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2	FLOR	IDA PUBLIC SERVICE COMMISSION	
3		DOCKET NO.	080503-EI
4	In the Matter	of	
	RENEWABLE PORTFOLIO	STANDARD	3664.
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17	PROCEEDINGS:	STAFF WORKSHOP	
18	DATE:	Wednesday, August 20, 2008	
19			
20	TIME:	Commenced at 9:30 a.m.	
21	PLACE:	Betty Easley Conference Center	
22		Room 148 4075 Esplanade Way	
23		Tallahassee, Florida	
24			
25	REPORTED BY:	JANE FAUROT, RPR Official FPSC Reporter (850) 413-6732	
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2	west Detroil Mom Pollinger
2	Cindy Miller, Esquire, Mark Futrell, Tom Ballinger, Judy Harlow, and Bob Trapp, FPSC Staff
3	Tom Sutton
4	Alan Taylor
	George Cavros
5	Bob Krasowski
	Rich Zambo
6	Frank Ferraro
	Del Jones
7	John Burnett
_	Jerry Karnas
8	Peter DeNapoli
9	John Burgess Marni Zollinger
9	Suzanne Brownless
LO	Mike Twomey
	Leon Jacobs
11	Eric Draper
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13	Jon Moyle Clay Bethea
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FLORIDA PUBLIC SERVICE COMMISSION

PROCEEDINGS

MS. MILLER: We welcome you to this workshop on developing the renewable portfolio standard. Pursuant to notice issued August 1, this date, time, and place were set for a workshop in Docket 080503-EI to implement some of the provisions in House Bill 7135.

I'm Cindy Miller, and I'm an attorney in the Commission's General Counsel Office. And with me are Mark Futrell, Tom Ballinger, Judy Harlow, and Bob Trapp. We also have Chairman Carter here with us and other Commissioners may be attending during the day.

We have set out 100 copies of the strawman rule and the summary and rationale of the draft rule, and also of the legislation. And we are going to just really welcome your comments today. Get started on that very quickly.

Just a few housekeeping measures. We have a court reporter here, Jane Faurot, so we would like you to state your name and who you represent. Also as we proceed today, we may keep it a little more formal. If we get into a lot of questions, we want those to be directed through me. We do plan to take a lunch break around noon. And after the workshop, we are going to be asking for you to give us type and strike alternative language, and we want that to be submitted by September 2nd.

Mark, would you like to discuss the call-ins?

FLORIDA PUBLIC SERVICE COMMISSION

MR. FUTRELL: Sure. Thank you, Cindy.

I'm Mark Futrell with the staff. Again, also a reminder, we have sign-up sheets in the back of the room so if you would please sign that so we have a record of your attendance.

Cindy mentioned that due to the tropical storm, the Commission has made an effort to try to accommodate those folks that could not attend today's workshop. First, as you hopefully have stated clear to everyone, we are going to --following the conclusion of this workshop we will reconvene next Tuesday and continue the workshop then. We have also made arrangements for parties that are interested to call in and provide comments to the rule this morning on the phone.

At this time I would like to recognize those that have called in and give them an opportunity to make some comments on the rule. At the conclusion we would encourage those folks that have called in to go to the Commission's website, www.floridapsc.com, and listen and monitor the workshop through that avenue. Folks can certainly call in at any time if they want to express themselves and contribute to the discussion, but we would really strongly encourage you, if you want to just listen, to use the website, the audio links there.

At this time I think we would like to try to get a roster of those folks that have called in and give us your name

and your affiliation, that you would like to speak at this time, and then as we go through this, before you begin speaking, please identify yourself and the party you are representing.

So if we could like to get folks that have called in to identify themselves, please, so we can have a list of those that want to speak now. I think I heard Frank Ferraro.

MR. FERRARO: Yes. This is Frank Ferraro with Wheelabrator Technologies. I'm on the line to provide comments. I believe Jon Moyle is there representing us who, I think will provide most of our comments, but I will be available to answer questions and provide more specifics.

MR. FUTRELL: Who else is on the line that would like to comment?

MR. SUTTON: Mark, this is Thomas Sutton with Sunshine State Solar Power. I would like to provide comments, but I was expecting that as we went through particular sections the comments would come then as opposed to all up front at once, you know, in order to make sure that I didn't use up more time than what was allotted. I expect to comment periodically throughout the session.

MR. FUTRELL: Okay.

MR. JONES: Mark, this is Dell Jones. The same thing Tom said. We expect to provide comments throughout the session.

MR. FUTRELL: Okay. So I've got Frank, Dell, and Tom 1 Anybody else that is calling in? 2 Sutton. MR. ZAMBO: You also have Rich Zambo representing the 3 City of Tampa, Palm Beach County Solid Waste Authority, and the 4 Florida Industrial Cogeneration Association. And I may have 5 comments. I understood that the process was going to be that 6 7 staff would explain the rule, and that was my primary interest today, and then I may have comments section-by-section as you 8 9 go through it. 10 MR. FUTRELL: Thank you. Who else? MR. CAVROS: Hey, Mark. This is George Cavros with 11 the Natural Resources Defense Council. I also wanted to offer 12 some initial thoughts and, if possible, comment as you go 13 14 through the day. MR. FUTRELL: Thank you, George. 15 MR. KRASOWSKI: Hello, Mark. This is Bob Krasowski 16 with the Florida Alliance for a Clean Environment interested 17 18 public. And I probably won't speak today, but would like to 19 reserve the right just in case something extraordinary comes up, but I will probably just listen in. 20 21 MR. FUTRELL: Okay. 22 MR. TAYLOR: And this is Alan Taylor with PCS Phosphate. We may have a few specific comments, but, you know, 23 I have a general introductory comment. 24

MR. FUTRELL: Anybody else?

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1 MR. BURNETT: Mark, this is John Burnett with Progress Energy Florida. I just wanted to let you know, we 2 plan to attend in person on the 26th and make our comments 3 then. We will just be listening in on the website. So, I just 4 wanted to tell you that, and we will be signing off now. 5 MR. FUTRELL: Thank you. 6 7 MR. KARNAS: Hi, Mark. This is Jerry Karnas, 8 Environmental Defense Fund. I'm in a similar position as 9 Progress Energy where we will be attending in person next week 10 on the 26th, so I will get off the line now. And I might jump 1.1 back on if I feel the need to make comments, but at this point 12 I am going to get off the line and get on the Internet. 13 MR. FUTRELL: Thanks. 14 I have heard from nine people. Is there anyone else 15 on the line that has called in? 16 Okay. At this time we will give those have called in 17 at least an opportunity, if they wish, to provide some opening 18 brief comments on the rule (phone interference) and we will 19 start with Frank Ferraro. 20 MR. FERRARO: I think I will wait until we get to 21 specific sections. 22 MR. FUTRELL: Okay, Dell Jones. 23 MR. JONES: I'm sorry, Mark, I was on mute.

Likewise, I will wait until we get to specific sections. Thank

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you.

MR. FUTRELL: Okay. Tom Sutton.

MR. SUTTON: I have similar comments, Mark, but I think as one gentleman mentioned a couple of persons back, he was hoping for a discussion from you guys as to how (phone interference), so I was hoping that that would occur. But I will say, you know, I appreciate the opportunity to be part of this. And I think you guys have done a great job to this point in having a starting point for everybody to talk from, so I look forward to working on this.

MR. FUTRELL: Thanks, Tom.

Rich Zambo. Rich, do you want to make any opening remarks?

MR. ZAMBO: Well, I said I wasn't going to, but I will raise an issue that I raised during our conference call last Friday. And that is on Page 3 of the -- I'm not sure, I guess it is the summary of the draft rule that you sent out in the packet last week. There is a reference to existing or current production of renewable energy of 3,759 gigawatt hours. And based on my rough analysis of what was filed with the Commission, that number is about half of what appears to be out there from the phosphate industry, the municipal solid waste industry, and Florida Crystals. And I think I was told on Friday that that would be discussed today, so I'll just raise that issue again.

I think it is important, because I presume that that

is one of the pieces of information that you based the beginning RPS number on. If my numbers are correct, it would be very easy for the utilities to reach that goal, and maybe double that goal with just existing generating capacity.

MR. BALLINGER: Rich, this is Tom Ballinger. I can address that, if you want, now.

MR. ZAMBO: Sure.

MR. BALLINGER: That number is an estimate, but it was based on a couple of factors that came up. One being from the FRCC, the reporting there shows that about less than 1 percent of the energy last year was from renewable generation. Now, that does not account for self-service generation. That is only what is firm sold to the grid.

I also looked at data that was provided earlier on in this process, some earlier workshops we had where we looked at existing facilities and also looked at self-service generation, and I think we came up with a total of about 253 million gigawatt hours of total sales. I'm sorry, 253,000 gigawatt hours, which is about 1.9 percent. So the 2 percent is really a rounded number based on what I have seen so far.

As you know, we are still collecting the potential data from our past calls and also looking at existing data. We are using that to verify that number again of the 2 percent, so that is where it came up from. I would be glad if you have other data shows where you got it from to share it with us.

1	MR. ZAMBO: Well, my data I guess my question is,
2	you have asked the industry, the people who are actually doing
3	this to provide their data. And they have provided it to you
4	and it's significantly higher than the numbers you have gotten
5	from FRCC or the utilities. My industrial self-service people
6	alone are more than half of this number. They are at
7	2.6 thousand gigawatt hours just from waste heat in the
8	phosphate industry, and I believe that Florida Crystals is
9	another 600. So if you add those two together you are up to
10	3,200, and that does not include waste-to-energy, which I think
11	is more than double that amount.
12	MR. BALLINGER: Where were those numbers provided,
13	Rich?
14	MR. ZAMBO: Mine were provided in the filings that we
15	made, the data requests that were submitted to you.

Those recent ones that we are MR. BALLINGER: compiling now?

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MR. BALLINGER: Okay. Well, we need to look at that to see if there is an overlap or a mismatch. I based this on data that we had prior to that when we were developing this rule. That data is still coming in and being examined for validity and stuff like that.

Okay. Well, I guess that is my point. My point is that from what I can tell just from those three

industries we have got more than double this, or about double this amount, and there is probably more out there that hasn't been accounted for because parties aren't involved in this process.

I know there is a lot of generation in the sugar industry from biomass that doesn't appear to have been reported anywhere. But, that's it, so I will just -- we will just address that as the process goes on.

MR. FERRARO: This is Frank Ferraro. And I was going to address this later in our comments, but can the staff share with the public all of their figures so we can look at it while you are also gathering this data, because that was a question I had. You have data you're looking at, and apparently we may disagree with your conclusions. It would be very useful for us to see your totals and your list of renewables so that we can check that off against what we believe should be on there.

MR. BALLINGER: Well, like I said, the data that we have been collecting recently that we just had a meeting last Friday on is still being reviewed. Some people have included existing and potential data as one number. That goes out to the year 2020. We are really trying to figure out, to sort it, what is truly existing in the ground today and what is potential.

MR. FERRARO: I understand, but you gave two sets of figures that you have developed, one of less than 1 percent,

and one of almost 2 percent. You had to have had retail electric sales and a list of renewables that made up those two numbers. At least can you provide those?

MR. BALLINGER: Certainly. The retail sales, the list of renewables, and the amount of energy is available in the FRCC 2008 aggregate plan. That's the number that was less than the 1 percent. The other number came from earlier data submittals by parties in previous workshops that we had that showed existing megawatt hours from renewables totalling 3,526 gigawatt hours.

MR. FERRARO: Could you just put that all as a spreadsheet on the web or somehow so that we could pull it off, rather that than -- you know, because it just would make it easier for the public to review it if it was in one spot that we could all take a look at.

MR. ZAMBO: This is Rich Zambo again. I don't want to belabor the point, but in my view it seems to me like this is an absolutely critical piece of information. That if this number is not accurate, then the starting point for the whole RPS would be questionable.

MR. BALLINGER: And, again, this is a strawman with a number put out there for discussion. We would welcome -- if the respondents have data that contradicts that, we would welcome to see that, but we can put this out there for the public to view, too.

We filed

2 our data. 3 MR. FERRARO: But we don't have the aggregate of all the data, so we can't make the same conclusions, or any 4 conclusions as to whether 2 percent is the right number or 5 whether we should be proposing 20 percent, for example. 6 7 We need to see what you were looking at so that we can then say, aha, 2 percent is the right number, or, well, you 8 9 know, you left out this, this, and this, so really the right 10 number is 3.5. Without that list, the public cannot comment. MR. BALLINGER: I said the list of the existing firm 11 12 is in the FRCC load and resource plan which is on our website. 13 The other number for self-generation that we got early on in 14 process was provided by the respondents, by the renewable industry for the self-service portion. 15 16 MR. FERRARO: It wasn't provided by Wheelabrator 17 Technologies. We don't have a figure. All I'm asking is can 18 you just put that somewhere where we can look at it. 19 it; we don't know how to get to it. 20 MR. BALLINGER: Certainly. 21 MR. FUTRELL: This is Mark Futrell. We will put a 22 little spreadsheet together and post it on the workshop web 23 page documenting where these numbers came from so that you can 24 track it. This is Rich Zambo, again. I think we 25

MR. ZAMBO: Well, we will filed it, Tom.

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MR. ZAMBO:

need to have some kind of process to reconcile that. I just did a quick calculation, and this is a conservative number, I believe it is low, but the existing waste-to-energy facilities in Florida alone are about equal to that number. I calculated 3,623. That's assuming an 80 percent capacity factor, and I believe most of them operate at 90 percent. So I think we just need to reconcile the numbers. We have that data available, and I presume you will want that to be verified somehow, but whatever numbers we use would need to be verified, and I think there will need to be a meeting of the minds between all parties.

MR. FUTRELL: And, Rich, that's what we are aiming to do through our data process is to bring the parties together and resolve some of the data differences, and also get Navigant involved in the process, as well.

MR. ZAMBO: Sure.

MR. FUTRELL: Before we continue on, Rich, I don't want to interrupt you too long, but I also would like to recognize that Commissioner Skop has joined us at the workshop today.

Rich, if you have any remaining comments, you can certainly go ahead at this time if you would like.

MR. ZAMBO: I don't at this point. There is some questions I have about the rule, but I think as you go through it they will probably be clarified.

MR. FUTRELL: Okay, thanks. Next, George Cavros with NRDC. George, would you like to make any opening remarks?

MR. CAVROS: Thanks, I would. I would just like to take a couple of minutes to sort of give a general opinion of the rule, and then offer some more specific comments next week. Thanks for the opportunity to address you.

Generally, the rule as proposed we believe is too heavily weighted toward cost containment in a way that will squelch any meaningful investment in renewable technology and clean energy jobs in Florida. The proposal doesn't accurately represent the intent of the Governor and Legislature as we see it. And what I mean by this is that in House Bill 7135, the Legislature highlighted a list of priorities that they wanted realized in an RPS, such as the promotion of the development of renewable energy, protection of the economic viability of Florida's existing renewable energy facilities, diversification of the types of fuel used to generate electricity in Florida.

They also wanted to lessen Florida's dependence on natural gas and fuel oil. They wanted to encourage investment within the state, and also improve environmental conditions.

And, lastly, they also wanted to minimize the cost of power supply to electric utilities and their customers. And the rule seems to be heavily weighted on the very last priority, minimization of cost to the detriment of other priorities in the RPS, such as diversification of fuel used to generate

electricity, or promotion of renewable energy, or encouraging investment within the state, and also improving environmental conditions.

And no one disagrees that there is a need for a reasonable safeguard system to assure that the implementation of the RPS is not cost prohibitive as set forth in Section 366.92(3)(b)(2), but the defining issue then is what is cost prohibitive. And the rule contemplates a 1 percent cost cap, and we believe the cost cap is too restrictive, and suggesting that anything above the cap is sort of an undue rate increase as staff has done in the summary of the rule is to ignore the types of costs the Commission has passed on to consumers in the last year.

I will give you an example. My utility bill alone is going to increase this year by approximately 16 percent due to fuel charges and approximately another 9 percent due to early cost-recovery from new nuclear plant construction. And other parties have also commented that residential electricity rates have increased about 25 percent since 2005 in Florida. So, then, I was just wondering what methodology was used to determine that anything above the 1 percent cap is somehow cost prohibitive. And I'm sure we will get into that issue later on in the day, and I just believe that such cost containment caps can't be selected in a void and should be judged against other forms of rate impacts.

And in my personal opinion, this is just emblematic of the unfair regulatory playing field between conventional generation and clean energy initiatives, and whether, you know, the renewable energy initiatives or energy efficiency initiatives, the playing field somehow there doesn't always seem to be level.

And while some other state RPSs may utilize a similar cost cap, like Colorado, these states currently have access to abundant lower cost wind resources and we don't have that luxury yet in Florida. So, you know, rather than ramble on and let you get on with the rule, I just want to mention, also, that I think the targets are very weak and won't incent the type of renewable investment and job creation found in the legislative intent of HB 7135. It pretty much preserves the status quo in Florida. As I understand it already generates approximately 2 percent of renewable energy from sources defined by Florida Statute, and I'm sure that it appears that there is some disagreement on that and that may be fleshed out later on in the day, too.

And, lastly, I was also struck by the fact that there was no enforcement tool in the proposed rule. If you want to engender compliance, you may want to have some sort of enforcement tool in the rule, and I understand that the Legislature asked for project compliance measures in 366.91(b)(2), so I would think that that would give the agency

the discretion to include some sort of enforcement tool in the RPS policy design.

And I will leave it at that, and try to contribute where I can during the day.

MR. FUTRELL: Thank you, George.

Next on my list, Bob Krasowski. Bob, would you like to make any opening remarks?

MR. KRASOWSKI: No, Mark, I won't. And what I am going to do is switch over to the website and keep the phone available for possibly later. I just would like to say, though, I thought George Cavros made a lot of very good comments.

MR. FUTRELL: Thanks, Bob.

Next on my list is Al Taylor. Al, would you like to make any comments?

MR. TAYLOR: No.

