system. The renewables  
5 generated that stayed in the house, those RECs would  
6 stay with the owner, because they never got pushed out  
7 of the house. They stayed in the house, and so they  
8 would get those RECs.

9 Now, there would be a metering issue with all  
10 this other stuff about how do you account for those,  
11 yes. I mean, that's a technical issue. But as to who  
12 has ownership, it's pretty clear. Now, if, however, the  
13 money, the amount of compensation that came to the  
14 utility was the as-available energy price, for example,  
15 or something else, well, then you've essentially  
16 unbundled the renewable attribute from the power, and  
17 then, of course, the REC would stay with the homeowner.

18 So basically, at a conceptual level, this is a  
19 fairly simple problem at the implementation level, which  
20 is mainly a metering problem, and there's a lot of cost  
21 involved with that. And so in the interest of actually  
22 getting a renewable portfolio standard at a reasonable  
23 cost, and I know you're all expensive and all tied up in  
24 there on reasonable cost, I wouldn't worry too much  
25 about those, because, you know, how much do they

1 actually generate?

2 That's all.

3 MR. MOYLE: Bob, Jon Moyle with Moyle  
4 Flanigan. I seem to recall, at least on one point,  
5 about who owns the renewable attributes, that the  
6 rulemaking that was engaged in a year or so ago on  
7 renewable energy, I think there was language in there  
8 that said with respect to generators, that renewable  
9 attributes are owned by the generator. So it seems that  
10 that bridge has already been crossed there. Now, to the  
11 extent that you get into net metering or whatnot, I  
12 would argue that probably sets a little bit of a policy  
13 direction.

14 But I wanted just to comment on your initial  
15 question, which was what role should the PSC play in  
16 this process, and provide a comment there and then ask  
17 Ryan a question, if I could. But it seems to me that  
18 the PSC has to play a key role in this renewable energy  
19 process and the REC process by virtue of the fact the  
20 Governor has issued his executive order.

21 If I understand what's going to happen in this  
22 process, we're going to have workshops, and eventually  
23 we're going to go to rulemaking, and you all are going  
24 to have rules that will have to be enforced. And while  
25 I think you have the option to say should we do this

1 in-house and track this and administer this in-house, or  
2 should we contract with Ryan or somebody like Ryan to  
3 help us do that, I think that's an option.

4 But it seems to me that the PSC has to play a  
5 key role in this. And I would suspect the Legislature  
6 will be seeking information about how we're doing  
7 meeting renewable energy goals and things like that, so  
8 I think you've got to be there playing an important  
9 role.

10 But the question I wanted to ask was, is there  
11 any other state -- because he's the expert on what is  
12 happening in other states. Is there any other state  
13 that has had a administration of RECs in a way where the  
14 public entity was not involved and the whole program was  
15 sort of administered by a utility organization?

16 MR. KATOFSKY: I am not aware of any examples  
17 where it was just the utility sort of setting -- you  
18 mean the utility setting the rules, basically, or --

19 MR. MOYLE: Yes, just in terms of reporting  
20 and tracking and things like that. I mean, I think my  
21 view is, and this is a personal view, you've got to have  
22 transparency to have the market work, and if you don't  
23 have transparency, it's a negative impact on the market.

24 MR. KATOFSKY: Right. So utilities as parties  
25 to an RPS may have reporting requirements, but typically

1 those reporting requirements would be spelled out either  
2 in legislation or in some kind of rulemaking. But they  
3 might be required to send quarterly or annual reports on  
4 how they're doing with compliance and other aspects, and  
5 the state may also be required to do a report as well.

6 MR. MOYLE: Thanks.

7 MR. COOPER: Can I chime in? My name is Jeff  
8 Cooper. I'm with Lake County government in central  
9 Florida.

10 I think I see a little mouse hole to get my  
11 two cents in this thing. The staff asked the question  
12 about, in my view, sharing and participation in the  
13 program. And I think the gentleman was correct that the  
14 rule of who owned the renewable generating issue was  
15 settled last year.

16 But in terms of the REC -- and this is where  
17 Lake County is concerned. We have a waste energy  
18 facility, and in fact, we see us as providing the  
19 supplier, as a fuel supplier. And in order to  
20 understand the issue, we've separated the players out to  
21 fuel suppliers, energy producers, and wholesale  
22 purchasers so that we could keep everybody separate.  
23 And we think everybody should participate in the game,  
24 and we think that as a result of participating in the  
25 game, we should also be compensated.

1                   Now, obviously, I'm not looking for  
2                   100 percent compensation, but I would like a little  
3                   piece of the pie so that I would then be entitled or  
4                   have the incentive to participate in more renewable  
5                   energy. For example, if I was part of the REC process  
6                   and I was to receive a payment or a portion of a payment  
7                   or a little piece of the payment, then I would be  
8                   encouraged to expand my renewable energy facility and  
9                   thus contribute to the renewable energy goals that are  
10                  set up for the state and for the local -- for the  
11                  individual power company that is dealing with this.

12                  And there, that makes everybody a participant  
13                  in this. So not only would we get a payment, but the  
14                  person who actually produces the energy, the renewable  
15                  energy, gets a payment. And then, of course, the person  
16                  who has to -- who actually buys it would receive a  
17                  portion of that payment as well.

18                  And I don't think it's very difficult to  
19                  separate the money. You can do it by percentages. You  
20                  can use a simple calculation, and that's kind of the  
21                  process that we went through. We said, well, what if it  
22                  was, you know, based -- let's say the payment was  
23                  \$800,000, and you turn around and you say, okay, we got  
24                  25 percent, and the other got 25 percent, and then the  
25                  actual purchaser got 50 percent. You know, whatever

1 percentage you want, it's immaterial, the percentages.  
2 You set them up, and that's what you share.

3 And in the same regard, the banking is a real  
4 important issue too, because even though -- let's say a  
5 utility would have, let's say, a 10 percent requirement  
6 at some point in time. Then they would have to turn  
7 around and say, okay, I've got 9-1/2 percent, and I have  
8 to buy a half a percent to meet my goal. So since RECs  
9 are cheaper than alternate compliance payments, okay,  
10 but I know I'm going to be able to meet my goal in two  
11 years, so I want to go out, and I want to buy three  
12 percentage points of my requirement. Even though I only  
13 need a half a percent, I want to be able to do that.  
14 Okay? So you see all this banking and all these other  
15 things, but even in the banking scenario, they still  
16 have to pay for who's supplying the renewable energy.

17 Now, if in fact they are supplying the -- for  
18 example, if you have solar or you have wind, where  
19 you're taking it that's there, then you get that portion  
20 of the payment anyway. So it can work, and it can work  
21 in terms of splitting up the payment, and it's just a  
22 matter of how much everybody gets.

23 I don't know if that makes sense, but that's  
24 kind of what we're looking at. We want to be a  
25 participant, and we want an incentive, and that's a way

1 to incentivize the local population to get involved in  
2 renewable energy.

3 MS. HERIG: Just a quick comment on the little  
4 PV system and the whole Colorado situation. Ryan, I  
5 welcome you to correct me, but the last I heard, for  
6 little PV customers, they were actually letting the  
7 utilities provide an up-front payment, you know, a  
8 capital payment, similar to the Florida program that's  
9 being run by DEP now. But by the utilities doing that,  
10 they owned the RECs for the life of the system, and it  
11 was a real simple way for them to do it.

12 Any corrections, Ryan?

13 MR. KATOFSKY: I'm not aware if that's going  
14 on in Colorado or not, but I am aware that there are at  
15 least one or two utilities that are talking about what  
16 effectively amounts to a forward purchase of solar RECs,  
17 and that's essentially a way to finance the system. You  
18 know, the forward purchase comes in the form of  
19 basically an up-front lump sum which pays for the  
20 system, and then the title to the RECs is essentially  
21 like the loan payment, if you want to think of that in a  
22 fairly simple way.

23 MS. HERIG: Right. So that would, you know,  
24 get it into the RPS that you're talking about.

25 MR. KATOFSKY: And that's --

1           MR. TRAPP: But you start with the principle  
2 that the RECs are owned by the solar producer.

3           MR. KATOFSKY: That's correct.

4           MS. HERIG: That's absolutely correct.

5           MR. KATOFSKY: That's correct.

6           MR. TRAPP: But if that solar producer wants  
7 to sell them in advance, over time, the rate, negotiate,  
8 let's make a deal --

9           MS. HERIG: Yep.

10          MR. TRAPP: -- it's up to them to say yes.

11          MR. KATOFSKY: Right. So there's a  
12 contractual arrangement between the buyer and the --  
13 essentially, the buyer and the seller in this case.

14                 I'll add one comment on this issue of property  
15 rights and attributes. Of course, if you go back enough  
16 years, this issue didn't exist at all. Now, typically  
17 when contracts are written, say a power purchase  
18 agreement is written, and that power purchase agreement,  
19 let's say for argument's sake, includes the bundled REC,  
20 there may also be provisions where the purchaser says,  
21 "We also have rights to any new attributes that may  
22 arise in the future, even if they are not yet defined in  
23 the market."

24                 So they're being very explicit now about what  
25 they're buying. So they're buying all the attributes,

1 even attributes that people haven't conceived of yet.  
2 So whether it's -- or that are not actively traded in  
3 the market. So people have become much more aware of  
4 this issue, obviously, because of this concept of  
5 attributes being separable products from the generation.

6 MR. MOLINE: Barry Moline, Florida Municipal  
7 Electric Association. I think the structure that Bob  
8 described is -- Bob Graniere described is generally  
9 reasonable.

10 There's a few other, I don't know,  
11 considerations or monkey wrenches that I would consider,  
12 and that is, the first question is who's required to  
13 comply, and the answer is utilities. I mean, we're the  
14 ones that -- somehow through the process of working with  
15 our customers, we're the ones who have to report, do  
16 whatever we need to do with the Public Service  
17 Commission or whatever the independent body is to make  
18 sure that we're meeting whatever goals there are. So if  
19 a customer owns a REC, somehow it has to be channeled  
20 through a utility to get to the compliance component or  
21 activity.

22 As a result of that, you know, there are state  
23 rebates, and if the State chooses not to be interested  
24 in the RECs, that's fine. If the utility provides an  
25 incentive to a customer that may be in addition to the

1 state incentive, then that customer installs a system  
2 and it goes online. But for the utility incentive, that  
3 project may not get developed, and I would say as a  
4 utility that the utility should therefore have the RECs.

5 In the case of -- even where a PV system  
6 looked like conservation because it was just the  
7 customer independently alone having a PV system on his  
8 house that reduced energy consumption, if there is an  
9 incentive involved from the utility to the customer, the  
10 utility should be the one that owns the RECs.

11 So if there -- however, if there's a  
12 completely independent customer investment that involves  
13 maybe just the State, who doesn't care about the RECs,  
14 and the utility provides no additional incentive, then  
15 in that case, I would think that the customer should own  
16 the RECs. The utility doesn't have any rights to it,  
17 didn't ask for that investment to be made. It looks,  
18 you know, for the sake of this discussion like  
19 conservation. Those RECs belong to the customer. But  
20 where the utility makes an investment or an incentive to  
21 get a project going, in that case, the utility should  
22 own those RECs.

23 MR. GRANIERE: May I respond to that, just to  
24 see if I think I know where we're going? Bob Graniere.  
25 I would agree with what you said if the utility made up

1 the difference between the state incentive. For  
2 example, let's talk one kilowatt of PV at the current  
3 \$8,000 price. Okay? If my understanding is right,  
4 about half of that comes from the State for 4,000. Now,  
5 if the utility were to provide the other \$4,000,  
6 essentially put it on and then up it goes on the house,  
7 I would have to totally agree with you that since the  
8 state portion is a subsidy, a true gift to the  
9 homeowner, that the utility would get the entire REC,  
10 because essentially they bought it. Right?

11 However, let's say the utility only gave 200  
12 bucks. Wouldn't you think that it would be right to  
13 somehow split that REC?

14 MR. MOLINE: No, I don't. I think that what's  
15 important is for the utility to find the price point  
16 that tips the customer to make the investment. The  
17 customer also has a benefit as well of lower energy  
18 bills, so the utility is doing, you know, good marketing  
19 to convince customers that you get an investment or a  
20 rebate from the State, and in addition, we'll provide  
21 this incentive to you. And but for that incentive, you  
22 know, those customers might not do it, but because we'll  
23 provide that additional amount, we're interested in  
24 those RECs.

25 MR. GRANIERE: Okay. Let me ask this then.

1 From what I'm hearing you say, any contribution by a  
2 utility gives them ownership of the REC. And then I  
3 would think that the next argument would be that that  
4 contribution should be recoverable from the ratepayer,  
5 if I'm right. So then I would guess what I would have  
6 to say then is that when the REC is retired or sold at  
7 some value, that you take that value, and wouldn't you  
8 credit it back to the ratepayers and lower their bills?

9 MR. MOLINE: Bob, unfortunately --

10 MR. GRANIERE: Unfortunately, somebody's got  
11 to get the value. I mean, that's what it boils down to.

12 MR. MOLINE: Unfortunately, I can't answer  
13 that question the way you would like me to, paint me in  
14 a corner, because I'm a municipal utility. So to me,  
15 those belong to our community.

16 MR. GRANIERE: Yeah, right. See, that --

17 MR. MOLINE: So I can't answer that question  
18 the way --

19 MR. GRANIERE: Well, you can for yours.

20 MR. MOLINE: As a regulated utility by the  
21 PSC. I'm sorry to do that. But, Susan, if you want to  
22 go for that -- you know, you don't have to.

23 MR. GRANIERE: Excuse me before you come in,  
24 Susan. I guess what I heard --

25 MR. MOLINE: You don't have to either, but --

1 MS. CLARK: I wasn't planning on answering  
2 that.

3 MR. GRANIERE: I guess what I heard then,  
4 Barry, is that in your case, because you're owned and  
5 locally governed and all those neat things, that you  
6 indeed would credit your bill back.

7 MR. MOLINE: The bill back to the general  
8 ratepayers.

9 MR. GRANIERE: Yeah.

10 MR. MOLINE: That would be a benefit to the  
11 entire community, so the way you said it, the answer is  
12 yes.

13 MR. GRANIERE: Okay.

14 MS. HERIG: Just a quick. You know, typically  
15 the utility is going to take that REC and retire it to  
16 meet their RPS obligation. But I think the regulators  
17 here regulate that whole cash flow within the utility,  
18 so, you know, I just think it's sort of -- you know, if  
19 they were to sell it, that becomes part of their  
20 revenue, you know.

21 MR. TRAPP: I think the only difference I may  
22 have with Barry's premise is, I start off with that we  
23 don't have to assign RECs to these people. We can say,  
24 "Utilities, build renewables. 100 percent of compliance  
25 with the RPS has to be from you building renewables." I

1 don't think that's wise, though. I think we should all  
2 be partners in building renewables.

