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BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. UNDOCKETED

In the Matter of  
RENEWABLE PORTFOLIO STANDARD (RPS).

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PROCEEDINGS:           WORKSHOP

BEFORE:                 CHAIRMAN MATTHEW M. CARTER, II  
                          COMMISSIONER LISA POLAK EDGAR  
                          COMMISSIONER KATRINA J. McMURRIAN  
                          COMMISSIONER NANCY ARGENZIANO  
                          COMMISSIONER NATHAN A. SKOP

DATE:                   Friday, July 11, 2008

TIME:                   Commenced at 9:30 a.m.  
                          Concluded at 3:17 p.m.

PLACE:                  Betty Easley Conference Center  
                          Joseph P. Cresse Hearing Room 148  
                          4075 Esplanade Way  
                          Tallahassee, Florida

REPORTED BY:           MARY ALLEN NEEL, RPR, FPR

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

2 CHAIRMAN CARTER: Good morning to everyone.

3 We'll ask everyone to take your seats, and welcome to

4 our workshop on the renewable portfolio standards.

5 And with that, staff, would you read the  
6 notice.

7 MS. MILLER: Cindy Miller with the Commission  
8 legal staff. Pursuant to notice issued June 27th, 2008,  
9 this date, time, and place were set for a Florida Public  
10 Service Commission workshop on the renewable portfolio  
11 standard.

12 CHAIRMAN CARTER: Commissioners, just kind of  
13 a brief statement, and then we'll ask Mr. Futrell to  
14 kind of go from there for our staff presentation.

15 Just for the record, the Florida Public  
16 Service Commission has a longstanding policy of  
17 promoting the use of renewable energy in Florida.  
18 Today, given the growing environmental and economic  
19 concerns in our state and across our nation, it's even  
20 more important that we find ways to utilize renewable  
21 generation technology to meet more of our future energy  
22 needs.

23 Our Governor and the Legislature have  
24 demonstrated support for the development of renewable  
25 energy as an important part of an overall state energy

4

1 policy designed to reduce greenhouse gas emissions,  
2 increase fuel diversity and energy security, and to  
3 encourage capital investment and economic development in  
4 our great state. Recently enacted, the energy  
5 legislation requires the Commission to submit a

6 renewable portfolio standard rule to the Legislature by  
7 February 1 of 2009 for ratification.

8 The purpose of our workshop today is to  
9 discuss the renewable portfolio standard requirements of  
10 the new energy legislation and hear the stakeholders'  
11 specific recommendations for elements of an RPS that  
12 should be addressed in the Commission's rule.  
13 Commissioners and those of you in the public, this  
14 workshop is a opportunity for us to take input from the  
15 interested parties who are joining us today to discuss  
16 the issues and give direction to our staff on how to  
17 move forward on the development of our RPS rule.

18 With that, Mr. Futrell, you're recognized.

19 MR. FUTRELL: Thank you, Mr. Chairman. Mark  
20 Futrell with the Commission staff. And before we move  
21 into our formal part of our agenda, I would like to just  
22 take care of a few housekeeping matters.

23 First, the agenda and all the presentation  
24 materials and comments that have been filed prior to the  
25 workshop are available to the audience here at this end

5

1 of the workshop. Also, Commissioners, you should have a  
2 notebook with all the presentation materials and  
3 comments that have been filed.

4 There's a sign-up sheet in the back of the  
5 room on this side, and we would appreciate it if all  
6 those attending would sign up so we can have a record of  
7 your attendance. We keep a list of attendees to our

8 various workshops and use that to notify parties of  
9 upcoming Commission events and also documents that have  
10 been received and posted onto our website.

11 We are going to make copies of all the  
12 materials that are submitted in this workshop on our  
13 home page. Hopefully, that will start appearing on  
14 Monday, and we invite you to check that out to access  
15 those documents. Also, we'll be having post-workshop  
16 comments, and those materials will also be posted onto  
17 the website.

18 Commissioners, as you recall, four workshops  
19 were held last year to gather information on a renewable  
20 portfolio standard. These workshops were in many ways  
21 conceptual in nature, where the many policy  
22 considerations that go into the development of an RPS  
23 were discussed.

24 As the Chairman mentioned, the Legislature has  
25 given direction on a specific Florida RPS. Going

6

1 forward, we will look to the statute in developing the  
2 RPS rule. Ms. Peterson of the staff will give you a  
3 description of exactly the contents of this new statute  
4 with regard to the RPS rule.

5 We view the Legislature's directions that the  
6 RPS covers supply-side renewable resources, and in the  
7 energy efficiency goal setting process that the  
8 Commission will undertake, that will be the forum for  
9 discussing demand-side or customer-side resources.

10                   Now, this morning, we'll first hear, as I  
11 mentioned, a presentation from Ms. Peterson on the RPS  
12 statute, and then we'll look forward to discussion among  
13 the parties and Commissioners on several presentations  
14 and remarks that parties have signed up to speak on.  
15 We'll also have a period at the end of the day for  
16 public comment. And also, any other parties who wish to  
17 speak, if they would come see staff during the day,  
18 during breaks any time, and give us a list of those who  
19 want to speak, we'll keep a record, and then we'll have  
20 a period of time at the end of the day for that.

21                   First we're going to ask Ms. Angela Peterson  
22 if she would come forward and provide some remarks on  
23 the RPS requirements of the energy bill.

24                   CHAIRMAN CARTER: Before Ms. Peterson comes,  
25 just as a heads-up, we want to have an opportunity to

7

1 hear from everyone, so we've asked, and I think staff  
2 has conveyed to those that are making presentations to  
3 kind of keep your presentations within the context of  
4 ten minutes. That way we can hear from everyone as well  
5 as have a discussion from the bench with the parties.

6                   Ms. Peterson, good morning.

7                   MS. PETERSON: Good morning. Among other  
8 things, House Bill 7135 included many provisions, one of  
9 which included and encouraged the development of  
10 renewable energy technologies here in Florida. I want  
11 to take the opportunity today to discuss what the law

12 says with regard to establishing a renewable portfolio  
13 standard, in particular, looking at Section 366.92,  
14 which outlines Florida's renewable energy policy.

15 The legislative intent of this section remains  
16 the same, and that is to promote the development of  
17 renewable energy, to protect the economic viability of  
18 existing renewable energy facilities, to diversify the  
19 type of fuel used to provide energy, to lessen  
20 dependence on natural gas and fuel oil, to minimize the  
21 volatility of fuel costs, to encourage investment within  
22 the state, improve environmental conditions, and at the  
23 same time, to minimize the cost of power supply to  
24 electric utilities and their customers.

25 The PSC is directed to adopt rules in order to

8

1 establish a renewable portfolio standard, an RPS for  
2 each provider. "Provider" in this case means an  
3 investor-owned utility, an IOU.

4 Additionally, each municipal electric utility  
5 and rural electric cooperative is to develop its own  
6 standards for the promotion, encouragement, and  
7 expansion of its renewable energy standard and encourage  
8 energy conservation and efficiency measures. These  
9 standards are to be identified in a report submitted to  
10 the PSC on or before April 1st, 2009, and every year  
11 thereafter.

12 Looking at the definitions, the Florida  
13 renewable energy resources definition remains the same,

14 that is, electrical, mechanical, or thermal energy  
15 produced from a method that uses one or more of the  
16 following fuels or energy sources: hydrogen, biomass,  
17 solar, geothermal, wind, or ocean energy, waste heat, or  
18 hydroelectric power.

19 Renewable energy is defined as hydrogen from  
20 sources other than fossil fuels, biomass, solar,  
21 geothermal, wind, ocean energy, and hydroelectric power.  
22 It also includes the alternative energy resource, waste  
23 heat from sulfuric acid manufacturing operations.

24 And the reason we're here today, an RPS or  
25 renewable portfolio standard. This means the minimum

9

1 percentage of total annual retail electricity sales by a  
2 provider to consumers in Florida that shall be supplied  
3 by renewable energy produced in Florida.

4 In the following slides, I'll get into the  
5 detail of the RPS contents, but I want to give you the  
6 overarching requirements for rulemaking. PSC is  
7 directed to adopt rules requiring an RPS for each IOU.  
8 In developing these rules, PSC is to consult with the  
9 Department of Environmental Protection and the newly  
10 created Florida Energy and Climate Commission. The  
11 draft rule is to be presented to the Legislature by  
12 February 1, 2009, and the rules may not implemented  
13 until ratified by the Legislature.

14 As we've discussed, House Bill 7135 requires  
15 that the PSC develop rules in order to establish a



16 renewable portfolio standard for each provider, each  
17 IOU, which requires them to supply renewable energy to  
18 their customers either directly, by procurement, or  
19 through renewable energy credits or RECs. We'll talk  
20 about those in a minute.

21 The rule is required to include methods of  
22 managing the cost of compliance. The PSC is given  
23 rulemaking authority in order to provide for annual cost  
24 recovery and incentive-based adjustments to authorized  
25 rates of return on common equity to providers. The rule

10

1 may provide added weight for energy provided by wind and  
2 solar over other forms of renewable energy.

3 The rule is to provide for compliance measures  
4 and conditions under which noncompliance may be excused  
5 due to a determination by the Commission that there is  
6 not is a sufficient supply of renewable energy to meet  
7 demand or it's cost-prohibitive. The rule is required  
8 to include compliance monitoring and enforcement and is  
9 to ensure that energy credited towards the requirements  
10 of the RPS is not counted towards any other program, no  
11 double counting.

12 Additionally, in developing the rule, the PSC  
13 is to evaluate through 2020 the current and forecasted  
14 levelized cost in cents per kilowatt-hour and current  
15 and forecasted installed capacity in kilowatts for each  
16 renewable generation method. Upon ratification of the  
17 rule by the Legislature, the PSC may approve projects

18 and power sales agreements with renewable power  
19 producers and the sale of RECs necessary to comply with  
20 the RPS.

21 Renewable energy credit trading or REC  
22 trading. REC is a product that represents the  
23 unbundled, separate, renewable attribute of renewable  
24 energy produced in Florida. It's equivalent to one  
25 megawatt-hour of electricity generated by a source of

11

1 renewable energy located in Florida. The rule is  
2 required to include procedures to track and account for  
3 RECs, including ownership of RECs, relative to whether  
4 the renewable energy supplier acts independently of a  
5 utility-sponsored program. The rule is also to include  
6 the appropriate period of time for which RECs may be  
7 used.

8 Reporting. On or before April 1st of the year  
9 following final rule adoption, each provider, each IOU  
10 is required to submit a report to the PSC which  
11 describes the steps they've taken in the prior year and  
12 the steps planned in the future in order to add  
13 renewable energy to their portfolio. It is also to  
14 state whether they were in compliance with the  
15 requirements of the RPS in the prior year and the plans  
16 for future compliance.

17 Additionally, each municipal electric utility  
18 and rural electric cooperative is to develop their own  
19 renewable energy standards and energy conservation and

20 efficiency measures. They are to report these standards  
21 through a report to the PSC on or before April 1st,  
22 2009, and every year thereafter.

23 And that's it. Do you have any questions?

24 MR. FUTRELL: All right. Commissioners, we're  
25 now moving to the period where we've had several parties

12

1 express interest in giving some formal presentations and  
2 remarks. And we would ask those that are going to speak  
3 to please identify yourself. Our workshop today is  
4 being transcribed, so please clearly identify yourself  
5 and who you're representing.

6 And first on the agenda is Mr. Steve Adams  
7 with the Governor's Office, the Energy and Climate  
8 Commission.

9 MR. ADAMS: Commissioners, good morning. My  
10 name is Steve Adams. I am representing the Executive  
11 Office of the Governor, the newly created Florida Energy  
12 and Climate Commission. I stand before you today just  
13 11 days since the creation of this new body by House  
14 Bill 7135.

15 On behalf of the Governor's Office, I want to  
16 commend the Commissioners for the work that has been  
17 invested by this body over the past year since Governor  
18 Crist signed Executive Order 127 last July at the Serve  
19 to Preserve Summit.

20 The Governor, as you know, called for a  
21 20 percent RPS and called also for particular emphasis

22 on solar and wind technologies in the constitution of  
23 that portfolio standard. Since the work has been done  
24 to date, the Legislature has enacted 7135, and the  
25 Governor proudly signed that just three weeks ago. We

13

1 were gratified by -- the content of the bill has many  
2 very important provisions that will help to reduce  
3 greenhouse gas emissions within the State of Florida as  
4 well as increase the energy security of our state.

5 We believe the renewable portfolio standard,  
6 the issue before you today, is one of the most vital  
7 strategies to moving this piece of work forward. We  
8 want to convey to you our willingness to work with you  
9 and with your staff over the next several months as you  
10 move through the rulemaking process.

11 We believe the renewable portfolio standard  
12 has very important economic development dimensions for  
13 the State of Florida. This will be a key strategy for  
14 job creation in a very important economic sector for the  
15 State of Florida moving forward, and that is in this  
16 area of advanced energy technologies.

17 So, Commissioners, with that, I really just  
18 wanted to say hello this morning, introduce myself, and  
19 to convey to each of you our willingness in the new  
20 commission to work with you and with your staff over the  
21 coming months.

22 Chairman, thank you.

23 CHAIRMAN CARTER: Thank you very kindly,

24 Mr. Adams. I know you guys are doing a great job. You  
25 worked yesterday and the last two days, and now here you

14

1 are again. We appreciate your efforts.

2 MR. ADAMS: Thank you, Chairman.

3 CHAIRMAN CARTER: Commissioners? Mr. Futrell.

4 MR. FUTRELL: Thank you, Mr. Chairman. Next  
5 on the agenda is Mr. Michael Dobson with the Florida  
6 Renewable Energy Producers Group.

7 Is there any member of the Florida Renewable  
8 Energy Producers Group in attendance today?

9 Okay. Seeing none, we'll move to our next  
10 speaker, Ms. Christy Herig with the Solar Electric Power  
11 Association.

12 MS. HERIG: Okay. Well, I too have been with  
13 this group for ten days now, but the Solar Electric  
14 Power Association is a group that is -- well, a little  
15 bit about the outline, but I'm not going to do this,  
16 because we want to keep it to ten minutes. You can see  
17 it in your stuff.

18 It was formed in 1992 as the Utility  
19 Photovoltaic Group with a lot of funding from DOE for  
20 the purpose of developing business scenarios with  
21 utilities. It has gone through a lot of changes, but it  
22 is still focused on utilities. The membership comes  
23 from several areas, but our services are still focused  
24 on utilities. Some of the really important information  
25 I think has come out of here, and as far as the Public

1 Service Commissions and staffs and energy offices, we  
2 give it all away for free. There's no membership  
3 requirement, so I would encourage you to take advantage  
4 of it.

5 But most recently, the business scenario  
6 report that came out in which Southern Cal Edison and  
7 Duke and Southern Company, many utilities were on an  
8 advisory board to develop that report. And I think  
9 making the business work for utilities is one of the  
10 most important things here also, and before I move on,  
11 the idea of integrating, because, you know, energy  
12 service and business is going through a change, so you  
13 need to figure out how to integrate the renewable  
14 industries with the utilities, with the environmental  
15 raw wounds that we have.

16 So keeping it quick, I don't need to go over  
17 these real quick, but remember, I've been in solar for  
18 -- well, in 1988, I built a plant for Florida Power  
19 Corporation back then over in Orlando, so it's been a  
20 long time. I never sold this house. I lived here in  
21 Florida. In fact, even though I worked at NREL for  
22 eight years, my colleagues a couple of nights ago  
23 laughed about the fact that I seldom showed up in  
24 Colorado. I was still working from Florida.

25 So in Florida, our solar radiation, you either

1 have a total measurement or two measurements, direct and  
2 diffused. Of the total, remember, you have either --  
3 that is what PV absorbs.

4 I just have to bring this up, because SEPA  
5 just took 31 utilities over to Germany for a  
6 fact-finding mission. I understand the Governor is over  
7 in Europe right now on a fact-finding mission. This is  
8 a comparison of the resources between Germany, who did  
9 1,000 megawatts, and I think 1,000 megawatts again in  
10 2007. The U.S. did little better in 2007. They did 200  
11 megawatts. But our resource across the board is better.  
12 Germany looks like Alaska.