MR. FUTRELL: Okay. I think I may have heard a few other folks call in. Are there others that have called on the line that would like to make some opening remarks (phone interference).

MR. DeNAPOLI: Hi, Mark. This is Peter DeNapoli with Solar World calling in. I would just like for you to know that I am on the line here and would reserve the opportunity to make comments during the course of the workshop here. Although I do have some other engagements that I have to go to, but I will

stay on as I can. Thanks.

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MR. FUTRELL: Okay. Thanks, Peter.

Anybody else that has dialed in that would like to make some opening remarks? Okay.

Again, if you just would like to monitor the workshop, you can go to our website, FloridaPSC.com. If you do want to stay on the line to make some remarks throughout the workshop (phone interference). And at this time I will turn it over to Cindy.

MS. MILLER: Okay. As Mark mentioned, the second day has been added to the workshop because of the tropical storm, so it is Tuesday starting at 9:30.

What we thought we would do is allow opening comments, very short, like three minutes if anyone wishes to use that opportunity. And I know that we heard some of the investor-owned utilities say they would actually be participating next week, but if any want to speak today, that is great.

And, also, if any from our sister state agencies, we see J.R. Kelly, Joe McGlothlin from Public Counsel, and Jeremy Susac from the Governor's Energy Office. So if you have any opening comments we would welcome those.

Otherwise, are there any investor-owned utilities who would like to make any comments, opening comments today? Are there any renewable representatives, or consumer

representatives, or environmentalists who would like to make opening comments?

MR. JACOBS: Good morning.

MS. MILLER: Leon Jacobs.

MR. JACOBS: Hi, good morning. My name is Leon

Jacobs. I'm here on behalf of the Southern Alliance for Clean

Energy. I also would like to thank you for the opportunity

today to address you, and thank you for the work that has

obviously been put forward already in developing what we

believe will be an important new initiative in Florida.

We obviously applaud the effort of the initial design of an RPS, but we would also echo some of the comments that were made by Mr. Cavros a few moments ago. And I would really want to just emphasize the importance of this opportunity. The Legislature has clearly enunciated its desire that renewables must become a real and legitimate resource in the energy planning of the state.

Your work thus far acknowledges that renewables are behind the ball. They have not had the opportunity to come to the market as they would like. But I believe that this exercise is an opportunity to promote and prompt a new world with regard to renewables. This is the opportunity to understand how this state can encourage and promote and build a renewable marketplace. I believe that if we take that approach it must be that we would look to understand not only what is on

the ground now, we do need to understand that, but we have to understand what are the real potentials that are there. I think the studies that are underway are important, but unless they determine what the real long-term life-cycle value of renewable resources in the state are, I think we will miss an important window of opportunity.

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You did a renewable study. The Commission did a renewable study several years back, and you acknowledged then that there is more work to be done to bring renewables to the marketplace. I suggest to you that this is a continuation of that thought. We believe that there is much untapped potential for renewables in the energy marketplace in Florida. We believe that that untapped potential represents real economic value lost to ratepayers in Florida. We believe that unless there is a real window of opportunity to bring new renewables to the marketplace — there are some renewables that have sustainability, they have the benefit of PURPA contracts over long periods of time, and they should continue to go on. I would suggest to you that an RPS ought to look beyond that horizon.

You ought to understand what are the nascent technologies that are there that have the opportunity now with some prompting to become sustainable legitimate resources in the long-term energy marketplace. I would suggest to you that there are many. I would argue that if we simply take the

approach now of narrowing down to those that can demonstrate their viability today at this point in time, we will lose on many resources that we believe are clear.

You have seen the data and the research. You have heard the experts that have come to you and told you that there are important opportunities out there for other technologies. So we encourage you to look at this process as that window of opportunity to bring these new technologies to market and make them a viable force in bringing Florida's energy resources and bringing down the cost to consumers.

By the way, Florida is among the top in the nation in average expenditures for household expenditures for energy. There are reasons for that. The reasons for that, I believe, is that we have relied almost exclusively on fossil fuel resources to meet our demand. There's comfort in that. There's reliability in that. We acknowledge that. But we believe that there are opportunities to reduce those costs to consumers by bringing in renewables. They are not, they are not a cost-prohibitive option.

We thank you.

ms. MILLER: Thank you. Is there anyone else who
would like to opening statements?

MR. DRAPER: Thank you very much. My name is Eric Draper. I am with Audubon of Florida.

I just have a very quick question for the staff

beginning, which is -- which will help provide context (phone interference) which is, is the intent of the rule, as the legislative intent is, is to promote the development of renewable energy? Just a context question.

MR. FUTRELL: I'm sorry, Eric, would you repeat the question?

MR. DRAPER: Yes. I was just looking at the -- which will help inform some of the comments I make later on as we go through the rule point-by-point. I was just looking at the legislative intent about promoting the development of renewable energy, and I was just wondering what part in staff's thinking when it put the strawman proposal together was that part about promoting renewable energy. Was that part of the intention motivating -- it looks like the rule is organized around forecasting available renewables and responding in terms of the RPS to what is available, and I was just trying to understand the difference between, say, forecasting and reaching for what is available and promoting.

MR. FUTRELL: I think the Commission, the staff took all of the intent the legislature has expressed into consideration when developing the draft. And I think that is reflected in areas such as the targets that we have thrown out there for discussion purposes, the idea of a REC market that provides an additional funding source for renewable generators. That idea we have thrown out there for discussion. So I think

we have tried to balance and recognize the various intents the legislature has expressed in this strawman as a starting point. But, again, we appreciate specific rule language comments from the parties on what you want to see changed, and specific language --

MS. MILLER: Also I think Bob Trapp would like to respond to those comments.

MR. TRAPP: Yes. I would simply like to refer you to Page 1 of the draft rule, 25-17.400. The intent of the rule is expressed in Section (1)(a) which states, "The Commission shall establish numerical portfolio standards for each investor-owned utility that will promote the development of renewable energy, protect the economic viability of existing renewable energy facilities, diversify the types of fuel used to generate electricity in Florida, lessen Florida's dependence on fossil fuels for the production of electricity, minimize the volatility of fuel costs, encourage investment in the state, improve environmental conditions, and minimize the cost of power supply to the electric utilities and their customers."

I think you will find that is directly from the statute and the guidelines that we were given by the Legislature to frame this rule, and that is our intent.

MR. DRAPER: Thank you. I'm familiar with that language, and while it is not exactly the same as the statute, I appreciate the response.

MS. MILLER: Thank you. Are there any other opening comments? What about from the cooperatives or municipals?

Okay.

MR. MOYLE: I have some briefly, Cindy.

MS. MILLER: Please. Jon Moyle.

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MR. MOYLE: Jon Moyle. I am representing

Wheelabrator; Frank Ferraro, I think, had indicated he is

available by phone, and most of our comments, I think, will be

geared toward portions of the rule. In reading the agenda, it

talks about the staff intends to go through a

section-by-section discussion, so we have prepared most of our

comments to address section-by-section.

I did just want to make a brief comment, and I promise I will limit it to the under three minutes you suggested. In asking for comments, George indicated that he would encourage you all, I think, to look at a compliance mechanism, and said he thought based on his reading of the statute that you all had the discretion to do that. I would respectfully take exception to that, and suggest that it is really not a discretionary provision. And I would refer you to 366.92(3)(b)(2). The Legislature said in developing the rule, and I quote, "The Commission rule shall provide for appropriate compliance mechanisms." So using the word shall, I think, is pretty strong and direct that compliance mechanisms need to be part of the rule.

The second portion says, "And the conditions under which noncompliance shall be excused," and it goes on. And your rule does address provisions by which an excuse for noncompliance can be considered. We have some concerns with that that we will address later on, but the first portion of the statute clearly says, "Shall provide for appropriate compliance measures." And we, in reviewing the strawman, do not see much in that respect.

Now, in the staff write-up, I think there was an indication on Page 4 that said staff doesn't believe that Section 366.92 provides the PSC with the express authority to establish an ACP or penalties to fund the development of additional renewables. I tend to think maybe the provision about funding additional renewables, there may be some lack of are clarity in that respect, but I don't believe there is any lack of clarity with respect to the ability to move forward and look at alternative compliance payments and other types of things given the language that says you can and you shall consider appropriate compliance measures.

Finally, I would just make this point. This rule is not like most of your rules where you adopt it and if it is not challenged it is going to go into effect. The Legislature is going to have another crack at this. It has to go back for ratification. So it seems to me that staff and the Commission as putting forth good public policy ought to figure out the

rule that would work the best to achieve the legislative goals to protect existing, to encourage the development of new renewables, to diversify fuel supply. Bob Trapp articulated them, and I know they are in the record.

But to the extent that there was a question about legislative authority, I think you could make that point to the Legislature and they are the ones that are going to get the final crack at it. So it seems to me that it is incumbent, and to the extent other states, if you go into a survey and say, you know, the RPSs in other states that have worked well have had compliance mechanisms in place, that that is what you ought to be shooting for, and I would encourage you to do that as we go through this process.

All of the other comments, I think I will wait and talk about it on a section-by-section basis.

MR. TRAPP: Cindy, if I might just inquire of Jon.

MS. MILLER: Bob.

MR. TRAPP: I know these are opening comments and perhaps now is not the place to go into the detail, but I am curious. When we get to that section of the rule, do you have some specific proposals with regard to the compliance section?

MR. MOYLE: I think we will.

MR. TRAPP: Good. I look forward to the discussion.

MR. MOYLE: Also, Bob, this process we are getting started here and whatnot, and I know you have got a short time

frame, but we also have the ability to provide written comments and whatnot and, you know, it's a joint collaborative effort.

I mean, we can do it, but it is not -- you know, your role, the way I see it, is not to wait around. If nobody showed up at this hearing, I think you all would still have a responsibility to go out and survey, and you are doing that, to say what is the best type of policy we can put forward. So we can talk about that, and I think we will have some specific comments on that section of the rule.

MR. TRAPP: We certainly would like to hear your comments in that area, because I agree it is an area that probably needs some more work.

MR. MOYLE: Good. And we will either get them to you -- I will make some general ones, and we have the opportunity to file written comments as well that you may find helpful and whatnot.

MS. MILLER: Thank you.

Any other opening statements?

MR. STAFFORD: Thank you, Cindy. Sean Stafford. I represent Florida Crystals. And in Gus Cepero's absence, Gus was going to be on the phone, apparently the hurricane has him in.

But we provided yesterday some written comments that were -- I think you would probably agree were rather direct on probably eight key points that Florida Crystals feels strongly

about. In the overall, Florida Crystals' overall position on this draft rule is that it just doesn't have the bold initiatives that were outlined both by the Governor, both in his original executive order in 2007, public statements both by the Governor and by the Legislature during this past legislative session. And, you know, we feel strongly that the rule ought to be geared towards developing new renewable energy and developing a much larger market.

We appreciate all the hard work that you all have put into it, and would like to address these issues on a piece-by-piece basis, but if you haven't had a chance to read our comments, I have got a couple of extra copies of them for you. And I don't want to go into all of them individually here, obviously we are limited to three minutes. So with that, we thank you for the opportunity to participate, and we would like to just address some of these issues as we go along.

MS. MILLER: Thank you. Any other opening comments?

Okay. We are ready to start right into the rule, and we would start on Rule 17.400, 25-17.400, on the section called application and scope, and ask if there are any comments on that initial application and scope.

Yes.

MR. DRAPER: Thank you. I have a suggestion.

MS. MILLER: And we do have to ask -- I know it is
always hard to remember to repeat your name and --

MR. DRAPER: Oh, yes. Sure. My name is Eric Draper.

I am with Audubon of Florida. I have some written suggestions
on how to -- on some additional language for that particular
section. Should I provide that to you?

MR. FUTRELL: Yes. If you want to pass that around, that's fine. Eric, you can also include that in your post-workshop comments.

MR. DRAPER: Okay.

MS. MILLER: We do ask when you file your post-workshop comments, now that we have a docket open, if you will file it in the docket through the Clerk's Office, and that will make sure everything gets captured. And that is Docket 080503-EI.

MR. DRAPER: My initial recommendation doesn't modify (1)(a), but actually suggests new language that would be inserted in terms of application and scope, which would -- and the basis for this, I think, is tracking what the Legislature instructed the PSC to construct the rule, and I think it would be helpful to be more direct in terms of the direction. So the language that I was suggesting is each provider is required to supply a minimum percentage of its total annual retail sales through renewable energy provided to its customers directly by procuring or through renewable energy credits. It simply traction some of the language in the legislation. I think it gives a more clear and direct statement of policy at the very

1 beginning of the rule. 2 MS. MILLER: Thank you. Jon. 3 MR. MOYLE: I have a question. If we are in the 4 application and scope section, do you want to go through each 5 paragraph, like (a) and just confine comments to (a), and then 6 move on to (b), or do you want to take them sort of by 7 paragraph? Because I have some comments on (b) I can hold. 8 MS. MILLER: We will say we are on (1)(a) right now. 9 MR. MOYLE: Okay. I will hold until we get to (b). 10 MS. MILLER: And, we are going to gauge it as we go 11 along and we will see how it goes. What about any comments on 12 (1)(b)? MR. DRAPER: I have one additional comment on (1)(a). 13 MS. MILLER: And this is Eric Draper. 14 MR. DRAPER: I am working off the rule here on Page 15 1, Lines 10 through 11. I would suggest that you amend those 16 to take out the words minimize the cost of power supply, and 17 have it read so that the cost of securing renewable energy or 18 renewable energy credits is not cost prohibitive. 19 MR. TRAPP: Cindy, could I question that? 20 Bob. 21 MS. MILLER: MR. TRAPP: How does that comport with the statutory 22 direction that uses specifically the task of minimizing the 23 24 cost of power supply?

MR. DRAPER: I think that you pick up -- the cost

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prohibitive language is also in the statute, and I think that 1 you just need to introduce that as a way to condition -- as a 2 way to suggest what -- I mean, basically I'm just making a 3 4 suggestion that you introduce that at that point, because at 5 some point the cost prohibitive become the standard, the bar by 6 which you evaluate whether or not a utility, I guess, can 7 choose not to comply with the RPS. That's just a suggestion. 8 MR. TRAPP: Where is that in the statute? 9 MR. DRAPER: In the law? MR. TRAPP: In the law. 10 11 MR. DRAPER: It's on page -- it's on (b). We are on 12 (3)(b)(2) under the word cost prohibitive on the bottom of -- I 13 am looking at your laws of Florida, it is the fifth line, end 14 of the sentence. 15 MR. ZAMBO: I'm sorry, this is Rich Zambo. I'm not sure I follow you. What page did you say you were on? 16 MR. DRAPER: I think that the request from Tom was to 17 go to the statute, or to the law where the words cost 18 prohibitive were introduced. And I went to -- I was pointing 19 out that those words are 366.92(3)(b)(2). On the laws of 20 Florida page, which I'm reading from, it is the fifth line. 21 MR. ZAMBO: Okay, thank you. I appreciate it. 22 23 MR. TRAPP: Thank you. MR. JACOBS: If I may, just briefly. 24

MS. MILLER: And this is Leon Jacobs.

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MR. JACOBS: I'm sorry, this is Leon Jacobs.

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On that same language, first, and Paragraph (1)(a), Lines 10 and 11. The concern that I would suggest to you is that by category of saying minimize the cost of power supply to electric utilities and the customers you made a very broad statement. What I read the statute to say, and I am looking now at 366.92 Sub 3, Sub A and B, Paragraphs A and B. There is a more detailed analysis of cost that is anticipated in the statute.

Rather than belabor it here in the opening paragraph, I think what I would propose would be some qualification where you would simply say minimize the cost of power supply to electric utilities and their customers as prescribed in Section 366.92 Sub 3. So it is a reference point rather than leaving that broad and open-ended.

MS. MILLER: Let's see if we have a line number on that.

Mark, do you know what line number that would be?

MR. FUTRELL: This is Mark Futrell with the staff.

Looking at the enrolled House Bill 7135, I believe we are talking about line number -- roughly 2708, and we have got on the screen here in the room. I hope you folks can see that. And I think we have provided a handout of certain pages from the bill here in the room. I believe that's the line you are talking about, is that correct?

MR. JACOBS: Yes. And as I indicated -- this is Leon Jacobs again -- I think the context of this language is more in putting forward an idea of evaluating the costs rather than a threshold idea of minimizing the cost particularly on filing. There is definitely, I believe, in this language the idea that the costs will be evaluated and managed, and I think that maybe can be a different concept on filing minimizing the cost to the utilities.

MS. MILLER: Thank you.

MR. TRAPP: I don't necessarily disagree, and I appreciate the comments that you are making. Let me try to seek better clarification, because I'm not a lawyer, I am not used to statutory construct and everything, but it seems to me that section of the statute is speaking to compliance measures, and it speaks to cost prohibitive in the context of compliance measures. I'm not sure that is -- I mean, can you construct that as overall intent, overarching intent, when you have got specific overarching intent in the opening statements of the statute.

It seems to me that the context with which we look at cost prohibitive as a standard, which to me is a very difficult standard. What does that mean? What does cost prohibitive mean? For someone making six dollars an hour, I think it means a lot different than somebody making 20 or \$30 hour. So what does that mean in the conventional context of the Commission's

role in looking at utility rates, we tend to look at, you know, are the rates affordable to the consumers. Can the consumers reasonably afford their utility services.

So I'm a little torn, quite frankly, with respect to broadening the application of the terminology such that cost prohibitive is contained in one section that pertains to compliance measures, and I think perhaps we ought to focus at least our discussion on how that term effects what we are proposing in the compliance measure section of the rule as opposed to tinkering with the overarching legislative intent that was clearly expressed by the Legislature in the opening paragraph. And I will just openly tell you that is my concern.

MS. MILLER: Also, I would like to note that Commissioner Edgar has joined us here.

MR. JACOBS: Well, if I may respond, this is Leon Jacobs.

MS. MILLER: Yes.