3 And having said that, if an individual  
4 homeowner builds something for whatever reason, he  
5 should have the rights to the REC. Now, if that  
6 homeowner wants to negotiate away, and by that I mean if  
7 he says, "Gee, the only way I can really build this is  
8 if I take the City of Tallahassee's incentive program  
9 that's only to give me 10 cents on a dollar for my REC,"  
10 that's a business decision the customer has made to  
11 accept your 10 cents on a dollar.

12 So I can kind of agree with you on that  
13 concept, but I start with the basic premise that the REC  
14 producer is the REC owner, and therefore the  
15 decision-maker on how to dispose of that REC,  
16 recognizing under the rules of the game, the only place  
17 he can -- the only thing he can do with that REC is sell  
18 it to some utility or retire to it try to drive the  
19 market price up. That's the only clarification I would  
20 put on your example.

21 MS. SZARO: Jennifer Szaro from Orlando  
22 Utilities Commission. Just to give you an example of  
23 how we've tried to address the issue in our solar  
24 incentive program, we did want to focus on  
25 customer-sited systems. We felt that was the most

1 cost-effective, and when we did our financial analysis,  
2 it did prove to be the most cost-effective method, was  
3 to give an incentive rather than trying to self-build  
4 everything, not to mention it supported our distribution  
5 system much better that way, and we could look at doing  
6 some supply-side management if we had battery backup  
7 on-site.

8 So our incentive that we've just submitted to  
9 the Public Service Commission includes a five cent over  
10 retail production incentive for PV and a three cent  
11 production incentive for solar hot water, which we meter  
12 with a Btu meter. And we have a contract with the  
13 customer that says that if they participate in our  
14 program, we will net meter them, and we will give them  
15 the five cents in return for the REC, the idea being  
16 it's their REC. We feel that there has to be a market  
17 transaction to purchase that REC, and we're making that  
18 transaction with them.

19 And if we go to a compliance market and the  
20 market value of that REC goes up, we would look at  
21 making sure that we're offering them a competitive  
22 offer. And if they choose to sell that REC to someone  
23 else, that's their right, but we want to make sure that  
24 we are able to bring in as much to our community as we  
25 can through customer-sited systems.

1           So we spent a lot of time with our legal staff  
2           to make a simple contract that would address the issue  
3           effectively, acknowledge the customer's ownership of the  
4           REC, and yet help us meet our own compliance goals.

5           MR. FUTRELL: Let's, if we could, take about a  
6           10-minute break and let the court reporter and everyone  
7           take a little stretch. So let's get back together in  
8           about 10 minutes.

9           (Short recess.)

10          MR. FUTRELL: Okay. Let's get started, if  
11          everybody will take their seats.

12          Okay. I would like to before we move on --  
13          we've talked a lot about RECs this morning, and before  
14          we leave really the first page of Judy's notes, I would  
15          like to get a little bit more into contract path and try  
16          to explore about where that stands. Bill, do you have  
17          a --

18          MR. ASHBURN: Yes, I just have a thought. I  
19          would like to get back to Judy's stuff. We like Judy.  
20          But on the contract path stuff, if that's the one we  
21          want to do -- and maybe we do want to do a mix of the  
22          two. I don't know. But, you know, I was thinking about  
23          tracking. We do have kind of a tracking mechanism that  
24          exists, at least in FRCC, that could be used for that if  
25          you use contract path and tie the energy to the REC

1 through the OASIS.

2 And the OASIS has got a tagging mechanism that  
3 tags transactions. You could set up some sort of a  
4 tagging mechanism which tags this industry as green or  
5 whatever, and that would be one way you could at least  
6 have a tracking mechanism for the contract path  
7 approach.

8 MR. TRAPP: Does that only work, though -- Bob  
9 Trapp, staff. Does that only work, though, for the  
10 large to-grid transactions?

11 MR. ASHBURN: Right. This is Bill Ashburn  
12 again. I guess I didn't give my name. It would have to  
13 be stuff that was able to transmit over the transmission  
14 system, which has to be more than a megawatt and that  
15 kind of thing.

16 MR. TRAPP: Right.

17 MR. ASHBURN: And it would only be in the  
18 FRCC. Anything outside of the FRCC would have to get  
19 tracked some way through it as well. But the OASIS does  
20 have a tracking mechanism with tags that maybe with  
21 minor programming or some sort of setting of codes, you  
22 could track those kind of transactions. I just thought  
23 I would mention that that's out there.

24 MR. TRAPP: That's what I'm struggling with,  
25 is that I think there are a lot of existing systems that

1 are out there that --

2 MR. ASHBURN: Yes. That's one I know of.

3 MR. TRAPP: -- probably could be pulled  
4 together. The question then becomes how do you  
5 coordinate all of those different entities and  
6 everything?

7 MR. ASHBURN: Right, right. That wouldn't  
8 necessarily --

9 MR. TRAPP: Some kind of central --

10 MR. ASHBURN: That wouldn't obviate the need  
11 of some central accounting mechanism or getting it to  
12 you, but there is a tracking mechanism for larger  
13 transactions where you could maybe set up something for  
14 green tags to it or something. I just thought I would  
15 add that.

16 MR. TRAPP: And under -- you know, Ms. Clark  
17 raises her preference for a third-party entity to do  
18 this, and I think I also have a preference for a  
19 third-party entity to do this to, to, if nothing else,  
20 pull together all the disparate pieces. But then my  
21 concern becomes what role does the PSC have in oversight  
22 with regard to that third-party entity? We have some  
23 indirect inputs into FRCC, FCG, those types of industry  
24 organizations. Of course, the FRCC now is a federal  
25 agency.

1           But that's the relationships I'm trying to  
2 work out in my own mind, is how you would set up --  
3 given that we don't have any other legislative directive  
4 in terms of the establishment of such an agency, I have  
5 to look at it from my back yard. So how would the PSC  
6 interact to create -- certainly I don't think we have  
7 staff or budget to do it at the PSC level, so I always  
8 look to the industry, you know, the conventional role we  
9 have of we run around with a big stick -- we think it's  
10 a big stick -- and let you all do the lion's share of  
11 the work, and we just make sure you kind of do it right.

12           MS. CLARK: Bob, I guess my reaction to that  
13 is, that has worked in the past for the various ends you  
14 were trying to accomplish. And as I was talking to Ryan  
15 at the break, he indicated that -- I've got to be  
16 careful. I think he indicated that most of them were  
17 done through a third-party administrator, where it may  
18 have been a proposal that the state put out that was  
19 responded to. As he recalls, it was part of a whole  
20 deregulation package, so we are somewhat different.

21           But those are things I think we can think  
22 about. There is precedent for actually having an agency  
23 or an entity that has some oversight by the Commission.  
24 In telecommunications you have the Relay system. I  
25 don't know if that's still functioning, but --

1 MR. TRAPP: Just discussing the idea, there's  
2 nothing that prevents, I don't think, the industry to  
3 come together as a group to jointly fund and contract  
4 with a third-party agency, while at the same time  
5 preserving the role that the PSC has over regulating the  
6 individual members of that organization. I guess that's  
7 the kind of model that I think of when I think of FRCC  
8 before it became a federal agency, the FCG --

9 MS. CLARK: Right. And you had done that with  
10 EPRI as well, and the research --

11 MR. TRAPP: EPRI, and working with PERC and  
12 all those things. There are contractual arrangements  
13 that the utilities become members of, and then the PSC  
14 kind of does our regulation of the individual utilities,  
15 depending on what level of regulation we have over those  
16 entities.

17 MS. CLARK: It has worked in the past, and I  
18 think it is something that should be looked at in this  
19 context.

20 MR. GRANIERE: Bob, along the lines on that --  
21 Bob Graniere. One of the things we might want to think  
22 about is -- and I think Jon Moyle brought this up. And,  
23 Ryan, correct me if you think I've gone too far here.  
24 Usually on something like this, you would want to have  
25 -- we would want to have all -- we would want to have

1 transparency, which means all the stakeholders are  
2 represented in that particular organization. And then  
3 when all the stakeholders get represented in that  
4 particular organization, they work out their agreements  
5 for tracking and that kind of stuff. And then what  
6 happens -- and I hate to come back to this RTO stuff,  
7 but basically that's the system of what an RTO looks  
8 like. And the RTO actually is regulated. It's  
9 light-handed regulation, but it actually is regulated by  
10 FERC.

11 So I would think that an organization like  
12 this that would be only for Florida, the PSC would take  
13 on the role that FERC currently has with these ISOs and  
14 RTOs. And the actual tracking thing, to avoid this  
15 problem or this perceived problem of the utilities being  
16 the only parties being involved in the tracking and  
17 verification and all that stuff, if there's full  
18 stakeholder participation in it, then that gets taken  
19 care of, and then it's done.

20 Now, that's the plus side, but the downside is  
21 that it usually takes a fair amount of time to put  
22 together an organization like that.

23 MR. FUTRELL: So in the interim, is the  
24 contract path -- to get to that point where Bob is  
25 talking about, is the contract path kind of the bridge

1 to get you there? And also, as far as the contract  
2 path, how do generally those systems deal with smaller  
3 generators? Is there room in a contract path approach  
4 for home generators, self-service generation? How is  
5 that accounted for?

6 MR. KATOFISKY: I'm not quite sure now  
7 California deals with that. Do you know?

8 MS. HERIG: No, I'm not sure how California  
9 deals with it. I was going to say something else.

10 MR. KATOFISKY: Yes, I mean, clearly that would  
11 be an issue with smaller generators. I mean, if you had  
12 large cogenerators and so on, I think they could  
13 participate more readily. So having something like  
14 certificates as a means of compliance does help with the  
15 small generators.

16 I know New York, their system resembles a  
17 contract path system in the sense that you have  
18 long-term agreements between the generators and the  
19 state as the obligated party. They actually carved out  
20 a small percentage of their RPS that they refer to as  
21 the customer-sited tier, and they haven't -- so they're  
22 actually handling the customer side of their RPS in a  
23 totally different manner.

24 So that's another -- and it does create a  
25 separate -- you know, in terms of complexity, I guess it

1 does create an additional program to manage, but they  
2 chose not to -- you know, because of the approach they  
3 chose for what they call the wholesale tier, you know,  
4 they just carved it out altogether.

5 MR. TRAPP: Could you just briefly --  
6 aggregators, aren't there businesses out there that have  
7 the business of aggregating small renewable credit loads  
8 to package to transfer to a utility?

9 MR. KATOFSKY: Yes, there are companies that  
10 have that as part of their business model, so they would  
11 aggregate up from the small generators and issue a --  
12 they have maybe a very simplified standard contract that  
13 doesn't take a lot of negotiation or other -- you know,  
14 it's not time-consuming, so you have a fairly simple,  
15 you know, fixed price arrangement or other kind of  
16 arrangement where you acquire the title to the RECs, and  
17 then they could sort of bundle them up and then be a  
18 participant in the market, yes.

19 MR. TRAPP: I think you also mentioned in your  
20 presentation this morning that -- was it New Jersey that  
21 was putting it on the bill? It appears to me that if a  
22 utility has got a meter, they ought to know what's going  
23 on behind it, and they ought to be able to communicate  
24 through their customer relations to try to act as  
25 aggregators themselves on the bill.

1           MR. KATOFSKY: Right. I don't think it was  
2 specifically putting it on the bill, but it was getting  
3 involved in the forward purchase of solar RECs. So  
4 obviously, New Jersey is an example where they have a  
5 very explicit market for solar, so what happens on the  
6 customer side is particularly important, because that's  
7 the primarily means of complying with the solar  
8 component of the RPS. So they spent more time thinking  
9 about how to handle that customer-side resource because  
10 it's the primary means of compliance for solar.

11           And this forward purchase is one example,  
12 essentially where the utility is taking that hassle  
13 away, if you will, from a small generator trying to  
14 figure out how they're going to sell their -- I mean, a  
15 two-kilowatt system maybe will generate three RECs a  
16 year, right, three megawatt-hours, roughly, a year. So  
17 to go through, you know, all the -- you know, if you  
18 have to register and everything else for three  
19 megawatt-hours, it would be a bit of a hassle.

20           MR. TRAPP: Right.

21           MS. HERIG: And that's the same thing I think  
22 that's going on in Colorado. It's a contract between  
23 the utility customer and the utility. So it's a  
24 contract path, and the RECs are -- you know, the market  
25 is starting to emerge using that contract path, you

1 know, until you get something set up.

2 MR. ASHBURN: This is Bill Ashburn. What  
3 about the shelf life thing? Can you purchase farther  
4 ahead than three years, which is the shelf life for  
5 these things, or is there a limit there?

6 MR. KATOFSKY: The shelf life refers to RECs  
7 you already have title to, so it's not the issue of --  
8 the forward purchase is a separate issue. You can have  
9 a contract to purchase RECs for more than three years  
10 out, but if you hold a -- some jurisdictions allow you  
11 to hold RECs that you already have title to for a  
12 certain period of time. As an obligated party, I could  
13 go out and, you know, execute a 10-year agreement to  
14 purchase RECs, or longer, if I chose to do that. That's  
15 different from what I would refer to as shelf life.

16 MR. ASHBURN: Can you count those forward RECs  
17 towards your current RPS requirements, or do they only  
18 apply to the year they accrue?

19 MR. KATOFSKY: I don't think there's -- I  
20 think to do -- there are some states, I think, that  
21 allow what we call early compliance, but I don't think  
22 it would be for using future RECs.

23 MR. ASHBURN: Okay. And what happens down the  
24 road if you've bought future RECs for ten years, and  
25 five years out the house gets trashed out for some

1 reason and the device is gone?

2 MR. KATOFISKY: Hopefully there's some  
3 insurance. I mean, there might -- I assume that the  
4 contracts would cover some of those provisions.

5 MR. ASHBURN: Yes. That simplified contract  
6 is getting more complicated; right?

7 MR. KATOFISKY: And that's an interesting  
8 point. I mean, that would be, you know, the main  
9 reason, I suppose, if you've got a rooftop system. You  
10 know, it's unlikely to otherwise break, although, for  
11 example, things like inverters do tend to require  
12 replacement, and that would be an issue.

13 What happens -- you know, as a homeowner, if  
14 my inverter fails, how quickly or how likely am I to get  
15 it replaced? Well, if I had an obligation to sell RECs  
16 -- and in the case of New Jersey, you know, solar RECs  
17 go for several hundred dollars a megawatt-hour, so it's  
18 not 10, \$15 a year that we're talking about. You know,  
19 if I'm on the hook for a 1,000 or \$1,500 worth of RECs  
20 in a given year to deliver, then I'll probably get my  
21 inverter fixed.