13 On direct, which is for concentrating solar  
14 power, Florida doesn't look real good. I've done a lot  
15 of studies for individual municipalities and counties  
16 out in California, and they can make it work. There's a  
17 lot of attributes that go into concentrating solar  
18 power. Transmission has to be nearby, just like wind.

19 I wanted to just -- these next two slides say  
20 that DOE has this Solar America initiative, and other  
21 than Orlando, Florida hadn't really taken part of it.  
22 There is some incredible work being done under this  
23 initiative. One item that is -- that I think Florida  
24 needs to take part in is a big smart grid consortium.  
25 And I think if we're going to make renewables work, we

17

1 need to think in terms of smart grid.

2 So really, the only way we've taken advantage

3 of this is, Orlando Utilities is now a solar -- Orlando  
4 is now a solar city, and the Orlando Convention Center  
5 is one of the showcases.

6 And when we talk about renewable, and I know  
7 that the industry here won't let you forget, but  
8 remember, solar water heating can have a big impact here  
9 in Florida. And Lakeland has been deploying solar water  
10 heating systems and selling thermal energy for years now  
11 very successfully, and their program is looked at --  
12 I've been working on an International Energy Agency  
13 project for five years. Their program is not only  
14 looked at across the United States, but the  
15 international community has looked at it.

16 We don't have to go into details here, but the  
17 U.S. has definitely fallen behind in --

18 CHAIRMAN CARTER: Excuse me, Christy, one  
19 second. Let me just ask you a quick question.

20 MS. HERIG: Sure.

21 CHAIRMAN CARTER: Back up for a second about  
22 the solar water heating, the cumulative value from '79  
23 to 2006, this 136,000 solar water heaters.

24 MS. HERIG: Yes.

25 CHAIRMAN CARTER: Is that in one concentrated

18

1 area of the state, or is it just scattered throughout?

2 MS. HERIG: It's all over the state. It's not  
3 in a concentrated area of the state. Up until a couple  
4 of years ago, Florida, Hawaii, and California were --



5 and I'll look towards the industry guys to back me up on  
6 this, but Florida, Hawaii, and California were the only  
7 states that were really still deploying water heaters on  
8 a regular basis.

9 CHAIRMAN CARTER: Thank you. Commissioners,  
10 anything? Thank you. You may proceed.

11 MS. HERIG: Our annual state, as you can  
12 see -- my 2007 numbers have been updated. These were  
13 the ones that came out back in January, and I just saw  
14 an update. California did a little over 100. The other  
15 states are probably about where you see.

16 My point here is, though we're seeing some  
17 deployment of PV in Florida because of the rebate, it's  
18 still not where it should be. But I have -- I just came  
19 from Albany, New York, a big meeting up there, and the  
20 industry tells me that they've negotiated a few pretty  
21 large deals down here.

22 I also wanted to say that, you know, we're not  
23 that far away, and a lot of the industry up in New York  
24 said the same thing. You know, this is -- currently  
25 we're close to having a good rate of return. Now, this

19

1 is with incentives, this map, as far as having a rate of  
2 return.

3 This is without incentives with a reduction in  
4 price in 2015 and with an aggressive increase in  
5 electricity prices, and before that was the low  
6 aggressive, the low price EIA. And the EIA forecast did

7 come out before we saw some of the incredible increases  
8 in both coal and oil that we see right now. So both the  
9 conservative and aggressive forecasts from EIA are going  
10 to be updated, according to my contacts there.

11 And the rooftop potential, Florida is right  
12 there. And before I go too far here, both rooftop and  
13 greenfield -- you know, I think we need to look at all  
14 applications, but let's not forget that we've got a lot  
15 of big boxes here in Florida that is essentially real  
16 estate that could be used.

17 And I just had to bring this in. In this trip  
18 to Germany -- and as I said, I have been working this  
19 International Energy Agency project titled "Urban Scale  
20 PV," and this is a site, 440 kilowatts of PV on a 400  
21 kVA transformer, completely integrated. But the most  
22 impressive thing here is the energy efficiency  
23 associated with it. I mean, you see this very commonly  
24 in Germany, not so much in Spain. They have more solar  
25 farms there. But Germany, now in France, the

20

1 Netherlands, this is a common sight. And in this case,  
2 I do know the architect. He redesigned it to  
3 accommodate the PV more fully.

4 Setting policy. I was involved with the CEC  
5 back in 1996 when they first started. And, you know, I  
6 don't think you can set policy in isolation, and I don't  
7 think policy can be set and not re-evaluated. So all I  
8 want to say here is, you know, set up a system where

9       there's input from the market, you're looking at the  
10       industry changes -- and when I say industry, I'm talking  
11       utilities and the renewable industry -- and adjust your  
12       policy accordingly. Looking at both Europe and Japan,  
13       China, and the U.S., you know, we're not that far away,  
14       so we need to be thinking in terms of a flexible policy.

15               Here is a really good graph, because it shows  
16       when California did not set their policy -- set their  
17       policy in stone and moved forward and then took away the  
18       policy, you just don't get a good market transformation.

19               Alternatively, when you look at Japan, though  
20       their market has declined somewhat with a zero subsidy,  
21       they still have a substantial market deploying in Japan.  
22       And they went after, you know, a segment, had a policy  
23       in place that was transparent, managed to bring prices  
24       down, grow industry, and have an environmental impact as  
25       well as a sustained market.

21

1               And this just says, you know what, there's a  
2       lot of people looking at dropping policies. And I  
3       really do think that when you design a policy, you need  
4       to make sure that you are considering the market and  
5       adjust it accordingly.

6               These are policy objectives actually developed  
7       by a lot of people that are in the room, a lot of the  
8       groups, the Solar Alliance, the Vote Solar. Again, I  
9       may be repeating myself, and I'm not going to go through  
10       all of them, but one thing I'm going to really bring up

11 is the economic development and job.

12 I've been working with Duke with their recent  
13 filing, and I was just very pleased when they came to me  
14 and they said, "Well, you know, our economic development  
15 guys have a bunch of questions we can't answer. If we  
16 got a plant here, how many kilowatt-hours does it take?"  
17 Well, I happened to be working in that area, and I could  
18 tell them, you know, if you have a 100-megawatt plant,  
19 what kind of sales they're going to see from a  
20 100-megawatt plant, what kind of jobs.

21 I had a calculator where I bought -- I used to  
22 buy the economic -- the Census Bureau, the economic arm  
23 of the Census Bureau multipliers to develop how many  
24 jobs came from solar and the decrease in utility jobs,  
25 and I've been using that from a number of years. We now

22

1 have empirical data from Europe, and you get about 10  
2 job-years for every megawatt deployed. And remember,  
3 that's one job for one year. People say jobs often when  
4 they really mean job-years.

5 And again, the administrative transparency and  
6 simplicity, remember the economist's rule of a real  
7 market is always transparent to all players.

8 Moving on, I also agreed with the Florida  
9 Solar Energy Association's decision to represent -- I'm  
10 sorry. I'm moving too fast. I also want to say, with  
11 the recent rulemaking, another area that I work in is  
12 land use in municipalities, urban planning. When I

13 brought it up five years ago to this group of 22  
14 countries working on urban scale PV, they said, "Oh,  
15 it's not important." It is now the focus of the study  
16 of 22 countries, and we guesstimate about \$10 million.  
17 The EU alone put 3 million into this project. You know,  
18 you can see it probably on your computer screen better.  
19 I don't know how the printout looks.

20 But working with municipalities, the recent  
21 legislation in Florida, where the comp plan is going to  
22 include an energy element and the other elements are  
23 going to include consideration of energy, you know, give  
24 some more guidance to the municipalities and the  
25 counties and regions in Florida that develop that

23

1 trickle-down comp plan, because I think the hassle  
2 factor when it come to not just solar, but every  
3 renewable energy, is one of the most important issues  
4 that you can take advantage of, and that's part of this  
5 whole integration.

6 Okay. Moving on, I know that you guys have  
7 had some workshops, but things change so quickly. I  
8 developed these tables of the 50 states and where the  
9 policies are, and I have to update them every six  
10 months. You know, the state RPS, state RPS with solar,  
11 the information is out there. I'm sure you know about  
12 the DSIRE webbase, website. And, you know, just ask,  
13 because SEPA is a resource, and DOE is an incredible  
14 resource also.

15 Florida related energy goals, I did this  
16 analysis when the Governor first made his announcement,  
17 looking at what his announcement was in the executive  
18 order and whether we would reach it. And what I did  
19 was, I looked at the base year, the 2012, 2025, and  
20 2050, subtracted out energy efficiency and the renewable  
21 portfolio standard. We can get there. We can get there  
22 with a portfolio, because I -- I was uncertain we could.  
23 But we look sort of like Illinois and New York as far as  
24 the energy mix goes, and New York is very aggressive.

25 I want to make the point one more time about

24

1 integration. I was on one of the committees for the  
2 2020 Commission back -- way back when, and one of the  
3 advice -- one of the advisories that came out of the  
4 committee was, you know, look to your universities, you  
5 know, look to your utilities, look to your industry and  
6 state, and do a lot of coordination. I think that's  
7 getting done, I think, but I just -- I think it needs to  
8 be in the forefront of your mind, on the radar screen at  
9 all times. Anyway, I just wanted to hand that out.

10 And then I also agreed to bring forth the  
11 position of the Florida Solar Energy Industries  
12 Association, and that is that they're thinking in terms  
13 of a suite of policies, and here they are.

14 I don't have to go over all of them, but one  
15 that they accepted that I really stuck in there because  
16 I'm here in Florida working with municipalities, when

17 undergrounding neighborhoods, think about design for DG  
18 compatibility. There's a lot of undergrounding going on  
19 here in the State of Florida. I'm really glad to see  
20 it, because I think it makes us look esthetically much  
21 better, and I think it helps us with storms, but DG  
22 compatibility is an issue.

23 And they also are thinking in terms of the  
24 market responsive renewable energy payment. I don't  
25 think that's an influence, from the trip to Germany,

25

1 since only one utility went with us from Florida.

2 And the benefits, these were calculated. The  
3 jobs were not empirical, but I would like to go back and  
4 use some of the empirical numbers that we now have.

5 And I just had to pull it in, and Ed Reagan  
6 said I could use this quote. He was one of the people  
7 that did go to Germany with us. And he came back -- we  
8 went out there with a lot of lot of conservative utility  
9 guys who said, "This just won't work in the U.S." By  
10 the end of the week, they said, "This is real, and we  
11 need to figure it out." And so he's thinking in terms  
12 of, you know, using a consortium of municipalities,  
13 putting together their own kind of renewable energy  
14 payment or feed-in tariff, you know.

15 And in the same sentence that he was talking  
16 about this, he also said, "Well, you know, we're not  
17 under the jurisdiction of the Public Service Commission,  
18 but that net metering bill they just passed, we're going

19 to adopt it, because it was just good." So, you know,  
20 even though they're not in your jurisdiction, they do  
21 look at what you do.

22 So thank you. I hope I didn't go too much  
23 over ten minutes.;

24 CHAIRMAN CARTER: That's okay.

25 MS. HERIG: I just want to say that the most

26

1 important issue is to integrate your environmental, your  
2 industry, your municipalities, and the economic  
3 development values, and, you know, typically you can  
4 make it work.

5 CHAIRMAN CARTER: Hang on one second, Christy.  
6 Commissioner Argenziano.

7 COMMISSIONER ARGENZIANO: Yes. Thank you for  
8 that. And I have a question you may be able to help me  
9 with, and it deals with the efficiency of the cell  
10 technology. And from what I understood, there was  
11 the -- I guess it's a high efficiency concentrator that  
12 has been used with cell technology that actually has  
13 broken the 40 percent barrier. I think I'm saying it  
14 right.

15 MS. HERIG: Yes.

16 COMMISSIONER ARGENZIANO: And that actually,  
17 by using this, I guess, optical concentrator, you can  
18 actually increase the intensity, sunlight intensity,  
19 creating more efficiency. Is that anywhere near  
20 marketing?



21 MS. HERIG: I would say yes. It's not a  
22 building integrating technology. It's more of a  
23 free-field technology, but it is being deployed.  
24 There's Hawaii and Arizona. But it's still PV. You get  
25 better advantages with the higher direct. And because

27

1 of our humid, we have diffused sunlight.

2 So, no, that's real. You know, bringing in  
3 the universities, I took the afternoon off Wednesday and  
4 looked at -- they had a venture capitalist forum where  
5 they had entrepreneurs with their new inventions  
6 presenting, and then the venture capitalists critiqued  
7 it. CitiBank was there. The New York Investment Fund  
8 was there. I mean, some big guys were there.

9 And they -- I mean, there's things like, you  
10 know, building glass with a strip of solar cells with  
11 holographs on the building, on the glass, directing --  
12 you know, it's a different kind of concentrator, not  
13 much concentration, just 5 percent, but it makes a  
14 difference, and it's also a building integrated  
15 technology.

16 COMMISSIONER ARGENZIANO: I guess what I'm  
17 trying to figure out is when the greater efficiency  
18 comes in with solar panels, which it seems like we're on  
19 the cusp of getting greater and greater efficiency. It  
20 makes a very big difference on how we look at spending  
21 our dollars today. And I guess -- I think, in my mind,  
22 if we have greater efficiency in solar paneling, because

23 a lot of times the argument is, "Well, you know, it  
24 costs so much to retrofit a house because the efficiency  
25 is not -- it takes forever to get the money back." And

28

1 if you have greater efficiency to begin with, I guess  
2 capturing more of the sun, the colors of the sun, or  
3 however it works --

4 MS. HERIG: It does make a difference, but at  
5 the same time, the thin film technology, it's out there,  
6 you know, and being sold at \$4 a watt installed. I just  
7 did the economics for GRU, and I guess their rates are  
8 at 13 to 14 cents. They could make a renewable energy  
9 payment of 16 cents, very willing to do that, when the  
10 price is it \$7 a watt. So if they could, you know, get  
11 a consortium together and get \$4 a watt, the IRR there  
12 -- and I think the IRR on that, I say it's 8 percent.  
13 They say it's 12. You know, that's always -- you know.  
14 But I know it would be up in the double digits at \$4 a  
15 watt.

16 And that thin film has the -- you know, I was  
17 always doubtful. That plant I built in 1988 was thin  
18 film, and that was the promise of the low cost  
19 technology. It's not going to be super high efficiency,  
20 but it's a building integrated product, and it looks  
21 good. I mean, you know, it could replace granite.

22 COMMISSIONER ARGENZIANO: Thank you.

23 CHAIRMAN CARTER: Thank you. Commissioners?

24 Commissioner Skop.

25 COMMISSIONER SKOP: Thank you. Good morning.

29

1 Just one quick follow-up question.

2 MS. HERIG: Do you want me to stay here?

3 COMMISSIONER SKOP: Yes, ma'am. I guess the  
4 Commission had a consumer write in about a company, and  
5 you mentioned that you had the opportunity to attend a  
6 venture capitalist meeting, and perhaps this technology  
7 came up. I think it was a company named Nanosolar.

8 MS. HERIG: This was at the Nanotech Center.

9 COMMISSIONER SKOP: That was making -- you  
10 know, apparently they have some new solar fabrication  
11 technologies, more like -- almost like ink jet printing,  
12 where you're printing like in a printing press. Has  
13 your organization evaluated their claims in terms of  
14 being able to actually delivery on a dollar per watt  
15 solar, which would be \$1,000 per kilowatt?

16 MS. HERIG: Not in a due diligence form. And  
17 I think that price, I think they have a 2012 date on it,  
18 so I'm -- a dollar a watt. Okay. Intuitively, you  
19 know, I think they could maybe get \$1.50 a watt. You  
20 know, you're just asking me, you know, off the cuff. I  
21 have not seen -- I have not heard any due diligence.