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MR. JACOBS: At the risk of some discourse, I'm not specifically joining in the recommendation on that language on cost prohibitive. My real focus is that this opening intent of the rule be put in context of what I believe to be a more robust and detailed idea of cost determination. I believe that the statute anticipates more so than an overarching intent to minimize the cost to utilities. The overarching intent I believe of the statute is to engage these resources, evaluate

their costs, and manage those costs effectively to the utilities. And I think those can be distinguished in terms of the overall concepts.

MR. MOYLE: Can I jump in briefly on that point?

MS. MILLER: Yes. And this is Jon Moyle.

MR. MOYLE: I'm sorry, Jon Moyle.

Raising a point, the statutory reference, and I think the point that's being made is that the cost prohibitive language is in a section that talks about compliance and an excuse for noncompliance. Cost prohibitive is an excuse for noncompliance in that statutory section. I think the point, if I understood Mr. Jacobs was making was to say, well, that may be something to consider in the compliance excuse for noncompliance section, but it probably should not be front and center in the unwarranted presence in the application and scope section of the rule. I think that is sort of the point as I understood it.

MS. MILLER: Thank you.

MR. STAFFORD: Sean Stafford, again. I would like to introduce two items that were in House Bill 7135 that appear in the legislative intent language on Page 103 where there are — that is a rather lengthy intent language and it amends Chapter 377, and I like Bob am not a lawyer.

MS. MILLER: So we can be clear, you are moving into Section 377 --

2 MS. MILLER: 377.601. And you said it's on page --3 MR. STAFFORD: It's on Page 103 of the House bill. It's on Page 103 of the House bill, and it is legislative 4 5 intent language that has a number of other legislative 6 priorities that the Legislature spoke to. 7 MR. TRAPP: Let me just stop you, because I don't 8 have that in front of me, but my understanding is 377 is not a 9 Public Service Commission statute. MR. STAFFORD: Well, it's not a PSC statute, but it 10 11 is speaking to the intent of the Legislature as they passed the overarching goals of the bill. And there are two provisions in 12 there that we think are very consistent with the themes that 13 were discussed in the bill, both in the legislature --14 MR. TRAPP: But just for clarity sake --15 16 MR. STAFFORD: Sure. 17 MR. TRAPP: -- the expressed direction that I think this Commission takes is specified in Chapter 366, and I 18 19 certainly would like to hear what 377 said and how you think it 20 applies in 366, but if you can link it better I would sure 21 appreciate it. 22 MR. STAFFORD: Okay. There are two issues, one is 23 the issue of energy security, which is an issue that we believe 24 the Legislature intended this to apply to, this entire bill as 25 it applied in 7135, energy security is, we believe, a priority

MR. STAFFORD: 377.601.

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of the Legislature.

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And the second is a similar theme that you have in the opening statements where -- or in the opening application and scope and the discussion of encouraging investment in the state, which is the theme of economic development. In economic development it discusses implementing new technologies that can be a source of new jobs and employment opportunities for many Floridians. In as much as there is a possibility and there is a way to take items from 377, just the legislative intent side on 377 and apply them, we think those two issues, energy security and economic development, are consistent with the theme, but aren't in there.

So, again, I will leave the statutory linking to the lawyers, but, you know, we read that, we read this bill as a comprehensive energy policy of the state. Not just, you know, a fragmented piece, but the Legislature's intent on changing the direction of energy policy in Florida. And there are a number of themes throughout the bill that we believe are very consistent with developing renewable energy and we would suggest that energy security and economic development are two more.

MR. TRAPP: Cindy, if I may.

MS. MILLER: Bob.

MR. TRAPP: Could I direct you to Page 4 of our written comments that I think you have prefiled with the staff.

In Section B of that you state that -- you make your case for additional consideration of economic development. But what caught my eye, because I do have an engineering background, is the statement that there are mathematical models which quantify the value of different levels of volatility. And the argument seemed to imply that there are also mathematical models associated with quantifying the effects of economic development. Could you share those mathematical models with the staff?

MR. STAFFORD: We can do that, and I believe we provided staff early on with an economic development study that Florida Crystals commissioned by Tony Villamil with the Washington Economics Group a few months ago. And in that, and I don't have the study with me, but in that study there was — and this study was done in 2003 obviously when fuel costs were far less, and it was a study specifically geared towards biomass and what the economic case is for biomass renewable energy development.

Obviously this study was done before any of these renewable energy policies had come into play, but there was an economic multiplier applied that the basic premise of it is about 85 percent of the money spent on biomass power generation, 85 percent stays within the state. It creates jobs for the people who truck the fuel, jobs for people who grow the fuel, it creates jobs for people who are in this process, the

beginning to end process of planting, fertilizing, 1 transporting, cutting, harvesting, and ultimately producing 2 3 power. And I can find that probably and provide it by the 4 end of the week. I can provide that study, but 85 percent of 5 the dollars that are spent on this particular technology stay 6 right here. And what the study also concluded was around 7 15 percent of the dollars that are spent in traditional power 8 generation sources, 15 percent stay within the state, and most 9 are shipped out for fuel costs that go to other states, or even 10 11 other countries. MR. TRAPP: Is that a Florida-specific study? 12 13 MR. STAFFORD: It is; it is. MR. TRAPP: I would like to see that. 14 15 MR. STAFFORD: Okay. MS. HARLOW: Ms. Stafford, I have a copy of the study 16 and I will provide that to the appropriate staff. 17 MR. STAFFORD: Okay. Thank you. 18 MR. TRAPP: I would rather it be filed in the rec. 19 MS. HARLOW: Could you please file it in the docket 20 for us, as well. Thank you. 21 22 MR. STAFFORD: Yes, ma'am. MS. MILLER: I would like to note Commissioner 23 McMurrian has joined us. And are we having any more comments 24. on (1)(a)? How about (1)(b)? 25

Suzanne.

MR. SUTTON: Cindy, this is Thomas Sutton, Sunshine State Solar Power.

MS. MILLER: Okay, go ahead.

MR. SUTTON: We did file some written comments yesterday, but we had addressed (1)(b), as well, and we would offer or suggest that five years is too long of a time period for the review. Certainly in the early stages of this as we make sure that all the hard work everybody put in is working as we expected, and we suggested reducing it to a three-year period.

And then also, kind of on a related issue, we would suggest also that that time period coincide or dovetail with the standard time period, as well, so that, you know, if we had a three-year review, then the percentages that we are looking at in terms of compliance would be on a three-year basis, as well, so it does match up.

MS. HARLOW: This is Judy Harlow with staff. Our concern with shortening the time period for review is just based on administrative issues, the timing of making sure that everyone gets their point of view heard and noticing requirements. And we were concerned with a shortened time period, and we wondered if you had any solutions for just the administrative issues of a full review of an RPS on a three-year schedule.

MR. SUTTON: You know, at this time I don't have a solution to that, but I guess we would be amenable. I do think in the early years five just seems too long to me. This will be very dynamic, and even though all of us think we have put a good product out there, it may not work the way we intended, and I would say that in the early years if you really do need to make corrections, you are just going to have to bite the bullet and go through the administrative, you know, perspiration and inspiration to make changes if they are necessary.

As we get further on and it works like everybody intended, then maybe when we are seven, ten years out we don't need to be looking at this as frequently and we could minimize that administrative burden.

MS. HARLOW: This is Judy Harlow, again. I would note that as our strawman, we based that five-year schedule on the scheduling that the Commission uses now in setting conservation-related goals, and it has worked very well for the Commission in those proceedings. And also I would note that the rule allows the Commission the flexibility to look at the RPS at any point in time that the Commission believes that that is warranted by either costs that we are seeing, or availability of renewables, or for any other reason, as well as a petition by anyone that is an interested party.

MR. SUTTON: Okay. I mean, I understand your

concerns.

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MS. MILLER: Suzanne Brownless.

MS. BROWNLESS: Hi, I'm Suzanne Brownless, and I'm here today representing the Florida Solar Coalition, and we have that very same concern. Our idea, actually, is for the Commission to conduct a goal hearing every two years for the first eight years. That is our idea. Because we share Mr. Sutton's concern, we want to make sure the Commission is coming back to look at this. As a former staffer, I do appreciate the effort that goes into what essentially becomes an ongoing continuous docket. But I do think because this is such a new concept, and I'm sure there will be so many things that have to be worked out that can only be worked out really in proceedings like this one where all the stakeholders are at the table. So the language we would propose would be two years for the first eight years after the approval of the initial renewable standards, and we will provide that in writing to you.

And I would also say that there was -- if you look at the previous reincarnation, or carnation, I guess, of 366.92, which was amended, there was in Paragraph 3 of that the same language that said the Commission may review and reestablish the goals at least every five years. That paragraph was deleted in the amendments to 366.92, so we took that as an indication that the Legislature wanted you to say, to look at

these goals more frequently.

And if I could just put out another clarifying question here. My understanding from the language that you have proposed was that you would be trying to track your FEECA docket in which goals are set every five years. Is it your intention, if you stick with that five year or any shorter period process, to have annual goals each year for each utility, or are you seeking to have goals -- because I couldn't that out from the proposed rule, and I know we are not there yet, just have goals for larger blocks of time, 2011, 2015, 2020, et cetera.

MR. FUTRELL: Suzanne -- this is Mark Futrell with staff -- I think if you look at Page 3 of the draft strawman.

MS. BROWNLESS: Uh-huh.

MR. FUTRELL: And about Line 18, where it talks about that the utility will submit proposed annual renewable portfolio standards, so we are envisioning annual percentages.

MS. BROWNLESS: Okay.

MR. FUTRELL: To answer your question.

MS. BROWNLESS: But only compliance proceedings or only proceedings to deal with whether they met or didn't meet those annual standards every five years.

MR. FUTRELL: Again, as Judy mentioned, as was contemplated, we may need to have a formal proceeding in an earlier period. And, again, their annual reporting will allow

us to monitor compliance. But, again, that's something we would like to talk more about when we get to that section, this idea of compliance.

Another thing I would like to ask you about on your point about having a proceeding every two years for the first eight, and I know I understand the need to, you know, make sure we are reacting properly, we are seeing what is out in the market, how things are developing and stay current. How do you -- your thought on balancing that with the need to give some stability to the market, that they can count on that this is a policy, and that the policy is not in almost a constant state of flux where it can go any way, you know, one direction or the other? What is your thought on that, of sending some kind of a consistent message to the market so that they can have some assurance of where the Commission is going.

MS. BROWNLESS: Well, obviously it is very important to the folks in my group, many of whom are developers, to have stability in the market and to have a market that's reliable, because it discourages investment in these types of facilities, many of which are highly capital intensive, unless it's a stable market. So I think that if you have your RPS trading market parameters set, and we have that worked out and what you are doing is basically tweaking, fine-tuning what's in the middle, that the concerns that you will scare people because there's nothing set in stone will be mitigated to a large

extent.

From our point of view, having more Commission involvement at the beginning is a critical issue, and we think that will more than make up for whatever appearance of instability is there if the REC market is clearly established.

MS. MILLER: Thank you.

Jon.

MR. MOYLE: I have a question I would like to pose, and I think I understand what is being done, but I just want to make sure. You are suggesting that each utility must meet the same percentage of renewable energy, correct? So say that it is 3 percent. That FPL would have to meet 3 percent by a certain year, TECO would have to meet 3 percent by a certain year. I mean, it would be a common number percentage-wise for each utility even though the megawatts needed to get to that percentage obviously would be different based on the size of the utility. Is that correct, in terms of my reading of what you are trying to do here?

MR. FUTRELL: I think these initial targets that we have thrown out would be applicable to each utility, certainly, it is in the rule that it be applied. Going forward, that potentially could change based upon, for example, availability of what is in the service area, what the potential is, but certainly initially these targets would be across the board.

MR. MOYLE: And I saw -- not to jump ahead, but I saw

that you did, when you do list the 2 percent and the 3.75 percent --

MR. FUTRELL: I'm sorry?

MR. MOYLE: That's all right, if you need to confer or something. But it does use the word initially. So then is it contemplated that you are going to have a disparate and diverse RPS numbers at some point down the road where, you know, one utility who has been very aggressive in following the legislative intent, let's say it is at 10 percent, but maybe another utility has not been such aggressive that they, you know, you would have one utility having a 10 percent number and another utility having a 6 percent number? Is that what you are thinking about and intending? And if that is the case, are you aware of that being done in any other state with any other RPS?

MR. FUTRELL: No, I'm not. I'm not aware of different percentages that are applied to different utilities. That is something that we would like to hear your thoughts on going forward.

Bob.

MR. TRAPP: I would just like to comment that at least from my perspective I think what we have established here is a procedure, and I think that is the most important thing. This is a process and a procedure.

We felt that because of the legislative intent that

it was important to kick off the procedure with some numbers, and so we have proposed the initial numerical -- what I call long-range standards that we are asking the utilities to file a compliance filing and to fill in the gaps to show how they would implement the fill-in to those dates.

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But, quite frankly, we don't know if this is, you know, rigid statewide standards that rely on putting the burden on utilities uniformly to meet a percentage and then use a rec market to buy and sell to get there or build yourself. We don't know where that is going to go. I think in the five-year cycle we would like to have the flexibility within that procedure for this Commission to make decisions based on the historic record that has been established and based on the record of fact that comes before us when we reevaluate the standards to make those decisions.

Do we stick with standard percentage across the board for the state? Do we allow regional variances because of locational factors associated with renewables to be taken into consideration? I don't know the answers today. Hopefully we will know them better in the future, and the Commission through this procedure will have the flexibility to do what is in the best interest of the ratepayers and consumers of Florida.

MR. MOYLE: I'm not sure I understand clearly the intent as to whether it's a common bar for all utilities, at least at the start, in terms of a percentage.

MR. TRAPP: Clearly it is.

MR. MOYLE: It is at the start, but you are saying maybe there is some flexibility, at some point that the bar will be different for different utilities.

MR. TRAPP: Clearly, the Commission might change policy at any time.

MR. MOYLE: Right. I guess the point that I would make on that is given the fact that, you know, if you are going have RECs and you are going to have a market, I think markets work better when there is not vulcanization, and you have different kind of submarkets in some respects. And what I suspect is that, and I haven't done the research on this, that is something that we can do as we go forward, but that I'm not aware of any states in the 20-something that have done RPSs where you have different numbers for different utilities. That at least going in that you clearly establish, hey, all utilities need to meet -- (phone interference) -- and not allow for different utilities to have different levels.

I mean, we are trying to get everybody to stretch here, that at least you have a common bar going in. Now, if further down the road that doesn't make sense, then maybe that is the point in time that you come back and change the rule and modify the rule. But surely going in I wouldn't think, given the idea that you want to encourage renewable energy, that you are going allow for disparate RPS numbers for different

utilities. I think that would not be good policy.

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MR. TRAPP: Then is it your recommendation that we go to a ten-year process as opposed to a five-year process, or a two-year process? I mean, you have to give --

MR. MOYLE: Bob, I think you have got to have flexibility. I think having more review to deal with it, you know, you can open up the rule and look at it, but I don't think you should say, you know, based on the reading of this to say everybody kind of do your best and then if Power and Light gets 3 percent and TECO gets 1 percent and Gulf gets, you know, 10 percent, oh, that is okay because of different things.

MR. TRAPP: But that is what we proposed. We have proposed a fixed percentage for all utilities to meet across the board in the initial process. We have also set up a procedure where the Commission can react when it needs to react. And I think you have to give some trust that the Commission will act wisely in changing those standards or the methods or procedures in which the standards are established in the future.

So, again, I think staff thought it was more important to have a process out there where we can all get together and decide whether we are on the right track, the right path, whether we need to tweak it or whether we just totally need to revamp it. The process to me is what is most important.

MR. MOYLE: Well, I would argue it sends the wrong 1 message to say, okay, different utilities can have different 2 It doesn't send a strong uniform message. 3 numbers. MR. TRAPP: It doesn't say that. 4 MR. MOYLE: Well, that's what I'm trying to 5 6 understand what it does say. MR. TRAPP: It does not say that. It says that there 7 is a fixed percentage standard out there. It says that in five 8 vears this Commission will review the standards to see if 9 they're on the right track. That's all it says. 10 MR. MOYLE: So long as the standard is the same for 11 12 all utilities, then I think we are --MR. TRAPP: Unless the Commission changes the rules 13 14 or the standards in those proceedings. The Commission has the 15 discretion to do that -- should have, in our opinion should 16 have the discretion to do that. 17 MS. MILLER: I would like to kind of pull us back 18 just a little bit here. One of the things I would like to 19 mention is it is not at this stage now a proposed rule. It is 20 merely --21 MR. ZAMBO: Cindy, this is Rich Zambo. Can I make a 22 comment? 23 Somebody on the phone must be on another conversation 24 or they are monitoring this on-line. I'm having a hard time 25 hearing what is going on.

1	MR. FUTRELL: This is Mark Futrell with the staff.
2	Everyone that has dialed in should have their phone on mute
3	unless they want to speak. We can't have conversation going on
4	in the background. And if folks will not put their phone on
5	mute, we are going to have to drop the line and have those that
6	want to to call back in. So we are going to give you about one
7	strike and you are out policy on this one. Everyone that has
8	is called in, please mute your line at this time.
9	UNIDENTIFIED SPEAKER: Mark, there's somebody who
10	just dialed in about a minute ago, and they are not hearing
11	what you just said because they are still bleeding through and
12	we can't hear anything people are saying in the room.

MR. FUTRELL: Well, here is what we will do. We will take about a ten-minute break, give our court reporter a chance to catch her breath. We're going to drop the line, and then everyone that wants to can call back in.

So we will reconvene at 11:00 a.m.

MR. ZAMBO: Great. Thank you, Mark.

MR. FUTRELL: Thank you.

(Recess.)

MS. MILLER: Let's get back started. And we're going to see if our call-in folks have it right now.

Are they on? Okay. It sounds like we have that covered now. We would like to ask for those who are on call-in to go ahead and announce again who they are.