22 MR. TRAPP: Bill, could I ask you -- you  
23 brought it up, so I'll ask you. Why would you give a  
24 life to a REC longer than the calendar year in which you  
25 were required to meet a goal, given my understanding, at

1 least, that the goals that we're supposed to be looking  
2 at are 20 percent of all electricity produced is  
3 supposed to be renewable?

4 MR. ASHBURN: Why would you get, or why would  
5 somebody want --

6 MR. TRAPP: Why would you give it a life more  
7 than the calendar year that --

8 MR. ASHBURN: Somebody may want that.

9 MR. TRAPP: Well, I say that. The --

10 MR. ASHBURN: If the requirements --

11 MR. TRAPP: The REC is going to renew itself  
12 each year by generation.

13 MR. ASHBURN: Right, if we're talking about  
14 things like PVs, which generate the same amount maybe  
15 every year. But there may be technologies which vary  
16 with seasons or with -- you know, maybe you have a  
17 crop-based system and you have a great year, and then  
18 the next year there's a drought and you don't have  
19 anything. So there may be some need, you know, because  
20 you have to meet that amount every year, to bank some of  
21 it in a big year and use it in a lean year or something.

22 MR. TRAPP: So you're talking about to finance  
23 the renewable more than to meet the goal of the utility.

24 MR. ASHBURN: Right. I think the forward  
25 contracts he's talking about are helping finance the

1 renewable. But from the utility's standpoint, you may  
2 want to look at some averaging or some ability to bank  
3 in a bad year and use it in a year when you need it.

4 MR. TRAPP: It comes to the discussion points  
5 of the last workshop of are we going to create annual  
6 goals, or we going to create five-year goals, or are we  
7 going to go out in time somewhere?

8 MR. ASHBURN: We don't have any hydro here,  
9 but there's years when there's lots of water and years  
10 when there isn't so much water because of drought and so  
11 forth, so they may be able to have a year when they're  
12 just swimming in RECs because there's so much water  
13 being produced because it's a wet year, and the next  
14 year there's a drought, and you may want to be able to  
15 carry that forward and average it over your obligations.  
16 That's why you may want to do that.

17 MR. TRAPP: Would you only want to bank  
18 surplus RECs? In other words, you have to meet your  
19 goals for whatever --

20 MR. ASHBURN: Right. That's what I'm saying.  
21 You may have to --

22 MR. TRAPP: And whatever carryover --

23 MR. ASHBURN: Exactly. You may have a 10  
24 percent obligation, and you've got 15 percent of RECs  
25 this year because it was a great year for water or

1 something, and you bank them for a future period.

2 MR. FUTRELL: Anything else on the contract  
3 path line that would be stumbling blocks or concerns  
4 that -- this looks like something that can be easily --  
5 when you begin something, you can easily move into and  
6 find your way and then move into these other compliance  
7 methods as everything develops and experience comes  
8 along.

9 MR. KATOFSKY: Right. I mean, clearly, you  
10 sort of have the infrastructure today in Florida to take  
11 that approach.

12 I guess the one point I brought up in the  
13 presentation is this issue of transmission constraints,  
14 so that would be one thing to look at. So if you  
15 found -- and I'll take the Texas example. You know,  
16 they had concentrated wind development in one part of  
17 the state, and they were having curtailment of the wind  
18 output because they couldn't deliver it to load. And so  
19 in parallel to their development of RPS, they also  
20 pursued policies and regulations that facilitated the  
21 building of more transmission. And today they have  
22 something called competitive renewable energy zones, I  
23 believe, CREZ.

24 So there are rules in place now in Texas that  
25 help facilitate transmission to ensure that they don't

1 run into bottlenecks related to the delivery of the  
2 energy. And, of course, even though they have RECs, you  
3 can only produce a REC if you can generate the  
4 kilowatt-hour or the megawatt-hour, so the transmission  
5 constraint still has a real implication for even a  
6 REC-based program if you can't generate the power  
7 because you're curtailed.

8 So that would be like a parallel activity that  
9 you might want to look at. You know, if you identify  
10 regions of the state that you have more, you know,  
11 basically export potential, if you will, of renewables,  
12 then you want to look at that else you need to do to  
13 ensure delivery of that energy.

14 MS. HERIG: I haven't dug into it completely,  
15 but the whole eminent domain issue here in Florida, and  
16 the third party, and the large systems, and the creative  
17 financing that's going on in California may become an  
18 issue in the contract path here in Florida and is  
19 something that really the lawyers need to dig into.

20 MS. HARLOW: Ryan, could you talk to us --  
21 this is Judy Harlow with staff. Could you talk to us a  
22 little bit more about how we could use our existing  
23 system where the contract path methodology is already  
24 kind of in place and move toward a REC system, to kind  
25 of use the contract path and then transition into a REC

1 system?

2 MR. KATOFSKY: The transition could occur --  
3 you know, I guess you could buy yourself as much time as  
4 you wanted, say, to implement a REC-based system if you  
5 started off with the contract path. And then initially,  
6 for example, you may implement that REC-based system,  
7 but you may have existing obligations under bundled  
8 contracts. But it wouldn't be that difficult, say, to  
9 take that bundled contract and essentially split it into  
10 two contracts, one for RECs and then one for energy.

11 And I believe that's what happened in the  
12 first couple of years in Texas as well, that even though  
13 there was a separate market, there were existing  
14 contracts that essentially transitioned over into a  
15 separate -- you know, the obligation was met with  
16 bundled energy.

17 There's also no reason why you couldn't --  
18 even if you were operating in a state, you know, with a  
19 REC-based system, you could still execute bundled  
20 contracts and just deliver both -- basically deliver  
21 both commodities simultaneously to somebody. So they're  
22 certainly not incompatible with each other.

23 MR. McWHIRTER: People are tolerant of me  
24 asking dumb questions, and I appreciate you being so as  
25 well. But it seems to me that if you're going to sell a

1 REC in advance under the contract path or analyze it,  
2 you've got to analyze it in terms of kilowatts as  
3 opposed to kilowatt-hours, because you're looking at the  
4 kilowatt-hours that a kilowatt will produce as opposed  
5 to measuring it in kilowatt-hours, because the only way  
6 you can measure it in kilowatt-hours is after the fact,  
7 as to what you actually delivered. I didn't see any  
8 analysis in here of megawatts or kilowatts as opposed to  
9 megawatt-hours.

10 MR. KATOFSKY: Right. I mean, RECs are  
11 clearly measuring energy and not capacity. There has to  
12 be an accounting mechanism, so a settlement period or a  
13 true-up period where you -- if you contracted for X  
14 number of RECs as energy, after that quarter or that  
15 month, if it's -- and I think to the earlier comment  
16 that some generation is variable, wind generation is  
17 highly variable by season, even by year. You can have a  
18 windier year and a not so windy year. And your  
19 contract, you know, may have basically an estimated  
20 amount, but you may get more or less in any particular  
21 year. But you're not -- you're still accounting for it  
22 as kilowatt-hours or as energy, you know, within a  
23 defined settlement period.

24 MR. FUTRELL: Ryan, a contract path approach,  
25 how does -- talk about how -- if a utility is a

1 distribution utility or purchases a predominant part of  
2 their power, how is it able to identify the various  
3 sources through system sales, you know, where there may  
4 be some combined amount of renewable and traditional  
5 fossil generation? Does that lend itself to being able  
6 to identify that for the utility to be able to report  
7 its obligation?

8 MR. KATOFSKY: Right. If you take California  
9 as the -- you know, that's really the best example of  
10 the contract path approach. They enter -- for RPS  
11 compliance purposes, they are entering into contracts to  
12 have renewable energy delivered, so the individual  
13 contracts have to be auditable to see how much was  
14 actually delivered under those contracts, so you would  
15 look specifically at how those particular generators  
16 performed and where they delivered their power to, I  
17 think. So you would look at it that way.

18 Now, California also has -- they have existing  
19 contracts, because in California they're at about 10 or  
20 11 percent, I believe, renewable today, and they have a  
21 goal of getting to 20, and those existing assets count  
22 toward their goals. So there's both existing delivery  
23 and new delivery that's going to come online, but it's  
24 the individual contracts, I believe, that are audited or  
25 traceable, if you will.

1           MR. HINTON: Ryan, under contract path, does  
2           -- this is Cayce Hinton with staff. Doesn't that  
3           particular methodology assume a certain availability of  
4           renewables within the region, or also the ability to  
5           import the actual renewables? If you're tying the  
6           attributes to the energy, you've got to actually have  
7           the energy for that to be successful.

8           MR. KATOFSKY: Right. You have to be able to  
9           physically deliver it, yes.

10          MR. HINTON: We were talking about  
11          transitioning from contract path to a REC system. Well,  
12          what if your goal is contract path? What if you want to  
13          actually produce and use renewable energy, but you don't  
14          currently have enough available to meet your RPS?  
15          Wouldn't a REC system then be used to transition into  
16          contract path?

17          MR. KATOFSKY: Oh, I see. So you're saying --  
18          let me make sure I understand. You're saying you would  
19          first allow, say, REC purchases, and you would allow a  
20          lot of discretion, say, as to where those RECs would  
21          come from?

22          MR. HINTON: Yes. You would be able to  
23          purchase a REC from the Midwest --

24          MR. KATOFSKY: Iowa.

25          MR. HINTON: -- until you're able to build it

1 or purchase it directly from, you know, Georgia or  
2 wherever.

3 MR. KATOFSKY: I think that would be -- it  
4 would probably the first time that anybody did it that  
5 way. Technically, I suppose you could do that to  
6 establish a market, but I think, if anything, the trend  
7 is the other way. You know, the trend is towards RECs,  
8 not away from RECs.

9 So if you were to establish, say, a contract  
10 path approach, I think one way to mitigate what you're  
11 referring to would be to make sure that the first year  
12 where the obligation begins is far enough out in the  
13 future that you would be able to meet that obligation.  
14 So you would give enough lead time to get those  
15 contracts in place.

16 MR. HINTON: If your goal was to actually,  
17 like I said, build renewable or actually purchase  
18 renewable energy, still wanting to have a REC system,  
19 though, the two aren't mutually exclusive.

20 MR. KATOFSKY: No, they're not necessarily  
21 mutually exclusive. You could have a period where the  
22 REC eligibility would change. You could say, well, for  
23 the first X years, we'll allow RECs from, you know,  
24 Florida and all neighboring states, say, with or without  
25 physical delivery, but starting in year X, we're going

1 to also require physical delivery to accompany  
2 out-of-state RECs, or you might say starting with year  
3 X, we'll just look inside the state for our renewables.  
4 You could phase it.

5 You could have the -- you know, there's  
6 certainly precedent for states going back in and, you  
7 know, reassessing the issues of eligibility and taking a  
8 look at -- you know, percentages might have been  
9 increased in several cases where states looked at how  
10 they were doing it and they said, "Well, let's actually  
11 raise the standard." They have people look at --  
12 biomass eligibility is a good example of where states  
13 grapple with what type of biomass, what type of  
14 technology, and they do change the rules. So, yes,  
15 there's no reason why you couldn't phase in different  
16 types of eligible resources.

17 MR. McWHIRTER: From the viewpoint of a  
18 utility dispatcher, as I understand it today, you try to  
19 -- your optimum dispatch is to dispatch the lowest cost  
20 generation available. When you get into a REC system,  
21 is that going to change the dispatch order if you're  
22 running short on your kilowatt-hours or megawatt-hours  
23 for renewable energy? Are they going to dispatch the  
24 more expensive renewable energy and charge customers for  
25 that rather than the less cost energy?

1 MR. KATOFSKY: I'll have to think about that  
2 one for just a second. I guess my first reaction would  
3 be that a REC-based system shouldn't change the way  
4 plants operate, because the -- and it would depend if it  
5 was a bid-based system or a cost-based system which  
6 determines essentially the dispatch stack. But my first  
7 reaction would be that the REC market would operate  
8 independently of how power plants actually function.

9 You know, certain types of renewable run when  
10 they run also, so wind and solar basically run when the  
11 resource is available. And when they run, their  
12 marginal costs are close to zero, so they should  
13 dispatch when they're available to run. Other renewable  
14 resources would run, you know, more like a traditional  
15 power plant, like a biomass facility would want to be a  
16 base load facility. And again, I think it would depend  
17 on the way the rules were written for the physical  
18 market, but I don't see how those would necessarily  
19 change as a result of layering a REC on top of that.

20 MS. HARLOW: If we go back to Mr. McWhirter's  
21 question, it seems to me that it's the goal that's  
22 causing the change in dispatch order, the goal itself,  
23 not whether it's done with a contract path or a REC  
24 system. And maybe that's appropriate, because if we  
25 have a statewide goal for renewable energy, I think it's

1 a policy position that costs will go up, because if they  
2 weren't going to go up, we would be using more  
3 renewables today than we are. So it's the goal causing  
4 the change in the dispatch order if it happens.

5 MR. ASHBURN: This is Bill Ashburn. Is it  
6 sort of changing the dispatch from least cost to least  
7 emission?

8 MR. TRAPP: Well, my engineering side of me  
9 says if it changes unit commitment, the types of units  
10 you're building. But it seems to me I agree with Ryan  
11 that, you know, the fuel price is going to affect the  
12 actual dispatch unless we create --

13 MR. ASHBURN: Unless we're obligated to get to  
14 a certain percentage of emissions in a year, and  
15 therefore we've got to dispatch more expensive units to  
16 run to make the RECs.

17 MR. TRAPP: That may cause you to go out of  
18 dispatch.

19 MR. ASHBURN: Right.

20 MR. TRAPP: And therefore you're saying --

21 MR. ASHBURN: That's what I'm saying. Under  
22 certain circumstances, it could be a least emission  
23 dispatch rather than a least cost emission -- least cost  
24 dispatch.

25 MR. TRAPP: Could be, could be.

1 MR. KATOFISKY: I think you can also think of  
2 it as maybe, say, a least cost -- it's the least cost  
3 dispatch within the constraints of the goal; right? So  
4 that would be the purpose of an RPS, would be to achieve  
5 the objective at the lowest possible cost.

6 MR. ASHBURN: Right. And as you said, certain  
7 renewable resources are probably must-run. I mean, if  
8 they're solar, they're going to put out what they put  
9 out, but some may be dispatchable based on -- you know,  
10 they are dispatchable because they're biomass or  
11 something like that.

12 MR. KATOFISKY: Right. But as a biomass  
13 operator, you would want to run it as much as you could;  
14 right?

15 MR. ASHBURN: Right. But you would likely be  
16 -- the contract with the utility -- because as you said,  
17 you're splitting the RECs from the energy, so it may be  
18 that the utility has cheaper energy to run at certain  
19 times of the day and doesn't dispatch the biomass, and  
20 that reduces the amount of RECs, which goes against your  
21 RPS requirements. So you may have different  
22 requirements on those two scales.

23 MR. KATOFISKY: Right. But presumably the REC  
24 covers those -- you know, would make the energy  
25 component of the biomass plant competitive; right?