22 One of my mentors is an elderly gentleman that  
23 has done over 20 companies on due diligence around the  
24 world. He just came back from China. And he always  
25 shares things with me, and then I can -- sometimes, you

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1 know, he tells me what I can say publicly and what I  
2 can't. But I don't know about Nanosolar specifically.

3 COMMISSIONER SKOP: Okay. Thank you.

4 CHAIRMAN CARTER: Thank you, Commissioners.  
5 Mr. Futrell.

6 MR. FUTRELL: Next we have Mr. Christopher  
7 Maingot representing the Solar Coalition.

8 MR. MAINGOT: Good morning, Commissioners and  
9 Mr. Chairman. Thank you for the opportunity to speak  
10 here today in front of the Commission.

11 First I would like to thank Governor Crist,  
12 the Florida Legislature, and the Florida Public Service  
13 Commission, and the Department of Environmental  
14 Protection for their commitment to develop a market for  
15 renewable energy resources such as solar under an RPS.  
16 Our coalition appreciates the opportunity to provide  
17 input.

18 But let me just go back. Sorry. I'm with  
19 FlaSEIA, which is the Florida Solar Energy Industries  
20 Association. I also represent the Solar Alliance, which  
21 is a group of PV manufacturers and integrators, and Vote  
22 Solar, which is a -- Vote Solar is a nonprofit  
23 organization with members throughout Florida and the  
24 U.S. that aims to address global warming and energy  
25 independence by bringing solar energy into the

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1 mainstream, and we formed a coalition to bring this  
2 presentation to you.

3           For the time being, we would like to limit our  
4           comments to the role solar can play under the RPS in  
5           Florida and what the solar community views as essential  
6           to create a thriving, self-sufficient local solar  
7           industry with markets that will continue to grow beyond  
8           state-established goals.

9           At present, financial support is needed to  
10          drive sustained, orderly development of Florida's solar  
11          markets. For solar to ultimately move away from  
12          subsidies and become mainstream for Floridians, the  
13          State needs to stimulate investment and build local  
14          markets in a stable manner.

15          As part of House Bill 7135, Section 42, which  
16          establishes guidelines for the RPS, the PSC was given  
17          latitude to provide added weight to energy production  
18          from solar and wind resources. To this end, our Solar  
19          Coalition believes that the RPS should optimize the  
20          following objectives:

21                 (1) Market diversity to encourage a wide  
22          variety of customers and applications, such as  
23          residential retrofit, new construction, and small to  
24          large scale commercial. These programs should include  
25          solar thermal and solar electric systems.

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1                 (2) Economic development and job creation.  
2          Solar jobs are high quality jobs that require skilled  
3          labor and pay good wages. Jobs created as a direct  
4          result of solar energy development can be broken into

5 two categories, manufacturing/integration jobs and  
6 installation/maintenance jobs. Manufacturing jobs are  
7 associated with the integration of solar energy systems  
8 and the fabrication of original solar energy equipment.  
9 Installation and maintenance jobs include skilled trades  
10 such as solar contractors, electricians, plumbers,  
11 roofers, and designers.

12 (3) A distributed solar market. Solar water  
13 heating and PV systems are most beneficial when deployed  
14 at the distribution level, where they serve as a  
15 dedicated end use and reduce the amount of power that  
16 must be transmitted over long distances. By emphasizing  
17 distributed solar energy, the State can ensure an  
18 in-state solar market without running afoul of the  
19 Interstate Commerce Clause.

20 Reduction of system installed cost. The RPS  
21 program should be designed to encourage cost reductions.  
22 Solar power technologies, like other high technologies,  
23 are ideally suited to have significant cost reduction  
24 with the increase of volume over time.

25 Long-term program. Ensuring availability of

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1 long-term, continuously available programs, for example,  
2 ten years, gives the confidence necessary to engage the  
3 financial community, educational institutions, and  
4 manufacturing sector to commit to massive business  
5 development and long-term sustainable investment.  
6 Without state regulatory policy certainty, the industry

7 will be hampered with a start-stop market.

8 Flexible program. Policies should be crafted  
9 with a market feedback mechanism as well as a market  
10 driven incentive reduction process. Set a biannual  
11 review process for the purpose of measuring the  
12 program's effectiveness and economic efficiency.

13 Adequate funding. Combined with program  
14 flexibility, an adequate level of funding is essential  
15 in order to achieve the goals set by the State.

16 Value grid benefits. For example, distributed  
17 solar thermal and PV benefits the grid by reduced peak  
18 demand, as well as avoided generation fuel costs,  
19 avoided transmission and distribution upgrade costs, and  
20 avoided T&D losses.

21 Value societal and environmental benefits. As  
22 a distributed, domestically produced energy resource,  
23 solar energy can increase our energy independence and  
24 security.

25 Further, as the Commission crafts RPS rules

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1 with consideration to providing added weight to  
2 production from solar and wind, as per House Bill 7135,  
3 the industry sees the following design criteria as key  
4 to developing incentives that will result in a strong  
5 solar market:

6 Set a specific goal for solar. In past  
7 comments, we have offered that the industry would be  
8 well prepared to meet a 4 percent solar goal, with

9 2 percent solar electric and 2 percent solar thermal, by  
10 2020.

11 Maximize investor confidence. Provide a  
12 secure revenue stream that will reduce risk premiums and  
13 lower the cost of financing projects and ensure a  
14 reasonable rate of return for all stakeholders.

15 Economic efficiency. Structure incentives to  
16 ensure that the program has cost-effectiveness and  
17 allows for market expansion and diversity. Ensure that  
18 projects are not oversubsidized or undersubsidized.

19 Program monitoring. Program incentives should  
20 incorporate a digression schedule to allow for  
21 adjustments to meet the program cost goals. Through  
22 vast deployment and innovation, solar energy cost  
23 reduction will occur and propel the solar industry  
24 towards energy cost parity and self-sufficiency.

25 Administrative transparency and simplicity.

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1 The success of any solar incentive program will require  
2 that all stakeholders have readily available access to  
3 market information and the ability to analyze the  
4 program effectiveness. The data collection, effective  
5 communication, and transparent processing between all  
6 participants will be important to the health of the  
7 program and the ability to respond to necessary  
8 adjustments in the program in order to adjust to  
9 changing market conditions.

10 And that is my presentation. Any questions?



11                   CHAIRMAN CARTER: Thank you so very much. We  
12 appreciate all of our speakers so far to adhere within  
13 the recommended time frame. That gives us an  
14 opportunity as Commissioners for questions. We also  
15 have a wrap-up session in the afternoon for further give  
16 and take.

17                   Commissioners, any questions?

18                   Thank you. Let's kind of -- staff, let's back  
19 up for a second. I see Mr. Dobson has come in, so let's  
20 kind of reverse order. We'll call Michael Dobson. That  
21 will be item number 2. Mr. Dobson.

22                   MR. DOBSON: Do I have a PowerPoint on there?

23                   MR. POTTS: Is that correct, sir?

24                   MR. DOBSON: Give me just a moment.

25                   CHAIRMAN CARTER: Do we need to pass over you,

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1                   Mr. Dobson, and move on?

2                   MR. DOBSON: I'm ready. Yes. I'm Michael  
3 Dobson with the Florida Renewable Energy Producers  
4 Association. And what we are, just briefly, we are --  
5 for lack of a better word, we're a trade association for  
6 renewable energy developers and producers interested in  
7 doing business in Florida. And our main focus is to  
8 work with the Public Service Commission, the Florida  
9 Legislature, and the Executive Branch with respect to  
10 creating the policy landscape that better makes for a  
11 renewable energy industry in Florida that will spur  
12 growth in that particular industry.

13                   I want to just give a brief outline on what  
14                   I'm going to discuss, what an RPS is, its expectations,  
15                   and how it benefits the renewable energy development  
16                   industry, renewable energy resources in Florida,  
17                   renewable energy technologies that are more readily  
18                   available for applications, RPS design features, key  
19                   components to implement a successful RPS in Florida,  
20                   elements for RPS compliance, consideration for RPS  
21                   tracking and monitoring.

22                   And as you know, an RPS is -- essentially,  
23                   it's a mandate that requires that each utility reach a  
24                   certain percentage of their generation be renewable.

25                   And our legislative goals of the RPS statute

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1                   are the following: To increase the amount of renewable  
2                   energy integration in Florida, promote stable electric  
3                   prices through a mix of energy resources, protect the  
4                   public's health by promoting the use of cleaner energy  
5                   resources, improve the quality of Florida's environment,  
6                   stimulate economic development by building a vibrant  
7                   renewable energy market in Florida, reduce dependence on  
8                   foreign fuels, and make us as a country more secure by  
9                   accomplishing the previous goals.

10                   Some key considerations for a successful RPS  
11                   program in Florida are to identify feedstocks and  
12                   resources that generate power today, develop incentives  
13                   geared toward helping developers with the economics of a  
14                   renewable energy project, make sure that incentives are

15 long-term and consistent from year to year, put more  
16 focus and investment into proven technologies, promote  
17 flexibility from utilities on price, encourage utilities  
18 to factor in the life span of a project in cost  
19 considerations.

20           And what I have is, I have a few maps that are  
21 in my presentation. One is an average daily solar  
22 radiation per month map, and what it shows clearly is  
23 that Florida is certainly a great state for solar  
24 energy. And also, I have a map that goes over the month  
25 of July. The first one talks about January, because,

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1 you know, we often hear that Florida has many clouds,  
2 et cetera, and what I wanted to do is to kind of give  
3 you some idea of what January looks like and what July  
4 looks like. And the map that indicates July would also  
5 show you that Florida ranks up to the upper medium range  
6 as it relates to solar PV radiation.

7           And we have another map regarding renewable  
8 generation that was a map from the year 2005 that  
9 provides an indication as to the amount of biomass  
10 activity we currently have in Florida. And as you may  
11 know, particularly here in North Florida and Northwest  
12 Florida, there's a lot of current biomass activity.

13           And we have a very general map that outlines  
14 biomass resources available in the United States, and as  
15 you see, Florida is very active again.

16           And there's always that question of wind. And

17 I would admit that I am guilty that in previous  
18 discussions, we've often said Florida is a questionable  
19 place for wind. But we do have a model that NREL has  
20 provided that indicates that there is some possibilities  
21 for wind in Florida, and I think that's something to  
22 pursue. And I know that others are pursuing that as we  
23 speak, so I just want to mention that, because when we  
24 talk about what resources will be considered in our RPS,  
25 we may want to continue to look at wind as one of those

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1 possibilities.

2 And regarding Florida renewable energy  
3 opportunities today, essentially what we have is solar,  
4 and we have wind with the question marks. We have  
5 biomass, we have landfill gas and digester gas,  
6 waste-to-fuel. Those are the things that we have today.

7 And I do have a slide here that you probably  
8 don't have, but I do have one slide that talks briefly  
9 about nuclear. And the reason I mention that is because  
10 in previous discussions before this Commission and in  
11 other venues, nuclear has often been discussed with  
12 respect to renewable energy. And we think that at the  
13 end of the day, what we're talking about are energy  
14 solutions, and nuclear is always going to be a part of  
15 the discussion, and long-term, nuclear is going to be a  
16 part of the mix.

17 But we also want to indicate that it has its  
18 problems. It has its problems with siting and problems

19 with respect to the length of time it takes to get it  
20 online, and I know that the Legislature and others are  
21 working on those issues. But it is not a renewable, and  
22 we just want to make it a point that we certainly  
23 recognize its place in the mix with regards to the  
24 solutions that we seek in Florida and in our nation.

25 And I just wanted to talk briefly about

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1 emerging technologies. We talked about what's available  
2 today. Of course, cellulosic ethanol is one that we  
3 often talk about, but not necessarily with respect to an  
4 RPS, although I think some would indicate that you can  
5 take a biofuel and power a generator for power  
6 generation, but that's an emerging technology. There  
7 are some small scale production processes in place  
8 currently.

9 And, of course, ocean wave energy, that is  
10 certainly RPS eligible. More R&D is needed. I'm sure  
11 you've probably heard from Dr. Driscoll and the  
12 wonderful work that they're doing.

13 Coal gasification is another emerging  
14 technology, which, of course, there's more R&D involved  
15 with that as well.

16 All those are part of our energy solutions, so  
17 I think I would be remiss in not mentioning those.

18 And where we are today, the last time we were  
19 here last summer, we had that infamous map that we  
20 constantly looked at, and Florida was missing with

21 respect to RPS. And today we have a map that shows  
22 Florida as one of those states that has a mandated RPS,  
23 and then there are several states that do not have a --  
24 that have a voluntary RPS. Along with Florida, I think  
25 North Carolina has joined us, and I believe, I want to

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1 say -- it's either Ohio or Oregon. I can't remember  
2 exactly which one.

3           The first steps of an RPS is to identify what  
4 technologies and resources we're going to use. And I  
5 think that's going to be one of the initial challenges  
6 that you guys are going to face in terms of talking  
7 about what's going to be in that mix, and then you're  
8 going to have to set the level of standards and its rate  
9 of increase over time, i.e., if you're going to have a  
10 20 percent RPS, how far out is that going to go, and  
11 things of that nature. And I think that's going to  
12 require a lot more discussions beyond today.

13           Key RPS details are going to indicate, of  
14 course, that mandate, i.e. the targets, the target date  
15 and the target amount, and the assignment of  
16 responsibilities as it relates to who is going to  
17 monitor compliance, what would be the Public Service  
18 Commission's responsibilities or what would be the  
19 responsibilities of other entities that would be  
20 involved. And that leads to enforcement and  
21 performance, tracking compliance and management of the  
22 details.

23                   Key RPS design requirements moving forward,  
24                   Florida will need strong political support, which we  
25                   currently have, regulatory commitments which will be

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1                   unwavering in the future. We'll need clear and well  
2                   thought out renewable energy rules. The design must be  
3                   consistent, long-term targets that will ensure a new  
4                   renewable energy supply. The standards must be  
5                   achievable given various challenges and practical  
6                   constraints, such as siting, et cetera.

7                   Enforcement must be credible and automatic.  
8                   It is also key that the penalties exceed the cost of  
9                   compliance. The design requirements must be applied to  
10                  the utilities that are financially in a position to  
11                  enter long-term contracts.

12                  RPS design requirements, we suggest that there  
13                  be a period of review established for the Public Service  
14                  Commission to review the RPS program. We suggest that  
15                  that period of review could be two years, three years,  
16                  but early on, we're going to have to take a look at what  
17                  we end up with at the end of the day to figure out, you  
18                  know, are we doing it right, do we need to tweak it, or  
19                  what do we need to do. And we suggest that each  
20                  regulated utility subject to the RPS file an annual  
21                  report regarding its compliance in the previous year,  
22                  while outlining renewable resource plans for the next  
23                  one year, along with perhaps a forecasted resource plan  
24                  for the next five years.

1 we mentioned long-term contracts, and I want to stress  
2 that, because however we frame this from the perspective  
3 of renewable energy developers or producers, having a  
4 framework that supports long-term contracts is key for  
5 market stability, and it's key for investor interest in  
6 the State of Florida and how this industry moves  
7 forward.

8 And I'm just going to briefly mention the fact  
9 that, you know, Florida joined the ranks of many states  
10 that have included RECs with this RPS compliance. You  
11 know, that's an extremely important feature for  
12 renewable developers. It generally helps with getting  
13 the deals done and just kind of getting over some of the  
14 hurdles with respect to the pricing. But what it does,  
15 it simply encourages renewable development. By policy,  
16 RECs may not be geographically restricted, so it enables  
17 the development of the most cost-effective resources.  
18 That could be debated, of course.

19 The REC revenue stream is enticing to  
20 developers and will therefore spur the industry in  
21 Florida, especially given the RPS. It will increase  
22 market efficiency, therefore, more players, more  
23 competition, more liquidity. It will provide  
24 contracting flexibility. It facilitates compliance.

25 Utilities that are otherwise finding it



1 difficult to make long-term energy commitments can find  
2 a way to do it with RECs. It helps the deal pencil a  
3 little bit better. RECs reduce long-term contracting  
4 risks for utilities that may have fluctuating or  
5 uncertain future energy loads.