1	MR. ZAMBO: This is Rich Zambo. Do you need our
2	affiliation, too, Cindy? (Pause.) Hello?
3	MS. MILLER: Thank you. Anyone else who has called
4	in?
5	MR. CAVROS: George Cavros is back on the line with
6	NRGC.
7	mr. karnas: Jerry Karnas of the Environmental
8	Defense Fund.
9	MR. TAYLOR: Alan Taylor of PCS Phosphate.
10	mr. RATNER: Roy Ratner (phonetic), Atlas Solar
11	Innovations.
12	MR. SUTTON: Thomas Sutton, Sunshine State Solar
13	Power.
14	MS. MILLER: Anyone else? And we want to remind you
15	to keep your phone muted, and it sounds like we have taken care
16	of the problem. Again, I'm Cindy Miller, and we are here
17	discussing the draft strawman rule. And, let's see, I know
18	that we have been on (1), and I want to see if Bob Trapp would
19	like to make some statements.
20	MR. TWOMEY: Mike Twomey with AARP.
21	MR. TRAPP: I wanted to go back briefly with Jon to
22	see if I couldn't I'm not sure we were communicating. Jon,
23	you understand we are under a real tight time frame with this
24	process in order to get to ratification by the Legislature.
25	And there has been some discussion this morning about the

percentages that we are starting out with in the strawman, which are certainly subject to discussion and change. But I want you to understand that we read the statute to also say that we are to evaluate -- (phone interference).

In parallel with this strawman effort that we are kicking off here today, which will go on for several months toward the end of the year toward a final rule proposal to send to the Legislature of ratification, we have retained a consultant, Navigant, to assist us with an economic and technical potential that will hopefully help us to verify the numbers -- (phone interference). In any event, we are attempting in a parallel effort with a nationally known consultant that has expertise in this area to try to do everything we can to ensure that the numbers we are using going into this process are good numbers.

Having said that, again, we are fixing or we are proposing to fix a number that has application across the state. And we hope to have that ratified by the rule, the rule ratified by the Legislature and put in place by 2010. We have proposed in the rule, though, a process by which the Commission can probably around 2014, in order to prepare for a 2015 implementation five-year cycle, take a look at that and make sure that we are still on the right track with respect to the standards we have established. And I hope that helps explain what we have proposed. (Phone interference.)

MR. FUTRELL: This is Mark Futrell. There is someone on the line that has not muted their line. Everyone that has called in needs to mute their line.

(Off the record discussion.)

MR. FUTRELL: Okay. I think we are hearing silence. Let's move on. Thanks.

MS. MILLER: Jon Moyle.

MR. MOYLE: I'm sorry, if I could just briefly respond to that point. And I will move on. I mean, we will have, I think, some other opportunities to discuss it. The point I was just trying to understand is whether it's contemplated that there will be different levels for different utilities to meet in terms of the RPS. I think that's a bit of a tortured reading of it, but arguably it is permitted because each utility is having to file information about what is attainable, and what is cost-effective, and things like that.

From, I think, my perspective, that we have been encouraged and told and directed by the Legislature move forward with an RPS, that it ought to be established in a way that moves you toward more renewable energy and doesn't send sort of what I would argue would be the wrong message, or a mixed message about you are not having to meet it in a common way.

I think, you know, the utilities need to go forward, and some of them are doing a good job of developing their own

and getting out and contracting with others to move it forward on a uniform basis. So what I would hope, and I can suggest Eric Draper has some discussions, but that you modify this to say that you shall set a uniform renewable portfolio standard to be met by each utility. Then you have resolved that ambiguity, and everyone has a clear message that they need to go out and get whatever the number is. I agree with your point, you need to have a realistic number and you can go through and gather that, but it should be a Florida-based market that gets you to those numbers.

There was one other point I was going to make on that, Bob, but it just slipped my mind, so I will defer and we can address it later. If I could, I had one other just brief comment on this section of the rule, and then maybe we can move on. But somewhat related, you know, there's a section about compliance later on, and I think Leon Jacobs made the point about, you know, affordable. We all know that that is a component that needs to be considered, but as you are crafting this rule, I think it might be better if on Line 22, you talk about each investor-owned utility — this starts up on Line 18, each investor-owned utility shall propose numerical renewable portfolio standards based on an analysis of the technical and economic potential for Florida renewable energy resources to provide renewable energy, period. You know, reasonably achieved and affordable annual energy kilowatt savings. I

think that is superfluous. I think it is something that is contemplated in your compliance section and is not needed here.

MS. BROWNLESS: Excuse me, Jon.

MR. KARNAS: This is Jerry Karnas. Is there an opportunity to jump in here?

MS. MILLER: Yes. Please say your name again.

MR. KARNAS: Jerry Karnas, Environmental Defense

Fund. I have a question on (c), as well. It seems to me that any analysis of the potential is really contingent upon which policy is being used to implement the RPS. You know, for instance, just take Germany who has gone from 2 percent renewable in 1997 to 14.6 percent in a matter of ten years.

They are going to hit 18 percent in another year. And so I wonder how they are going to be able to do that absent looking at multiple policy options for the implementation.

And then the same question I have is about the Navigant study. Are they going to be looking at the potential for attracting investment in, for instance, solar manufacturing or jobs, and then are they also going to be looking at cost containment through the lens of different implementing policies?

I know that when New Jersey's PSC went through this they had Summit Blue (phonetic), a very similar consulting firm, and they looked at seven different policies to implement an RPS, and they actually came to the conclusion that the

REC-only policy was the highest cost option. So I am wondering if we are also going to be able to have an opportunity to see different implementing policies lined up against each other in terms of costs, their ability to create jobs, their ability to attract manufacturing, and to increase -- all the things that are in the legislative intent, the investment in the state, improve environmental conditions, minimize costs.

MS. MILLER: I think Mark Futrell is going to respond here.

MR. FUTRELL: Jerry, Mark Futrell.

It is my understanding that Navigant will be looking at some different scenario analyses and addressing some of the concerns that you have raised as far as looking at the potential for future renewable development. And we can talk about that as we go through our conference calls, in the data collection area, and in our updates with Navigant as that contract is finalized.

MS. MILLER: And I want to keep reminding people that you are invited to send us alternative rule language by September 2nd.

Suzanne.

MR. BURGESS: Can I jump in? This is John Burgess.

MS. BROWNLESS: No.

MS. MILLER: Go ahead.

MR. BURGESS: I run the energy business for Knight

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(phonetic), which is the largest market maker in the state. I am also a member of the Alliance for Renewable Energy.

When I looked at this draft rulemaking, it appeared to me that this is focused very much on a REC structure with a market-based REC trading REC. And it seems to me, again, based on my thoroughly extensive experience in the energy space that this model works reasonably well in a wind renewable market such as Texas, but is not going to work at all well in Florida. And the experience of New Jersey and Maryland would seem to bear that out, where tradable REC structures have been largely a disaster for a number of the renewable industries, particularly the solar industry.

And I would further go on to ask to what extent has the PSC in its analysis around the world of the most successful renewable policy instruments actually looked to feed-in tariffs and renewable energy payments as Jerry Karnas from EDF just mentioned, you know, clearly the most successful policy mechanism in the world for delivering renewables. The House and the -- well, the energy bill language would seem to allow a study and a PSC policy directive to look at the procurement of renewable energy, procurement by utilities of renewable energy, which is exactly what a feed-in tariff and a renewable energy payment policy mechanism does. So to what extent has that analysis been done, and can we see it, please.

MS. MILLER: Well, this is Cindy Miller, again. We

will see what other comments there are, but today we are trying to focus on the rule language, and we are on (1) only of 17.400. So to the extent that we can really focus on the draft strawman proposal, that will really help.

But, let me see if there are any other comments that we have from our staff. Okay. Suzanne Brownless has been trying to speak. Let me turn to her.

MS. BROWNLESS: Thank you. And my comments are going to be directed at Jon with regard to -- because I don't quite understand how his comments impact what we are talking about, which is (1)(b). We started talking about how many years there would be a Commission review, and then I think Jon started talking about whether the percentages would be applied, and I guess I think that is more appropriately discussed when we get where I hope we will eventually, down to (3)(a).

So, Jon, are your comments in any way related to (1)(b), or are they kind of a preview of what you are going to talk about for (3)(a)?

MS. MILLER: Jon Moyle.

MR. MOYLE: I'm sorry if I wasn't clear on that.

They were picked up on the (b) provision, because it requires utilities to go out and look at technical and economic potential --

MS. BROWNLESS: No, no, no.

MR. MOYLE: -- for renewable resources, so I was

trying to understand whether it was contemplated that each IOU 1 would have its own RPS with its own RPS number. So you would 2 have TECO with 3 percent, Power and Light with 6 percent, Gulf 3 with 4.2 percent. That you would have an RPS that contemplated 4 that. And I think the answer was that could be a possibility 5 further down the road, which I'm not agreeing with. 6 MS. BROWNLESS: Well, Jon, I don't see what you are 7 talking about with regard to (1)(b). The language of (1)(b) 8 talks about initial renewable portfolio standards and talks 9 about how often we are going to come back. So where is it in 10 11 (1)(b), that is what I don't get.

MR. MOYLE: Well, it says the Commission shall review and set renewable portfolio standards, plural, for each investor-owned utility.

MS. BROWNLESS: So you were trying to clarify whether that would be different standards for different utilities or the same standard initially for each.

MR. MOYLE: That's right.

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MS. BROWNLESS: Got it. Thank you.

MS. MILLER: Okay. Do we have any more comments on this Section 1? And we've got a long day ahead.

MR. ZAMBO: Cindy, this is Rich Zambo. I just had a brief comment about the Navigant study.

Based on the workshop we had, or I guess it was a meeting we had last Friday, the Navigant folks indicated their

know we have got a rulemaking hearing scheduled for

December 3rd, and I was just curious as to how the Navigant

study was going to mesh with everything. Because presumably we

would have a draft rule, you would have taken comments from

everybody by that time, and then you are going to get a new set

of information from Navigant. I just wondered what your

process was or what your thinking was as to how that would be

integrated into what we accomplish up to that point.

MS. MILLER: And Mark Futrell is going to respond on that one.

MR. FUTRELL: Rich, Mark Futrell.

Again, the contract with Navigant and Lawrence
Berkeley Lab has not been finalized. But in the scope of work
where we are now it contemplates some interim deliverables that
we think can be informative to the parties, the Commission, the
staff. And presently there is a tentative date of the end of
October to get a deliverable of a draft product that may be
useful, and then from then on it will be a process of
finalizing that document and bringing it into final form.

MR. ZAMBO: Okay. That clarifies it. So you will be getting something considerably prior to the next -- to the rulemaking hearing.

MR. FUTRELL: Yes. And we also contemplate that the report will be finished by the end of November. We also will

be having, you know, status report conference calls with the parties and with Navigant once the contract is finalized so that we can begin interacting and working through the data that we are developing.

MR. ZAMBO: Thank you.

MS. MILLER: Eric Draper.

MR. DRAPER: Eric Draper, Audubon of Florida.

I do have another comment on (1), particularly on (1)(c). When I read particularly the last two lines, Lines 20 and 21 of (1)(c), it appeared to me that including the words technical and economic in terms of the potential would be exclusive, would exclude some other potential benefits of renewable energy sources. So if we are going to ask them to do an analysis of potential, it shouldn't be limited to technical and potential. And, by the way, I've provided some alternative language here, I'm just trying to explain why I was looking at that.

The second thing is when I looked at the last line it said provide reasonably achievable and affordable annual energy savings. I thought actually -- I know Jon suggested taking this out, but I actually think that that clause is good, but I'm not sure about the use of the word affordable, because I'm not sure where I find the statutory basis for limiting those, the savings to affordable savings. So I have provided alternative language in the comments that I distributed

previously. And, again, I would like to try to describe what those are on the page that I handed out.

On Page 1, Line 20 to 21, that is the section on my comments, if you would refer to that. It's suggested that instead of -- that you amend this to read, start with the word analysis, so analysis of the benefits and obstacles for all potential Florida renewable energy sources to provide reasonably achievable annual savings that are -- and I inserted the words that are not cost prohibitive of energy produced from fossil fuels.

And I think that particularly relating that savings concept to the energy produced from fossil fuels are savings -- energy savings from energy produced from fossil fuels relates very much to the legislative intent, and also relates to the intent of the way that you -- I mean, your currently described application and scope of the rule.

And so that is just kind of an alternative way of coming at the same thing, but I think it is a little more direct. It takes out the limitations of technical and economic. It takes out affordable, which I don't think has a basis in the statutes. Thank you.

MS. MILLER: Sean Stafford.

MR. STAFFORD: Thank you, Cindy.

On Line, I believe it is 20, the potential for Florida renewable energy resources. We think that is a very,

very important part of this rule, but we find it very difficult to believe that there is any way that in six weeks a study can actually give you a number of what Florida's potential for renewable energy resources are. I mean, just in the biomass field alone, I mean, there are almost -- I mean, progress is being made on a variety of crops and farming mechanisms. The improvements are happening almost exponentially. And we are hopeful that that will be a realistic and achievable number, but it has also got to take into account that today's resources aren't going to be the resources we have four or five years from now, especially if new crops are introduced as feedstock in biomass.

So following up on Jerry Karnas' point I think he mentioned on the phone, your rule and what you do will impact this potential because it will be an economic driver and incentivizer for people and for growers in Florida and for energy producers in Florida to produce more feedstock using better practices and to really ramp up the development of that segment of the market.

I certainly can't speak for the other technologies, but at least on the biomass side one of the things we learned both at the climate action submit that the Governor put on and even in the trade missions we participated in the U.K. were that there are things being done around the world, there are things being done today, research that is being put into these

issues that it is already starting to give us some pretty tangible results. And we would like to -- you know, again, I think we mentioned this on the workshop call, that we would like to help Navigant with this and be able to steer them to the right folks, both at the University of Florida and overseas on this issue.

MS. MILLER: Thank you.

MR. KARNAS: I'm sorry, this is Jerry Karnas again. I think Sean hit it right on. I mean, for instance, not to belabor the point again, but Germany has 10 gigawatts of biomass in that country. If we are the number one biomass potential state in the country, you know, Florida has, you know, the potential there is huge, and so it is really policy dependent on what the potential is. So that is where I'm having problems with this section, so it really depends upon which policies we put in place to see what the potential is.

MR. BURGESS: This is John Burgess adding a comment on the solar side.

Jerry, you are absolutely right. The solar insolation in Florida is double that of Germany's, yet Germany installed 1,100 megawatts of solar in 2007 and has 3,800 megawatts installed today.

Now, that is policy driven. So, again, I think I would echo both Sean's comments and Jerry's comments here. The policy is absolutely critical here in terms of evaluating the

economic potential.

2 MS. MILLER: Thank you.

And we have Leon Jacobs and then Michael Dobson.

MR. JACOBS: Hi, this is Leon Jacobs for the Southern Alliance. My question goes to Paragraph (c) in Subsection 1, and I want to -- actually, this is a matter of clarification. It appears that the process here anticipates that when review of the RPS is undertaken that the initiating factor will be the utilities filing what they propose to be the new goals, ala the FEECA process, and that the threshold for those measures will be that they produce kWh savings. Is that the correct interpretation of that paragraph?

MR. FUTRELL: I believe that's what it says, yes.

MR. JACOBS: Then we would suggest that probably it would be too narrow a perspective when you are looking at how you want to move the RPS forward. We would suggest to you that you would want to make sure that you are -- much in the context of what I think was earlier language, you are exploring whether or not you have done a good job in bringing to the market reasonable renewable resources in the past, and I think you want to look at what we can do in the future.

The very nature of this market is that it is evolving, and these technologies will be evolving as this process evolves. I think at each turn when you come back to look at this you probably ought to want to make sure you are

not leaving anything out. So I will be concerned if when you come to look at -- review this, that you are only looking at what is, again, on the ground now, and what seems to be viable. I think you want to have a forward-looking process. And I would be concerned if the threshold is that it must produce kWh savings. That's not what you look at when you look at other resources, supply-side resources.

I would suggest to you that you may want to have a more liberal perspective in what is that threshold. I'm not prepared today with language as to what that will be, but I will give consideration to that and try to give you something in our comments.

MS. MILLER: Thank you.

MR. FERRARO: This is Frank Ferraro, if I may talk about (c).

MS. MILLER: Michael Dobson is next, and then we will turn to you.

MR. FERRARO: Okay.

MR. DOBSON: Yes. Michael Dobson with the Florida

Renewable Energy Producers Association. And I have really a

question, and I guess this would -- I'm thinking it would be

Mark. Again, with respect to Section (c), and that issue

regarding Florida renewable energy resources, will Navigant be

considered a sole driver with respect to how are we going to

determine the percentage of those resources and how that's

going to interplay with the time frames, et cetera, with the renewable energy portfolio standards? And, also, will Navigant work with IFUS (phonetic) and other organizations to help them extrapolate beyond what they are able to do in that six-week period of time?

MR. FUTRELL: This is Mark Futrell.

We tried to express at the meeting last Friday that we have started this collaborative process of interested parties here at the Commission to develop data. Now that Navigant is coming into the picture through this contract that is pending, we expect Navigant to work with the parties, we expect the parties to work with Navigant, as well as the staff, and the Governor's Energy Office to pull together a collaborative process. And the information from that process will be helpful in helping inform the Commissioners in their decision-making.

Ultimately, in Navigant's study they have to decide what is the appropriate data to utilize to do their analysis. We hope the information is developed from Florida sources. It will be useful to them and they will find it reliable, viable data. We have directed them as they begin the process to look at sources of data in Florida outside of our PSC process, like state universities, the Florida Solar Energy Center, other sources of information. So we will continue to work with them and we would encourage you to participate in that process.

1 MR. DOBSON: Thank you.

2 MS. MILLER: Thank you.

And then the call in, I believe it is Frank Ferraro.

MR. FERRARO: Yes, thank you. Frank Ferraro,

Wheelabrator.