1           Because you're getting a premium for the attributes, the  
2           actual energy you deliver you can deliver essentially at  
3           the market price.

4                   MR. ASHBURN: Well, presumably. Some of these  
5           units are going to run for 20 years, 30 years. I mean,  
6           over time, the cost of units change, and their dispatch  
7           changes over time as well, depending on what gets built  
8           in the meantime.

9                   MR. KATOFISKY: Yep.

10                   MR. McWHIRTER: Could a Florida utility either  
11           build a plant, a solar plant, say, in Arizona, and  
12           charge the Florida customers for the RECs attributable  
13           to that plant?

14                   MR. KATOFISKY: If the rules allowed them to do  
15           it, yes. If the RPS rule said we can buy RECs that are  
16           made in Arizona, yes.

17                   MR. McWHIRTER: And would that be in the  
18           public interest, in your opinion?

19                   MR. KATOFISKY: I would say that the general --  
20           one of the motivations for RPS is to have local  
21           benefits, so something like that is not typically  
22           allowed in RPS.

23                   MR. FUTRELL: Okay. If there's no other  
24           questions at this time, let's take a lunch break and  
25           come back about 1:30. Thanks.

1 (Recess from 12:30 to 1:44 p.m.)

2 MR. FUTRELL: Okay. If you'll take your  
3 seats, we can get started.

4 What we would like to talk about first before  
5 we get back into the questions that Judy had teed up for  
6 us is the renewables assessment data, the legal sized  
7 spreadsheet. We provided copies. We also e-mailed it  
8 out yesterday. And Karen Webb has done a real good job  
9 for us of compiling the data that came in from the last  
10 workshop, and we would like to kind of go over that and  
11 let Karen kind of talk about where we are. And if  
12 anybody has any questions or wants to make any points  
13 about the data that's here, this is a good opportunity  
14 for you to do that.

15 MS. WEBB: Hi. Karen Webb, Commission staff.

16 I guess all of you have a copy of the long  
17 worksheet, and this was the corrected version of this  
18 subsequent to the last workshop, where we asked the  
19 utilities and others to please -- if they thought any  
20 corrections were required, to please submit those, and  
21 we've since changed that in here in the spreadsheet. We  
22 also changed the format a little bit of the feeder  
23 sheets to make it a little bit easier to read and make  
24 it a little more uniform.

25 Some questions were raised during the break --

1 I don't know if you want to go in that -- in regards to  
2 the self-generation. You see on the summary sheet, if  
3 you start from the bottom, there's total, above that,  
4 conservation, above that, subtotal, above that,  
5 self-generation. If you go across, you'll see a zero  
6 under capacity. That doesn't mean zero. That probably  
7 should have just been left blank, because we pulled that  
8 from ten-year site plan book, that load and resource  
9 plan, and they just didn't list capacity in the area  
10 where we were pulling these numbers from, so that  
11 probably should have just been left blank. What we were  
12 focusing on was the energy, that number there, the  
13 3,526,000.

14 We called FRCC in regards to some of the  
15 complaints we were hearing that those numbers might be  
16 incorrect, underestimated or what have you, and the  
17 response was, "Unclear as to where that number came  
18 from." So if you know of a particular site that has  
19 some clarifying information as to where -- everywhere  
20 that this can be pulled from, we would definitely  
21 appreciate that.

22 In addition to that, we've heard from  
23 Mr. Zambo. You'll see the footnote, the cross footnote.  
24 Post-workshop comments submitted was 517.5 megawatts  
25 with 2,791,000 megawatt-hours. And this line, I

1       suppose, confused some people, judging by some of the  
2       comments we heard during the break. That number, the  
3       734,000 megawatt-hour number, is the difference between  
4       the FRCC number for energy and the number that we pulled  
5       from the post-workshop comments that we got from  
6       Mr. Zambo. Now, that's likely due to other industries  
7       that were not represented by Mr. Zambo, or it could be  
8       due to a difference in calculation of how FRCC computed  
9       that 3,526,000 number.

10               But again, we've gotten some feedback from  
11       Mr. McWhirter and Mr. Zambo and Mr. Treshler as to how  
12       we might go about clarifying that, but any  
13       clarifications are welcome.

14               MR. TRAPP: Karen, could I just clarify what I  
15       thought I heard you say? The number reported by the  
16       FRCC in the load and resource plan is the 734,000? Is  
17       that I heard?

18               MS. WEBB: No, sir. The 734,000 number  
19       represents the difference between what the FRCC book  
20       gave us for energy and what Mr. Zambo gave us for his  
21       clients' energy.

22               MR. TRAPP: So FRCC is reporting 3.5 million?

23               MS. WEBB: Yes, sir.

24               MR. TRAPP: Of which Mr. Zambo has accounted  
25       for 2.79 million?

1 MS. WEBB: Yes, sir. And our question is --

2 MR. TRAPP: Where the other difference comes  
3 from?

4 MS. WEBB: First of all, we want to know how  
5 did FRCC get their numbers, because we've had some  
6 difficulties getting from them how they calculated that  
7 number. So first of all, is that number correct, the  
8 3,526,000, but second of all, who would make up the  
9 difference between Mr. Zambo and what FRCC is reporting.  
10 Is it citrus? Is it sugar? Is it pulp and paper? Who  
11 all is it?

12 MR. TRAPP: Well, I think these -- again, I  
13 want to emphasize the importance I place on these  
14 numbers. They show a wealth of potential renewable  
15 gigawatt-hours that are out there that could be counted  
16 toward an RPS and that may have additional value if we  
17 go to some type of a REC program.

18 So it seems to me that it would be incumbent  
19 upon all the parties to try to get that number  
20 accountable and in the program and credited if that's  
21 the direction we wind up going. And that's open for  
22 discussion. I would love to discuss that.

23 But the way I read this chart, we've got three  
24 potential areas that may contribute to meeting the goals  
25 that we're trying to strive for, and we need to talk

1 about each one of them, conservation, self-service  
2 generation, and utility purchases and construction.

3 That's my stump speech, and I'm sticking with  
4 it.

5 MS. WEBB: Very unanimous.

6 MR. ZAMBO: Well, Karen, I'll give you some  
7 comments if now is the appropriate time.

8 MS. WEBB: Sure, sure. I was going to bring  
9 up next what we talked about on the break about breaking  
10 up the self-generation, but you would probably explain  
11 that better than I would, so please go ahead.

12 MR. ZAMBO: I'm not sure about that, but I'll  
13 give it a try.

14 Before we get into that, though, on the  
15 self-generation, I think I mentioned to you during the  
16 break, all self-generation in Florida that I'm aware of  
17 is not necessarily renewable. There are some fairly  
18 sizable natural gas-fired facilities out there that are  
19 used for self-generation, which leads me into my issue,  
20 and that is that I think you ought to break the  
21 self-generation down by technology or by energy  
22 resource.

23 MR. FUTRELL: Richard, if you could just  
24 identify yourself for the court reporter.

25 MR. ZAMBO: Oh, I'm sorry. Rich Zambo

1 representing renewable generators.

2 The fertilizer industry is a pretty good  
3 example, because they've got, at last count, 370  
4 megawatts of installed capacity or operating and  
5 installed capacity. And of that, only 15 megawatts is  
6 being sold pursuant to firm capacity and energy  
7 contracts, so you've got -- 355 megawatts presumably  
8 would be included in the self-generation number, but you  
9 have no indication in either your demand side or your  
10 supply side charts here.

11 I would say you put that in your list on the  
12 demand side so that you can create a -- this chart can  
13 act as an inventory. You can look at it and see what  
14 you've got installed in the state in each of the  
15 different categories, MSW, waste heat, landfill gas, and  
16 so forth.

17 Also, the numbers I gave you, I probably  
18 wasn't clear in how I presented them, but those -- I  
19 think we combined some municipal solid waste along with  
20 the waste heat. The waste heat numbers are the ones  
21 that are primarily used for self-generation. The  
22 municipal solid waste are typically sold to utilities.  
23 So I would be happy to work with you and help you get  
24 those numbers to match up with what I've got.

25 But I don't know what else is -- I don't know

1        what the FRCC has included in that number, but I do know  
2        there's generation out there. Almost all the sugar  
3        companies generate using small power producers. Some of  
4        them aren't even connected to the grid. They generate  
5        during the season when they're making sugar, and they  
6        provide their own power, and when there's no sugar to be  
7        produced, they just shut down and go home. And I know  
8        the pulp and paper industry generates from wood waste,  
9        from bark, from different chemicals that are produced in  
10       the process. I know there are some chemical plants up  
11       in the Panhandle that produce combustible gases as part  
12       of their process, which probably also are renewable. So  
13       I don't know how you go about finding out what those  
14       are, but I think there's some significant numbers.

15                    And with that, that's about all I have to say,  
16       except I would encourage you to list the waste heat  
17       under the demand side and the supply side where it's  
18       appropriate to do so.

19                    MR. FUTRELL: I would like to ask -- I don't  
20       mean to pick on Bill, but there's a lot of self-service  
21       in your territory, in TECO's territory. To what extent  
22       do you or does the company keep up with that potential  
23       out there, what's out there, and then how do you report  
24       it to FRCC, if you know?

25                    MR. ASHBURN: I'm not sure I can answer how

1 we -- I'm sure our resource planning department reports  
2 whatever they do to FRCC. I don't know exactly where  
3 they get it.

4 But I agree with what Rich says. Particularly  
5 for the phosphate industry, there's an awful lot of  
6 generation they use internally to themselves, so it's  
7 sort of self-supplied generation, but then they sell  
8 excess to us or to Progress Energy or that kind of  
9 thing, or in the market. So there's a mix of their  
10 capacity which would fall under the waste heat  
11 quantified, and part of it is self-supplied, meeting  
12 their own load, and part of it is exported out to us, so  
13 it might be a good idea to have it mixed.

14 And I'm sure someone like Steve Davis can get  
15 theirs, or Rich can accumulate all of theirs. As he  
16 said, there's other entities like that out there in the  
17 forest area, the pulp and paper area, I assume, and  
18 other areas.

19 MR. TRAPP: The more important question to me  
20 is, should that self-service generation be counted  
21 toward the goals, and if so, how do we go about  
22 establishing -- putting them a REC program? How do you  
23 as TECO identify how to administer RECs to them, or if  
24 we're going to a third-party entity to do it, how do we  
25 go about getting the RECs to those people so they can be

1 counted?

2 MR. ASHBURN: I think that's a really good  
3 question, and I think it also depends on whether you're  
4 going to go for a REC program or a deliver the energy  
5 program. I mean, if you go for this contract path  
6 approach, their contract path is internally to  
7 themselves. Do you count that or not? If you go to a  
8 REC program, then I assume there would be some process,  
9 just like we talked about with the solar, that they  
10 could acquire a REC for having produced it. The fact  
11 that they internally used it, they can then sell that  
12 REC to somebody who needs RECs.

13 MR. TRAPP: Well, again, it seems to me the  
14 economics on the customer side of the meter are  
15 different than the economics on the utility side of the  
16 meter, but they both contribute to the goals, all the  
17 goals we listed of environment, economic development,  
18 fuel diversity, and what have you. So again, I would  
19 entertain the thought of potentially including them in  
20 an RPS type goal counting system. I think if we don't,  
21 the burden is clearly on the utilities. You've got 1.39  
22 percent you can count.

23 MR. ASHBURN: No, I totally agree with you.

24 MR. TRAPP: It's a long way to 20.

25 MR. ASHBURN: I think if the technology

1       qualifies, as their waste heat currently does, I think  
2       that technology should count, or the RECs or the  
3       attributes associated with it. Whether it's used  
4       internally or sold out to a utility or somebody else, I  
5       think the generation itself should count and be  
6       available for use towards meeting the goals.

7               MR. COWART: My name is Ben Cowart, and I'm  
8       with the City of Tallahassee, and I would like to  
9       address your question about why should a third party  
10      participate in an RPS.

11             Having friends that are in the phosphate  
12      industry and having come out of the phosphate industry,  
13      I think that what we'll see is that these  
14      self-generators are going to be part of DEP's overall  
15      goal for reduction of emissions. And if we're looking  
16      at the state as whole in reducing our emissions and RPS  
17      is a part of that, then even if they return nothing to  
18      the grid, there should be some credits captured, because  
19      there's a liter of CO<sub>2</sub> or a gram of SO<sub>2</sub> that's not being  
20      emitted that they get no credit for, yet they're being  
21      ratched down and treated just like any other power  
22      boiler or utility that's out there, but they're being  
23      excluded from this because they don't return anything to  
24      the grid.

25             And I think that big picture needs to be

1 looked at, that they should get some kind of benefit.  
2 They should be able to acquire some kind of RECs and,  
3 you know, sell those, or be able to trade or do what  
4 they need, because we can't look at them separately.  
5 It's a big picture issue.

6 MR. ASHBURN: Bob, this is Bill Ashburn again.  
7 I have a related question to this, and maybe Ryan can  
8 help some. What is the measurement? Is it the gross  
9 output of the generator, or if there's a net use of the  
10 power for the generator to operate, say, a municipal  
11 solid waste operation, for the cranes and so forth, how  
12 is that measured around the country?

13 MR. KATOFSKY: Probably differently in  
14 different parts of the country.

15 MR. ASHBURN: What a shock.

16 MR. KATOFSKY: I would think, though, if you  
17 had internal consumption -- you know, say you had gross  
18 output at the generator terminals, but you could deliver  
19 X megawatt-hours either for internal use beyond what  
20 might be considered sort of the parasitics of the power  
21 plant itself, I would think you would measure it net of  
22 the internal consumption to make the plant run.

23 MR. ASHBURN: Right.

24 MR. KATOFSKY: So it's a net calculation one  
25 way or the other, I would guess.

1 MR. ASHBURN: So net of the use of the  
2 generator itself, whether it's internal pumps and all  
3 that kind of stuff.

4 MR. KATOFISKY: Yes. I haven't actually looked  
5 specifically at this issue, but I would suspect that  
6 would be the way that you would do it.

7 MR. TRAPP: And then again, how do you verify  
8 that?

9 MR. ASHBURN: Right, exactly.

10 MR. TRAPP: I mean, we regulate you guys.

11 MR. ASHBURN: Right. I've heard that.

12 MR. TRAPP: Who can get behind the meter and  
13 verify --

14 MR. ASHBURN: Well, as an example, for cogens,  
15 when we do our normal connections with them and do our  
16 avoided costs and all those things, we require a meter  
17 on their generator. And that's an issue that always  
18 comes up, where is the meter, is it ahead of or back of  
19 certain parasitic loads and so forth, and that's set up  
20 at the time it's all set up. But managing that is a  
21 problem over the years as, you know, people hook up the  
22 things ahead of or behind the meter, that we're  
23 measuring the output of the generator. And that's just  
24 a management issue or a contractual issue to maintain.

