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2 BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

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5 DOCKET NO. UNDOCKETED

6 In the Matter of

7 RENEWABLE PORTFOLIO STANDARDS.

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PROCEEDINGS: STAFF WORKSHOP

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16 DATE: Thursday, September 27, 2007

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TIME: Commenced at 9:43 a.m.

18 Concluded at 3:13 p.m.

19

PLACE: Betty Easley Conference Center

20 Room 148

4075 Esplanade Way

21 Tallahassee, Florida

22

REPORTED BY: MARY ALLEN NEEL, RPR, FPR

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

2 MR. FUTRELL: Okay. Good morning. I think

3 we're going to get started. I'll ask Martha to read the

4 notice.

5 MS. BROWN: Why I'm not sure. Pursuant to

6 notice, this time was set for a staff workshop to

7 discuss renewable portfolio standards in Florida. The

8 purpose of the workshop is set out in the notice.

9 MR. FUTRELL: Okay. I'm Mark Futrell with the

10 staff, and I would like to welcome everybody to the

11 workshop today to continue our dialogue on renewable

12 portfolio standards.

13 We tried to do a little different setup to

14 afford parties more opportunity to come to the

15 microphones, so feel free. If you want come and want to

16 speak, find a microphone. We've got several over here.

17 If you don't intend to speak, if you'll make sure a

18 microphone is available for the folks that do want to

19 participate. But again, hopefully this will -- we may

20 have to do some handing back on the mikes here, but

21 hopefully this will be beneficial today.

22 Again, today the focus of the workshop is to

23 look at in more depth compliance and enforcement issues

24 associated with a renewable portfolio standard. And

25 before we get into our discussion today, we want to have

4

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

5

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

6

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

7

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

8

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

9

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

10

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. KATOFSKY: 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. KATOFSKY: 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

11

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 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.

12

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,

13

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 CO2, because that's considered an

7 important attribute of renewables, being low or zero

8 CO2, 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

14

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.

15

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

16

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

17

1 multipliers. So, for example, it 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

18

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

19

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

20

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

21

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

22

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

23

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

24

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

25

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

26

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

27

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,

28

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.

29

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

30

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

31

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

32

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

33

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

34

1 a PSC type authority?

2 MR. KATOFSKY: 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

35

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.

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1 MR. ASHBURN: Right. So do these tracking

2 systems all talk to each other and trade information, or

3 what happens?

4 MR. KATOFSKY: 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. KATOFSKY: 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. KATOFSKY: Right. So that registry would

20 say, okay, you're eligible or you're not eligible.

21 MR. ASHBURN: Okay.

22 MR. KATOFSKY: It gets messier when you have

23 adjacent control areas.

24 MR. ASHBURN: Right.

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

37

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.

38

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 CO2 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, SO2 or NOx, 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?

39

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 CO2, and you've sold off the SO2, 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

40

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

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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. KATOFSKY: 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?

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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

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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.

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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. KATOFSKY: Yes. They call them white

7 tags.

8 MR. MOLINE: One tag?

9 MR. KATOFSKY: White tags.

10 MR. MOLINE: White tags.

11 MR. KATOFSKY: In some places, yes.

12 MR. MOLINE: And those, how are they different

13 than RECs?

14 MR. KATOFSKY: 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. KATOFSKY: Yes, traded or some sort of --

25 MR. MOLINE: Or purchased.

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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

46

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. KATOFSKY: 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. KATOFSKY: 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?

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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;

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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. KATOFSKY: 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. KATOFSKY: 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

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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.

50

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

51

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?

52

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 –

53

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

54

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.

55

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

56

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

57

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

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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

59

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.

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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

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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.

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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

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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 –

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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

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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

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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. KATOFSKY: 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. KATOFSKY: 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.

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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

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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

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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

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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

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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.

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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

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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 met 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

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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

75

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

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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

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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.

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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

79

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

80

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 –

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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,

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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

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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

84

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.

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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 –

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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

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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

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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.

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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

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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

91

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 them 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.

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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 –

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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

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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

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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. KATOFSKY: 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. KATOFSKY: 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

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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.

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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

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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

99

1 reason and the device is gone?

2 MR. KATOFSKY: 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. KATOFSKY: 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

100

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

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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

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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

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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

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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

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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

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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.

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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

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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

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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?

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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

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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.

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1 MR. KATOFSKY: 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. KATOFSKY: 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. KATOFSKY: Right. But presumably the REC

24 covers those -- you know, would make the energy

25 component of the biomass plant competitive; right?

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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. KATOFSKY: 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. KATOFSKY: 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. KATOFSKY: 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.

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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 –

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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

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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?

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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

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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

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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

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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

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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

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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

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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 CO2 or a gram of SO2 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

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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.

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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. KATOFSKY: 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

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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

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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.

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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.

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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

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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

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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. KATOFSKY: 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,

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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

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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

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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

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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.

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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 it 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?

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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

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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

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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

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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

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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

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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

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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

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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.

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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

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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

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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

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1 penalties, or does the State PSC in that?

2 MR. KATOFSKY: 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. KATOFSKY: That's right. So if there was

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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.

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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

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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.

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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

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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

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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.

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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.

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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.

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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

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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.

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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

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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

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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

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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

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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

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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,

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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,

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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.

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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 completing 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.

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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 the 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

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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

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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

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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

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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

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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

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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 except 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

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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

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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

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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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1 CERTIFICATE OF REPORTER

2

3 STATE OF FLORIDA:

4 COUNTY OF LEON:

5 I, MARY ALLEN NEEL, Registered Professional

6 Reporter, do hereby certify that the foregoing

7 proceedings were taken before me at the time and place

8 therein designated; that my shorthand notes were

9 thereafter translated under my supervision; and the

10 foregoing pages numbered 1 through 177 are a true and

11 correct record of the aforesaid proceedings.

12 I FURTHER CERTIFY that I am not a relative,

13 employee, attorney or counsel of any of the parties, nor

14 relative or employee of such attorney or counsel, or

15 financially interested in the foregoing action.

16 DATED THIS 4th day of October, 2007.

17

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