I'm confused by (c). The answer given to Jon Moyle about (b) where it talked about each investor-owned utility. It was, I think, stated that the intention was that there was a set percentage and all the utilities had to meet that percentage. And down here, again, in (c) it's now saying each investor-owned utility shall propose numerical standards. I don't know why it's the -- first of all, I don't know why it is the -- and I assume this is going back to this once every five years or whatever time period review, but I don't know why it specifically calls out the investor-owned utilities to propose standards. It seems like it's just that the Commission is going to have a proceeding much like this one where all parties will come in and comment.

And so to say that the utilities will come in and propose a standard seems to -- I'm sure it's not the case, but it is certainly implying that it is between the Commission and the utilities and everybody else is out of it. So I don't know why it is singling out to say each investor-owned utility shall propose standards. If the standards apply across the state, and it's a proceeding in five years or whatever time period to

review the numerical standard, then why isn't it just that there is going be a proceeding?

MR. FUTRELL: Frank, this is Mark Futrell. This

Commission has authority over the investor-owned utilities in

this matter. We do not have authority over, for example, your

firm, so we cannot require you to provide us information or to

direct you to take action. So this is where we are coming from

is from what our statutory authority is.

Now, when processes like this begin, interested parties as they are here today and as you have called in may participate, and there will be ample opportunity for you to participate. And I think this Commission has a tradition of open processes, but that's the starting point. That is how this starts is that we have an opportunity --

(Simultaneous conversation.)

MR. FERRARO: -- the investor-owned utility can just say the Commission will hold a proceeding, but that is all right, it's semantics, and I will pass on it.

MS. MILLER: Thank you.

Are we ready to start with Section 2, definitions, or is there anyone else on Section 1?

MR. CAVROS: This is George Cavros.

MS. MILLER: And I do hope Section 1 was one of the toughest. Was there someone calling in that had a point to make?

MR. CAVROS: Yes, please. This is George Cavros.

I am also requesting a clarification on the construction of the last item starting on 21 and ending on Line 22 where it says the analysis of technical and economic potential for Florida renewable energy sources to provide reasonably achievable and affordable energy kilowatt savings.

My question is this, it contemplates each investor-owned utility proposing a numerical standard based on technical and economic -- (phone interference) -- for the purpose of providing reasonably achievable, et cetera, et cetera.

I imagine that is the right way to read the sentence, or does it mean that as part of the technical and economic potential for Florida renewable energy resources the utilities will provide their best estimate of what is achievable and affordable? Because at that point, you know, achievable is a term of art, and at that point you insert a lot of investor-owned utility discretion.

MR. FUTRELL: George, I think that's a good point, and I would suggest that you provide some clarifying language there. Again, I think we contemplate a process where there is a look at all the potential renewables out there. If you have got some better language you would like to see to clarify this, please provide that in your post-workshop comments.

MS. MILLER: Okay. Let's move to definitions, Section (2). Eric Draper.

MR. DRAPER: Yes. I just have a recommendation that insert a definition for environmental conditions, which is one of the concepts within the legislative intent, and also within the proposed intent language in the draft rule. I provided you proposed definition language for that, and I would propose that you insert that alphabetically before Line 17. And the reason I think it's important to have environmental conditions as a consideration is I think as this rule evolves and as you receive more information on a renewable portfolio standard, that environmental conditions will, of course, be part of the consideration and analysis that you are going to want to require of the effect of the RPS and the information that is provided.

So if you look at the bottom of the page that I handed out earlier, Page 2, Line 17, insert environmental conditions means amounts of carbon dioxide equivalent emissions, amounts of regulated pollutants, amounts of waste, amounts of water used, and impacts on native fish and wildlife from the production of energy.

MR. FUTRELL: Eric, this is Mark Futrell. To understand that, how do you foresee using that term in the rule?

MR. DRAPER: Well, if you remember my previous comments in (1)(c) in terms of what the analysis will be done by the investor-owned utilities, that we would anticipate that

there will be some analysis of the environmental conditions 1 That will be one example. You know, as I have examined 2 the rule, or I have saw some other places where that would 3 probably be taken into consideration. I don't want to 4 complicate this process or discussion by trying to insert a lot 5 of that at this time point into the discussion, but it is 6 7 really a placeholder. Thank you. MS. MILLER: Thank you. And is this definition from 8

the statute or --

MR. DRAPER: You know, I did a quick review to see if there was something that I could relate to, but I didn't find something that was appropriate just to borrow from. So some of the specific language in there, I think the carbon dioxide equivalent emissions is found in other language. fish and wildlife is, in fact, statutory language that would be borrowed from both 403 and 373.

MS. MILLER: Thank you. Other comments on definitions?

Jon Moyle.

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MR. MOYLE: I had one. On the first page. It looks like Line 17. You used the term associated compliance plans. It talks about all modifications of the approved renewable portfolio standards and the associated compliance plans.

MS. BROWNLESS: Jon, where are you on the bill itself?

MR. MOYLE: This is up in Section (1)(b). 1 MS. BROWNLESS: Oh, back in (1)(b). 2 MR. MOYLE: Line 17. I'm sorry. The term is used 3 associated compliance plans in Section (1)(b), and I think it 4 would be helpful to define associated compliance plans so that 5 it's clearly indicated what you expect in those plans from the 6 7 investor-owned utility. 8 MS. MILLER: Thank you. 9 I need to ask Mark. Mark, is it not my MR. TRAPP: 10 understanding that that is covered under Section (3) of the 11 rule on Page 3 where we say what the utilities are supposed to 12 file? Is that not the compliance plan? MR. FUTRELL: That is what we are contemplating, yes. 13 14 MR. TRAPP: I thought that was the intent, Jon. That 15 is covered in Section (3) on Page 3. 16 MS. MILLER: And we could note as set forth in. 17 Commissioner Skop. 18 COMMISSIONER SKOP: I will reserve my comment. 19 MS. MILLER: Thank you. 20 MR. JACOBS: This is Leon Jacobs for SACE. 21 In Paragraph (f) in Subsection (2) where you define 22 renewable energy credit, I note that you have undertaken this 23 whole bundled versus unbundled REC idea, and essentially come 24 down on the side of making these unbundled. 25 We just want to raise that there are a lot of policy

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issues that are wrapped up in that choice. Many of them are applicable further down the line to other areas of this rule.

And we probably want to take some time to look at this, because my first response is that there may be some need for flexibility.

Putting together an unbundled RECs market to my understanding is a fairly more difficult proposition. It introduces a lot more policy decisions that you have to make. Whether or not you allow out of state versus in state, all of those issues that may not be clearly tied down to this rule. And so we feel like if you go with an unbundled RECs market, those are some issues that we probably want to have some discussion about how they are going to play into all of this.

MR. FUTRELL: This is Mark Futrell. I think the statute is fairly clear that we are talking about a Florida-only REC market. It seems to preclude out-of-state RECs.

MR. JACOBS: Okav.

MR. FUTRELL: It seems to make that fairly clear. If anyone has a different understanding, I would like to hear that.

MS. MILLER: Bob.

MR. TRAPP: I would like to what Mark said. If you will refer to Page 96 of the proposed bill, Line 2663 is the definition of a renewable energy credit, and our definition is

exactly from the statute or from the law. So it appears to me that, you know, an unbundled REC is unbundled.

MR. JACOBS: I accept that. I won't belabor that point. I accept that. As to that issue, the statute is fairly clear; and I was really referencing that as an example of several issues that I believe are important to address. But you bring out a good point is that those subtleties are going to be really important as you go through the rest of the rule, and that is really my point. The subtleties of making that choice are important and we want to recognize those as we go through the rest of the rule. I won't belabor that point, but I agree.

MS. MILLER: Sean Stafford.

MR. STAFFORD: Thank you, Cindy.

On that issue, we believe there are two different issues. One issue is what the actual definition of a REC is, and we believe the definition of a REC is very clearly prescribed in the statute as an unbundled product. But your decision to go to an unbundled -- your decision to require two separate transactions, which is the power purchase agreement and the sale of the rec within a rec market is a different policy option, and we don't believe that is necessarily in the bill. That the bill doesn't speak to whether or not you have to sell an unbundled REC. We believe the option should be there, and I know we are getting into a little further down in

the rule to also bundle these products together, but not compromising the definition of the REC. The REC can be unbundled, but the REC is an unbundled product that will have a cost associated with it, it will have a very specific attribute associated with it. But combining the power purchase agreement -- (phone interference) -- we think is a whole different issue.

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we get there, but it's not clear in my mind that we have strictly done what you are implying we are doing. Because as part of this rule it was my recollection that we required utilities to refile those purchased power agreements to reflect the new policies that are reflected in this proposed rule, one of which would be how to treat RECs in terms of standard offer contracts and negotiated contracts.

I don't think that the REC market, I'm not sure that it says anywhere in there it is an hourly REC market that you can only buy on an hourly basis or anything like that. I don't think the staff's intent was to constrain you from entering into long-term contracts with respect to annual evaluations of RECs. What we did put in there was a valuation cap, if you would, with respect to the amount of money we are willing to spend on carbon sequestration, and that number was debatable, as well. So I look forward to that discussion in particular, because I'm not sure that our intent was as restrictive as you're reading it.

MS. MILLER: Thank you.

MR. ZAMBO: This is Rich Zambo. I just wanted to follow up on that. Are we still talking about the unbundled issue there?

I just wanted to say as someone who has had some experience over the years in selling energy in Florida, I think the unbundling of the REC is a definite positive. Because if you have to sell that energy, you know, off system and go through a process of transmitting it and paying for line losses and transmission charges, you know, you are going to lose a lot of the value. I think you are better off to have the flexibility to sell the energy and the REC separately. That would just be my observation. I support that part of the rule.

MS. MILLER: Thank you. So we are proceeding through the definitions. We've, I believe, gone through a few of these, but let me see if there are any other comments on the definitions or whether I need to go through them and identify them one-by-one. I'm not seeing anyone offering any comments, other comments on definitions.

MR. KARNAS: I'm sorry, this is Jerry Karnas,

Environmental Defense Fund. I just have a question. It

relates to the definition section, but it is a lack of

definition for some words that I thought might need definition.

In the statute when it says the Commission shall adopt rules

for a renewable portfolio standard requiring each provider to

supply renewable energy to its customers, it says directly, by procuring or through reliable energy credits. And so I guess the question I have is it seems that the legislative intent of creating a rule where energy can be, you know, provided directly to customers or through procurement, that is being left off the table in this rule, and I was just wondering if there was a reason for that and why renewable energy credits are the only method that is being contemplated.

MR. FUTRELL: I think even if a utility procures its own -- builds its own capacity, there would be renewable energy credits associated with that project. And those RECs from that project could be used to meet their own RPS standard, or they could be used and sold on the market to a utility that needed them. So I think we addressed that --

MR. KARNAS: But just if the Legislature throughout the entire bill it is or through renewable energy credits, so it is not -- you know, and so I am just wondering. You know, there are other policies that could be geared towards the procurement of renewable energy like long-term contracts and pricing schemes to widen the market.

MR. TRAPP: This is Bob Trapp. My understanding, as the staff discussed that language in the statute, we found it impossible to account for, to tell you the truth, mixing kilowatt hours with RECs. They are two separate things that are identified by the statute as being separate attributes. So

in my viewpoint, in making the RECs the thing that you count in order to comply with the RPS, it's a way to simplify the accounting of did you meet the RPS or not. The RECs are associated with utility constructed facilities. That's the build option, the self-build option. The RECs are associated with purchased power contracts. That is the procurement option. And the RECs are associated with renewable facilities, that's the renewable option.

So, again, in my mind, if you can think of a better way of accounting for these attributes that are going to be counted toward the RPS, fine, let us know about it. But that was our means of simplifying the accounting of did you meet the REC or not, or did you meet the RPS or not.

MR. BURGESS: This is John Burgess. Just in direct response to that point. Again, in Europe and in Germany they have a REC transfer, an accounting transfer under a feed-in tariff policy mechanism. So you absolutely can have a REC transfer in conjunction with a different policy mechanism along the lines that Jerry just outlined.

So, again, I would reiterate Jerry's point. I believe that the current rule drafting has ignored the other policy mechanisms that are working successfully throughout the rest of the world and has focused purely on a very narrowly defined concept of a REC, which is a market REC, and I think frankly that analysis needs to be done. I mean, why was it not

looked at? Can I just throw that out.

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MR. ZAMBO: This is Rich Zambo. Can I make a comment? I maybe can shed some light on this. I'm assuming that as a base for all of this that the energy that gets sold from a renewable energy facility would be sold at avoided cost, right? So we do have a separate pricing protocol under existing Public Service Commission rules for the energy, and this is just an additional attribute that would add additional revenues on top of the energy revenues.

MR. TRAPP: That's my interpretation. This is Bob
Trapp, again.

And with respect to this concept of feed-in tariffs,

I think if you would look at the concept of feed-in tariffs,
they parallel very closely Florida's existing policies with
respect to standard offer contracts for renewables and
cogeneration facilities. What we have done is taken the
existing avoided cost constrained feed-in tariff and expanded
it pursuant to the legislation to embrace these other
attributes associated with -- they go beyond just the energy to
basically put together a feed-in tariff that has, what do you
want to call it, value plus, if you would. And that's the
concept. So I think we have analyzed the Germany methodology,
so to speak, in the context of how it works in Florida.

MR. ZAMBO: Yes, I think you have, Bob. This is Rich Zambo, again. I just want to say that is why it is crucial or

critical, in my view, that the RECs be separate from the 1 energy. Because depending on where the renewable energy 2 facility is located, its particular utility may not have a need 3 for energy, but it may have a need for a REC or vice versa. 4 I think it is important to keep these two separated, otherwise 5 you are going to limit your market to sell these and extract 6 7 any value from them. MS. MILLER: Thank you. 8 Suzanne Brownless. 9 MR. BURGESS: This is John Burgess. 10 MS. MILLER: Could you wait --11 MR. BURGESS: Following on that comment, I think that 12 is actually a little misunderstanding of the way a feed-in 13 tariff system works. You don't need a separation. 14 bundled payment. You can have a separation, certain markets 15 do, but the majority of the markets have one bundled payment. 16 17 MR. TRAPP: And that is certainly a potential under 18 this rule. MR. ZAMBO: The Florida markets have separate energy 19 20 payments based on utility needs and utility service areas, and that is a matter of federal and state law. I don't think we 21 22 could change that in this rulemaking. 23 MS. MILLER: Thank you. 24 Suzanne Brownless.

MS. BROWNLESS: And I just want to make sure, Bob,

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that I understand the basic concept here for this REC market.

As I understand it, each qualifying facility, whether it is being constructed by the utility itself, whether the utility is purchasing RECs from it, or energy from it, or whether it is being built by a third-party will generate a certified number of RECs, is that correct?

MR. TRAPP: Yes.

MS. BROWNLESS: Okay. And then there will be a price associated with those RECs. I mean, the market will set a price.

MR. TRAPP: There will be a market associated with those RECs. It may be a contract market, it may be an hourly broker market. Hopefully it is both.

MS. BROWNLESS: Exactly. That's what I'm trying to get at.

MR. TRAPP: We want to establish a working market -(phone interference) -- so that we can maximize the value of
the attribute to the renewable to foster development while at
the same time minimizing the cost to the ratepayer of paying
for that attribute.

MS. BROWNLESS: And that for a third-party developed renewable resource that had a bundle of RECs associated with it, they would be able in this larger market to negotiate a separate contract with whomever needed the RECs, and that that value could be however they negotiate it.

They could bundle the contract, they can 1 MR. TRAPP: separate the contract, they can do it as they want to as 2 3 available, and they can -- as Rich Zambo has suggested, there is no transmission line losses associated with RECs. 4 5 MS. BROWNLESS: Exactly. MR. TRAPP: It's a fungible piece of commodity, a 6 7 piece of paper. MS. BROWNLESS: Exactly. So that you could have a 8 long-term contract of a minimum of, let's say, ten years that 9 would generate a stream of revenue for the sale of RECs. 10 11 MR. TRAPP: Sure. MS. BROWNLESS: Giving stability to the market, and 12 also giving a developer basically a bankable stream of revenue 13 that he could then use to project finance his project. 14 15 MR. TRAPP: Sure. 16 MS. BROWNLESS: Thank you. 17 MS. MILLER: Okay. We are on definitions, and you 18 are hearing staff's views on what is in the strawman proposal. 19 Sean Stafford. 20 MR. STAFFORD: I just wanted to follow up on that. You know, in our written comments, Florida Crystals has taken 21 22 the position that the statute specifically notwithstands avoided costs, and on Line 2694 of House Bill 7135 we are 23 24 trying to figure out how we come to an avoided -- how we go

back to avoided cost plus the REC. And why is there -- and

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guess I don't know if this is the right time to discuss this or not. I guess we are going to discuss this in a few minutes if we ever get to these other sections, but avoided cost is obviously a very -- it is just not anything we support as being part of this process, because we believe the Legislature spoke fairly clearly and said, you know, for purposes of complying with this, we are now throwing avoided cost out the window and we are now going to allow for maybe more of a voluntary -- maybe more of a negotiation between two parties. And, I guess our question is why are we back to avoided cost again on this unbundling?

MR. TRAPP: Cindy, may I?

MS. MILLER: Bob.

MR. TRAPP: Let me answer you in the form of a question. What is affordable? What is cost prohibitive? And, basically we are not here to talk about avoided cost, we are here to talk about what is the value of the attribute known as a REC, and we are using that to define going beyond avoided cost pursuant to the provisions of the statute.

But remember, the statute also says we don't want to overburden the ratepayers of Florida. Why should the electric consumers of Florida bear the full burden of global warming? I mean, is it all here? Are there tax incentives, tax breaks and other incentive mechanisms in play that encourage reduction in greenhouse gases? We are but a part, and our part has to be

balanced.

Our reading of the statute is the balance is between environmental economic development and all of those other attributes and cost to the consumer. This is our proposal to balance those parameters. If you have a better idea, let us know.

MS. MILLER: Jon Moyle.

MR. MOYLE: I'm sorry, I think the point simply was if I understood it, you had said in response to a question from Rich that you interpreted avoided cost to be still a polestar, and if I understood what Sean was saying, he was saying, yes, but remember the Legislature expressly addressed that when it said notwithstanding 366.913 and 4 upon ratification of the rule, the Commission may approve projects and power sales agreements to comply with the REC.