6 CHAIRMAN CARTER: Mr. Dobson, are you close?  
7 I gave you a little time because of your technical  
8 difficulties, but are you close?

9 MR. DOBSON: I'll wind it down.

10 CHAIRMAN CARTER: Please do.

11 MR. DOBSON: Okay. I'll wind it down by just  
12 talking briefly, and very briefly, regarding the  
13 importance of the market. At the end of the day, the  
14 RPS should create a framework in which renewable  
15 development is certainly market driven. And the  
16 elements of market driven again is the stability that  
17 the RPS will provide, as well as the ability to enter  
18 into long-term contracts.

19 Investors are watching what Florida does.  
20 They will be watching what the Public Service Commission  
21 does, and they will be watching what the Legislature  
22 approves come February. And their reaction would have a  
23 long way to go with where we're going to be a few years  
24 from now with respect to our RPS.

25 And thank you for indulging me. I appreciate

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1 it.

2 CHAIRMAN CARTER: Thank you, Mr. Dobson.

3 Commissioners, any questions?

4 Thank you. Mr. Futrell.

5 MR. FUTRELL: Thank you, Mr. Chairman. Next  
6 is Mr. Mark Sinclair, who is representing the Clean  
7 Energy Group. That will be number 5, Commissioners.

8 MR. SINCLAIR: Good morning. It's good to be  
9 here. I appreciate your time.

10 My name is Mark Sinclair. I represent a  
11 nonprofit called Clean Energy Group. We work to advance  
12 policy and finance to advance clean energy. We also  
13 manage an alliance of 20 states with clean energy  
14 programs called the Clean Energy States Alliance, or  
15 CESA.

16 Relative to this proceeding, we're working  
17 with a lot of states across the country on their RPS  
18 laws. We've actually got funding from the Department of  
19 Energy to facilitate a state and federal collaborative  
20 to advance thinking and learning about RPS success, and  
21 some of your staff have been involved in our webinars  
22 and discussions. This collaborative is developing some  
23 best practice recommendations based on what seems to be  
24 working best across the states.

25 In some ways, Florida is very fortunate, in

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1 that you can look and see what mistakes have been made  
2 by other states, the 26 other states that have RPS laws.  
3 So I think this is an opportunity for you to learn from

4 what has gone on before and to develop one of the best  
5 RPS laws in the country, and our organization would be  
6 very pleased to assist as we can in providing objective  
7 information.

8           And we provided some preliminary comments. I  
9 just want to summarize a couple of the key elements from  
10 our perspective as you design this RPS for Florida.

11           Many states have determined that critical to  
12 the success of an RPS is also the establishment of a  
13 clean energy fund, a public benefit fund, to offer  
14 incentives and technical support to encourage the  
15 development of the higher cost renewable energy  
16 technologies. In fact, some 21 states have used a  
17 public benefit fund, some in combination with their RPS,  
18 to ensure acceleration of project development. So we  
19 recommend that Florida consider providing financial  
20 support through a renewable energy fund as part of this  
21 RPS program, with a focus on distributed generation and  
22 higher cost technologies, and with funding coming from a  
23 modest system benefits charge. We also recommend that  
24 funds that are generated from an alternative compliance  
25 payment system go to this fund.

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1           In terms of RPS targets, we don't really have  
2 any specific recommendations at this point, but I will  
3 point out that an RPS really needs to be aggressive if  
4 we are to reduce greenhouse gas emissions and address  
5 the huge challenge of climate change. Regardless of the

6 specific targets, we believe it's important that those  
7 targets and that the program rules remain very stable  
8 over time and not subject to sudden or frequent changes.  
9 Try to get it right the first time. That will create an  
10 investment climate that will be conducive to project  
11 development and long-term financing.

12 We also submit that the primary goal of the  
13 RPS in Florida should be to drive new renewable projects  
14 and increase production of renewable electricity.  
15 Eligibility of the existing generators we think should  
16 be somewhat limited to support more targeted support for  
17 new renewable energy project development.

18 In terms of eligibility, we think it's very  
19 important that eligibility definitions be clear,  
20 especially when it comes to technologies and fuels like  
21 biomass and hydropower. To that end, we over the last  
22 year and a half worked with a number of states in New  
23 England and the Mid-Atlantic region to come up with some  
24 recommended resource definitions based upon input from  
25 those states and commonalities among their definitions.

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1 And in an appendix to my comments, we provided some what  
2 we think are smart definitions that take a lot of the  
3 argument out of what is eligible. Now, obviously,  
4 you're going to have to decide what technologies are  
5 eligible, but we provide definitions that if you choose,  
6 for example, hydropower, a definition that we think is  
7 rational and clear.

8                   In terms of the use of RECs, I think it's very  
9                   important that the Legislature has authorized the use of  
10                  RECs. States have found that that is an important tool  
11                  both for compliance tracking and for lower cost  
12                  compliance.

13                  We will make one comment. We believe that  
14                  since the primary purpose of the RPS is to stimulate  
15                  renewable energy development and enable a wider market,  
16                  that there should be a clear prevention of the use of a  
17                  REC for compliance and for voluntary markets. There  
18                  should really be a prevention of double counting.  
19                  That's consistent with the statute that says that you  
20                  shall ensure that the energy credited toward compliance  
21                  with the requirements of this section is not credited  
22                  toward any other purpose.

23                  Consumers who choose to buy voluntarily and  
24                  pay more for renewable energy are doing so to promote  
25                  additional development above and beyond RPS

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1                  requirements, so to protect those consumers, we believe  
2                  voluntary green power sales should be prohibited to  
3                  satisfy your RPS.

4                  On the issue of enforcement, the statute says  
5                  that you shall provide for appropriate compliance  
6                  measures. We recommend that you consider the use of an  
7                  alternative compliance payment, which is an effective  
8                  enforcement approach. We think the rule should allow  
9                  for utilities to pay a set price into a renewable energy

10 development fund in lieu of procuring electricity as a  
11 less punitive enforcement approach. And we believe it's  
12 important for those payments to be dedicated to this  
13 fund for the development of available renewable energy.  
14 And we think the ACP payment that you set should be at a  
15 level significantly higher than the estimated compliance  
16 costs if we're going to actually drive additional  
17 generation.

18 I think the final point I want to make today  
19 is the issue -- dealing with the issue of differential  
20 support for solar and distributed generation. Your  
21 statute does allow for you to provide more weight to  
22 energy provided by solar PV and for wind over other  
23 forms. Pursuant to that, we believe you should look  
24 very closely at differential support for solar  
25 technologies and for distributed generation

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1 applications.

2 According to recent research from the Lawrence  
3 Berkeley National Lab -- we work with LBNL quite often  
4 on the RPS issues. They've found that RPS policies with  
5 no differential support for solar are unlikely to  
6 provide any meaningful support for customer-sited or  
7 utility scale photovoltaics or for solar thermal.

8 And typically, differential support provided  
9 by a set-aside or by a multiplier, evidence from states  
10 using those tools shows that the solar set-aside  
11 requirement is likely to be much more effective than

12 multipliers in growing the solar market within an RPS.  
13 So because of the value that solar and DG provide to  
14 reduce peak loads, emissions, and load congestion, we  
15 recommend that the Commission consider establishing a  
16 set-aside for solar and for distributed generation.

17 With that, I'll wrap up my comments. I just  
18 want to congratulate the State of Florida in pursuing an  
19 RPS, and I offer our information and assistance as  
20 useful in developing a strong program. Thank you for  
21 your time.

22 CHAIRMAN CARTER: Thank you, Mr. Sinclair. We  
23 sincerely appreciate your help, and we look forward to  
24 your continuing relationship with our staff.

25 Let me ask you this, kind of in reverse order.

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1 Commissioners, no problem if you have any questions. I  
2 just want to get it out before I have one of my over-50  
3 moments. On the public benefit fund that you found in  
4 these states, how significant has that been? In  
5 essence, were they able to put together a fund with  
6 enough magnitude to create a market?

7 MR. SINCLAIR: Certain states have. Other  
8 states have not. It really depends not so much on the  
9 amount of funding as it does the duration of funding and  
10 clever use of the funds, both through grants, but also  
11 through things like loans and even equity investments.  
12 California has been very successful with their public  
13 benefit fund at driving solar markets. New Jersey has

14 been somewhat successful. New York has also been  
15 successful.

16 Even a state like Vermont, which is using  
17 about \$10 million a year for assistance for renewable  
18 energy development, has been successful in some sectors.  
19 They focused on, for example, manure on farms to  
20 electricity, and it has helped the economy and farmers  
21 successfully to reduce energy costs and drive some  
22 renewable energy development.

23 So overall, the public benefit funds have  
24 shown great success. Certainly trying to focus on  
25 distributed generation has been more difficult, because

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1 there needs to be a host of policies if you're going to  
2 drive the customer-sited generation. But we've got a  
3 lot of information we can provide you on how to design a  
4 public benefit fund with a smart design.

5 CHAIRMAN CARTER: One other question. On the  
6 solar set-aside, can you kind of -- just kind of speak  
7 to that for one second, please, on how you did on your  
8 experiences with that.

9 MR. SINCLAIR: We've been working -- we work a  
10 lot with the Lawrence Berkeley National Lab, which we  
11 fund, as does DOE. And they've been looking very  
12 closely at the use of solar set-asides and multipliers.  
13 And if you see, in the last couple of years, a host of  
14 states have implemented set-asides for solar and for  
15 distributed generation, because otherwise, the RPS laws



16 just have not been driving those more expensive  
17 technologies, and wind has been the predominant winner.  
18 So states have found that to be effective at driving  
19 distributed generation and the use of solar  
20 technologies, they really need to use a set-aside.

21 The Lawrence Berkeley National Lab in looking  
22 at the results from the different approaches has found  
23 that multipliers have so far not really been effective  
24 at supporting these higher cost technologies. That may  
25 be because the multipliers aren't set high enough. But

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1 most states have determined that a set-aside is a more  
2 specific, definite approach to support these  
3 technologies that have great promise and have social  
4 benefits that may not be as typically quantified and  
5 recognized.

6 CHAIRMAN CARTER: Thank you. Commissioner  
7 McMurrian and then Commissioner Skop.

8 COMMISSIONER McMURRIAN: Thank you. I wanted  
9 to follow up actually on the Chairman's first question  
10 about public benefits funds. And I know that you said  
11 that -- you suggested that we consider them, and your  
12 answer to the Chairman went along the same lines. But I  
13 wanted to ask, you suggested a modest system benefits  
14 charge, and you mentioned some of the states who were  
15 more successful already. In some of those states that  
16 were more successful when they've implemented system  
17 benefits charges, what was sort of the modest system

18 benefits charge? Can you give us an idea or sort of a  
19 range? I know some of them include broader goals in  
20 their system benefits charges as well, so I'm not sure  
21 how to get a good handle on --

22 MR. SINCLAIR: Many, many states have used a  
23 system benefits charge for energy efficiency. There has  
24 been less use of a public benefit charge for renewable  
25 energy. I would submit that that is a bigger challenge

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1 and needs more assistance from state investment, so a  
2 system benefits charge focusing on renewable energy to  
3 me makes great sense.

4 Energy efficiency can pay back very quickly.  
5 Renewable energy can't. Renewable energy markets need  
6 to be built. So it's important for the State to use  
7 smart dollars to create markets and to help higher cost  
8 technologies happen.

9 To your specific question, most states who  
10 have created public benefit funds for renewable energy  
11 have looked at 1 to 2 percent of the rate base. Again,  
12 you know, California is spending \$200 million a year on  
13 renewable energy through their public benefit fund.  
14 Vermont is spending 10 million.

15 I would submit again that it's not as  
16 important, the amount of money, as it is that you have  
17 the right delivery mechanism. Most states have found  
18 that these funds should be independently administered by  
19 an administrator that is not within a utility and is

20 typically not within a state agency, but there is almost  
21 like an economic development organization that helps to  
22 spend these dollars so that it's really focused on  
23 finance and investment and where those dollars can do  
24 the most good.

25 I can also provide you with a whole graph of

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1 what the charges are for those 21 states. In fact, your  
2 staff has done a great job of that already. In the  
3 workshop proceedings, in the back, there's a graph of  
4 how much states are spending and what the charge on the  
5 tariff-- what the tariff is. And I can provide you with  
6 updated information to show you how much those states  
7 are spending. Typically, these are coming from a system  
8 benefits charge.

9 Some states, however, have used other  
10 approaches, like an alternative compliance payment, like  
11 in the states in the Northeast with their RGGI  
12 initiative. They're going to use some of the auction  
13 allowances for this purpose. And then several states  
14 have put charges on the storage of nuclear waste to go  
15 towards a renewable energy fund. So there are lots of  
16 creative ways outside the rate base, but the majority of  
17 the states are using the rate base.

18 COMMISSIONER McMURRIAN: So are there any  
19 states that have a specific system benefits charge just  
20 for renewable energy development?

21 MR. SINCLAIR: Yes, roughly 20 states.

22                   COMMISSIONER McMURRIAN: Twenty. Okay. Thank  
23 very much.

24                   MR. SINCLAIR: Sure.

25                   COMMISSIONER McMURRIAN: Thank you for

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1                   offering more information. I'm sure you can work with  
2 our staff and get that for us. Thank you very much.

3                   MR. SINCLAIR: Thank you.

4                   CHAIRMAN CARTER: Commissioner Skop.

5                   COMMISSIONER SKOP: Thank you, Mr. Chairman.

6                   Good morning, Mr. Sinclair. To the point that  
7 was raised by Commissioner McMurrrian, we heard generally  
8 public benefits fund, system benefits charge,  
9 alternative compliance payments. Again, I think when  
10 you have that broad category, it sometimes leads to the  
11 propensity for the moneys maybe to go to their  
12 nonintended purposes. So I guess to the point I think  
13 you were just speaking to, and you may have answered  
14 this, but should there be a renewable energy charge, in  
15 your view, so that those funds are solely dedicated to  
16 renewable energy?

17                   MR. SINCLAIR: My answer is yes. We greatly  
18 support energy efficiency. However, we believe energy  
19 efficiency really does pay for itself, and the  
20 technology is fairly accepted. Markets are there. We  
21 believe that where the greater need is for limited  
22 dollars from the ratepayer is to invest in renewable  
23 energy, because those markets in many cases need a

24 jump-start.

25 So we would recommend that your system

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1 benefits charge certainly be dedicated towards renewable  
2 energy. You may also want to be doing work on energy  
3 efficiency. That's a great resource. But we think --  
4 what we're arguing for is a system benefits charge in  
5 association with the RPS that focuses on renewable  
6 energy deployment.

7 COMMISSIONER SKOP: And I guess to that point,  
8 I guess the nomenclature is what gets me. To me, you  
9 know, if there were such a thing, I would probably  
10 prefer that it would be specifically identified as  
11 renewable energy. That way you can't, you know, morph  
12 it into other unintended purposes.

13 But also, too, getting to your comments about  
14 carve-outs, to me, I'm a little torn on that, because I  
15 think each state is different, and I've seen the  
16 experiences in New Jersey and the price of the RECs as a  
17 result of the carve-out, and also in California. I  
18 guess Florida is a little bit different because, again,  
19 we have a marginal wind resource, perhaps a better solar  
20 resource, but certainly not as much as in some other  
21 states.

22 But in terms of a carve-out, is it really fair  
23 to favor a single emission-free generation source and  
24 disadvantage other emission-free sources? For instance,  
25 in Florida, you know, you have that tradeoff between

1 wind and solar. And certainly I agree with you that  
2 distributed PV generation is a great thing, as well as  
3 solar, but I just worry about, you know, if you  
4 incentivize one specific emission-free source of  
5 generation -- you know, it seems to me that all  
6 emission-free sources should be equally valued.

7 MR. SINCLAIR: That is a huge issue, and  
8 intelligent people can take different positions on the  
9 merits of a carve-out. What I would say is that if one  
10 of your -- and it really depends on what your objectives  
11 are for your RPS. If one of your objectives is fuel  
12 diversity, then I think a set-aside is going to be  
13 necessary. Without it, you're probably going to be  
14 looking at primarily biomass and wind.