25 MR. BETHEA: Clay Bethea with Buckeye. We

1 produce biomass electricity now. Most of it is used --  
2 well, all of it is used internally. But if you do not  
3 include us in the RPS where we can sell our credits, the  
4 fear that I see is that you have a lot more demand on  
5 biomass. And as the demand goes up, the price goes up,  
6 and the RPS credits are going to help pay for that  
7 demand. And then you put us at a disadvantage, just  
8 because we invested that capital years ago and saw the  
9 advantage years ago.

10 So if anyone is generating energy and using it  
11 internally, well, that's energy they didn't have to get  
12 off the grid, and so they should be included, and you  
13 should be able to sell those credits, because at the end  
14 of the day, if you just look at north Florida and the  
15 general area of Tallahassee, there's a potential of  
16 3-1/2 million tons of biomass that's going to be  
17 required within the next five years if some of these  
18 plants come online, if everything you read in the  
19 newspaper.

20 You know, I keep hearing people say, "well,  
21 we're going to use the municipal biomass." There's not  
22 that much municipal biomass coming out of Tallahassee or  
23 anybody else, Orlando. So you're going to put a demand  
24 -- you know, you're trying to drive biomass use or  
25 renewables, so everybody is going to have to be included

1 so that as the market drives prices up, you don't drive  
2 everybody else out of business that was doing it  
3 beforehand.

4 MR. GRANIERE: Excuse me. Could I interject  
5 here on this, just for an effort to do something? Let  
6 me create a hypothetical, and then maybe we could sort  
7 of get at it, you know, all these ins and outs.

8 Suppose just for the sake of argument that the  
9 utilities and all of the excess met the renewable  
10 portfolio standard of whatever it was for that year.  
11 Then I would submit that the internally generated RECs  
12 are valueless within the state, and you could only sell  
13 them outside the state. So it seems to me that the only  
14 time that there's value for these internally generated  
15 RECs is when the utility or some responsible party has  
16 to buy them for compliance. Am I wrong there?

17 MR. BETHEA: I don't know.

18 MR. GRANIERE: It seems to me -- you know,  
19 it's sort of like the idea, the utilities generate, and  
20 they've come up with 150 RECs, and they've sold -- and  
21 they've bought excess energy at the retail rate, and  
22 they've come up with another 50 RECs, and all they need  
23 is 200 RECs for that month. Well, they've got their 200  
24 RECs. And all those internally generated RECs, I would  
25 say who would you sell them to? Nobody wants them.

1 MR. ZAMBO: Could I respond, Bob?

2 MR. GRANIERE: Sure.

3 MR. ZAMBO: Well, one thing I see is, there  
4 may be a situation where the utility wants RECs, but not  
5 energy. But it's true -- what you're saying is true of  
6 whether it's internally or whether it's sold. If a  
7 utility has no need for the RECs, they're not going to  
8 buy the power that the RECs are associated with, nor  
9 would they buy the RECs of self-use or self-generation.  
10 I would think the self-generation RECs may be more  
11 flexible, because they could be used -- they're  
12 unbundled, so to speak, from the actual flow of energy.

13 MR. GRANIERE: Just to respond -- Bob  
14 Graniere. Just to respond, Rich, you're absolutely  
15 right. And if you're able to sell those particular RECs  
16 on the national market or international market, well,  
17 good for you. And that's what I see.

18 MR. ZAMBO: But I'm not referring just to the  
19 national or international market. I'm referring to the  
20 Florida market.

21 MR. GRANIERE: Sure. Bob Graniere again.  
22 What I'm saying is that in the hypothetical I created,  
23 the demand for them in the Florida market would be zero  
24 unless they wanted to buy them to bank or something like  
25 that in the scenario that I put up.

1           MR. ZAMBO: But in your scenario, how do you  
2 distinguish the demand for the bundled RECs and the  
3 unbundled RECs? You must be making some assumptions. A  
4 REC is a REC, whether it comes with energy or whether it  
5 comes without energy, so I'm not sure what --

6           MR. GRANIERE: No. All I'm simply saying is  
7 that the responsible party has accumulated in some  
8 fashion all of the RECs that it needs without having to  
9 buy an unbundled REC from self-generation. I'm saying  
10 in that case, the only value that the unbundled REC from  
11 self-generation has is more than likely outside of the  
12 Florida market. However, if the responsible parties  
13 couldn't come up with enough RECs, then the unbundled  
14 REC from self-generation would have a value here in  
15 Florida.

16           MR. ZAMBO: And conversely, if the responsible  
17 party bought up all the unbundled RECs and no longer had  
18 a need for bundled RECs, those would have no value in  
19 the Florida market.

20           MR. GRANIERE: Well, actually -- Bob Graniere.  
21 What would happen then is that -- the answer would be  
22 that the unbundled RECs were more than sufficient to  
23 meet the portfolio standard, and that would say that  
24 self-generation by the people was more than enough to  
25 serve 20 percent of the load of the thing and has

1 actually displaced 20 percent of the load. And there is  
2 an interpretation that would say, yes, you've met your  
3 renewable portfolio standard under those criteria.

4 So I would think that in the grand scheme of  
5 things, which is exactly the criteria that would be used  
6 if the system that we're talking about was all PV,  
7 because basically, PV, most of it, at least when it's on  
8 houses and things, is for internal generation. And so  
9 as a result, the only thing that shows up on the grid  
10 would be the excess, or the excess of the excess,  
11 however you want to call it. So as a result, yeah,  
12 you're absolutely correct. But the point is that that's  
13 what it means.

14 MR. TRAPP: Bob, if I could just respond staff  
15 to staff here, I think you're right. I can't disagree  
16 with you. I think if you've met your goal, your  
17 renewables goal, then RECs may have a zero value. But  
18 RECs aren't the only thing in the game. You know, the  
19 actual -- the RECs are there because we don't think  
20 we're going to meet the goals, and they're to provide an  
21 incentive to build technology that will meet the goals  
22 and therefore cancel out the RECs.

23 But what have we done? I disagree with you.  
24 The self-service generator is contributing to the grid.  
25 It's called negawatts. And that generator is going to

1 be dispatched, quite frankly, by the retail rate. Those  
2 kilowatt-hours that are sent to the grid are going to be  
3 dispatched at the utility's avoided cost rate, or  
4 incremental cost rate.

5 So I guess the confusion I have with your  
6 hypothetical is that it starts with the assumption that  
7 we've met the goals, and I don't think we have.

8 MR. GRANIERE: Well -- Bob Graniere. I  
9 totally agree that I started with the assumption that we  
10 met the goals. But the only purpose of that assumption  
11 was to try to clarify the argument that was going on,  
12 which was what kind of value does a REC hold if the  
13 power is used for internal consumption, and that's the  
14 only thing I addressed. And what I addressed was that  
15 if no one needs those RECs, they're valueless.

16 MR. TRAPP: That's true. That's true.

17 MR. GRANIERE: That's all I said.

18 MR. TRAPP: That's true.

19 MR. KATOFISKY: Can I just jump in for just a  
20 second? Ryan Katofsky. I think this hypothetical is, I  
21 think, a little bit confusing, because the first  
22 question to answer is whether or not -- what are the  
23 eligibility criteria for basically having possession of  
24 a REC? So is behind-the-meter generation eligible or  
25 not? And then the market sets the price for RECs,

1       whether there's -- if there's too many RECs in the  
2       market, then the price goes down.

3               So I'm not sure -- and I think it's more of a  
4       fundamental question as to if you allow the RECs to be  
5       -- if you allow an existing behind-the-meter generator  
6       to have RECS and they have RECs that have value in the  
7       market; right?

8               MR. GRANIERE:   Bob Graniere once again.   All  
9       I'm simply saying is that I'm not presuming that the  
10      market is perfectly competitive and that it's all  
11      transparent and it's running back and forth and people  
12      are buying RECs instead of building things.   What I'm  
13      saying is that suppose there were bunch of people in  
14      Florida who decided, you know, it's in our best business  
15      interests to build this stuff, it's just in our best  
16      business interest to build this stuff.   And if they make  
17      that conclusion that it's in their best interests to  
18      build this stuff, then the people who do this stuff on  
19      their own are just doing it on their own.   There's not  
20      going to be any REC market in here for them.   So it's a  
21      business decision on their part too.

22              So what I'm saying is that you have an  
23      assumption in your thing too, which is that they're not  
24      going to come up with enough to meet it on their own.  
25      And I'm just saying, nice assumption, but I'm going to

1 take that one away and make my own assumption, which  
2 says, what happens if they do come up with enough to  
3 meet it on their own? That's all I'm doing.

4 MS. HARLOW: This is Judy. I'm not sure if  
5 this is on. Is it on?

6 This whole discussion, I got a little lost in  
7 the middle of it, frankly. But the point that came to  
8 my mind is, it seems like there's a lot of agreement  
9 that we want to include self-generation, we want to  
10 include behind-the-meter with small systems for  
11 customers, and how do you do it?

12 And it seems to me that that implies you have  
13 to have a REC system, because if you have to have a  
14 bundled product, I don't see how you can include  
15 self-generation. That implies an unbundled product. So  
16 is that the case, that you have to have a REC system in  
17 order to include self-generation, and if we went with  
18 conservation, even behind-the-meter conservation  
19 efforts?

20 MR. KATOFSKY: I don't know that it means you  
21 would have to have one, but I think it would be a fairly  
22 straight -- a more straightforward way to do the  
23 accounting if you did want to include all those  
24 different resources. But you wouldn't necessarily have  
25 to do it. Take the New York example again where they

1 just -- they created a separate tier for customer-side  
2 resources as part of the RPS.

3 MR. ASHBURN: Judy, I don't think you have to.  
4 I'm not sure it's both. But most of the people who are  
5 self-consuming their power behind their meter have the  
6 opportunity to sell us the power. You know, we'll do a  
7 buy-sell, or you can consume it behind your meter. So  
8 if there's something in the process that says it has to  
9 be a bundled product that we buy in order for them to  
10 get REC credits, they could easily contract with us to  
11 buy-sell, so that they would buy all their internal  
12 needs and sell us all their generation and not just use  
13 it behind the meter. I mean, that's an option, so  
14 that's why I don't think there's any incredible  
15 difference between self-generation behind the meter as  
16 far as REC value and having sold us the power as a REC.  
17 Essentially, it's the same thing.

18 MR. FUTRELL: Any more discussion on that  
19 topic?

20 Now I would like to move on to another  
21 question in Judy's list, alternative compliance payment,  
22 and I guess throw it out for discussion on. Is the idea  
23 of an alternative compliance payment essentially a  
24 method for a utility that's obligated to meet a goal to  
25 essentially not invest in renewables, depending upon the

1 price there?

2 And I think you had some comment in your  
3 slides, Ryan, about that. Is that effectively what an  
4 alternative compliance method is?

5 MR. KATOFSKY: I'm sorry. Say again.

6 MR. FUTRELL: Is it not simply a method to  
7 avoid essentially investing in renewables?

8 MR. KATOFSKY: I don't see an alternative  
9 compliance mechanism or payment as a way to avoid  
10 investing in renewables. I think the main purpose is to  
11 help create the demand that will then encourage the  
12 investment. If you know that the alternative compliance  
13 payment is \$50 a megawatt-hour, then that gives a  
14 generator confidence that there is a market for his  
15 output where the REC will be worth up to that amount.  
16 So that's main motivation for having an alternative  
17 compliance payment, so it creates that certainty for the  
18 investor in the project.

19 And then the flip side of that I think that's  
20 equally important is the issue of cost control. So it's  
21 a safety value, if you will, or it's a ratepayer  
22 protection plan that ensures that even if 100 percent of  
23 the RPS were met with alternative compliance payments,  
24 it would only mean a small percentage rate impact or  
25 cost impact on a customer's bill.

1           So those are the two main purposes. I don't  
2 see it as a way of avoiding compliance. If there were  
3 weak enforcement provisions and, you know, the  
4 alternative compliance payment were very close to the  
5 market price, say, you know, some obligated parties may  
6 just say, "Well, it's just easier to pay the penalty,  
7 because there's not much financial difference, and we  
8 just don't have to worry about doing all that  
9 contracting and all that other stuff we need to actually  
10 comply. We will just pay the penalty." So that is a  
11 possible outcome.

12           Now, if that were happening time and again,  
13 then you would have to take a look at the program and  
14 say, "Is this doing what we want it to do?"

15           MS. HARLOW: Ryan, I think you said in your  
16 talk earlier that in Massachusetts, you had seen the  
17 movement away from the compliance payments and toward  
18 actual renewables, and I wondered if you would -- I  
19 guess you were talking about the compliance payments  
20 giving renewables certainty, and that gave them the  
21 certainty that they would receive a certain amount of  
22 revenue. Is that the reason they're moving in  
23 Massachusetts? And also, have you seen that occurring  
24 in other states that had RPSs that had an alternate  
25 compliance payment?

1 MR. KATOFSKY: The best example -- in  
2 Massachusetts, we actually did have the case where the  
3 obligated parties were paying a substantial portion of  
4 their obligation with alternative compliance payments.

5 In Texas, you've never had that happen because  
6 they've had RECs in excess of their requirements, so a  
7 -- you know, the \$50 a megawatt-hour cap in Texas, or  
8 200 percent of the actual price. The actual price for  
9 RECs in Texas is around 10 to \$15 a megawatt-hour, so  
10 quite reasonable.

11 In Massachusetts, the price for RECs basically  
12 bumps up against the alternative compliance payment  
13 because they're supply constrained. So that has sent  
14 that signal that there is a market for RECs that is --  
15 you know, that is close to that alternative compliance  
16 payment. You know, if you think about it in rough  
17 terms, a \$50 alternative compliance payment roughly  
18 doubles the revenue to a generator, roughly, you know,  
19 thinking of a four or five cent wholesale market. So  
20 that does send a pretty strong signal.

21 The challenge in Massachusetts was really one  
22 of getting projects built in a timely fashion, which is  
23 why they fell behind, essentially, on their compliance.  
24 And it's now three or four years later, and they're  
25 starting to catch up, effectively. But having that

1 compliance mechanism in place kept that signal in the  
2 market that, you know, eventually, if we build this  
3 stuff, we know it's going to be worth -- you know, that  
4 REC is going to be lucrative enough that it's going to  
5 make our project viable.

6 So it has done what it was supposed to do. I  
7 think if they were still in a situation where they were  
8 falling further and further behind, then they would have  
9 to start taking a look at what's going on. But since  
10 they're actually in a situation now where they're coming  
11 into compliance with actual RECs as opposed to the  
12 alternative payments, then that's a signal, you know,  
13 that something is working.