So I think there is latitude that the Legislature provided to you not to necessarily hamstring you with an avoided cost analysis. But you asked the question, well, what is affordable. I would say that's probably something that could be determined, but it is what a reasonable buyer would pay a reasonable seller. You know, a willing seller and a willing buyer would pay for the REC.

MR. TRAPP: No, no. Show me your formula, Jon. Willing buyer, willing seller. Where is the ratepayer in that equation? Where does the ratepayer get to say, no, I don't

want to pay that much for that? That's what the role of the PSC as I understand it is, to act on behalf of the ratepayers, the utilities, and the renewables to strike a balance in this arena governed by the guidance that we have been given in the statute.

Again, we are not here to discuss or rehash of avoided cost. That is an existing policy that is on the Commission's books that may or may not get changed. I don't know, it could be subject to rulemaking, too. What we have done here is looked at what the legislative guidance was in going beyond avoided cost, and that is to try to put some kind of boundaries on this concept of attributes, separate attributes away from energy.

Now, you have got the energy. It is still over there. It is an existing policy, and if you want to change it, we can open some more rulemakings. That's over there. We are dealing here, which is a separate attribute that we are trying to put boundaries on with respect to what should we pay to attract while at the same time protecting our ratepayers and their ability to afford the electricity that is generated from that process.

MS. MILLER: We are at the noon hour, and we had planned to break for lunch at noon. And, you know, I think the dialogue is useful, but we are really trying to just keep moving through on the rules.

1 Let me ask you this, does anyone have any other specific comment on the definition rules or changes? And if 2 not, when we come back at 1:00, we are going to start on 3 Section (3), which is the renewable portfolio standard. 4 5 So are there any final comments on definitions before 6 we break for lunch? 7 MR. ZAMBO: Yes. This is Rich Zambo. I had one comment on the definition of classes. You have only got two. 8 You have got two classes there, and I would suggest to you that 9 10 you may want to have a third class. I realize Class I is by 11 legislative directive, but there are other types of renewables 12 out there, primarily the waste heat industry, who has zero 13 emissions, just like wind and solar do. And I would suggest that there should be a possibility of another class between 14 Class I and II. That is the only comment I've got, and I will 15 get you written comments to that effect at the appropriate 16 17 time. MS. MILLER: Thank you. We will break for lunch 18 19 until 1:00 o'clock. MR. FUTRELL: And those that are on the line, we are 20 going to drop the line, and you can call back in at 1:00 p.m. 21 MR. ZAMBO: Thank you. 22

(Lunch recess.)

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MS. MILLER: Okay, we are back after lunch. We extended a little bit, because we heard some of you were stuck

in line at the cafeteria. So we are on (3) on renewable portfolio standard.

I want to mention a couple of things. We have had a few concerns about on the call-in people, and we do have them on again, to please ask to speak. To just ask me, Cindy Miller, that you want to speak, because there has been some concern that it's getting too casual, and we do have some serious stuff to work through. And all the discourse I have heard has actually helped people, but if you could go through and ask me first so we are not just having a dialogue, we'll have it more formal.

We are on the renewable portfolio standard, and I want to ask if anyone has some opening comments on the renewable portfolio standard, generally. And then I'm going to ask Tom Ballinger to talk about the numbers that we have in here.

Do we have any opening comments from anyone?

MS. BROWNLESS: I don't have any opening comments,
but I couldn't hear what was just said on the telephone.

MS. MILLER: Was there a speaker from the call-in?

Oh, it was just backfeed.

MS. BROWNLESS: I'm sorry, I have no question.

MS. MILLER: Mike Twomey.

MR. TWOMEY: Cindy, I think if I may, I will just incorporate what might be kind of a short opening and comments

on specific parts of (3).

MS. MILLER: Okay. And let's go down the line. Does anybody want to make opening comments on the renewable portfolio standard? Okay. Well, I'm going to turn it over to Tom Ballinger to head this up.

MR. BALLINGER: Thank you, Cindy.

Chris, if we could put up some slides here. Let's go to, I think -- let's go to the third slide first, Chris. That might be easier.

These are numbers -- I know we had a discussion today about the 2 percent starting number in 2010, if that is existing resources, or whatever like that. Let's leave that discussion for another day and we will make sure those numbers get verified, but all I wanted to do is present, based on the percentages shown in Part 3, what the effect would be on gigawatt hours in Florida.

Okay. Gigawatt hours and RECs, it's the same thing.

And what you see is what I did is I took the percentages, I also looked at the utilities' 2008 ten-year site plans, which go out to the year 2017 of projected sales. All you have to do is take those sales, so for the years 2010 and 2017, I took the four generating investor-owned IOUs, which is FPL, Progress, TECO, and Gulf, added them together, multiplied it by the percentages you see here to get the equivalent gigawatt hours. And you see it is over a doubling between 2010 and 2017, going

from a 2 percent RPS to 3.75 percent.

We then extrapolated the growth of utility sales by the same growth rate that they had historically to get years 2025 and 2050, and you see we have approximately another doubling by the year 2025, and then a huge increase by the year 2050. Again, by the same percentages. So the math fell out that way. I'll be happy to -- later on, I guess, as we go we can provide actual tables that show these numbers down the road, but just from a graphical representation, I wanted you to be able to see this.

Then what we also had to try to do was look at what does this mean in terms of dollars. And, Chris, if you would go to the first slide, I think. What I did here is since we have escalating sales and we are trying to look at an estimate 1 percent of total retail revenues into the future, I needed to develop an equivalent rate to use going forward. And what I did is I went to the utilities' actual 2007 retail revenues, multiplied it by 1 percent, got a total dollar number, divided it by those gigawatt hours sales in that year, and came up with an equivalent rate. And that is what you see up here. So it is roughly about 1/10th of a cent for each IOU on their revenues. These will change as fuel prices change and all of that, but we had to have a starting point to give some estimate of the financial impact of the 1 percent cap as we go forward.

The next cap that we did -- Chris, the next slide,

please -- is what I'll call the REC equivalent rate. And this goes back to that other cap that is in the other portion of the rule of the \$16 a ton. Now, this one gets a little complicated. I was charged with putting this in cents per kilowatt hour, so bear with me. It is a little confusing, but it is not too bad.

I first started out with going back to try to find total tonnage that the four generating utilities emitted. And the latest data we could find was in the year 2004 off a DOE site I think it is, or an EPA site, E-GRID (phonetic), and it gave total tons emitted by the four generating utilities, again.

I simply took that number times \$16 a ton to get a total cost at \$16 a ton to sequester all of that carbon. I then took that number, divided it by the gigawatt hour sales in the year 2004, to get an equivalent rate. And, again, these are estimates to give us a ballpark figure of what we are trying to do, because we are trying to balance the 1 percent revenue cap versus the RPS cost, as well.

And as you see here, in my mind it shows something quite telling. FPL had the lowest rate on a per carbon, and that is to be expected given FPL is primarily natural gas. So their amount of carbon per kilowatt hour is probably going to be less than the other utilities. So the rate results to me made some intuitive sense.

As you see, this really would be the plus, if you will, to our avoided cost plus concept that we are proposing here. This would be the adder to the traditional, if you will, avoided cost contracts that generators would get. What I don't have and what I would ask of the IOUs maybe for the next workshop that we have, if John Burnett is still watching on the web, is to get a levelized cost for the utilities' existing standard offer contracts so we can have a comparison of what the adder would be in terms of percentage. Is it increasing the total revenues, if you will, to the renewable generator by 5 percent, 10 percent. That is the piece we are missing yet, and I would ask the IOUs help in providing that.

When you take this rate -- go back to the other one. I can give you the 1 percent increase. It is not a chart here, but using those dollars, or those rates I should say, the impact roughly of meeting the 1 percent cap, if you will, for FPL in the year 2009 it would be about \$120 million. In 2016 it would escalate to 149 million. In 2024 it would be 189 million, and on. And I've got similar numbers for Progress and TECO and all of that.

That led to staff's discussion there in the summary that most utilities would be below the 1 percent cap given these RPS numbers. Obviously if you start changing these numbers, you start coming up closer to the cap and, we are trying to balance between bumping up against that cap and

getting development, as well, and not burdening ratepayers too much.

As an aside, we got some written comments by the Solar Sunshine -- what was it, by Thomas Sutton who proposed different percentages, and they were different rates, and I did a quick calculation this morning to do that. And, Chris, if we could go back to the third slide. I'm sorry, you don't have it, but that number in 2010 he proposed also a 2 percent number, so that number would stay the same as far as the gigawatt hours from renewable energy in 2010 would be the same under the solar proposal and the staff's strawman rule.

In 2017, the number jumped up, I think, to 8 percent, and that number would jump up to 18,294 gigawatt hours. So you would see almost a doubling, over a doubling of what staff has proposed. And in the year 2025, the solar proposal would jump up to 57,337 gigawatt hours as opposed to 17,000. So it is a much more aggressive RPS.

I have not done the following calculations to see what the cost of that would be given the equivalent rate. And I think what we are at today is this is where staff tried to balance things between the 1 percent cap and the costs that we are adding to avoided costs to balance this. And we would ask, you know, the participants and anybody if you have other ideas, and also a similar type analysis to what you are proposal would do. And I think from there we can go into some questions.

1 MS. MILLER: Do we have any questions or comments? 2 MR. MOYLE: I just wanted to --3 MR. KRASOWSKI: Cindy, this is Bob Krasowski. 4 any of those charts that Tom was referring to on the website at 5 all? 6 MR. FUTRELL: Bob, this is Mark Futrell. They are 7 not on the web now. We will post those at the conclusion of 8 today's workshop. MR. KRASOWSKI: Okay, thank you. 9 10 MR. FUTRELL: Sure. 11 MS. MILLER: Suzanne Brownless. MS. BROWNLESS: We have, the Florida Solar Coalition 12 13 has looked at these numbers, and we'll present detailed comments, but I will just tell you kind of where we came from. 14 We agreed with starting at 2 percent as the prior year's retail 15 electric sales for 2010, so we agree with that starting place. 16 We would say that by January of 2011 it should be 3 percent; 17 January of 2013, 10 percent; January of 2015, 12 percent; 18 January of 2018, 16 percent; and January of 2020, 20 percent. 19 Our idea being that we read the Executive Order 20 07127 to be 20 percent renewables by 2020. And we appreciate 21 22 that the executive order states that the Commission has requested to initiate rulemaking to, "Require that utilities 23 produce at least 20 percent of their electricity from renewable 24

resources, a renewable portfolio standard with strong focus on

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solar and wind energy, "but doesn't give a year.

But we also know that the Governor's Office has issued numerous press releases, the first one being July 13th of 2007, and this is also found in the Florida Department of Environmental Protection's -- I don't know what you call this thing. The name of it is The Post, so I think that is their internal newsletter, which also clearly states that the Governor's directive is that it is 20 percent by 2020. So the goals that we've set out achieve 20 percent by 2020, and in our comments we will try to provide the analysis that talks about revenue and dollars and rate impact.

MS. MILLER: Mark.

MR. FUTRELL: Is Mr. Sutton on the line?

MR. TRAPP: Could I ask before you leave Suzanne's comments, could I just ask her a clarifying question?

MS. MILLER: Bob.

MR. TRAPP: Thank you.

Ms. Brownless, in proposing those RPS standard levels, have you done any analysis on the potential rate impact, or the potential relationship with the staff's proposed revenue cap, or RPS, or REC cap levels, have you done any correlation of how they fit?

MS. BROWNLESS: We are in the process of doing that, and we'll have a chart with our comments that do that. We actually started out thinking that the better comparison

instead of to revenues would be to fuel expense on the theory
that renewable energy saves fuel. And we did look at those
numbers. And, frankly, the fuel expense numbers are so
staggering in terms of the billions of dollars that are spent
on that that when we were doing that analysis we thought, well,
if the staff wants to do annual revenues, we will go with
annual revenues.

MR. TRAPP: But isn't it true that to the extent -- I mean, we are talking here primarily about the RECs and the attributes and everything, but aren't you compensated for energy when you sell energy at avoided fuel rates? Isn't that a wash?

MS. BROWNLESS: I think there is some idea that, particularly for small solar thermal folks, folks who have hot water heaters, they are not actually selling energy to the grid, they are avoiding demand. And so for people who are actually selling energy, Bob, you are absolutely correct. But for folks who are not actually selling energy to the grid, but are avoiding fuel expenditures because they are removing demand, they're in a different category.

MR. TRAPP: Have you looked at the retail rate impacts associated with that, though? Because the equivalent economic value they are receiving is a full retail rate as opposed to a energy or capacity rate.

MS. BROWNLESS: And, Bob, we will. I mean, we are

trying to do that.

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MS. MILLER: Additional comments going down the line here.

Leon Jacobs.

MR. JACOBS: We have not formulated specific proposals or alternative proposals to the standards here, but as a general comment, the idea we hope in developing this structure is to incent -- is a balancing of the incentive for bringing renewables to the market and providing signals to that marketplace, and management, again, not minimization, but the management of the costs to the utilities. We would agree that the structure that is proposed is slanted too far towards minimizing costs for utilities and does not, we believe, provide sufficient incentive to attract investment to the renewables marketplace.

We believe that a more aggressive structure is called for to do that. We are not prepared at this moment to agree with the alternative proposal of Mr. Sutton, but we will provide that in our written comments.

MR. FUTRELL: This is Mark Futrell. I would just like to follow up with that. What is a sufficient incentive to give us a sense on our thinking on this? You know, we have thrown the idea out of this 1 percent revenue cap and you are saying it is not sufficient. What would be a sufficient incentive?

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MR. JACOBS: In my reading and understanding of the literature, both length of contracts and amount of compensation of both issues as to adequate incentives, I don't have a threshold for those, but what I have seen are three to five year length of contract, and looking at -- and I would agree with the comments, I'm not sure that I am at the point of agreeing that we look at the revenue.

I see that as a beginning point. I don't know that I think that it's terribly off base to look at it as a beginning point, but I believe it is just that, a beginning point. If you want to incent this marketplace, I think you have to begin to look at ways of providing growing revenues to the renewable providers as this market grows. And remember this, what we are seeing in most of these industries is that their costs are coming down, and so it's not necessarily indicative that you will have to increase costs to the utilities in order to expose this market to more renewables.

If their costs continue to decline, you can expand their market access without imposing pro rata costs to the utilities. And I think that's the apple on the tree that you really want to be shooting for in this structure. And that is what -- I don't know that we have dug that deep yet and we would like to propose something that would do that, and we will do so in our comments.

MS. MILLER: Mike Twomey.

	MR.	SUTTON:	Cindy,	this	is	Thomas	Sutton.	Could I
add	something	?						

MS. MILLER: Yes. I just recognized Mike Twomey, so let's go with him next and then we will go right to you.

what Leon said, and that is I would ask everybody in the process to recognize and remember that utilities aren't going to be paying incentives. Their customers will. The utilities are going to pass these costs through, every cent if they are prudent, on to their customers. So whether they are viewed as incentives, payments for the RECs or whatever, these are dollars and cents that are going to be paid by real people that are out there footing the monthly bills. It is not like a big corporation is going to pay it by and large, the bulk of these customers are residential customers. They are going to foot the bill at the end of the day. Thank you.

MS. MILLER: We will go next to Bob Sutton and then Eric Draper.

MR. SUTTON: Thank you. I think our company was mentioned as we did submit comments yesterday, and our percentages were more aggressive than the strawman, but not as aggressive as what Suzanne spoke about from the Solar Coalition. But we got to this -- I think our assumptions and reasons for being more aggressive were exactly the same as what she laid out, and, you know, to me these need to be stretch

targets on we won't hit them. And we don't have any doubt that with the right incentives, the industry will get there and they will meet these targets.

Now, what is the right target? And we put some numbers out there with respect to just say solar PV, but one of the concerns we had is if we understood the calculation that Tom went through, we were translating the REC value at 1.6 cents per kWh or \$16 per megawatt hour, and using that number, one of the IOUs, I think it was Gulf, would hit the 1 percent cap. So we worked backwards and we said, boy, if I go and sell my power at avoided cost, let's say \$90 a megawatt hour, and then I get only, if you will, 16 for the REC, there aren't very many -- hold aside solar PV -- there aren't a lot of other renewable technologies that are going to expand at those prices. So, you know, either the 1 percent is not a sufficient cap, or there is, you know, some other calculation and metric, and I don't know if it is fuel costs like Susan (sic) said, but maybe we need to look at some other metric. Because I just don't see us advancing if those are the prices that we would be talking about.

MS. MILLER: Thank you.

Eric Draper.

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MR. DRAPER: Yes. Just in reference to previous comments, I just think that we need to recognize that, you know, with concerns about short-term pocketbook issues that we

are here because of -- primarily with what drove the passage of the legislation, the reason we are having this discussion today has to do with climate change and fossil fuel scarcity. Just a preamble comment.

But without getting into the numbers itself, I did -and maybe I misunderstood your direction, but I did have a
couple of changes that I was going to recommend in terms of the
language. I think in Number 3 is that the analysis that is
asked for there, I think that the words technical economic
potential unnecessarily limits the analysis that would be done
to allow the utilities to propose their standard is too narrow
and doesn't consider all the things that probably ought to be
considered such as the avoidance of environmental impacts and
particularly climate change.

So I'm going to suggest, I have given you language on this in the handout that I have provided this morning, that everything after the word standards is stricken from Line 15 through 17. And that is just one recommended change. And then I have another one that I would like to address, which is in (3)(a). It seems to me that when -- I'm just not sure about this, and maybe you can answer the question or make an assertion, I am recommending that you left something out in terms of production of purchase of renewable energy credits, that the question of the procurement of renewable was the third option that the legislation talked about.

And I don't know if I am just misreading that or not, but it seems like there is supposed to be three options for being able to get renewables and that you have two listed. So I've got recommended language of putting in the words procurement of renewable power, which comes directly from the statute. That would go on Line 18 through Line 20.