15 So if fuel diversity is important, resource  
16 diversity, then I think a set-aside is a necessary tool.  
17 But you've got to shape it very cleverly with the  
18 industry, and I would argue, as California has done,  
19 you've got to sunset the requirements so that the  
20 industry is basically forced to bring down costs over  
21 time.

22 My sense, though, in Florida, not knowing that  
23 much about the state, is that solar resources can be a  
24 tremendous economic development boon here, and the costs  
25 are coming down. So I see this as a temporary tool to

1 help that industry create market share. And I would

2       argue that all the energy generation sources in the  
3       state are being subsidized, so it's a question of what  
4       is your objective in using smart subsidies.

5                COMMISSIONER SKOP: Right. And to that point,  
6       I think that's what I'm somewhat struggling with,  
7       because I do see -- and I think you've very much  
8       clarified and articulated some very excellent points on  
9       carve-outs. To me, I'm trying to balance the carve-out  
10      versus -- you know, the carve-outs or the set-asides,  
11      which certainly have worked in other states, versus a  
12      multiplier, which effectively can somewhat accomplish  
13      the same thing as a carve-out or a set-aside and do it  
14      in a manner that provides maybe some flexibility. But I  
15      think the points that you made have helped clarify and  
16      shape some of my views on that point, so thank you.

17               MR. SINCLAIR: You may want to ask, and we can  
18      help with this, somebody from the New Jersey program,  
19      which is using the solar REC, because they're living  
20      with this, struggling with this realtime, and --

21               COMMISSIONER SKOP: Actually, yes, I spoke to  
22      someone the other day that manages that program in New  
23      Jersey. So thank you.

24               MR. SINCLAIR: Thank you.

25               CHAIRMAN CARTER: Thank you, Mr. Sinclair.

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1       Mr. Futrell.

2               MR. FUTRELL: Yes, Mr. Chairman. The sixth  
3       speaker on the agenda is Mr. Gus Cepero from Florida

4 Crystals.

5 MR. CEPERO: Good morning.

6 CHAIRMAN CARTER: Good morning.

7 MR. CEPERO: My name is Gus Cepero. Thank you  
8 for the opportunity to offer some remarks.

9 I represent Florida Crystals, and just in the  
10 way of an introduction, we are located in Palm Beach  
11 County. We're an agricultural company that has also  
12 expanded into energy in the last few years. And we have  
13 been able to develop a 140-megawatt biomass power plant,  
14 and we believe it's the largest biomass-to-electricity  
15 facility in the country, in Palm Beach County, and we  
16 have been operating for over ten years pretty  
17 successfully.

18 And we really operate very much like a power  
19 plant, like a conventional power plant. We achieve  
20 about a 90 percent capacity factor on an annual basis.  
21 We operate on a year-round basis, 24/7. And given  
22 favorable market conditions, we have the ability to  
23 expand our facility in Palm Beach County, and certainly  
24 we're eager to develop other biomass facilities in  
25 Florida.

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1 I think that all of us should start at the  
2 beginning. And Chairman Carter started at the beginning  
3 by reviewing the policy objectives of this renewable  
4 portfolio standard. I think the Legislature has done  
5 and Governor Crist has done a great job in identifying



6 what the policy objectives are, and I think that we need  
7 to be disciplined and just very careful to meet those  
8 objectives and not start sort of creating our own  
9 separate set of objectives here.

10 And just to briefly review, objective number  
11 one is to reduce greenhouse gas emissions in Florida.

12 Objective number two is to advance fuel  
13 diversity in Florida. I read that as advancing fuel  
14 diversity, renewables versus fossil. I suppose you  
15 could read that as fuel diversity among renewables, but  
16 I think that we can all agree that the big issue that we  
17 have is that something like 75 or 80 percent of  
18 Florida's energy comes from fossil resources. So when  
19 we talk about fuel diversity, we're trying to reduce the  
20 dependency on the fossil fuels, particularly the natural  
21 gas and the oil, which are the ones -- well, and even  
22 coal, which is now over \$100 a ton. So fuel diversity.

23 Third, promote investment and economic  
24 development in Florida, in Florida, not in different  
25 states. And let's look at the -- let's look rigorously

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1 at the renewable alternatives that do the best job of  
2 promoting investment and economic development.

3 And finally, I think I readily acknowledge  
4 that the Public Service Commission has a standing  
5 obligation to look after costs and to do what is  
6 cost-effective and cost-competitive and always be  
7 responsible to, you know, the issue of what will it cost

8 to do anything.

9 This light is a little bit offset. I don't  
10 know if you can move it down a little bit.

11 I would like to briefly show how biomass  
12 relates to these objectives that we just described.  
13 First of all, in terms of greenhouse gas emissions, a  
14 lot of people believe that biomass, because it's a  
15 combustion technology, it's dirty or it contributes to  
16 global warming. I'm here to tell you that the  
17 combustion of biomass is a carbon neutral activity. And  
18 I think most people agree with that, because the  
19 greenhouse gas emissions which are emitted when the  
20 biomass is combusted are numerically equivalent to the  
21 carbon dioxide which is absorbed when the plant is  
22 growing. So, for example, in our case, sugar cane  
23 absorbs carbon dioxide as part of the photosynthesis  
24 process, and the amount of carbon dioxide which is  
25 absorbed by that plant when it's growing over the course

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1 of a year is numerically equivalent to the amount of  
2 carbon dioxide which is released when we combust the  
3 fiber component of that plant.

4 Where the positive comes in is that we are  
5 able to combust that fiber in a very efficient way and  
6 generate net positive electricity and export that  
7 electricity to the grid. We have actually done some  
8 very, we consider, pretty complete and rigorous studies  
9 of our carbon footprint as a corporation, and we have

10 been able to demonstrate that our power plant reduces  
11 carbon dioxide or greenhouse gas emissions in Florida by  
12 360,000 tons per year.

13 In addition, in our particular case, not  
14 always true of all biomass facilities, but in our  
15 particular case, about 50 percent of our fuel supply is  
16 urban wood waste that we clean. It's not painted wood  
17 or treated wood. It's clean wood material, vegetative  
18 material. But that material, if we did not use it or  
19 recycle it in our facility, would end up in landfills  
20 and would release methane, so there's an additional  
21 corollary benefit to the kind of activity we do.

22 We're a base load operation, so each megawatt  
23 of capacity that we have operates 90 percent of the  
24 time, and so we're able to achieve fuel diversity. That  
25 energy achieves the maximum amount of fuel diversity and

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1 the maximum amount of greenhouse gas emissions  
2 displacement.

3 A very important point. We are a Florida  
4 resource. Our fuel is homegrown, and 85 percent of the  
5 dollars that we spent to operate that facility stay in  
6 the local economy, stay in Florida. I contrast that  
7 with a fossil application, where 80 percent or  
8 85 percent, particularly in something like natural gas,  
9 of the dollars used to operate a combined cycle natural  
10 gas facility leave the State of Florida and have no  
11 positive impact in terms of job creation, economic

12 activity, et cetera.

13 We have also quantified this in the form of a  
14 study by professional economists. We have made that  
15 study available to your staff, and we'll be happy to  
16 talk about that at a different time or elaborate on that  
17 point. But 85 percent of our dollars every year, not  
18 one time, but every year that that plant operates for  
19 the last ten years and for the next whatever many years  
20 stay in Florida and contribute to jobs and tax income.

21 Finally, we're cost-competitive, we believe,  
22 with other renewables and with conventional solid fuel  
23 alternatives like coal.

24 I think one of the key questions facing the  
25 Commission is what methodology do we use to determine to

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1 approve particular projects or contracts, and what  
2 standards do we use. Up until now, the standard has  
3 been, generally speaking, avoided cost. If you are able  
4 to meet avoided cost or are below that, you're good; if  
5 you don't meet avoided cost, you're out of here. I'm  
6 oversimplifying, but I think that's not too much of an  
7 oversimplification.

8 I think we go back to the policy objectives in  
9 the bill and say what is the impact of any particular  
10 decision on greenhouse gas emissions, what is the impact  
11 on fuel diversity, what is the impact on economic  
12 development, and certainly what is the cost performance.  
13 And I think we need to be numerical, analytical, and

14 quantitative in our approach here and really have the  
15 discipline to say for each of these projects or  
16 initiatives that will be presented to you where you have  
17 to make decisions, have a structure where you look at  
18 these objectives, emission reductions, diversity,  
19 economic development, and cost, in a numerical way, you  
20 know, what does it do per megawatt of capacity, and make  
21 your decisions accordingly.

22 I will politely remind you that the bill  
23 explicitly has a clause that supersedes the avoided cost  
24 standard and states that renewable projects or contracts  
25 will be approved if they contribute to the RPS, and if

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1 there's any conflict with the avoided cost standard,  
2 that the avoided cost standard is superseded.

3 Finally, I'll give you my opinions on some  
4 other key issues that are in front of you. First, how  
5 much. I think Governor Crist has been as clear as he  
6 can be on that point, and he has proposed a number of  
7 20 percent RPS. Now, he has not proposed 20 percent by  
8 2020. Twenty percent by 2020 is my proposal. But I  
9 will note that Governor Crist has proposed aggressive  
10 targets for greenhouse gas reductions, and I certainly  
11 agree with the prior speaker that we need to be  
12 aggressive in setting the goal. So we would support an  
13 aggressive ramp-up as well as a 20 percent target within  
14 the reasonably near future.

15 Second, we would propose no set-asides. I

16 think Commissioner Skop voiced our concerns with  
17 set-asides. It's really unfair to single out a  
18 particular alternative over others, and you really then  
19 face the issue, well, how much, and why, et cetera.

20 So we do recognize that solar in particular  
21 may have a lot of promise and may require some special  
22 help, and we would support that. We just think that it  
23 should be not at the expense of other alternatives, that  
24 it should be something that is controlled and measured,  
25 and maybe a public trust fund is the way to go.

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1 And on the issue of should existing resources  
2 count at full value, first of all, I would simply refer  
3 you to the legislative language. The legislative  
4 language clearly in the opening paragraph states that --  
5 I'll read it to you. "It is the intent of the  
6 Legislature to promote the development of renewable  
7 energy and protect the economic viability of Florida's  
8 existing renewable energy facilities." So to me, that  
9 kind of settles the issue. But besides that statement,  
10 I think it makes a lot of sense to include existing  
11 resources, because you can't assume that just because a  
12 resource is existing, it will continue to exist and  
13 survive and so on forever.

14 Let me give you another point. Existing sites  
15 such as ours are probably very favorable candidates for  
16 expansion. All you have to do is look at the utilities.  
17 I would venture to say, without having studied it

18 rigorously, that over 50 percent of the generating  
19 capacity in the State of Florida in the last ten years  
20 has taken place at existing sites. Just look at the FPL  
21 expansion plan and how much they have used their  
22 existing sites.

23 If you take existing out of the equation,  
24 you're taking a very promising resource for expansion  
25 out of the equation. You would get into enormous, very

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1 difficult situations to sort if you say, "Well, you can  
2 expand at existing sites, but how about if you use the  
3 same fuel yard? How about if you use the same  
4 electrical transmission interconnection?" Let's avoid  
5 all that. Let's heed what the Legislature said. Let's  
6 include existing resources, full dignity with everybody  
7 else.

8 CHAIRMAN CARTER: Mr. Cepero, can you wind it  
9 down, sir?

10 MR. CEPERO: Yes, sir.

11 CHAIRMAN CARTER: I appreciate it.

12 MR. CEPERO: The last point, cost-prohibitive.  
13 We're very sensitive, like everybody else, to what has  
14 happened with the electric rates over the last several  
15 years. I just would suggest that RPS not play second  
16 cousin or poor cousin to everything. It's okay to raise  
17 rates when fuel prices go up, but it's not okay to raise  
18 rates for RPS, that to me sounds like a bit of a double  
19 standard.

20 Thank you for your patience, and I apologize  
21 for running over.

22 CHAIRMAN CARTER: Thank you. Commissioner  
23 Skop, you're recognized, sir.

24 COMMISSIONER SKOP: Thank you, Mr. Chairman.  
25 Good morning. I just wanted to touch upon

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1 some points that you had made. Certainly biomass will  
2 certainly play a major role in meeting any RPS  
3 requirement on a forward-going basis. And I think as  
4 you correctly have stated, this industry already  
5 provides a tremendous and tangible economic benefit to  
6 the state, and I think that is one huge part of  
7 renewables in Florida, because certainly there is that  
8 resource there.

9 And certainly, you know, as you stated about  
10 the combustion of the biomass itself and the tradeoff  
11 between what that means in terms of actual carbon  
12 neutrality or what have you, you know, I think as you  
13 stated also too, there's a balance between that and  
14 emission-free generation, and I think that everyone will  
15 find that happy medium. On a forward-going basis, I  
16 hope that biomass, just by its inherent nature of being  
17 a base load generator, plays an important part in  
18 meeting that.

19 So thank you for your comments, and thank you  
20 for your contribution to Florida's economic development.

21 MR. CEPERO: All right.



22                   CHAIRMAN CARTER: Thank you. Commissioners,  
23 anything further?

24                   Particularly, thank you for the 85 percent of  
25 the economic development standard.

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1                   MR. CEPERO: We're proud of that. I advertise  
2 it. Thank you.

3                   CHAIRMAN CARTER: Thank you very kindly.

4                   Mr. Futrell, before I come back to you, I'm  
5 looking over at the court reporter, and I think we've  
6 kind of got her going. This may be an appropriate time  
7 to take a break for the court reporter. Commissioners,  
8 I'm looking at coming back at -- this time I'm going to  
9 look at the clocks on the wall. What is that?

10                  How about 22 after, we come back at 22 after.  
11 That gives us ten minutes and will give the court  
12 reporter the opportunity to take a break, and also gives  
13 the staff time to take care of the technical  
14 difficulties. We're on recess.

15                  (Short recess.)

16                  CHAIRMAN CARTER: We are back on the record.  
17 And before we proceed further with our next presenter,  
18 Commissioners, just for planning purposes, and those of  
19 you here within the confines of the building, just for  
20 your purposes as well, to assist you, our plans are to  
21 go until about one o'clock, and we'll break for lunch  
22 from 1:00 to 1:15, and that way -- that's 15 minutes?

23                  Well, see, I was going to buy, but now that

24 you guys are asking for more time, the offer to buy is  
25 over now. So we'll go from 1:00 to 2:15, but then lunch

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1 will be on your own. That will give an opportunity --  
2 we've got a good streak going here. We've got a good  
3 flow of things, and we can kind of go from that, as well  
4 as give an opportunity for staff to kind of recalibrate  
5 some things as we do take that break. So we'll take a  
6 break for lunch at 1:00 to 2:15. We'll return at 2:15.

7 With that, Mr. Futrell, you're recognized,  
8 sir.

9 MR. FUTRELL: Mr. Chairman, seventh on the  
10 agenda is a joint presentation by Clay Bethea and  
11 Michelle Curtis with Buckeye Florida.

12 CHAIRMAN CARTER: Good morning and welcome.

13 MR. BETHEA: Thank you, Mr. Chairman and  
14 Commissioners. We appreciate this opportunity that we  
15 can come here and present.

16 Just to give you a little background on  
17 myself, I've been in the energy business my whole career  
18 and had the opportunity to design and build a solar car  
19 and race it through the State of Florida from Orlando to  
20 Detroit back in 1990, and worked for IG -- excuse me,  
21 Eastman Chemical Company, who is a premier company in  
22 gasification. And I have worked in three of the  
23 renewable facilities in the State of Florida, managed  
24 one of them for a number of years in the production of  
25 electricity and energy. So that's my background.