14 MS. HARLOW: I keep going back to the idea of  
15 certainty for the renewable generators, because if  
16 you're somebody that's happy with the idea of an RPS,  
17 Florida is kind of behind the curve, because we're  
18 behind 26 states. So in a sense, we're competing with  
19 those other states for those renewable generators. So I  
20 think it's important if we do end up with an RPS that we  
21 build some kind of certainty into the market so they  
22 know if I come in, if I put my foot this market, I can  
23 stay in it.

24 And that was one of the points we've had  
25 stressed in earlier workshops by the PV people, is that

1 we have limited capacity to create these systems right  
2 now, and so we're going to put our efforts where we get  
3 the biggest bang for our buck and we have that  
4 certainty.

5 MR. KATOFSKY: Right. There's a couple of  
6 interesting dynamics taking place, particularly in the  
7 wind and solar markets in the last two or three years,  
8 which is that the demand for the products globally has  
9 been so high that there's basically pent-up demand in  
10 the market. You know, the German solar program is so  
11 aggressive, and even states like New Jersey that had a  
12 very aggressive rebate program couldn't get product.

13 So that's a -- I view that as somewhat  
14 temporary. So if there is sustained demand for this  
15 stuff, then the capacity will be there eventually. So  
16 there are some short-term -- call them growing pains, if  
17 you will, related to product supply. And the same can  
18 be said for the wind turbine market.

19 But in general, you're right. It's important  
20 to set the rules and the compliance mechanisms in such a  
21 way that if someone comes, you know, they'll want to  
22 come here and build here, and they can compare that  
23 opportunity in Florida to other opportunities they have  
24 around the country.

25 MR. TRAPP: I want to throw one at the

1 utilities. With regard to the alternative compliance  
2 measure, here's the problem I have with it. I don't  
3 know what to do with the money. They collect all this  
4 money. The PSC is going to go build renewables, or  
5 they're going to -- so I'm going to do a Bob Graniere on  
6 you. I'm going to give you a hypothetical.

7           Instead of calling it an alternative  
8 compliance measure, why don't we call it a cap and  
9 penalty system? We set a cap. If you spend that much  
10 on renewables, you're forgiven if you don't meet the  
11 goals. If you don't, we come after your return on  
12 equity by a couple of hundred basis points. That's more  
13 workable from a regulatory sense, in my view, so I throw  
14 that hypothetical to you and let you comment on it.

15           MS. CLARK: I think Bob McGee wanted to  
16 respond to that.

17           MR. MCGEE: And I appreciate you bringing that  
18 up, the cap piece of it, because I wanted to address  
19 that.

20           Let me wind back, though, before I answer that  
21 and answer a question that Mark had earlier, and that  
22 was, would an alternative compliance payment be a way to  
23 avoid investing in renewable energy. And I think it  
24 would be if those dollars, if those ACP dollars were not  
25 invested in some renewable projects, which addresses

1 your question, what do you do with those dollars. If  
2 you do something with those dollars that later helps the  
3 renewable industry in some way that the State deems  
4 appropriate, it could be -- you could view an ACP  
5 essentially as a different form of a REC.

6 And hang with me here for just a second. A  
7 REC is something that you purchase or you pay for the  
8 attribute after it's generated. An ACP is something  
9 that you pay for in compliance with a renewable  
10 portfolio standard which, if invested properly and  
11 efficiently, would benefit or create some renewable  
12 energy in the future. Now, the timing is a little bit  
13 different, but it's another way to view it.

14 So in my mind, those things are not  
15 incompatible, and they both go towards compliance, and  
16 then neither one trigger a penalty, because they're both  
17 meeting the goal, essentially the long-term goal of  
18 helping the renewable industry in the context of an RPS,  
19 assuming that an RPS is something that is desirable.

20 The other thing was Ryan's comment earlier  
21 about the main point of an ACP, and that is to create  
22 some certainty of price in the REC market, and I agree  
23 with that particular position. That's what an ACP is  
24 for. And given that motivation, what do you want to do  
25 with an ACP? You want it to be high enough that

1 somebody can fit some real projects in underneath  
2 whatever that number is. But that is counter to the  
3 goal of not wanting to raise consumers' rates too much.  
4 So you've really got these two conflicting goals going  
5 on, and you're trying to solve them with one particular  
6 mechanism called an ACP we're talking about here.

7 I would suggest that you may want to use an  
8 ACP in order to set the cap and make the cap -- or make  
9 enough head room for real projects to get done there,  
10 but also implement an expense cap, which is similar to  
11 what Barry Moline had floated early on, which was -- I  
12 think he labeled it as a revenue cap. I'll call it an  
13 expense cap, the total amount of expenses made by a  
14 utility in compliance with the RPS might not be any more  
15 than some percentage.

16 Now, I'm going to differ with something that  
17 Ryan said earlier. He said that an ACP works well as a  
18 cost control, that it's a ratepayer protection plan, and  
19 even if all the renewable portfolio standard was met by  
20 an ACP, you would have a small percentage increase in  
21 the customer's bill.

22 Now, let me give you an example, and I'm get  
23 into some numbers here. Assuming a 20 percent RPS and a  
24 five cent ACP, that's a one cent per kilowatt-hour  
25 impact on all your customers' bills, one cent per

1 kilowatt-hour. And let's assume it's a ten cent per  
2 kilowatt-hour average cost we're looking at. That's a  
3 10 percent increase in the bill. That's much higher  
4 than the number that we have talked about earlier as a  
5 potential expense cap at 1 percent.

6 So my point there is simply, there is a  
7 scenario that says if you set your ACP high enough, it's  
8 not a very effective expense cap or revenue cap or rate  
9 cap. You may need to have both of those mechanisms  
10 working there and interacting with each other.

11 MR. TRAPP: I'm still not sure you've answered  
12 what I do with the money.

13 MR. MCGEE: One scenario would have the money  
14 going to the existing mechanisms that are in the state  
15 for incenting renewables right now. I believe the PV  
16 incentive was funded at 2-1/2 million last year. I  
17 think in Massachusetts, in one year there was a large  
18 number of dollars, much higher than 2-1/2 million, that  
19 came through the ACP. And certainly you wouldn't want  
20 to design one to funnel that much money through it, but  
21 I think it could be used effectively in that way,  
22 because right now it's coming out of general revenue, I  
23 assume, the state budget.

24 MR. TRAPP: You got outside the PSC  
25 boundaries. My question was, what can the PSC do with

1 the money?

2 MR. MCGEE: I'm not sure I have an answer for  
3 that.

4 MR. TRAPP: Again, I hear what you're saying,  
5 and I don't disagree with you, but I think again, I'm  
6 trying to determine what as a staff member of the PSC I  
7 can, with the authority I've been granted, recommend a  
8 program that will work, and I don't know what to do with  
9 the money under the ACP. It sounds to me like I've got  
10 to go outside the agency to do what you want to do or  
11 are proposing. And if that's true, that's fine. If  
12 that's the only alternative I've got, that's fine.

13 But again, what if we just penalize you 200  
14 basis points if you don't meet the spending target?

15 MS. CLARK: Well, I think John Burnett may  
16 want to comment on the authority --

17 MR. BURNETT: You got my attention with basis  
18 points, Bob. You brought me back to the table. John  
19 Burnett on behalf of Progress Energy Florida.

20 Bob, your question is a good one. Under the  
21 current jurisdiction of the Commission, I guess the  
22 operative question is to back up and say, does the  
23 Commission have the authority at all to have a REC  
24 system or an alternative compliance system at this  
25 point? That's, I think, the first threshold question.

1 That would largely drive, I think, the answer to your  
2 question under the current paradigm as we sit here today  
3 with the law right now.

4 If an RPS standard is put into effect by the  
5 Legislature, I would hope that the Commission would get  
6 some guidance from the legislative body as well as to  
7 what the Commission should do, how they should do it to  
8 some degree, and what they should do with the funds. I  
9 would think a legislative purpose and objective would be  
10 set forward that would identify the policies and  
11 analysis behind why the RPS is there in the first place  
12 and the objectives that it's made to accomplish. I  
13 think that would tell us and the Commission a lot with  
14 how the money should be done and would drive a lot of  
15 the questions we're talking about here today.

16 But to your point, under the current paradigm  
17 and the current jurisdiction the Commission has, I'm not  
18 sure that they could do it at all, because I think that  
19 would be a de facto penalty which may be covered by  
20 statute already. And I don't know if the Commission  
21 could hit a utility as a basis point penalty under the  
22 existing statutes for buying something over avoided  
23 cost. In my opinion, that would exceed the Commission's  
24 jurisdiction.

25 MS. HERIG: I just wanted to say that there

1 are analyses floating around in other states in which  
2 they've said, okay, we do not want to have more than a  
3 1 percent rate impact and look at the term of the RPS  
4 implementation and then figure out what the alternative  
5 compliance penalty is relative to not exceeding that  
6 rate impact. So it is tied together. And other states  
7 have also used that money to do community projects and  
8 low income projects, you know, but keep it in the  
9 renewable deployment still.

10 MR. KATOFSKY: Ryan Katofsky. And there are a  
11 number of states that already have existing mechanisms  
12 for collecting what they call system benefits charges.  
13 So you may not have it here, but other states already  
14 have, you know, sort of -- let's call them obvious  
15 places where those ACP funds might go.

16 And just on a slightly humorous side,  
17 hopefully, where I live, unfortunately, a one cent a  
18 kilowatt-hour change is small, so --

19 MR. TRAPP: Humorous for us, maybe not for  
20 you.

21 MR. ZAMBO: Could I follow up with a few  
22 comments? As far as your statutory authority, I think  
23 you've got it in 366.92, which gives you the authority  
24 to establish goals. It would be foolish to assume you  
25 could establish goals but couldn't enforce them. So I

1 would say in light of that statutory provision, plus the  
2 general legislative mandate to encourage renewables, it  
3 seems like those two things would work together.

4 And the other thing is, I'm not sure it's  
5 foregone conclusion that this is going to cost money.  
6 There may be savings. I mean, renewable energy,  
7 bringing renewable energy in may reduce fuel volatility,  
8 may reduce fuel costs, may reduce the need for utilities  
9 to build new power plants. I mean, I keep hearing that  
10 it's above avoided cost, but I don't know that there's  
11 evidence. To me, it's not de facto that this is going  
12 to be higher cost. I think as the fellow from the  
13 Public Counsel said when he was here last month at the  
14 workshop, he said the risk is not in building  
15 renewables, the risk is in not building renewables.

16 And I think the value -- that needs to be  
17 quantified. We're talking about caps. I think that  
18 needs to be quantified and maybe used as an offset to  
19 those caps.

20 That's all I have. Thank you.

21 MR. FUTRELL: Ryan, I've got a question, a  
22 question from your presentation. You were talking about  
23 penalties, and you said in some cases, renewable  
24 generators may be subject to penalties. And is that  
25 subject to the REC tracking administrator providing

1 penalties, or does the State PSC in that?

2 MR. KATOFISKY: I would think it would be  
3 whoever is responsible for the actual RPS administration  
4 as opposed to the tracking function. They would be the  
5 people that would have the discretion to levy the  
6 penalties if that was appropriate. So the tracking  
7 function is separate from who has responsibility for  
8 actual compliance, because one is just basically an  
9 accounting system, and the other is actually providing  
10 the enforcement. So it would be whoever had the  
11 authority to do the enforcement, and I don't think that  
12 would be the -- you know, if there was a separate entity  
13 that was managing the tracking system.

14 Take a case where -- most of these tracking  
15 systems are multistate tracking systems, so there's no  
16 -- ISO New England doesn't do the enforcement of RPS,  
17 because each one of those is done at the individual  
18 state level. So it would be the people at the state  
19 level with responsibility for implementing the RPS that  
20 would have the ability to assess penalties.

21 MR. FUTRELL: So in most of those cases, the  
22 enacting legislation has given the state body authority  
23 over these types of generators in this particular  
24 instance.

25 MR. KATOFISKY: That's right. So if there was

1 RPS legislation, it would say, you know, that the fines  
2 would be this, this, and this, and under these  
3 circumstances, and it may define an appeal process or  
4 direct the agency to develop one or whatever.

5 Again, I don't think there's a lot of  
6 precedent for actually assessing penalties. I haven't  
7 seen a lot of that yet. I think either the program is  
8 not far enough along, or there has been a preference for  
9 taking more of a collaborative approach to addressing  
10 any problems that may exist.

11 MR. FUTRELL: As far as assessing where the --  
12 in the case of an alternative compliance payment or even  
13 penalties, where those levels are, are there usually  
14 provisions among the states to have some regular  
15 assessment of where that level should be to adjust to  
16 how the REC market is performing?

17 MR. KATOFSKY: Yes. I would say generally  
18 speaking, the legislation that creates RPS includes  
19 periodic review and allows for that adjustment to occur.  
20 And I don't know whether they're specific enough that  
21 they say every four years you have to address the issue  
22 of how much the ACP should be or if they're more  
23 general, saying every X number of years, you need to  
24 assess how the program is doing and make some  
25 adjustments.

1 I know that in New Jersey, they've had  
2 recently a lot of work on the solar REC market where  
3 they have made changes to that solar REC ACP, just in  
4 the last couple of months, I think, actually. So  
5 they've actually gone and revisited that cap, and  
6 they've changed it.

7 MR. GRANIERE: Mark? Just one question for  
8 you, Ryan. Bob Graniere. Given the uncertainty  
9 involved in these things -- and let us suppose that  
10 there is a fairly substantial RPS. Would it be better,  
11 in your opinion, to have a review after a preset number  
12 of years, or alternatively, to apply continuous  
13 monitoring and evaluation, especially in the early  
14 years?

15 MR. KATOFSKY: That's not something I've  
16 necessarily thought about before. I would think there  
17 would certainly be continuous monitoring, you know,  
18 annual reporting and so on. What the triggers would be  
19 for conducting -- say, opening up a new docket or what  
20 have you to actually consider making changes, typically  
21 that's specified in -- you know, there is a  
22 predetermined period when that's going to occur. That's  
23 my understanding.

24 Would you want to make that more frequent in  
25 the early years, and then maybe require some triggers in

1 the out years, you know, as long as there are -- you  
2 know, if there haven't been any penalties levied or any  
3 ACPs paid in four years, then that suggests that  
4 everything seems to be functioning, and you don't have  
5 to, you know, do a significant review. I think that  
6 would just be up to you to decide what you thought was  
7 most appropriate.

8 MR. GRANIERE: Well, what I'm -- Bob Graniere  
9 once again. What I'm thinking of here is that being a  
10 traditionally regulated state, and also having reporting  
11 requirements like we do in other areas, conservation,  
12 energy efficiency, things like that, and we have annual  
13 reviews for cost recovery, it seems to me that in states  
14 with that particular set of mechanisms already in place,  
15 that continuous review and evaluation of what has  
16 transpired in the prior year, all of those mechanisms  
17 are already in place. And I would think that -- why  
18 would it not be advantageous to use those mechanisms  
19 rather than say we'll go back and see it after five  
20 years or four years or three years.