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MR. FUTRELL: Staff's assumption on that one was that where we used the word production of credits, they would be produced from a utility-owned facility. And so that is just to fill that in a little bit more. But we appreciate your suggested language. But just so you will know, produced -- we have through the production or purchase production we contemplated that would include utility-owned renewable generation.

MR. DRAPER: Just a follow-up question, and you are helping me learn here. Then you only anticipate that the nonutility, the purchase of power that is nonutility produced then would only be purchased through RECs, it wouldn't be purchased through direct contracts?

MR. BALLINGER: If I may, Cindy? Tom Ballinger.

I think what Bob said earlier is, yes, this is a REC-only proposal process. That the purchase of energy is still under our current cogeneration statutes at avoided cost. The REC market is in addition to that. So it is RECs only, and it was more for accounting for keeping track of these things,

and that is the intent of that.

MR. DRAPER: I guess I missed that. I think that that is probably just not consistent with what the statute seemed to recommend, but maybe I'm wrong about that.

MS. BROWNLESS: Cindy.

MR. KARNAS: This is Jerry Karnas.

MS. MILLER: Okay. Go ahead, Jerry.

MR. KARNAS: Yes. We will be providing some detailed language on this, but just broadly, if I may, I just think that these targets don't reflect the seriousness of the problem. You know, both our energy dependence issues, in Florida 98 percent importing for energy needs to Florida, and also with climate change. So I have some very strong opinions about the targets, and we'll be providing some alternative options on that.

And then in terms of the costs, we have to remember, as well, that every dollar spent on renewable energy production in Florida is a dollar that stays in Florida. So regardless of what Mr. Twomey has said, yes, your ratepayers will be bearing this, but the money is going to be staying in Florida creating jobs in Florida. So one of the lenses that I would recommend these targets be looked at through are are these targets going to create jobs. Are these targets going to increase venture capital investment in Florida. How are the markets internationally and nationally going to respond. I mean,

California has \$400 million flowing into the green energy sector every single quarter. These targets, are they going to change that dynamic for Florida?

You know, we have to act in a bold fashion in order to get a corner on this global market, and I think that that is something we really need to look at here. Because, you know, with the state of Florida's economy, we are crying out for diversification right now, and this is largely, you know, even T. Boon Pickens has identified this as the new growth area for our country, and we have got to send a clear signal to the markets that Florida is in play and I don't think these targets do that.

The other lens I would ask this be looked at is is this going to bring solar manufacturers to the state of Florida or other renewable manufacturers to the state of Florida. That is another key component of what the Governor's vision for renewable energy in Florida is that, you know, we start creating jobs through manufacturing and development of new technologies. And I don't think these targets would meet that standard, as well.

MS. MILLER: Okay, thank you.

MS. HERIG: This is Christy Herig. May I?

MS. MILLER: Yes, go ahead.

MS. HERIG: I just want -- I did do some calculations
as to what it would take to get it by 2020, and it is certainly

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1	way more than 1 percent. But, back at your first workshop, you
2	asked someone to supply to you what the system benefit charges
3	or rate impacts were in other states, and I'm wondering did you
4	ever get that information?
5	MR. FUTRELL: Christy, this is Mark Futrell. In our
6	RPS summary docket we did a survey of other states. We do not
7	have we didn't follow up or don't have that current
8	information, but we do have some information in our summary
9	report on public benefit funds.

MS. HERIG: Okay. Well, I was just asking because, you know, typically in other states it is more like, you know, 3 to even 5 percent. So the 1 percent cap is going to be difficult to get some of the, you know, the diverse technologies that bring in the benefits that the previous speaker just spoke about.

MR. CAVROS: Cindy, this is George Cavros. Could I have a word?

MS. MILLER: Go ahead.

MR. CAVROS: Thanks. I didn't realize when I was looking at the targets that they were driven by this cost cap. This cost cap seems to be driving the goals. It seems to be driving the excusal of performance, and it seems to be driving the REC value. And, you know, maybe this might be a good opportunity to address that cost cap.

You know, at first blush, the RPS targets are very

weak, and we don't believe that they will incent the type of
renewable investment and job creation found in the legislative
intent of House Bill 7135. In the early years it preserves the
status quo. You know, I would agree that 2 percent is a
starting place, and then we are held stagnant there until ten
years later. You know, it seems like we are on a slow train to
nowhere in terms of incenting renewable energy investment,
robust renewable energy investment in the state.

The targets in the Florida RPS will be the lowest of the 28 states that have an RPS. You can look from Arizona to Wisconsin, the Florida targets don't come close. That said, it is an oversimplification to say that the targets alone decide the success of an RPS. You know, coupled with the cost containment constraint which maybe I can discuss now, I have concerns that the RPS rule as proposed will not drive investment in renewable energy technology and jobs, which that is a part of the legislative intent and that of Governor Crist.

You know, I am concerned that it is just going to support the status quo. And I think we all can agree that business as usual just isn't an option in Florida anymore. Florida wants to position itself as a leader in a clean energy economy.

You know, Bob asked earlier a very good question. He goes where is the ratepayer in all of this? Well, let me answer that as a ratepayer. My bill early next year is going

to increase by over 20 percent from early cost-recovery for new nuclear plant construction, and also fuel charge pass-throughs, and all of those costs are related to conventional generation.

Okay. That is 20 percent from decisions that this Commission has adopted. And I would like to ask the previous speaker, Mr. Twomey, where his outrage is over that? And that is to 3-1/2 million ratepayers in FPL's territory and the ratepayers in Progress's territory and we hear similar stories of massive rate increases.

I mean, we finally have the opportunity to wean ourselves from conventional energy, to avail ourselves of renewable energy, the energy dollars in the state, you know, and the proposed rule limits the rate impact to 1 percent, even though I am going to be paying 20 percent next year because of our reliance on conventional generation.

And I would like to, you know, and maybe I would like to throw a question out to the staff and have the staff answer this. You know, where is the fairness in the regulatory framework? If conventional generation was subject to the same cost cap, I wonder if we would have any conventional generation today. You know, you need to level the regulatory playing field. It is obviously discriminatory, and the proposed cap is a reflection of that. And I would like to throw it back to the staff and get their comments on that. Thank you.

MS. MILLER: Okay, thank you. Let's see if we have

any responses on that.

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MR. BALLINGER: Cindy, if I may.

MS. MILLER: Tom Ballinger.

MR. BALLINGER: You mentioned your bill going up 20 percent, that may be true with fuel, but what we are talking about today is a REC market which would even add to that, and that is why we are very considerate of the impact to the ratepayers. We are talking about continuing to pay renewable generators the utilities' avoided cost and then adding an adder to that for this REC market to recognize the additional attributes that they have. So we are trying to be considerate of the ratepayer and balance that.

MS. MILLER: Okay. Let's proceed down the line here.

MR. CAVROS: Could I respond to that? This is George Cavros, again.

MS. MILLER: If you want to make a quick comment in response and then we will move on to the next speakers.

MR. CAVROS: Sure, thank you. I just wanted to recognize that we appreciate what staff is doing in trying to keep costs low. I just want to just for the record state that there is -- I bet there are a lot of ratepayers out there that would want to avail themselves of renewable energy options at even more than the 1 percent cost cap. Thank you.

MS. MILLER: Thank you.

MR. JACOBS: If I may?

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MS. MILLER: Leon Jacobs.

MR. JACOBS: Hi, this is Leon Jacobs. I would suggest, and I hope we are looking at this in somewhat of a broader context. I thought what I understood the analysis to be is we understand that the utilities are going to have to incur costs to deal with carbon reduction. And I thought one of the elements here was assessing a value to the options and resources that they have available to them to do that.

I think it's a correct observation to say if we continue to rely heavily and if not exclusively on fossil fuel resources, those costs are going to continue to increase, and the consumer's risk, as Mr. Twomey correctly noted, for those costs will continue to increase. And so I hope we would look at this as, okay, here is an opportunity, here is a resource where not only can we diversify the fuel mix, but we can help the utilities to better manage that cost risk. That has to be a part of this analysis, not just the idea that there will be some rate impact.

And, by the way, what is the time frame of that rate impact? Will the life-cycle costs of these resources really wind up being an onerous rate impact to these consumers when the costs that Mr. Cavros referred to are definitely going to have a long life-cycle. Are we looking at -- how are we looking at the life-cycle costs for these resources and how they measure into that equation?

So those are some of the subtle points that dig deep into the analysis here. And, again, I think it's going to require -- and I don't think we can do this overnight. We probably can't do it immediately in the first design, but it has to be a part of the process as we talked about earlier in putting this facility in place.

MS. MILLER: Thank you. So we are continuing to look at these percentages in (3) in the rule, and I know that some of you have nicely already sent some written materials with some suggested revisions but, again, those who haven't, September 2nd is the date.

Sean Stafford.

MR. STAFFORD: Thank you.

On behalf of Florida Crystals, we strongly support the Governor's executive order issued in 2007, and we believe that is a goal that should be set. We think there is an enormous jump start value to the renewable energy market when you set a strong goal, send a strong message, and then have that tension of the safety valves which you are trying to build into this, which is either some sort of price cap that does protect consumers from rate increases, but we believe the goal — and we will just stick to the goal and not get into the price cap. We believe the goal ought to be more aggressive. I mean, we very respectfully, you know, we respect the work that you all have done in assembling this and putting it together,

but those numbers just aren't the kind of numbers that are going to bring renewable energy developers into Florida, that are going allow existing renewable energy developers to expand, and incentivize existing renewable energy developers to be more aggressive.

Right now, Florida Crystals has, you know, I think we mentioned in it the written statement, there are plans to expand currently in Florida, but those plans are going to be very contingent upon this rule, and these goals that are set, and the structure of this and how it works. And as, you know, really the nation's -- we believe it is the nation's largest biomass electric plant located right in Florida, Crystals has a lot of experience doing this and doing it in a cost-effective way.

We don't have some of the other problems that might exist on the cost side that may be there with other technologies. But from Florida Crystals' perspective, the goal ought to be far more aggressive, but ought to contain those safety valves that do have those protections. Will we meet the goal? You know, we don't know. But should we try for 20 by '20, we believe we should, and that's our position.

MS. MILLER: Are you suggesting that the Governor's executive order had a 2020 requirement in it?

MR. STAFFORD: We will echo what Suzanne said, which is the Governor's executive order was very clear about setting

the state on a new path on energy. And in all of the
statements as it was released, and I think the Governor was
very clear that 20 percent was the number. He made it in, I
believe, his State of the State Address to the Legislature in
discussing renewable energy and greenhouse gas reductions, and,
you know, that is the number that we support.

MS. MILLER: Thank you. And I believe we have a few people up here who would like to speak.

Mark.

MR. FUTRELL: Sean, if you could, you mentioned that you do believe that some sort of a cost containment is appropriate. Can you give us a sense of what you feel an appropriate number would be, or some sense of what that level is that you think is appropriate to accomplish what you think ought to be accomplished?

MR. STAFFORD: Well, you know, we have studied it and we haven't submitted numbers yet, and we are waiting -- we are trying to assemble that, as well. And we don't know what the exact number should be, but given the context that the previous speakers have talked about, about the cost of where we are now because of traditional generation, we feel that 1 percent is really, really undershooting it. You know, maybe it is 3, maybe it is 5, I don't know. We haven't landed on a specific number that we think should be the number moving forward, but we strongly believe one in the context of all the other rate

increases that have been passed on to consumers the last few 1 2 3 4 5 6 7 8 9

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years, one is just a -- it's an unfair comparison for a market that needs -- a market of renewable energy producers that need to be sent a message along with their partners that are going to be financing these projects, which is Florida is serious about it. We are going to set the requirement out there. We are going to do everything in our power to make sure this happens given all of the regulatory tools that the Commission has. All of the -- I guess people talk about incentives, but also the hammer.

That message has to be sent. And if it is not sent you just aren't going to see a whole lot more generation. So, as to a specific number, we haven't lit on it yet, I guess you could say, but we do strongly feel one is too low.

MR. FUTRELL: Well, it would be very helpful to provide that information to staff. I mean, Ms. Brownless has committed to suggesting higher targets than is in the strawman and to provide supporting information and analysis on the impacts of that. And it would be helpful for those that are going to file the comments to attempt that similar type of effort. That would inform staff very effectively. Thank you.

MS. MILLER: Bob Trapp and then Tom Ballinger.

MR. TRAPP: I just wanted to clarify one thing. You stated you mentioned goals. Are you advocating goals or are you advocating standards? I think the rule calls for

standards.

MR. STAFFORD: Standards. I was just interchangeably using that term.

MR. TRAPP: We try not to do that.

MR. STAFFORD: I apologize.

MR. TRAPP: Thank you.

MS. MILLER: Tom.

MR. BALLINGER: Well, Bob asked my first question. I caught that, too. I didn't know if it was — because you said if we meet 20 percent, fine, so was it a goal or a standard. But it is a standard. You think it is number we should shoot for. Okay. That sort of answered my question, because I was going to ask you to comment on Mr. Moyle's provision that we should have compliance payments if we don't meet it. So what if we don't meet these things? We need to have the teeth in it. And I think you are saying the same thing now.

MR. STAFFORD: We are. And Florida Crystals provided some options on what we thought were some possibilities on the compliance side. You know, the bill didn't exclude an ACP, the bill didn't specifically address an ACP. You know, it is our opinion that the wide latitude in that language that I believe said -- let me read directly from the bill. The language that said appropriate compliance measures gives you all the flexibility you would need to put together a serious and meaningful set of rules and penalties for noncompliance.

MR. BALLINGER: I would echo what Mark said that any submissions you have with proposals of different percentages, give us the economic impact of it. If it is going to be 20 percent by 2020, what do you estimate the impact to the ratepayers to be?

MR. STAFFORD: We will be more than happy to do that.

And, you know, obviously our economic impact is a little different than some of the other renewable technologies' economic impact. So as we discuss economic impacts moving forward, we have to take into consideration that technologies have wide varieties of costs. You know, generally speaking, we believe that — and in our data submission we believe that moving forward a new renewable energy plant that we built would have probably a levelized cost of plus or minus 12 cents a kilowatt hour. That is a very different cost structure than are out there with some of the other technologies.

Now, the other technologies have their benefits and we have our benefits. And we can, you know, probably argue that, I guess, in the tiering section, but we feel that we can provide economic data as to how it would impact the ratepayers from a biomass production point of view, but I don't know if we are the best qualified to discuss, you know, some of these other -- there were a couple of submissions that had rate impacts or electric generation at 60 cents and above. That is just not an area of expertise that I think Florida Crystals

believes we have, but we can provide complicate data on our technology.

MS. MILLER: We are going to go to Bob Trapp.

MR. TRAPP: I had one more follow-up. You are touching on some things I really want to talk about if we can today, and Tom goes back to some of those comments Jon Moyle was talking about earlier. Let me address the alternative compliance payment, and I think we explained it a little bit or tried to explain it a little bit in our summary of the rule.

In our view, the Legislature did give the Commission discretion to look at compliance strategies. But what they didn't give us was the name of the agency to send the money to. And we noted that in most jurisdictions during the RPS workshops that employed an alternative compliance payment in lieu of meeting the goal or standard, they sent it to some place that used the money to develop renewables. We weren't given that. I don't think -- the staff didn't believe the Commission had the authority to either establish such an entity or to pick such an entity, so we kind of thought that that conventional thinking of an ACP was off the table.

What does that leave you with? Basically, in our experience it only leaves you with the conventional regulatory compliance strategies. So what do I do? Fine them \$5,000 a day for not complying with the rule? I don't think we would get far with that. Do I attack their return on equity? If so,

Jon, how many basis points should I assign to it?

MS. MILLER: Bob, if I could, I know that's a topic,

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MR. TRAPP: You are going to pull me in?

MS. MILLER: -- but Joe Treshler and Clay Bethea have been wait a long time to speak, so if I could let them speak and then we go to the alternative compliance that would be good.

MR. TRESHLER: Thank you. Yes. I am Joe Treshler with Covanta Energy. We build facilities that fall within the biomass definition, like Florida Crystals and Wheelabrator, and we are supportive of their comments that have been made to date here. And one of the things in just an overview of looking at this is it seems like one of the major things that we are all trying to work with is minimizing the cost of power to the ratepayer. And it seems like this whole thing is sort of minimizing the cost of renewable power, and those are not the same things.

And I'm disappointed that staff's position is continued reliance on the avoided cost model here. This approach has stifled renewable energy development, indigenous diverse renewable energy in this state for 15 years, and fuel supplies are less sensitive to the fuel impacts that we are talking about here just in the last few minutes where we have seen huge rate increases that fall outside of how you do an

avoided cost structure. So, I guess, you know, that is just my general feeling that we are kind of missing the point by relying on an old model. And we are working with these guys to try to come up with language to try to help you with that to put the Public Service Commission in the driver's seat to set standards that the utilities then have to come back to and that there are some real penalties for not meeting so that we can actually drive this marketplace. So we will all work on this, and so thank you for your efforts, and we are here to try to support those.

MS. MILLER: Thank you.

MR. BETHEA: Thank you, Cindy.

Clay Bethea, and today I'm representing the Florida
Pulp and Paper Association. And to make some comments around
the percentages of retail electricity, the numbers look
palatable to our organization from one respect that you don't
have unintended consequences. But one of the things that we
wanted to present would be you have got a lot of competing
interests. And as my company has presented in the past, if you
just put 100 megawatt facility up, well, that's
1.3 million tons if you do it conventional technology. And if
you are only harvesting 15 million tons a year, so pretty quick
you can see that you deplete the resource of woody biomass in
North Florida.

And obviously there is organizations here, and as you

comment to protect renewable energy as well as sites today, is should you carve out, because as Sean stated awhile ago, there is a lot of potential in agricultural type crops, whether it's sugar cane, or energy cane, or maybe a eucalyptus. But woody biomass, what is the potential there, and there is not the potential that most people perceive.