1           Buckeye, we're in Perry, and we're a pulp  
2 mill, and we operate a cogeneration facility currently.  
3 We do agree with diversify Florida's electrical  
4 generation fuels to reduce greenhouse gases. We agree  
5 that increasing the amount of electricity generated from  
6 renewable resources is a good thing. And we also agree  
7 with using more the efficient technologies that require  
8 less biomass per megawatt generated. We think that's  
9 very key, and we'll show that in this presentation. And  
10 we also think that utilizing and managing Florida's  
11 natural resources in a sustainable manner -- and that's  
12 very key in this presentation. We've been managing  
13 those resources for 50 years, and as we go through the  
14 presentation, we'll share some of that.

15           And just to let you know, back in the 1980s,  
16 our company did an initiative, basically what the State  
17 is doing now. We are the only company, we believe, that  
18 brings in the whole tree already. We did try to bring  
19 in the stump at that time. The technology, the  
20 conversion technology did not allow us to do that. But  
21 we think there's technology out there now, and we're  
22 looking at bringing in the stump also.

23           And we encourage you guys -- I'm sorry. We  
24 encourage you to come down. We would love to give you  
25 tours on how the integrated process works, from the

1 logging to the planting to the sustainable forests and  
2 the conversion process.

3 Our agenda today is importance of energy  
4 efficiency, Florida's forest resources, and then we have  
5 some conclusions and recommendations for you.

6 This is the graphic that I want to spend the  
7 most time on. Over here on the Y axis, you have acres  
8 of land. This is what it would take, the number of  
9 acres it would take for a 100-megawatt facility to be  
10 sustainable. So if you look at the growth cycle of a  
11 yellow pine tree -- this is North Florida growth cycles.  
12 If you take a look at that, it takes about 20 years to  
13 grow one of those into maturity. That's where you get  
14 the most growth rate. And if you assume 90 wet tons per  
15 acre at harvest -- and remember, we're already pulling  
16 everything off of the land. We pull the tops. We don't  
17 leave that waste wood there. And if there's hardwoods  
18 there, we'll come back and chip that for energy today  
19 also.

20 So if you look, for a 100-megawatt facility,  
21 if you're looking at conventional technology today, a  
22 fluidized bed boiler and condensing turbine, 1500 PSI  
23 unit, you're basically looking at somewhere around  
24 300,000 acres. Now, you're not cutting 300,000 acres a  
25 year. That's what it would take to have a forest that

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1 would produce for that facility.

2 If you're looking at an IGCC plant, there's

3 one in Varnamo, Sweden, that has run. It's smaller than  
4 what we would like to put in, but you would look at a  
5 lot less acreage here. And if you would put in  
6 community heating or some other way to use that energy,  
7 just, you know, having other forms of heating, other  
8 manufacturing cogeneration, you would be off of this  
9 curve. You would be very efficient.

10 And so what we're looking at and what we're  
11 encouraging is, whenever we go down this RPS, not only  
12 should we be specifying -- we need to be looking at  
13 efficiency, because what you're going to have is, you  
14 can come in and just slam in, looking back 20 years and  
15 saying, "This is the technology we're going to use."  
16 And what we're putting in is, we're putting in  
17 technology that's going to be here for 30 years.

18 Energy is something we've got to look at  
19 differently in the future, and I think we all are  
20 looking at that differently now with 4 and \$5 gasoline.  
21 And so efficiency is the answer, and we have to deploy  
22 those technologies correctly.

23 One last point I'll make off of this graphic  
24 -- and I don't want to speak for South Florida. I'm not  
25 a native of that, but I'm a seventh generation North

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1 Floridian, so I understand this part, and we farm.  
2 Whenever you take a look at 300,000 acres of land, if  
3 you're in North Florida, remember, about 30 to 40, and  
4 possibly 50 percent of our property is in wetlands,

5 cypress trees, and Michelle will talk a little bit to  
6 that. So typically, whenever I say a sustainable forest  
7 for a 100-megawatt plant, you're probably looking at  
8 about half a million acres, really, because you're not  
9 going to go down in those cypress -- those cypress trees  
10 don't grow out every 20 years. Michelle will talk to  
11 that.

12 I think that's what I want to cover. But if  
13 you'll notice the heat rate, just pay attention to that.  
14 Efficiency really takes us down, and we've got to take a  
15 look at what we do with our RPS.

16 Second, importance of efficient technologies.  
17 Energy assets are 20- to 30-year assets, and whenever  
18 I'm speaking to this, I'm talking about what we do,  
19 converting of biomass. Integration to utilize all the  
20 energy will be very important for future generations.  
21 The decisions we start making today will have a lasting  
22 impact, and we must use our resources in a sustainable  
23 manner and the most efficient manner.

24 The last question I will ask you is -- you're  
25 dealing with electrical generation. We understand that.

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1 But as we look at our fuel costs and trying to look at  
2 our liquid fuels, we have to make those sustainable  
3 also. And I would ask the question, there is technology  
4 out there that is available, how to take cellulose and  
5 move it into ethanol, which is liquid fuel. So as we  
6 write RPSs, we want to be careful, because there is

7 actually another use for some of that wood also.

8 And what I want to do is turn this over to  
9 Michelle. She's going to talk about biomass. I'm much  
10 more in the conversion process, and she's the biomass  
11 expert.

12 MS. CURTIS: My name is Michelle Curtis. I'm  
13 a forester. I attended the University of Florida and  
14 have been practicing forestry in Florida and Georgia for  
15 thirty years now, so what I want to do is talk about the  
16 forest.

17 And as you prepare to define the RPS, you have  
18 to understand, well, what is my biomass resource, what  
19 is available for use.

20 Now, the data I'm going to share with you  
21 today is not Buckeye data. What you see on this chart  
22 and on your papers is United States Forest Service data,  
23 so it's accessible to everyone. And I've got two books  
24 here just to give you an example. These are the two  
25 pamphlets I took the information out of. The slides are

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1 actually presented -- or prepared by the United States  
2 Forest Service. So I'm sharing this with you so you're  
3 aware that it's out there and encourage you to get the  
4 experts involved in understanding and making those  
5 decisions.

6 Okay. This next chart -- again, as I  
7 mentioned, all these charts are prepared by the U.S.  
8 Forest Service. Anything in red I've added, and I added

9 that in red so you would know clearly that I'm adding  
10 something to a slide that was already generated.

11 But the U.S. Forest Service defined I think  
12 real clearly for us where is the wood in Florida. And  
13 as you can see, the wood is mostly in North Florida, and  
14 there's a little bit in South Florida, 76 to 100 percent  
15 forested land. So anything in the dark green lets you  
16 know that 76 to 100 percent of the land is in forest.  
17 The lighter colors are 51 to 75 percent. Our plant is  
18 located here, just for perspective.

19 The University of Florida also completed an  
20 economic impact study in 2003 to look at the impact of  
21 forestry on Florida. Our county, this county alone,  
22 Taylor County, had an economic impact on Florida of  
23 \$1.9 billion annually. And so one of the things we want  
24 you to consider as you move forward is, you don't want  
25 to destroy the current businesses, the current

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1 industries are that using wood. There's huge economic  
2 impact. And some of the new technologies, or some of  
3 just the power generating or pellet plant kind of  
4 technologies have very little employment compared to  
5 your current wood-using industries. So we want to  
6 encourage you to let's think about preserving what we  
7 have as well.

8 The next slide shows timberland area by  
9 ownership. And again in red, I've put my comment here,  
10 the key point to take away from these slides. The U.S.



11 Forest Service looked at, well, who owns the land. And  
12 the point here is, the public, the government, federal  
13 and state, owns 27 percent of the forests in Florida.  
14 So as you think about, well, what is available for  
15 biomass use, well, 27 percent is owned by the  
16 government. And in talking with government leadership  
17 on these lands, it's not likely that a whole lot of that  
18 is going to be used for biomass production, so you have  
19 to realize that's not available for use.

20 The next slide talks about area by ownership.  
21 Okay. On the left is public lands, and it shows you the  
22 trend in public land ownership. So you see in 2005, the  
23 white part of the chart is natural timber, and that's  
24 primarily hardwood and cypress. The bottom part is  
25 planted pines. Okay? So what you see is most of the

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1 government ownership is in natural timber or hardwood  
2 and cypress. And when you look at the privately owned,  
3 there is a lot of it, but basically, if you look at the  
4 total, 35 percent, approximately 35 percent of all  
5 natural timber is owned by the government.

6 Now, this slide says, okay, what is growing  
7 out there, how much is really growing, and this is in  
8 billions of cubic feet of fiber. And this is an  
9 estimate, so please understand, this isn't scientific,  
10 but it's an estimate of government-owned timber not  
11 available for use. So if you think about, well, how  
12 much wood is out there, you've taken out a chunk that's

13 not most likely going to be available for biomass  
14 production.

15 The next slide talks about cypress, how are we  
16 doing on growing cypress. And it's a very busy chart,  
17 so I've tried to pull out the key points for you. This  
18 first bar says how much is my gross growth. Then you  
19 take out how much of the wood died naturally, how much  
20 then grows after that, and then how much did I cut, and  
21 how much is left in growing stock.

22 The key point on this one is in the 1980 to  
23 '88 period, you had 25 million cubic feet of cypress  
24 growing stock. '87 to '94, the harvest was so high, we  
25 overcut the cypress forest. It was not sustainable. So

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1 that's a problem. We do not want to overcut our forest.

2 A change occurred, though, in 1995 to 2005,  
3 and we reduced the harvest of cypress by 33 percent. As  
4 a result of that, our cypress is coming back and our  
5 growing stock is coming back.

6 So one key point here, though, is less cypress  
7 is being grown in Florida in 2005 versus 1980. And as a  
8 result of the fact that we cut back on harvest and now  
9 we have cypress growing, if you increase your harvest of  
10 cypress for biomass production, well, then you might be  
11 into an overcut situation again. So we don't believe it  
12 is likely that cypress could be used for renewable  
13 energy production in Florida, although it is rebounding  
14 now based on a reduction in harvest level.

15                   The next slide talks about hardwood. Okay.  
16                   The same kind of things to look at. And remember, about  
17                   a third or 35 percent of Florida's hardwood and cypress  
18                   is owned by the government. And I said will not be used  
19                   for renewable energy production, but yesterday we had an  
20                   opportunity to meet with the Florida Division of  
21                   Forestry staff, the director, assistant director, and  
22                   their stop staffers, to review these charts, because --  
23                   first, they've already seen them. They're U.S. Forest  
24                   Service data that was presented last year. But to be  
25                   sure any conclusions that we would share with you today

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1                   would be -- that they would agree with. And they asked  
2                   us to say most will not be used, because the Florida  
3                   Division of Forestry does allow some harvest of timber  
4                   from the property. So just consider most, but again,  
5                   the State defines how much that most is, and we can't  
6                   count on it. We don't think we can count on it.

7                   The key point on this chart, if you look to  
8                   the far right bars, the purple bars, they're getting  
9                   less. That means with our normal harvest level of  
10                   107 million cubic feet of hardwood annually in the last,  
11                   say, ten years, our reserves of hardwood are going down.  
12                   That trend does not support sustainability of the  
13                   resource.

14                   So we're already depleting, you know, our  
15                   hardwood resource. If you increase the harvest of  
16                   hardwood, it will only speed up the fact that you don't

17 have a sustainable resource. So we're saying we don't  
18 think hardwood is the answer. We don't think there's  
19 hardwood out there to support sustainability of lots of  
20 increased demand, or even the current level.

21 So that takes you down to, well, what about  
22 the pine? What's left in pine? And this is a real  
23 important chart for us to look at, so let's take a  
24 minute and absorb what it says. If you look back to the  
25 first set of bars, in 1980 to '86, we were actually

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1 overcutting our pine forest. Okay? Well, what  
2 happened? Now we have excess pine growing right now, a  
3 snapshot in time. Okay. What happened is, our harvests  
4 have actually gone down or stayed about the same, 444,  
5 434, 445. So why are we now having more pine? It's  
6 because we planted more acres for a short period of  
7 time.

8 Okay. So what you see is, we have an excess.  
9 And all this data was from 2005, because it takes time  
10 for the Feds and all to gather the data and then report  
11 it to the public. Okay. But since 2005, more new  
12 businesses have been established, pine-using businesses  
13 in Florida and businesses that are exporting wood to  
14 Europe to meet their Kyoto Protocol requirements. So  
15 those kinds of things have changed since this data was  
16 produced.

17 We want to encourage the State of Florida --  
18 and I know it's not all certainly in your control, but

19 you'll have a part of that. But Florida needs to ensure  
20 sustainability of its forests every time new  
21 biomass-using businesses are established and sited in  
22 Florida.

23 Now, the next two charts are the key if you  
24 walk away from anything and look at. Remember, the  
25 previous chart showed that we were starting to grow more

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1 or having more pine growing, and it was getting bigger.  
2 Here's why, because there was a period of time -- this  
3 top line shows planted acres. For that period of time,  
4 we were planting more acres, so we have an excess. Pine  
5 tree planing in Florida has declined since 1980. If you  
6 look at that top line, we've been -- less and less trees  
7 per year have been planted.

8 Now, as we reviewed this with DOF yesterday,  
9 they wanted to be sure we understood this is the best  
10 data available. It's not probably the most accurate. I  
11 mean, it's not, because they take information from the  
12 nurseries in Florida -- that's state and private  
13 nurseries -- to say how many pine trees have been grown  
14 to be out planted. Some of those trees could have been  
15 exported outside of Florida, and there might have been  
16 some pines brought into Florida. So just recognize that  
17 on that number, but it's still I think a very -- they  
18 definitely agreed with the trend that pine planting has  
19 gone down in the last 20 years.

20 Now, this chart, this next chart is sort of

21 the crux of it. It puts the detail on it to help you  
22 understand what we're facing in the future. Wood we are  
23 planting today -- or wood we are cutting now was planted  
24 in 1988. You see the spike. And the wood that it shows  
25 that we have extra wood now, it's this right here, this

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1 big peak.

2 The level of clear-cut harvest in Florida is  
3 at about 175,000 acres or so, if you'll look on here.  
4 You can see in the last ten years, our level of  
5 replanting is less than what we've harvested. We are  
6 planting less than the number of clear-cut acres. Our  
7 sustainability of pine forest today is at risk. You  
8 cannot sustain a harvest level this high if you only  
9 have that many acres to offer up.

10 So what we're saying is, yes, for a few years  
11 we have some extra pine, but in a few years from now, if  
12 you think, we're harvesting '88 now, in less than ten  
13 years, we're going to be overcutting the forest, even  
14 with our current demand on the wood. So something has  
15 got to be done in the future to sustain the forests in  
16 Florida.

17 We definitely support using biomass. We use  
18 biomass for energy production today. We think it is  
19 right and good, but we need to recognize there is not an  
20 unlimited supply of wood to support biomass expansion in  
21 Florida.

22 So our recommendations and conclusions, first,

23 any technologies of the new plants that are being  
24 established need to be the most efficient as possible so  
25 that every acre of biomass used gets the maximum amount

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1 of megawatts generated. We don't need to be employing  
2 inefficient, old technologies that take too many tons of  
3 wood to make a megawatt of power.

4           Secondly, we have a concern that demand for  
5 wood and woody biomass may exceed growth. Right now it  
6 doesn't in the snapshot of 2005, but that chart says it  
7 will exceed at our current -- just the way things are  
8 currently, we believe our forest resources will be  
9 depleted. We must take action to make sure that doesn't  
10 happen.

11           And we think Florida should develop a  
12 statewide plan to ensure forest sustainability. Florida  
13 needs to ensure there's a reliable, sustainable supply  
14 of wood and woody biomass for the current as well as  
15 proposed demand prior to siting new plants. We believe  
16 that we need to have continuous monitoring to ensure  
17 total wood and woody biomass harvest for domestic and  
18 export markets does not exceed growth.

19           Now, today, the U.S. Forest Service is on a  
20 five-year schedule, and we believe we've got to have  
21 more frequent updates so that we know on an annual basis  
22 how much is being used versus how much is being grown so  
23 that we're not bringing in plants that get us into a  
24 situation where our forests are not sustainable.

1 markets, I recently attended the World Bioenergy  
2 Conference in Sweden at the end of April, and what I  
3 learned is that the countries in Europe have basically  
4 tapped out their wood supply, and to meet their demand  
5 for their green energy plants, they've got to find wood  
6 elsewhere.