21 MR. KATOFSKY: Seems reasonable to me.

22 MR. GRANIERE: Thank you.

23 MR. KATOFSKY: If you wanted to build it into  
24 your existing processes, I don't see why that wouldn't  
25 make sense.

1 MS. HARLOW: Do you need a review like that if  
2 you've got something -- I forget which state you said,  
3 but the ACP kind of floated with the REC price over  
4 time, and it was either this many dollars per megawatt  
5 or it was 200 times the REC price. So that's to me a  
6 self-correcting mechanism. But I guess you would still  
7 need a review process of the RPS for other aspects of  
8 it.

9 MR. KATOFSKY: Right. There's many aspects to  
10 the RPS. And think -- that particular example is Texas  
11 where they have the 200 percent or \$50 cap. So for the  
12 Texas example, they haven't had to do reviews because  
13 their targets were not being met. They remain ahead of  
14 their targets, frankly, but they've made reviews for  
15 other -- they have reviews for other reasons. Maybe  
16 they want to reconsider the kinds of resources that are  
17 eligible.

18 A good example, when they actually -- or if  
19 they're consistently ahead of targets, does that mean  
20 they should be raising their targets? And that's in  
21 fact what they did. And when they did that, one of the  
22 things they addressed in that particular case was, well,  
23 all they were getting was wind, which is not necessarily  
24 a bad thing. But when they increased the target, I  
25 think the original target was 2,000 megawatts by 2009 or

1 something like that, and now it's 5,000 megawatts by --  
2 I think it's 2015, but don't quote me on that. But what  
3 they did in the process of adjusting the targets is,  
4 they also said, "Well, we are only getting wind power,  
5 and we want to encourage some other forms of generation  
6 in the state."

7 So even though multiple other forms of  
8 generation are eligible, they weren't getting any it, so  
9 as part of the adjustment to the target, they said,  
10 "Well, we want 500 megawatts of the target to be set  
11 aside for anything but wind." So that was an adjustment  
12 they made to the RPS in response to what they were  
13 seeing in the market.

14 And it wasn't because the RPS wasn't working,  
15 and it wasn't because the costs were excessive. It was  
16 just a decision that they made as part of that  
17 adjustment to create essentially a carve-out for  
18 non-wind technology. So it was just a response to an  
19 observed trend in the functioning of their RPS.

20 MS. HARLOW: You said before they redesigned  
21 in Texas, they were getting all one resource, and that  
22 was another thing I was wondering about. If you didn't  
23 have multipliers or some kind of a tiered approach and  
24 you just kind of let it go, how would you -- are there  
25 other mechanisms to encourage certain types of resources

1 to be developed? Because some resources either have a  
2 high capital cost, or for whatever reason you can't get  
3 them, or they have a low capacity factor. I'm just  
4 wondering, how do you get those resources without a  
5 multiplier or a tiered goal approach?

6 MR. KATOFSKY: Right. You know, one of the --  
7 I guess if you sort of think of it in its purest sense,  
8 an RPS is meant to be a least cost way of achieving  
9 renewable generation, and you let the market figure out  
10 what is that mix that is going to give us the least  
11 cost. If you have other things you want to promote,  
12 then you can create multipliers, tiers, set-asides,  
13 different alternative compliance payments for different  
14 technologies or different resources.

15 But what you do tend to see is, different  
16 parts of the country tend to be getting different mixes  
17 of resources. The Northeast is getting a fair bit of  
18 biomass and not that much wind. New York is getting  
19 probably more of a mix of things. There's some good  
20 wind resources in parts of the state, and in other parts  
21 of the state there's good biomass resources. And in  
22 Texas, it has been primarily wind. California is  
23 getting a mix. They've actually gotten some very large  
24 contracts signed on solar thermal electric in  
25 California.

1           So you will see regional differences based on  
2           the resources in terms of what's cost-effective to build  
3           or easier to site, or whatever the reasons are for  
4           people choosing one resource over another.

5           So again, you know, if you wanted to promote  
6           one particular technology, then you would have to be  
7           explicit about it. Otherwise, you know, the idea is to  
8           let the market sort it out, for lack of a better term.

9           MR. FUTRELL: Let's talk about the idea of  
10          banking RECs as a method of compliance. Is it typically  
11          allowed to go up to about 12 months, is what we see, or  
12          is there a typical method that's out there for allowing  
13          banking to go on?

14          MR. KATOFSKY: I'm not sure what's typical,  
15          but again, I think the banking period is relatively  
16          short. I don't know of any that are out more than three  
17          years. So again, there's -- I don't know that there's  
18          any magic formula for determining what that appropriate  
19          banking period is.

20          One thing I will say about banking is, if you  
21          think about supply -- let's say there were no banking  
22          whatsoever, so you think of supply and demand curves for  
23          RECs. When the supply -- when the demand is met in any  
24          given year, that incremental REC has almost no value  
25          whatsoever if there's no banking provisions.

1           Conversely, if you don't meet enough of -- if  
2 you don't have enough RECs, then that last REC will go  
3 right up to whatever the maximum allowable price is. So  
4 banking is a way to smooth out that marketplace and  
5 allow for sort of more -- you know, essentially cost  
6 averaged REC pricing. So it is an interesting and I  
7 think a valuable tool to consider.

8           MR. GRANIERE: Mark, if I could ask the  
9 responsible parties to -- Bob Graniere. I'm on now.  
10 Bob Graniere. If I could ask the responsible parties or  
11 who may be the responsible parties, what are some of the  
12 things that you prefer in terms of the questions that  
13 we've been asking?

14           Right now I'm hearing what Ryan thinks, and I  
15 certainly know what I think, but I really don't know  
16 what you think. So is anybody willing to talk about  
17 some of the things? You know, do they prefer continuous  
18 monitoring, do you prefer safety valves, do you  
19 prefer -- you know, what do you prefer? Or are you  
20 preferring anything, and, boy, I've got a blank check.  
21 I would be happy as could be on that one.

22           MS. CLARK: You know, Bob, we are actually  
23 learning along with the staff and appreciate these  
24 workshops. And with respect to the specific issues, we  
25 will respond in our post-hearing comments.

1           But as you've heard from the people who have  
2 made comments today, you know, we are looking at the  
3 idea of an ACP, the notion of an expense cap, that you  
4 do need those safety valves, what are the -- how do you  
5 set the goal, I mean, what are you trying to achieve by  
6 that? We've provided you our thoughts in post-hearing  
7 comments already, and we will be prepared to do that  
8 here.

9           MR. GRANIERE: Bob Graniere once again. All  
10 I'm just thinking about is that this particular workshop  
11 was on compliance and enforcement, and that sort of  
12 moves us past the setting of the goal. You know,  
13 whatever the number is, that's what the number is. You  
14 know, whatever those things are, that's what they are.  
15 And we could start this discussion from, we have one of  
16 these things, how would we comply with it, how would we  
17 enforce it, and that's what I'm trying to think about.

18           You know, I've heard some stuff about RECs and  
19 will RECs be the primary means of compliance. We've  
20 heard alternatively that maybe the bundled contract path  
21 would be the primary means of compliance, or  
22 alternatively, whether the primary means of compliance  
23 is the utilities building and owning the renewables.  
24 We've heard all of these options and things, but what I  
25 haven't heard and I don't think anybody has heard is any

1 sort of leanings on the part of the responsible parties  
2 for what their preferences are.

3 MS. CLARK: If I can just back up a little.  
4 You're indicating how you would do compliance and  
5 enforcement is not somehow tied to how you would set the  
6 goal. I would suggest to you that what you would do as  
7 far as compliance and enforcement has a great deal to do  
8 with how you set the goal. As Judy has said, is it  
9 aspirational, is it specific, how soon does it have to  
10 be met, what is it going to include? So, you know, your  
11 initial decision on that will influence all these --  
12 responses to all these factors in an RPS.

13 MR. GRANIERE: Bob Graniere once again. I  
14 totally agree with you that there is a tie between the  
15 two. So I guess the question that I would ask is, if I  
16 were to find -- if you were to offer what your preferred  
17 compliance and enforcement was, then I can backward  
18 induct, so to speak, into what would you like to see the  
19 goal look like and whether it's mandatory or  
20 aspirational, all that stuff you talked about.

21 So basically, what I'm saying is that, you  
22 know, if you'll give me the back end, I could backward  
23 induct. If you'll give me the front end, I can forward  
24 induct. But if you don't give me any end, I'm kind of  
25 stuck.

1 MR. TRAPP: I think staff is very interested  
2 in, you know, in what your positions may be on all of  
3 these issues. And I know that we're certainly getting  
4 an education here too, but at some point in time, we are  
5 going to have to turn to some kind of specific  
6 proposals.

7 But before we do, let me ask you -- there are  
8 still some questions here on the page we may want to go  
9 through, and I think we need to get through that. I  
10 would like for you to be thinking about what kind of  
11 additional education we might need to get into in our  
12 next workshop, because I think we have scheduled one,  
13 another get-together in November. Maybe that's the time  
14 we want to begin to explore some brass tacks.

15 I know that we have been working with Bob  
16 McGee at Gulf on an example that he very graciously  
17 provided in response to a question from the last  
18 workshop with respect to multipliers, and I know the  
19 area of multipliers has been touched on today, but not  
20 in any great depth. And I think staff was thinking  
21 about perhaps getting into that a little bit more, the  
22 impact of multipliers on REC pricing, incentives, and  
23 that type of thing. But should we include in the  
24 program next time brass tacks?

25 MS. CLARK: You mean the actual elements of

1 how we would design a program?

2 MR. TRAPP: Yeah. Are y'all at the point of  
3 construction?

4 MS. CLARK: Well, we have provided you in  
5 previous comments some of our thoughts on additional  
6 education on the various subjects, and I know that  
7 you're putting together a list of existing renewables.  
8 You know, I think that would be -- to the extent we get  
9 down to more detail, we would be prepared to respond to  
10 that and provide you our ideas as well.

11 MR. TRAPP: Thanks for the offer. I guess  
12 we'll work on a schedule.

13 MR. FUTRELL: Let's talk about if anybody has  
14 had any thoughts on the flexibility measures Judy had  
15 mentioned there. One of them was a true-up period,  
16 which as I understand it is allowing for some months  
17 possibly after the deadline, for example, an annual goal  
18 period, to allow for there to be some true-up. Does  
19 have been have any thoughts about that as a potential  
20 mechanism?

21 MS. CLARK: I think one of the things we  
22 talked about is maybe looking at it over a several-year  
23 period, because you might have one year that you meet or  
24 exceed your goal and one where you don't, and the  
25 thought was to do some averaging over some period of

1 time.

2 MR. TRAPP: I think that may be part of what  
3 Bob might be getting to. In your thinking -- Bob Trapp,  
4 staff. In your thinking, are you thinking about annual  
5 goals that have to be met, or are you thinking about,  
6 you know, period goals, in three to five years we would  
7 come to it and say, "Here we are." What kind of  
8 approach?

9 MS. CLARK: What we talked about early on in  
10 -- my recollection is, in one of these workshops, we  
11 talked about you would do it similar to what you do with  
12 conservation goals. You would provide annual reporting,  
13 but you would do some review and readjustment on a  
14 periodic basis. That could be three or five years or  
15 some basis like that, so you get an idea of what the  
16 trends are, and do you need to revisit those things.  
17 But on a yearly basis, you would know what was  
18 happening.

19 MR. TRAPP: Right. I would certainly  
20 appreciate that. I do recall, though, that the  
21 legislation on the FEECA goals was fairly broad with  
22 respect to its ordering. It said, "Commission, you set  
23 goals. Utilities, you go do programs." Here I think  
24 the challenge we're faced with is 20 percent, so I'm  
25 looking for some guidance on how to reconcile the

1           absoluteness of that 20 percent.

2                   MS. CLARK: I think, Bob, you talked about  
3           that before, and that was -- as I recall, one of the  
4           things you put out there was the notion of, you know, an  
5           aspirational goal of the 20 percent, but then when you  
6           look as you do a more near term goal, you would do an  
7           assessment of what you thought was available in that  
8           term, near term, and set the goal in that way. And it  
9           would seem to me that that sort of addresses how much  
10          you might use in an alternative compliance mechanism.

11                   MR. MOLINE: Bob, Barry Moline. There's a  
12          sort of balancing act in your question that is -- we've  
13          heard 20 percent, or we know we have 20 percent as a  
14          target. We don't have a time frame for it. And the  
15          balance for the time frame is how much is available, and  
16          how much is available depends on whether we include  
17          efficiency along with renewables. So there's multiple  
18          questions or multiple variables in the equation.

19                   But to answer one specific question that you  
20          had, we would prefer -- I don't know what we call them,  
21          you know, bins or, you know, a goal, a five-year goal  
22          and a 10-year goal and a 15-year goal or something like  
23          that as opposed to an annual incremental goal, because  
24          that allows for some flexibility and timing of bringing  
25          resources on, just to give you one little piece of an

1 opinion, since you were asking, Bob.

2 MR. LEWIS: I'm Roger Lewis from Lakeland  
3 Electric. And just to put this in the most simplistic  
4 of terms, if we try to do a lot in a short time frame,  
5 the cost is going to go like this (indicating). But if  
6 we take our time line and we spread it out a little bit,  
7 the costs are more reasonable. And I've heard  
8 discussions about a 1 percent cost cap for the consumer.  
9 And if we implement a 20 percent RPS, given the  
10 technologies that are available today, over a short time  
11 period, we're going to blow through that ceiling in no  
12 time at all.

13 MR. TRAPP: We also haven't talked about cost  
14 recovery? Do y'all want cost recovery? We don't have  
15 jurisdiction over the munis and co-ops, but do the IOUs  
16 want cost recovery?

17 MS. CLARK: I think we have answered that  
18 already in some of our comments. Yes. And another  
19 aspect of that would be transparency to the customers so  
20 they understand their contribution to this RPS standard.

21 MR. TRAPP: Do you have a rate case coming up?

22 MS. CLARK: Bob, we have looked at various  
23 ways of doing that, and one of the things we thought  
24 about is the use of existing cost recovery clauses or  
25 something similar to that. I think that helps in

1 encouraging the renewable resources in much the same way  
2 that cost recovery clauses for purchased power and  
3 conservation I think have that incentive aspect to them.

4 MR. BURNETT: Bob, may I ask a question? I'm  
5 backing up just one second. John Burnett, Progress  
6 Energy.

7 Bob, you said something earlier. You said the  
8 absoluteness of the 20 percent goal. I guess I want to  
9 throw out a question. Is it the staff's position or I  
10 guess anyone's position that the PSC is mandated as we  
11 sit here today to enact a 20 percent RPS?