There is a 20-year growing cycle. Our industry has made that a renewable industry, you know, for what we have worked on. We developed those planting technologies, but I don't think you want to take and deforest North Florida and plant all agricultural crops. I don't think that is our goal here. And so as we look through this, do you have carve-outs for just as you would solar and thermal, solar thermal, should you be looking at woody biomass and then closed loop systems within your percentages that you put there so that just as the standard says, it's renewable, and if we start planting 100 megawatt facilities and they are all using woody biomass, we are going to overcut that resource quickly, which we think there is planting data that shows that within five years what we are using today is going to be overcut.

MS. MILLER: Judy Harlow.

MS. HARLOW: Mr. Bethea, you mentioned the set aside in the rule for solar, and I just want clarification from you. Are you looking at some type of rule language that would limit the amount of woody biomass that was used as fuel within the

RPS that would limit the amount of credits from those facilities that would count towards utilities' compliance?

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MR. BETHEA: I think there is data out there that says we talk about waste wood that is not being used today, I think we can quantify that pretty easily. And after you get past that, and I would refer you to the study that was done by GRU down in Gainesville. Biomass, and basically for the 40-megawatt -- and here it is talking about a 40-megawatt plant, but I think it is a 100-megawatt plant now. 40-megawatt plant in GRU, Jacksonville, and Tallahassee, and if you will look at what they are talking about there, they are getting into pulpwood. They are going to use all the waste wood and then they are getting into the pulpwood. And so what you are going to do is you are going to drive cost up quickly on pulpwood, and I would refer you to Europe where wood now is priced -- and I think wood will be priced here before long -on a Btu basis. It will not be priced on the way it is priced today on a ton basis, it will be looked at as Btu.

And so a lot of people see this as a cheap resource today, and I don't believe that is going to be the case especially after the RPS. But the point is in Europe they have got organizations that control cutting. You can't cut your own land. I don't think that is going to go over in the United States. I own my own property and I don't want somebody coming and telling me when I can cut it.

So the point is how do we make this palatable to where we don't overcut the forest. We know what those resources are today. Now, some of those resources will disappear and I think energy crops will be put in. But right here at the beginning I think we need to be very careful what we put because we can overcut those resources.

So what I'm saying is we don't want to hurt the folks that want to do a closed loop system. If they want to go get 30,000 acres and plant an energy crop, you know, I think we encourage, you know, replacement of fossil fuels.

MR. FERRARO: This is Frank Ferraro. Can I speak?

MS. MILLER: Yes, go ahead.

MR. FERRARO: Thank you. First, with just a general comment. The last speaker, it is kind of scary to a developer that there might be a thought that the state is trying to regulate what the free market will regulate. That is if the price for fuel gets to be so high, biomass or any other kind, developers will not build and that's the regulation. I would hate to see the RPS become a tool to decide what technologies get built because of some theoretical model. But that is just a general comment on that last comment.

But as to the percents, as I said earlier,
Wheelabrator will comment on it, but we will reserve that until
we see the data that the staff has said they are going to post,
because we feel we need to see that before we make any informed

recommendation. As to the Governor's 20 percent goal, I certainly think that is a good and achievable goal, and I would think that he would have wanted to see it happen before he reaches his 94th birthday. So I think that perhaps putting it out to 2050 is somewhat of a stretch.

and just before you go on to talking about the ACP, I want to stick with this Number (3) here, and I think we are still in Number (3) and Number (3)(a). And this may sound like I am talking semantics again, but here it is much for specific, where the strawman rule instructs the investor-owned utilities to propose annual global portfolio standards. And I am, again, struck by the -- confused by the use of the word proposed, because here in this context, as opposed to (1)(c), it's requiring a proposal from the utilities within 90 days of the effective date. So we are not talking about a future rulemaking, we are talking about now.

There is nothing to be proposed. If there is a fixed percentage established in the RPS, there's no proposal. It is this is what the number will be. The utility has a certain amount of retail electric sales it has, there is a fixed percentage set in the rule, and so it's a simple calculation. So, again, I think the word proposed needs to be stricken from Section (3), because it is not a proposal, it is a requirement to submit the amount of RECs that they are going to have to produce.

MS. MILLER: Okay, thank you. Let me follow up on a few things here and we will also hear from staff on that.

Commissioner Skop.

COMMISSIONER SKOP: Thank you.

Before we went on to the ACP discussion, I guess, that Mr. Trapp was going to speak to, and if we could possibly put Mr. Ballinger's slides back up. I would like to speak to provision (3)(a) with respect to the implementation schedule. And I'm equally concerned about the cost to the ratepayers, but I do say that I share many of the concerns that have been expressed here today by some of the participants to the extent that the proposed strawman rule implementation schedule, I think, needs to be more aggressive in terms of implementing even if it becomes a stretch goal, assuming that there is an appropriate cap or a safety valve to constrain costs.

And I think that, you know, I fully support both the Governor and the legislative initiatives, and they have tasked us to develop the best possible analytical framework in support of legislative ratification. And I guess one of the concerns I see it has been suggested that Florida currently has a 2 percent existing renewable generation within the state, and I see that the proposed rule in Item 1 suggests that the baseline should be adopted by January 1st, 2010.

And I think that perhaps a more appropriate
baseline -- and, again, that's subject to determination, I

guess staff has taken that action item to ascertain exactly what our existing renewable resource would be, but perhaps the baseline should be implemented by January 1, 2009, and then we would be subject to legislative ratification, and then you would move on from there with maybe some additional increases in renewables.

It would jump-start, as some of the other stakeholders have suggested, moving forward with complying with the RPS. But certainly 2050, again, I'm not so sure the Governor would be happy with waiting that long in terms of trying to do what both he and the Legislature has directed our Commission to do. So certainly I think a more aggressive approach, and I will speak to that in one second.

But going to Tom's slide real quick about the cap, and I guess I have a greater underlying question. One of Mr. Ballinger's slides showed the existing retail sales by utility. And assuming we know that number, and that would be 1 percent of the retail sales, that translates into a dollar value figure by utility. It to would be interesting at least for me and also for some insight into what goals are achievable in terms of setting percentages to know how much renewable capacity in terms of actually building various renewable resources could be actually installed on a per year basis using a 1 percent cap.

For instance, you know, if you know you have a certain dollar amount, and assuming that wind is about

2.3 million per megawatt installed, PV solar is about 10,000
per kilowatt installed, I don't have a good number for solar
thermal or biomass, but it would be, at least to me,
instructive to see some sort of correlation between if the cap
were at 1 percent, what does that translate into how much
nameplate capacity that you could put in for each year based on
the individual types of renewables.

I guess the other part of that, I guess, that translates into once you know what types of renewables that you can put in on a year-to-year basis you know a capacity factor for each of those renewables. For instance, wind, solar, biomass is nearly a baseload, solar thermal, et cetera, you can calculate how many actual kilowatt hours would be expected to be produced by each of those respective renewables. And then I think assessing that, that translates into what is achievable in terms of each year of what you could do.

And if there is no direct correlation between the 1 percent and these numbers, and I think Tom has placed them, these numbers are driven by the 1 percent cap, then obviously to reach a more aggressive goal the cap needs to increase or some other mechanism needs to be addressed to find that happy trade-off between cost and implementing prudent policy.

So, again, I would ask staff, or perhaps even more appropriately the stakeholders to do some sort of instructive analysis that could ascertain exactly what ability and how many

kilowatt hours or megawatt hours could be attained by each of the various renewables to help us, you know, further define what this schedule would be. But to me I do share the concern that the schedule seems to be highly biased to cost. Which, again, cost is a big consideration to me. But also, too, we have been tasked by the Legislature and the Governor to implement an aggressive RPS, I think, and although it is not expressly stated, I do remember hearing 2020. 2030 maybe I could live with, but, again, I think it is important to be cognizant of that and balance those tradeoffs between cost and implementing renewables for the sake of reducing our dependence on foreign oil and stimulating our economy in Florida.

And I think one of the best things that was contained in the legislation that was enacted is that the Legislature duly recognized the importance of generating in Florida, which provides jobs in Florida, supports our economy, and does something for our state instead of buying thin air out of state. And I think those are some very important considerations. Actually, I've been approached by a large solar company that had an interest in setting up shop in Florida that actually manufactures solar, and I think that is a good thing. That is part of what could come to Florida as a result of this.

But just one additional point that I wanted to make with respect to, I think, on Page 3 -- excuse me. I have lost

myself -- Page 5 of the summary of the rule, it speaks to a REC price cap. And I think if I understood Mr. Ballinger's calculations that are presented on the slides correctly, that the \$16 per ton originated in part from looking at the generation portfolio of each of the respective utilities, and, you know, some utilities are heavily dependent upon natural gas and others have coal-fired generation, and then somehow meshing that to the extent that you would not exceed a 1 percent price cap. I guess that's a good analogy.

I guess what kind of throws me a little bit, and I wanted to get a little bit more discussion on is that the REC is expressed in dollars per ton, and I think that that was to kind of drive in or back door into the 1 percent cap. It is not really a 1 percent revenue cap. But to me, again, noting that each utility has its own different generation, for instance, that, you know, coal would have more emissions per ton than natural gas, but also, too, like for instance, biomass, you know, they emit some carbon, so how do you equally balance using that type of methodology.

I mean, I am more used to seeing it in a dollar per megawatt hour. One REC is 1,000 kilowatt hours, which equals one megawatt hour. So I just wanted to get a little bit more clarification and discussion. But I also do share the concern that if we are going to incentivize renewables noting that the avoided cost at current, you know, fuel prices is probably

somewhere between 80 and \$90 per megawatt hour, \$16 per ton, and I don't know what that would convert to, to megawatt hour, I just kind of question how you can get there because renewables are a little bit more than that. So if Tom could provide just a little brief discussion or clarification, I would appreciate it.

MR. BALLINGER: Sure, I will try. Picking a REC price cap of \$16 a ton, first, I think it is kind of a conservative estimate. It came from some discovery and data we saw in the nuclear need cases for FPL. It is on, quite frankly, the low side of cost of carbon in the future projected. But we thought it would be appropriate to use a dollar per ton basis to kind of quantify the differences in renewable generators. Some have no emissions, like solar and wind; some have some emissions, like biomass. So to try to equate or not prioritize, but recognize the differences in renewables as far as their impact on the environment, and taking a dollar per ton value is the way to do it.

Now, that doesn't equate easily to cents per kilowatt hour. So until we get a utility with a portfolio of renewable generators and model its economic dispatch on its system, you are not going to get the impact of carbon emissions on the utility system. So until we have that data, we really can't get a firm grip on what it will do to the utilities' costs. What we did in the interim was try to develop an equivalent

cents per kilowatt hour rate, and that is why I went back to historic data and tried to show the linkage between carbon emissions and kilowatt hour production for each utility given their existing structure and their existing rates. And I think that is why this table, in my mind, shows some logic and some sensibility.

The way the rates shook out with FPL being primarily natural gas, they are the lowest emitter on a per kilowatt hour basis of carbon than the other utilities that have more coal and oil. This was purely done to try to get a feel for if RECs were priced at this much, which would be the adder to avoided cost, what would the total dollars be then of the price of the RPS standard compared to the 1 percent revenue cap.

So there is really the two caps going on here. One is setting if the market cap was this, this is how much you would spend to meet your RPS goal versus your 1 percent cap. Obviously, if you spend more for RECs, you are going to meet the 1 percent that much quicker. So it was trying to show a balance. And it is a number that is for discussion. It is nothing, you know, wed in science. It is a way to try to get something to start the discussion going of what is the right number.

COMMISSIONER SKOP: And just as a follow up, and I do appreciate that, I think that is a good way to quantify based on the 1 percent cap analogy and trying to develop a fiscal

framework for what implementation will cost. I just wonder if it might be more straight forward. I mean, we have got a good handle, I think, as a Commission on what avoided costs are for each type of generating unit. You know, if the REC were tied directly to, you know, perhaps a generation which seems to kind of correlate well to the legislative directive that it's based on prior years retail sales, which are dollars per kilowatt hour, it would seem maybe that it would be more simplistic to avoided cost plus the price of the REC equals, you know -- but I will leave that as the basis for further discussion.

But just touching upon my point, again, I think that the proposed schedule, some consideration probably should be given as some of the stakeholders have mentioned, to probably taking a little bit of a more aggressive approach, or stretch goals being equally cognizant of cost consideration and having those appropriate safety valves. But, again, I think that -- I think more would be expected from a draft rule than perhaps the basis for discussion presented.

I think that both the Legislature and the Governor probably expect a little bit more aggressive implementation.

And I don't know what that is. I mean, it could be -- I will just go hypothetical, and, again, this is not my thinking, but in 2009 if you have the existing baseline then by maybe 2010 you could add something to it. Like we have 2 percent now, maybe 4 percent in 2010, and then kind of ramping up

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that.

Thank you.

MS. MILLER: Bob.

know, this is a strawman throwing it out for discussion and everything. We have put some numbers in there, but, again, we have retained a national consultant to try to help us better get a handle on those numbers. And hopefully we will have results from that study that are Florida-specific and that we can get a better grasp of both the RPS percent numbers and the economic effects of a 1 percent cap and other types of things, and the economic potential as well as technical potential phases of that study.

slowly. But then when you hit 2015, where you have some time

for adoption and construction, maybe going up by 2 percent per

alternate fallback, but, you know, the last time I checked it

was try and do this in a cost-effective manner, but stretch

goals, I think, are important. And if we don't achieve them,

protecting the ratepayer. Which, again, is equally important.

But just if consideration could be given as staff continues to

develop the proposed rule, I think I would greatly appreciate

an important consideration. And to me 2030 would be an

then maybe there is that safety valve that provides for

I don't know how that would drive costs. That would be

So I would absolutely amplify on your comments,

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though, that input from the parties is highly desirous and 1 highly welcomed in that regard, too, because we would like to 2 get as much information as we can from consultants, you all, 3 4 us, independent analysis as we can. COMMISSIONER SKOP: One more follow-up. 5 MS. MILLER: Commissioner Skop. 6 7 **COMMISSIONER SKOP:** Thank you. Just one more quick follow-up, too, just to Mr. 8 9 Ballinger. 10 In relation to developing the 1 percent cap and the 11 equivalent rates and the REC price cap, did that just encompass the utilities' existing generation and excluded any PPAs that 12 13 they might have for renewables, or did that just look at their existing base load generation in developing that number? 14 15 MR. BALLINGER: I don't think it plays in because I 16 look at retail sales, so that comes from a mix of generation 17 and purchases. 18 COMMISSIONER SKOP: Thank you. MS. MILLER: Okay. 19 If we could go -- yes, Michael 20 Dobson. 21 MR. DOBSON: I just wanted to make a very brief 22 I know you are trying to move on, and you do have my 23 written comments, but we wanted to go on record, the Florida 24 Renewable Energy Producers Association, to let you guys know 25 that we, too, certainly support the Governor's position. It is our position that we wouldn't be sitting here today, frankly, without the Governor's executive order. So when I look at the strawman proposal, I would have to admit that we have somewhat obliterated anything that the Governor had in mind with respect to the percentages and the time frame.

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And with respect to the 1 percent cap, what I would tell you is that you have a tough job. Because the problem with Florida, when I talk to developers who have tried to do business in Florida, the word is that you will spend a lot of money in Florida and you will die young trying to get a deal done. So as a consequence, we really don't have a lot of historical data that would give you some idea as to the costs, how the costs will be spread out, how it will ultimately effect, you know, the ratepayer. But what I can tell you is that a lot of that depends on the deal. It depends on that renewable project. Each project is different. Those projects, the cost is really going to depend on a variety of things, depending on the technology, depending on the experience of the developer, depending on the financing models, and, you know, it could be a host of things. So I am saying that to say that we are going to have to have some latitude to go beyond the 1 I think that is going to be crucial. percent. Thank you.

MS. MILLER: Thank you.

MR. KARNAS: Hi, Cindy. This is Jerry Karnas, a couple more comments.

MS. MILLER: Okay, go ahead.

elements to cost control for renewables is maturing the market quickly. Creating the economies of scale quickly. You know, so that is one of the issues with the standards is that you are actually going to end up having, you know, not driving the cost reductions down quickly, because of the unambitious goals. For instance, Germany has averaged 5 percent cost reductions per year on solar PV. They have 4,000 megawatts of PV installed in Germany, 22,000 megawatts of wind, and they have done it through the price of a loaf of bread, which is the equivalent ever three to four Euros, which is \$7 American, which is exactly what -- or a little less than what Progress Energy customers are paying per month in 2009. It's less than what they will be paying in 2010, which is \$10.71 per month.

Going all the way up to 2015, your analysis states \$36 per month on every customers' bill for a nuke plant that is ten years away. A 40-megawatt solar plant can be built in one year. A 10-megawatt solar plant can be built in about six months. So focusing on creating economies of scale quickly as an important cost containment device is critically important to be evaluated in this rule.

MS. MILLER: Thank you.

We do need to change court reporters, and I know we have some follow up on a couple other questions that came up,

1	but we are going to take a fift ee n-minute break. It's 2:25
2	now, so we will come back at twenty of 3:00.
3	(Recess.)
4	(Transcript continues in sequence with Volume 2.)
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1 2 STATE OF FLORIDA 3 CERTIFICATE OF REPORTER 4 COUNTY OF LEON 5 I, JANE FAUROT, RPR, Chief, Hearing Reporter Services Section, FPSC Division of Commission Clerk, do hereby certify 6 that the foregoing proceeding was heard at the time and place 7 herein stated. IT IS FURTHER CERTIFIED that I stenographically 8 reported the said proceedings; that the same has been transcribed under my direct supervision; and that this 9 transcript constitutes a true transcription of my notes of said 10 proceedings. I FURTHER CERTIFY that I am not a relative, employee, 11 attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel 12 connected with the action, nor am I financially interested in 13 the action. 14 DATED THIS 25th day of August, 2008. 15 16 JANE FAUROT, RPR 17 Official FPSC Hearings Reporter (850) 413-6732 18 19 20 21 22 23 24

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