7 They have ten energy plants under construction  
8 right now, biomass energy plants that will use about  
9 6 million tons annually, and they're seeking new pellet  
10 plants in other parts of the United States to service  
11 that demand. They did many presentations, and those  
12 presentations looked at wood availability, and they're  
13 targeting basically the Southeast U.S, because we have  
14 fast growing wood and they perceive that there's a lot  
15 of wood available, but they haven't looked at the  
16 numbers the U.S. Forest Service presented to us last  
17 year.

18 So we've just got to be aware as we plan for  
19 the future. We think it's right for us to grow in the  
20 green energy area, but our last bullet point here is  
21 key. We have to plant additional biomass plantations  
22 and crops. We really -- we've got to encourage that in  
23 Florida to support our need for renewable energy. It's  
24 right to renew, but we need to plant additional crops,  
25 additional trees to support the new demand that will



1       come online.

2               So with that, I would open it up to questions.

3               CHAIRMAN CARTER: Thank you. Commissioners?  
4       Commissioner Skop, you're recognized, sir.

5               COMMISSIONER SKOP: Thank you. Just a quick  
6       follow-up question. And thank you for the informative  
7       presentation on the forestry industry in Florida.

8               Just as a point of information on my part,  
9       when they actually cut, are they required to replant  
10      with saplings?

11              MS. CURTIS: No. We're in a free market here.  
12      In Sweden, they are. Now, we are not suggesting that  
13      Florida ought to demand those things, but we ought to  
14      have -- we ought to have things that encourage that.

15              And I want to go back to one of the slides,  
16      because there are two points on that chart of tree  
17      planting. We actually had -- yes, that's great. The  
18      government had incentive programs. This right here was  
19      what's called the Soil Bank Program. The government  
20      incentivized tree planting, and you see what happened.  
21      Also, this big run-up here on the chart was the  
22      Conservation Reserve Program. Those programs work.  
23      They really do spur the planting of new forests. And we  
24      want to displace the use of oil, but we need to have the  
25      trees to support that.

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1              COMMISSIONER SKOP: And just as a quick  
2      follow-up -- and the reason I asked that question is,

3 I've seen the numerous tree farms in the State of  
4 Florida, and I think that's a great innovative concept.  
5 But to your point about the availability of wood or  
6 demand exceeding supply on a forward-going basis, what  
7 about biomass generated from other things, like remnants  
8 of vegetation crops and such like that? Are you guys  
9 more amenable to that, or --

10 MS. CURTIS: Well, I think it -- we believe  
11 that is right. We need to plant more crops. In fact,  
12 our company is looking at all the different biomass crop  
13 options for the future, because we believe we're going  
14 to have to have some high production crops, because  
15 there's not enough wood to support that. So we think  
16 that is absolutely the right direction. We need  
17 planting of additional biomass crops.

18 COMMISSIONER SKOP: Thank you.

19 CHAIRMAN CARTER: Commissioner Argenziano.

20 COMMISSIONER ARGENZIANO: He can --

21 CHAIRMAN CARTER: Oh, okay. Go ahead.

22 MR. BETHEA: To follow up with that question,  
23 that's a great question, and actually, we have a group  
24 working on sustainability for our company. Michelle has  
25 been asked, "What do we do in the future, and how do we

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1 do this?" And so she's out scouring -- that's why she's  
2 been to Europe and other places.

3 But remember, to get crops on, if you're  
4 talking about a herbaceous crop, number one, for North

5 Florida, where you have -- it's going to take about five  
6 years for us to make that evolution to get something  
7 possibly if it's high growth. So there's a time lag  
8 here that we've got to pay attention to.

9 The other thing I meant to say in my slide, I  
10 keep hearing -- I go to a lot of these conferences and  
11 stuff, and everybody's talking about the waste wood that  
12 we're going to utilize. What I'm going to share with  
13 you, a 100-megawatt plant at the most efficient that we  
14 know how to do today, and that's probably going to be an  
15 IGCC plant, that's going to be 1 million tons of the  
16 biomass.

17 Everybody keeps talking about, well, we're  
18 just going to use yard scraps and all of this. We  
19 already take the whole tree, so we understand how much  
20 waste is out there, because we implemented this in 1980.  
21 So 1 million tons for a 100-megawatt plant, that's the  
22 most efficient, and it really goes up from there.

23 So those are some numbers I think you can  
24 write down and have, just ballpark figures. I'm sorry.

25 CHAIRMAN CARTER: Thank you. Commissioners,

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1 anything further? Commissioner Argenziano.

2 COMMISSIONER ARGENZIANO: Thank you. I was  
3 going to speak to that point of the planting and the  
4 time it's going to take to get there, and then exactly  
5 what you're going to plant also, corn and now sugar cane  
6 too, but I think that's very important and critical,

7 especially in North Florida.

8 And I think the other thing I wanted to ask  
9 you about and to elaborate a little bit more on, I think  
10 you had mentioned encourage the planting of more trees.  
11 And I think -- are you saying, in other words,  
12 government incentives to get started? Because actually,  
13 afterwards, I think the incentive would be the demand.

14 MS. CURTIS: You know, I think the problem  
15 with the lag in time on the trees, because you're  
16 talking a 20-year rotation, you're in trouble before  
17 people realize that -- before the prices go up that  
18 would incent people to grow more trees. So I personally  
19 am talking about -- we need some incentives of some sort  
20 for landowners to plant more trees.

21 The other thing I wanted to mention quickly is  
22 the level of clear-cut harvest. People sometimes  
23 misunderstand clear-cutting. Pine trees must have full  
24 sun to grow, so that is why clear-cutting is done. If  
25 you plant a tree in the shade underneath some big pine

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1 trees, they won't grow. So I just want people to  
2 understand, it is a must. You have to actually cut the  
3 whole forest down and replant to have a new crop, just  
4 like a row crop of corn or what have you.

5 COMMISSIONER ARGENZIANO: Okay. Since Buckeye  
6 was in my district for a number of years and I toured  
7 Buckeye, I can say with comfort that you guys really  
8 know efficiency. I've seen you get the best

9 efficiencies at the plant. And I'm looking forward to  
10 working with all of the entities on trying to figure out  
11 how we get to where we need to go, and I feel  
12 comfortable about that.

13 And if you'll just indulge me a minute, would  
14 you tell all the guys and ladies back at the plant I  
15 said "hi." And just so you know, I remember -- I think  
16 I was chair of Ag when that study came out, that impact  
17 study on the economics of Buckeye and how many people  
18 came from so many different counties -- it wasn't just  
19 Taylor County -- and worked at that plant. So just tell  
20 them I said "hi."

21 MS. CURTIS: Okay.

22 MR. BETHEA: Thank you.

23 CHAIRMAN CARTER: Commissioner Skop.

24 COMMISSIONER SKOP: Thank you, Mr. Chairman.

25 Just as a follow-up, I think that the point that the

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1 presenters made is also an excellent one to the extent  
2 that it does show that we are promoting renewables in  
3 Florida, although we need to make sure that there's to  
4 be adequate resources to protect our forestry industry.  
5 I think the corollary to that is that making these types  
6 of investments in Florida stimulates other industries in  
7 Florida, such as agriculture and forestry, and heightens  
8 awareness of what we need to do to not only facilitate  
9 and incentivize, but also to protect those natural  
10 resources.

11 CHAIRMAN CARTER: Thank you so kindly.

12 Mr. Futrell.

13 COMMISSIONER McMURRIAN: Yes. Eighth on the  
14 agenda is Mr. John Wilson with the Southern Alliance for  
15 Clean Energy.

16 MR. WILSON: Good morning, Commissioners.

17 Thank you for the invitation to speak.

18 I represent the Southern Alliance for Clean  
19 Energy. My name is John D. Wilson, and I work out of  
20 our Asheville, North Carolina office, but I did grow up  
21 in Florida. And by way of background, I previously  
22 worked for the Florida Legislature doing policy research  
23 there for several years.

24 Our organization promotes responsible energy  
25 choices that create global warming solutions, and we

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1 also want to encourage clean and healthy and safe  
2 communities throughout the Southeast.

3 I have just four brief topics I would like to  
4 address today. We're going to submit more extensive  
5 written comments. I thought I would focus on things  
6 that I think other presenters may not be touching on.

7 We've already heard several presentations that  
8 have talked about the various aspects of legislative  
9 intent that the Commission will need to balance when it  
10 implements this legislation. I wanted to point out that  
11 -- and I don't believe anyone else has specifically  
12 referenced this, that Section 377.601, which creates the

13 -- or sets direction for the Energy and Climate  
14 Commission, also has relevant state policy.

15           And I'm not an attorney, so I don't know  
16 whether policy of the State of Florida trumps  
17 legislative intent or vice versa. But I think that what  
18 you're left with is an awful lot of different policy  
19 statements and intent that, if any one of them were  
20 taken to their extreme, would conflict with the others.  
21 And so what that gives you is either enormous latitude  
22 or enormous complexity, depending on your point of view,  
23 in implementing this legislation.

24           I want to highlight really just four aspects  
25 of the balancing that you will have to do. The first is

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1 that when you're looking at greenhouse gas emission  
2 reductions, you're going to be looking at it on a life  
3 cycle analysis. And having spent a lot of time as the  
4 director of research for our organization on life cycle  
5 analyses, I can tell you there's no perfect data out  
6 there on this question. It's going to be a very  
7 subjective call as to how to interpret the various  
8 studies that have been done on this topic, particularly  
9 in the arena of biomass. And as you may be aware, there  
10 has been a lot of controversy about the life cycle  
11 impact of biofuels production, both in the U.S. policy  
12 and the European policy, so that's something that we're  
13 going to need to delve into very carefully, and I think  
14 the previous presentation really laid that out for you.

15                   A second -- another aspect of the legislation  
16                   is, clearly, the Legislature is looking to establish a  
17                   long-term strategy that promotes rapid technology  
18                   development. You can see this illustrated in the grant  
19                   to Florida Atlantic University for 8.75 million to look  
20                   at ocean energy, or you can look at the past three  
21                   years, \$42 million appropriated to renewable energy  
22                   development projects. We clearly have an interest in  
23                   not just sort of adding a little bit of renewable energy  
24                   capacity to the system, but really changing the economy  
25                   of Florida and the technologies that are being used to

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1                   generate electricity. And so I think that that is a  
2                   mandate to go beyond just simply a cost-based approach  
3                   to this issue.

4                   Third, cost stabilization and minimization.  
5                   While we do have this one direction to go in terms of  
6                   technology development, there's this interest in sort of  
7                   stabilizing and making sure that everything is done in a  
8                   cost-effective manner, and we absolutely support that.

9                   And then next, there's, of course, the  
10                   interest in job and business development, and I think  
11                   you see this emphasized in the focus on Florida  
12                   production of electricity.

13                   The next point I would like to make is the  
14                   need to look at the RPS in a planning and forecasting  
15                   framework. Really, we can't just simply look at the RPS  
16                   in isolation from the other policy issues that are



17 before you. We have the upcoming FEECA process that  
18 will be looking at the energy efficiency and demand-side  
19 renewables goals for the utilities in the state. And  
20 this really needs to be looked at together, and not in a  
21 formal legalistic manner, but we need to have the  
22 analysis that is supporting these two ongoing policy  
23 developments to be done in an integrated approach, for a  
24 number of reasons.

25 First of all, one of the important aspects of

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1 a forward-looking energy policy is that it helps us  
2 reduce the risk, the cost risk to the public.  
3 Typically, most analyses I've seen of the cost of energy  
4 focus on sort of the levelized costs, and you'll see a  
5 comparison of the cost of wind to nuclear, you know,  
6 sort of 8 cents versus 12 cents, or whatever it might be  
7 on a per kilowatt-hour basis. But I would urge you to  
8 look at more comprehensive modeling analyses that also  
9 put explicit quantitative values on the different risk  
10 reduction opportunities that different resources  
11 promote.

12 The Northwest Power and Conservation Council  
13 actually does very extensive modeling on this and has  
14 shown that, for instance, when you compare different  
15 portfolios of energy strategies to each other, one might  
16 save a billion dollars in long-term costs versus  
17 another, but the risk premium of the more expensive  
18 policy is actually a savings of potentially 4 or

19 \$5 billion in terms of risk avoided. And the kind of  
20 risks that they model are the risk of higher energy  
21 prices that are expected in a baseline case or other  
22 kinds of risks.

23 So there are real huge dollar values at stake  
24 in terms of risk avoidance and, of course, this is  
25 something that we're very used to valuing in the

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1 insurance industry, for instance. There's ways to put a  
2 dollar value on risk. So I would encourage you to go  
3 beyond sort of a base case analysis and look at those  
4 values as well.

5 The other reason that I would suggest going to  
6 sort of a planning and forecasting framework that  
7 integrates all of these issues is that you're able to  
8 understand how different renewable energy choices are  
9 going to affect different -- affect things outside of  
10 the renewable energy arena. The particular load shapes  
11 that are associated with renewable energy generation  
12 will have an effect on the cost-effectiveness of energy  
13 efficiency, will have an effect on the  
14 cost-effectiveness of the nuclear plant, et cetera,  
15 et cetera. These are all interrelated values, and  
16 you're going to need to put together a system approach  
17 that balances these all, and you can't do it sort of by  
18 creating isolated models and sort of guessing how they  
19 fit together.

20 And this alludes to a point, I think, that's

21 really important. We had some discussion earlier today  
22 about the demand-side resources, distributed generation.  
23 And, of course, the FEECA process explicitly provides  
24 that we're going to have goals for utilities in terms of  
25 demand-side renewable resources, so that's another area

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1 where we need to look at how these two policies  
2 integrate, because we don't want to have an ambitious  
3 goal under the RPS that assumes full build-out of  
4 rooftops for solar PV, for instance, and an additional  
5 goal that's imposed that counts the same things twice.  
6 So there could be double counting across these two  
7 proceedings if they're not coordinated at the analysis  
8 stage.

9           Finally, in terms of planning and forecasting  
10 framework, we've seen a lot of maps today that have just  
11 shown Florida. And, of course, the law does say that  
12 we're talking about production of electricity in  
13 Florida, but that's not necessarily where the resources  
14 will come from. There's nothing in the law that says  
15 that there can't be imports from other states, or even  
16 other countries, of biomass. And so we need to have a  
17 planning framework that takes that into consideration  
18 and looks at both directions, potentially, of resource  
19 flow into and out of the state and how that could affect  
20 things.

21           And finally, although it's probably not  
22 allowed to count towards the RPS, there is a potential

23 for a very large development of offshore wind in the  
24 Georgia-South Carolina region, and it is certainly  
25 conceivable that that could be built into the State's

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1 planning framework in terms of transmission down into  
2 Northeastern Florida. And so I would urge you to keep  
3 that potential resource in mind, even though it may not  
4 be legally eligible for the current -- under the current  
5 statute.

6 And this comes into the third point I would  
7 like to make, which is the definition of eligible  
8 resources. I think the statute lays out a very good  
9 framework for beginning this work, but there is some  
10 further work that's going to need to be done. First of  
11 all, I would urge you to look at resources, both the  
12 ones that are available from a commercially ready  
13 perspective in the near term, and to look at longer term  
14 resources that require R&D.

15 As I mentioned, we've got the state funding  
16 for ocean energy. We can't count on any specific amount  
17 of ocean energy being developed by 2020. But on the  
18 other hand, I think we have to sort of assume success at  
19 some level and count on that idea and that vision of the  
20 state becoming a reality. And I'll talk a little bit  
21 later about how I would suggest doing that.

22 Second, I think the area of biomass, as we  
23 just heard in the previous presentation, and also  
24 waste-to-energy, is an area where we're going to see a

25 lot of complication. We have a direction in the

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1 statutes to look at life cycle greenhouse gas emissions,  
2 and these are both technologies where life cycle  
3 emissions are a very complicated question, and so we're  
4 going to need to get into definition there.