12 MR. TRAPP: I'm not the PSC. I'm just staff.

13 MR. BURNETT: Well, I understand, but --

14 MR. TRAPP: You know, I'm nont mandated to do  
15 anything, except we're trying to educate ourselves here  
16 and come up with a program that, you know, meets some of  
17 the desires that have been put in place before us. I  
18 don't know --

19 MR. BURNETT: I think --

20 MR. TRAPP: I'm not a lawyer, but let me give  
21 you a response. The direction that we got from the  
22 Governor was a request for the Public Service Commission  
23 go look at this, and it had numbers, 20 percent, and  
24 some other things in it. So I think certainly that's  
25 the target which we're framing our discussions around,

1 but I don't know that anything is cast in concrete, and  
2 we certainly have room for, you know, rational  
3 discussion and decision-making here. And ultimately,  
4 staff's role in this, as you know, we'll have to put  
5 together some kind of recommendation for someone and  
6 take our best shot.

7 MR. BURNETT: And I ask that question really  
8 not to be cute, but it really drives the process. If  
9 we're saying 20 percent is absolute, there's no budging,  
10 that's largely, in my opinion, going to drive the  
11 answers to every single question, you know, you and Bob  
12 and everyone else asked today. It's like, "We've got a  
13 number. How do we get to it?"

14 If it's not absolute and we have goals, we  
15 just have a goal out there, an objective, if our  
16 objective is to do X, let's say -- I'm going to throw  
17 one out in air. Our objective is go reduce greenhouse  
18 gas emissions. If we say that's our objective, it's not  
19 tied to a number, but there's a goal out there, I may  
20 get to that in a different way.

21 So what is preventing me from providing, I  
22 think, meaningful input on the table is the ability to  
23 come up here and say, "What exactly are we doing? What  
24 is our target bogey?" I mean, in a military state of  
25 mind like I have, I start with my mission, take hill,

1 and if I'm going to go take the hill, then I figure out  
2 how I'm going to do it. I can't get my arms around what  
3 my mission is.

4 MR. TRAPP: Well, I can only express my own  
5 personal belief. You know, the military charge I see, I  
6 feel strongly motivated by meeting a 20 percent goal,  
7 so --

8 MR. BURNETT: Understood. And in that  
9 framework, I think the answer to that question would be  
10 what do you do. If you set that goal, you have to ask  
11 yourself how can that be obtained within the current  
12 jurisdiction that the Commission has under all of the  
13 direction or all the power that the Commission has been  
14 granted by the Legislature under the existing statutes,  
15 what can I do to get the utilities there.

16 And if that's the case, I would probably say  
17 you would want to have a tiered approach. You would  
18 want to let the market talk and speak and the available  
19 resources speak, and you would get together an analysis  
20 and say right now we're after 2 percent, so maybe we see  
21 where we're at in five years and ten years or whatever,  
22 and see if that's obtainable under the current  
23 jurisdiction. And if it's not in a three-year or a  
24 five-year period, then maybe the Legislature needs to do  
25 something to change that.

1           But to me, that's a really simplistic view of  
2           it, but I thought it was important to note that. Again,  
3           it drives to when you set that firm objective, it's  
4           largely going to answer, I think, a lot of the question.

5           MR. GRANIERE: Could I get bit of  
6           clarification? Bob Graniere, a little bit of  
7           clarification. Let's -- if I heard what you were  
8           saying, let's just for the sake of argument say that  
9           there's a simple objective, the one that you put out,  
10          which is reduce greenhouse gases. Would something like  
11          reduce greenhouse gases this much, but don't use a nuke,  
12          would that be okay?

13          MR. BURNETT: I mean, I think if you set the  
14          objective, then everyone has to come to the table and  
15          say, "What's the best way to meet that objective with  
16          all the competing interests?" And the competing  
17          interests, you know, are obvious, availability of  
18          resources, feasibility, time frame, cost-effectiveness,  
19          impact on the ratepayers.

20          So I don't think in a vacuum you could make  
21          that decision. I think you have to say, if I've got an  
22          objective, I take all the ways I could get there and  
23          give them rankings based on all the stakeholder  
24          interests and realistic factors and then figure out the  
25          best way to go.

1                   MR. GRANIERE: Okay. How about if I asked  
2 reduce greenhouse gases at zero chance of polluting the  
3 land?

4                   MR. BURNETT: Same answer. Now you've got two  
5 missions, and you take your available ways to get there,  
6 take all the stakeholder interests, do the evaluation,  
7 and come up, I think, with the best bang for your buck.

8                   MR. GRANIERE: So that answer would be no  
9 nuke, and the other answer would be nuke; right?

10                  MR. BURNETT: Again, I'm saying the answers  
11 are driven by, you know, whatever the results show.

12                  MR. GRANIERE: Okay. So basically where we  
13 are is, we're back to the point that if there's multiple  
14 objectives and we don't want to get into a long,  
15 drawn-out thing of trying to rank these multiple  
16 objectives and everything else, then wouldn't that say  
17 that basically what we're really doing is, we're doing a  
18 continuous balancing act, and we really don't need that  
19 much information because we have all of the multiple  
20 objectives, and we don't have them ranked?

21                  MR. BURNETT: I object to the form of the  
22 question.

23                  MR. GRANIERE: Which is generally the case  
24 when I ask a question, unfortunately, because usually  
25 answering it is a little bit harder than you want it to

1 be.

2 But in any event, you know, I've had those  
3 situations. You said you come from a military  
4 background. Believe it or not, I actually have a little  
5 bit of that too. And there have been times when you had  
6 to look over your shoulder a lot more often than you  
7 want to, and I think that that's what this is right now.  
8 This is a situation where, because of the multiple  
9 objectives and everything else, there's a lot of looking  
10 back and seeing where you're going and what has happened  
11 and what you did. That's all I'm simply saying.

12 MS. HARLOW: Maybe you all need an easier  
13 question, so can we go back to the cost recovery issue?

14 Susan, you said that you guys were looking at  
15 a cost recovery clause. Would that be for all expenses,  
16 including whether you own the assets or not, or are you  
17 just talking about alternative compliance payments and  
18 things of that nature?

19 MS. CLARK: I think as I recall -- and I think  
20 we put this in comments, or we discussed it at a  
21 previous workshop. It could be a new cost recovery  
22 mechanism. You could use existing the cost recovery  
23 mechanism.

24 And it seems to me that -- now, you asked the  
25 question, if the utilities self-build, would you handle

1       it a different way? I would stay I might. It would  
2       certainly be -- I think you would have to look at that  
3       and see what is the most appropriate way to do it. I  
4       will say I think that by doing it sort of separate from  
5       rate setting, to me it has the advantage of being more  
6       of an incentive, since you don't have to wait for a rate  
7       case to get that cost recovery.

8               MR. MOYLE: Can I ask a question from you  
9       all's perspective? And there's a lot going on in this  
10      arena right now, as we saw yesterday with -- and I would  
11      commend Florida Power & Light for announcing the solar  
12      project that they did with former President Clinton and  
13      the Governor. There's a lot going on, the Governor's  
14      executive order at 20 percent. You know, I think we've  
15      had good discussions about market forces and whatnot.

16             But I guess the point made by the gentleman  
17      from Progress I think is a good, valid point. And  
18      Mr. Zambo pointed out the statutory authority says you  
19      all can adopt goals. It seems to me that a lot of what  
20      we're discussing today may be influenced by what the  
21      goal is. I mean, clearly, if you say, "Okay. We're  
22      going to do the 20 percent" -- Bob, as you said, that's  
23      kind of where you think we need to go. Then when you're  
24      looking at what should be included and multipliers and  
25      things like that, I think a lot of that would drive some

1 of that debate and that discussion.

2 But I guess what I was trying to understand  
3 is, we have the workshop today and comments, and we have  
4 a workshop, I guess, in November. I mean, is it  
5 anticipated we will move forward with a rule before the  
6 end of the year or at some point? Where is this sort of  
7 going, if I can be so direct?

8 MR. TRAPP: I think, you know, from the staff  
9 perspective, we're just trying to get a handle on the  
10 issues, the magnitude, scope, and breadth of the issues.

11 I agree with you, John. Set a goal. Fine,  
12 here it is. 20 percent, that's your goal. But without  
13 any more clarification or edification, I don't know what  
14 you do with it. So that, I think, is the reason that  
15 we're trying to get into depth with some of the --  
16 fortunately, we do have other states that have led the  
17 way. We have expert help from our consultants from EPA  
18 helping us to see what other people have done so that  
19 perhaps we can create a better mousetrap here. Right  
20 now we're in an educational process trying to pull all  
21 this together.

22 But, yes, I think our ultimate goal is to try  
23 to comply with the Governor's request. He asked us to,  
24 you know, look at this in terms of renewables and solar  
25 and wind and 20 percent and come up with a new program

1 and rule. If rulemaking is the way to do that, then  
2 that's the way to do that, and we intend to get there.

3 As far as absolute timing, I can't tell you  
4 right now. All I know is Mark is going to announce to  
5 you in about a minute and a half that we're going to  
6 meet again for education on the -- what's the date? A  
7 date, and continue down this line of trying to educate  
8 ourselves.

9 I can't make a recommendation myself until I  
10 feel like I know a little bit more about what all is  
11 available out there to, you know, try to put in the  
12 program. And you know us engineers. We get  
13 over-prescriptive sometimes and like to have too many  
14 I's dotted and T's crossed. And maybe it's overkill,  
15 but we want to learn so more if we can.

16 MR. MOYLE: And I'm not -- I mean, I think  
17 this is a good process, and we have good resources. And  
18 to name names, I mean, FPL Energy is operating in states  
19 all over the country and is familiar with, I would  
20 presume, RPSs all over the country. And I think with  
21 everybody trying to work together, we can get there. I  
22 just was a little curious as to the anticipated timing  
23 on that, so thanks for the response.

24 MR. FUTRELL: Okay. If we don't have any  
25 other questions, I think we've addressed most everything

1 that was in, if not everything that was in staff's list.  
2 We appreciate everybody's participation.

3 As Bob said, we're planning another workshop.  
4 We have a tentative hold date on November 5th, and we  
5 will get -- we'll try to firm that up, firm that date up  
6 and get the announcement out as soon as possible, and  
7 also formulate an agenda well in advance to give you a  
8 heads-up on exactly what we want to see covered and any  
9 other outstanding questions.

10 MR. TRAPP: Just for discussion purposes on  
11 the upcoming agendas, as I think I mentioned, we  
12 certainly haven't formulated an entire agenda and would  
13 like your input on other areas that you think that we  
14 need to address.

15 One the areas that came up at the last meeting  
16 and that we've been exploring some hypotheticals with in  
17 the post-workshop comments from that meeting are the use  
18 of multipliers to incent certain high cost industries  
19 such as solar. We would like to pursue that some more.  
20 That's going to be perhaps a little more detailed and  
21 technical than what we've done today, and hopefully  
22 we'll be in a position to share some of that information  
23 with you before the workshop so we can all be on the  
24 same plane about the hypothetical. That's one area that  
25 we would like to talk about more, is multipliers and how

1 do you do them, what effect do they have.

2 And then I guess we also discussed about do  
3 people want to begin to reveal system analysis and put  
4 things together in kind of proposal. I certainly would  
5 entertain that if you would like to do that. Any other  
6 areas, please pitch in.

7 MS. HERIG: Christy Herig, FlaSEIA. If you're  
8 going to look at multipliers, I suggest you look at all  
9 three mechanisms to influence the market portfolio, and  
10 that's multipliers, tiers, and set-asides.

11 MR. FUTRELL: Okay.

12 MR. TRAPP: That's a good suggestion.

13 MR. TWOMEY: Mark?

14 MR. FUTRELL: Go ahead, Mr. Twomey.

15 MR. TWOMEY: Mike Twomey. To try and get just  
16 a little bit more clarification on where we're going to  
17 go sequentially here, I may be wrong, but I thought the  
18 Governor asked that y'all, the Commission start  
19 rulemaking before the end of the year. Is that correct?  
20 Or he didn't expect that you would have rulemaking  
21 accomplished by the end of the year, did he?

22 MR. TRAPP: I don't have the executive order  
23 with me, Mike. I don't recall. I think that may have  
24 been the case with respect to interconnection and net  
25 metering, but I'm not -- I can't remember if it was the

1 case here or not right offhand.

2 MR. TWOMEY: Well, help me understand. I  
3 assume it's your attention after these workshops at some  
4 point to actually start the formalized rulemaking  
5 process; right?

6 MR. TRAPP: That's the only way I know that we  
7 could initiate policy here at the Commission.

8 MR. TWOMEY: I mean, you have to propose a  
9 rule. At some point, you're going to propose a rule, if  
10 I understand the process correctly, and then there will  
11 be hearings, and the parties in this room, presumably,  
12 and some others that haven't taken much of an active  
13 role yet, but have an extreme interest in this, in the  
14 outcome of this, would then have an opportunity to  
15 participate in the rulemaking hearings and so forth  
16 going on; correct?

17 MR. TRAPP: I think that's correct. And this  
18 educational process to me is the precursor to that. I  
19 think this is an opportunity for people to begin to  
20 frame the rule. Staff's objective in rulemaking, quite  
21 frankly, is to try to have the parties reach consensus,  
22 and thus, the more education we get, the more  
23 understanding we have, the more commonalities we can  
24 develop, the quicker the rulemaking will go. So that's  
25 why we're apparently taking so much time on this

1 process. If we can get people at a central plane of  
2 understanding, I think we can get the rulemaking over  
3 fairly quickly.

4 MR. TWOMEY: And I would commend you taking  
5 your time on it and being thorough. I was trying to  
6 look ahead so I could tell my clients where we think  
7 we're going to be by the end of the year. And it  
8 strikes me --

9 MR. TRAPP: I don't have a date certain for  
10 you.

11 MR. TWOMEY: Right. But I'm just trying to --  
12 without a date certain, it strikes me that we're going  
13 to have another workshop. You mentioned an agenda.  
14 What's the agenda going to be for?

15 MR. TRAPP: No, no, no. The agenda for the  
16 workshop. We're trying to formulate the agenda for the  
17 next workshop.

18 MR. TWOMEY: So it strikes me that we have --  
19 probably it's going to be difficult to start any  
20 formalized rulemaking before the end of the year, or if  
21 you do, you'll just get into it, given that we're almost  
22 at the beginning of October.

23 And I would just add too, as everybody in this  
24 room that is aware of the statutory requirements of  
25 rulemaking, I would commend to you being very specific

1 about what your statutory authorization is.

2 Thank you.

3 MR. FUTRELL: Okay. If there's not any other  
4 follow-up comments, thank you for attending, and we'll  
5 be in touch. Thank you.

6 We also have a -- we have a sign-up sheet in  
7 the back and over here on the side, if you'll make sure  
8 you sign up.

9 (Proceedings concluded at 3:13 p.m.)

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