5 And also, these are both technologies where  
6 there are potential environmental impacts that go beyond  
7 just simply the contribution to renewable resources or  
8 the greenhouse gas emissions, and so those are also  
9 directed by statute as things that needed to be  
10 considered. The economic, social, and environmental  
11 impacts I believe is the phrase in the statute. So  
12 those are issues that will need to be taken into  
13 account, and I'll suggest in just a moment how I think  
14 you might look at that.

15 Finally, I think that in addition to the  
16 question I raised earlier about the demand-side  
17 resources and how they would be included in the RPS, if  
18 at all, the other place that demand-side resources could  
19 be included is in building codes. We have the statutory  
20 delegation to pursue energy efficiency in building  
21 codes. We could see, for instance, solar hot water  
22 heater use becoming more of a requirement in the  
23 building codes than just simply an option. I'm not sure  
24 how that will play out. I wanted to raise that as a  
25 possibility.

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1           Finally, I would like to briefly go over some  
2 concepts for how to structure an RPS. We favor an  
3 approach with tiers and carve-outs, but we favor --  
4 we're not promoting that just simply sort of as an  
5 abstract notion, but tied to the points I made earlier  
6 that are in the statute.

7           First of all, in terms of the tiers, the main  
8 focus there would be on the greenhouse gas emission life  
9 cycle analysis and the environmental impacts of the  
10 different resources. So we would suggest three tiers,  
11 the top one being those that are zero emission from all  
12 perspectives. Any resources that count towards that  
13 category would count towards full compliance with  
14 whatever RPS you set. The second tier would be those  
15 with less than zero greenhouse gas emissions, so biomass  
16 or waste-to-energy, where there is some greenhouse gas  
17 emissions, would fall into that category. And then the  
18 third category would be those with significant  
19 environmental impacts, whether or not -- regardless of  
20 their greenhouse gas emission level.

21           And what we would suggest is that for Tiers 2  
22 and 3, you set a maximum of, say, 15 percent of the  
23 total goal could be contributed from those categories.  
24 So that would allow full counting of those resources  
25 towards the RPS, but a limited amount of the

1 contribution.

2                   We also think that there should be a carve-out  
3                   for solar and wind to promote the rapid technology  
4                   development, and we would suggest that that would be  
5                   about -- that about 15 percent of the total goal would  
6                   be appropriate.

7                   I also think that we want to look at staging  
8                   the goals. I think you should focus on the 2015 goal  
9                   and the ramp-up to that point in terms of the actual  
10                  identifiable potential resources that are in the state  
11                  right now, things that are commercially ready to go, and  
12                  then look towards 2020 as more of an aspirational goal  
13                  that is intended to move forward the technology R&D at a  
14                  rapid pace, and revisit that goal in 2014.

15                  Finally, I think we've had some interesting  
16                  remarks about, for instance, an alternative compliance  
17                  mechanism. I think that would be an appropriate thing,  
18                  particularly for smaller utilities that may want to make  
19                  use of Public Service Commission services or some other  
20                  state agency that could sort of collectively purchase  
21                  and manage RECs on their behalf. I think the larger  
22                  utilities probably do not need an alternative compliance  
23                  mechanism. They're perfectly well suited to -- staffed  
24                  to handle those kind of issues internally.

25                  So I thank you for your interest in our

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1                  remarks, and I look forward to providing you with  
2                  further materials later.

3                  CHAIRMAN CARTER: Thank you very kindly.

4 Thank you. Mr. Futrell.

5 MR. FUTRELL: Next on the agenda is Mr. Eric  
6 Draper with Audubon of Florida. He is number 9 on the  
7 agenda.

8 MR. DRAPER: Thank you. My name is Eric  
9 Draper. I'm deputy director of Audubon of Florida, a  
10 conservation organization and science-based organization  
11 and steward of wildlife in Florida for over 100 years.  
12 We thank you, Chairman Carter, for the opportunity to  
13 address the Public Service Commission today on the  
14 establishment of the renewable portfolio standard  
15 pursuant to the provisions of Section 42 of House Bill  
16 7135 which was passed and signed into law this year. I  
17 had the opportunity to lobby the Legislature on that  
18 bill, and we're very proud of some of the content of it.

19 The law directs the Commission to adopt rules  
20 for an RPS requiring each provider of electricity to  
21 supply renewable energy directly, by procuring, or  
22 through renewable energy credits. And this goal should  
23 be cast in costs and capacity in 2020. I've attempted  
24 to direct my comments specifically to what Section 42  
25 requires.

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1 The Legislature, of course, did give itself  
2 the power to approve the rule, and I think that that  
3 should cast all of our considerations in a special  
4 light. The rule is, nevertheless, a wholesome  
5 assignment that should allow the Public Service



6 Commission to act boldly to make renewable electricity a  
7 major part of Florida's energy future.

8 Policies in 7135 also create conditions for  
9 decreased electricity demand, and that's going to be an  
10 important point I'll make today, building codes,  
11 particularly energy efficiency and conservation  
12 programs, which should be factored into the PSC's  
13 analysis.

14 The RPS directive is timely as Florida's  
15 government and its citizens are all involved in efforts  
16 to reduce our dependency on fossil fuels and imported  
17 fuels, as well as to improve our economy and protect the  
18 state from the devastating impacts of global climate  
19 change.

20 There is considerable precedent in other  
21 states for RPS as a strategy to accomplish the goals I  
22 just mentioned. As of March 25th -- as of March, I  
23 think 25 states and the District of Columbia have  
24 implemented some type of renewable portfolio standards.  
25 But RPS is just one of the suite of measures that must

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1 be undertaken to free us from reliance on expensive  
2 fossil and imported fuels, to reduce greenhouse gases,  
3 and to build a clean energy and low carbon economy.

4 Now, the Commission has requested this  
5 workshop focus on two specific areas, the requirements  
6 of 7135 and specific recommendations for elements of an  
7 RPS that should be addressed in the Commission's rule.

8 Prior to addressing these areas, it's important to note  
9 some baseline assumptions that must influence policy  
10 thinking and subsequent rulemaking.

11 It's important to have an initial target for  
12 the RPS. In policy, as in archery, targets help refine  
13 our aim. A target can be moved or changed, but plays an  
14 important role in helping to test assumptions about the  
15 effort, and I think there's a lot of testing of  
16 assumptions that needs to go on right now. The  
17 Legislature did not preclude a target number or  
18 percentage or even suggest constraints related to  
19 percentages or targets.

20 Contrary to current assumptions, demand for  
21 retail delivery of electricity, driven largely by fuel  
22 costs, will decline. I know that statement is contrary  
23 to what has been said in here by almost everyone, but  
24 I'm going to make it again, and I'm going to attempt to  
25 try and reason my way through it. But I think that that

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1 should at least be a consideration guiding some of your  
2 considerations as you're looking at an RPS. As a  
3 consequence of that decline, a proposed RPS expressed as  
4 a percentage of total retail sales will be more  
5 attainable than if you use the current projections of  
6 electrical demand growth in Florida.

7 Given current and projected fuel costs and new  
8 policies and increased energy efficiency, Audubon  
9 believes that decreases in energy demand will contribute

10 to a decreased need to build out our fossil fuel based  
11 energy capacity and will contribute to ensuring that a  
12 20 percent RPS standard in the year 2020 may be  
13 successful. The cost per kilowatt-hour from renewable  
14 sources will go down as technologies improve and  
15 capacity increases.

16 The intent language in 7135 finds that the  
17 State's, quote, energy security can be increased by  
18 lessening its dependence on foreign oil, that the  
19 impacts of global climate change can be reduced through  
20 the reduction of greenhouse gas emissions, and that the  
21 implementation of alternative energy technologies can be  
22 a source of new jobs and employment opportunities for  
23 Floridians.

24 We note that other states have set ambitious  
25 targets of 20 percent for RPS by 2020, and this target

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1 should be considered by Florida. Establishing an RPS  
2 that supplies at least 20 percent of Florida's  
3 electricity by 2020 through safe, clean renewable energy  
4 helps meet the intent of 7135 and will serve to reduce  
5 greenhouse gas emissions and make an important  
6 contribution to stabilizing climate change, thereby  
7 positively contributing to major policy goals of the  
8 State of Florida and, of course, our Governor.

9 I should note -- I just got an e-mail while we  
10 were sitting here -- that Yale and the University of  
11 Miami, Yale College and the University of Miami released

12 a poll this morning about climate change. It was a poll  
13 in Florida, and they found that 65 percent of Floridians  
14 support an RPS standard of 20 percent by 2020 and would  
15 pay more, as much as \$100 more a year on their electric  
16 bill, according to the poll. I hope I got that  
17 information right. It came over an e-mail.

18 But I thought that was an interesting little  
19 piece of news. Somebody clearly must have known you  
20 were meeting today and released that news. Maybe one of  
21 the other interest groups here was going to break that  
22 themselves.

23 7135 gives priority to solar and wind sources.  
24 This should be reflected and strengthened in the rule  
25 through a tiered system that allows preference to solar.

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1 Additionally, any renewable source that captures waste  
2 methane and converts it to fuel for electricity should  
3 be given preference.

4 We have to note here that from Audubon's point  
5 of view, wind is a weak energy source in Florida that  
6 has been shown to have significant impacts on wildlife  
7 in other places where wind energy has been used as a  
8 technology. We think that would be particularly  
9 significant in Florida, because wind would be located  
10 here along our Atlantic beaches, which happen to be  
11 major migratory flyways where million of birds move  
12 throughout the United States.

13 We would also suggest, particularly based on

14 the information that has been provided today, that you  
15 put at a very low tier some of the biomass projections,  
16 notwithstanding existing activity that's coming from  
17 Florida Crystals. But we're very concerned as a  
18 wildlife organization that we would end up strip mining  
19 our forests to provide -- I know that's a provocative  
20 comment. I don't usually make those. But strip mining  
21 our forests to provide electricity is a short-term  
22 solution, and it doesn't make much sense for a beautiful  
23 state like Florida.

24 The law does provide and the rule should  
25 provide for including demand-side reduction or

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1 efficiency. I want to say that again. The law does not  
2 provide and the rule should not provide for including  
3 demand-side reduction or efficiency as a part of the  
4 RPS.

5 A large designated percentage of the RPS  
6 should be reserved for solar energy. Of all renewable  
7 sources of electric power, solar is the most promising  
8 for Florida. Solar fuel is free, nonpolluting, and  
9 provides for distributed production. Solar could be  
10 granted additional incentives by allowing multipliers  
11 for renewable energy credits. Indeed, RECs could be  
12 limited to solar. That would be our recommendation,  
13 limit RECs to solar in order to give a strong, strong  
14 preference to that particular source.

15 Providing this share is consistent with the

16 provisions of 7135, which states that the Commission  
17 may, quote, provide additional weight, end quote, to  
18 renewable energy such as solar photovoltaic.  
19 Additionally, 7135 begins to bring down the significant  
20 regulatory and financial barriers that have slowed the  
21 wide scale deployment of solar technology and hindered  
22 the growth of the solar market.

23 Interconnection and net metering policies were  
24 incorporated into 7135 and should contribute easily to  
25 diversifying Florida's solar mix and allowing renewable

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1 energy to reach the grid from distributed sources.

2 The effectiveness of net metering and  
3 interconnecting the grid should stimulate the growth of  
4 solar power in Florida and will be bolstered by a robust  
5 RPS that reserves a specific share for solar. Including  
6 a solar share specifically to encourage the growth of  
7 Florida's solar market will save consumers money and  
8 contribute to cutting greenhouse gas pollution in a  
9 manner that's safe and secure.

10 I want to go back to demand. Forecasts of  
11 electricity demand and costs by utilities based upon  
12 assumptions that are changing rapidly and do not take  
13 into account new trends, such as the rising cost of oil  
14 and gas, and new policies for energy efficiency and  
15 renewable energy, including policies in 7135, all of  
16 which should be factored into electric supply capacity  
17 pricing, analysis, and forecasts done by the Public

18 Service Commission in order to set the standard.

19 As oil prices continue to rise, it is likely  
20 that natural gas prices will follow suit. Even if oil  
21 prices remain at current high levels, or worse, they  
22 continue to rise, elementary economics tell us that we  
23 will see a decrease in energy consumption. Indeed, it  
24 has already begun. Oil consumption has decreased by  
25 2 percent in the United States over this year, just this

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1 year, a decrease of 400,000 billion barrels a day -- I'm  
2 sorry, barrels a day. Adjusted to include for ethanol  
3 consumption, the daily decrease is actually 530 billion  
4 barrels a day -- 530,000 barrels a day. I can't read my  
5 own numbers here.

6 Anyway, also, gasoline prices will continue to  
7 rise, projected to increase to \$4.48 per gallon in 2009,  
8 corresponding to a further decrease in 2009 daily oil  
9 consumption. The reason I mention that is because I  
10 believe that, as we've seen, consumers reduce their  
11 consumption of gasoline as a factor of oil supply. The  
12 same thing will actually happen, I believe. I can't  
13 prove this yet, but I think that you ought to really  
14 look at it, that electricity usage will also go down.

15 Retail electricity prices will rise. They've  
16 risen in Florida. We've got testimony here today  
17 they've gone up 40 percent since 2000. I was actually  
18 stunned by that number. They will rise in conjunction  
19 with rising oil and natural gas prices. Florida will

20 especially feel this effect because we're dependent upon  
21 importing fuels to produce our electricity.

22 And I'll skip over some of this. I guess the  
23 point that I'm trying to make is that the -- we should  
24 project into this question and all of your cost  
25 considerations that fuel prices are going to go up and

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1 that there's going to be a corresponding reduction in  
2 demand. I wish that I had the research here to be able  
3 to present that to you and show you a projection, but  
4 you've relied some and you have to rely some on the  
5 projections that the regulated community is giving to  
6 you, and I think that you should search far and wide to  
7 look at what the actual consumption is going to be. And  
8 I think that some of that is going to be a phase-out of  
9 some of those fossil fuel facilities that actually  
10 produce some of that electricity.

11 So the question is, will renewables be  
12 cost-effective and have a place in the supply future.  
13 That's a question that you've got take up rather than  
14 rely just on the utility projections. I notice in your  
15 data request that -- well, I notice you've got a piece  
16 in here on a data request which related to 7135. I hope  
17 that as you collect that information on what appears to  
18 be a very short time frame that you will in fact make  
19 sure that you reach out to and stimulate the collection  
20 of data and the use of data that will help us to  
21 understand the costs and the consumption of the energy



22 future, because I think that that is a fulcrum upon  
23 which a lot of the decisions about RPS, and particularly  
24 solar, will rest.

25 Thank you very much for listening to me.

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1 CHAIRMAN CARTER: Thank you, Eric. Wait for a  
2 second. Commissioner Edgar.

3 COMMISSIONER EDGAR: Thank you, Mr. Chairman.  
4 Thank you, Eric.

5 I agree with many of the things that you've  
6 said, and I also hope that when you encourage us, which  
7 I agree, I think we all do, with trying to do some  
8 additional outreach and tap into a wide variety of data  
9 sources and analysis, that your organization will help  
10 us do that.

11 I wanted to come back for a moment to some of  
12 your comments about perhaps demand decreasing more than  
13 some of the projections have been over the past few  
14 years or even currently. And I recognize, as you  
15 pointed out, that the bill has some things in it to try  
16 to help further that in this state. I know I personally  
17 think that some of the building codes language and  
18 having energy efficiency requirements improved in our  
19 new buildings and retrofitting is, you know, a great,  
20 still untapped opportunity.

21 But even with that in mind, I would like you  
22 to elaborate a little bit as to why including additional  
23 -- I think we could separate it out. So why do you

24 argue for not including demand-side or new efficiencies  
25 as part of an RPS? If you could just speak to that for

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1 a few more minutes.

2 MR. DRAPER: One of the reasons is the reason  
3 that Mr. Wilson mentioned, which is that I think it's a  
4 confusing set of requirements that the Legislature has.  
5 They did not clearly in 7135 go as far as we had wanted  
6 them to in terms of encouraging efficiency and  
7 conservation. But nevertheless, I think that a lot  
8 of -- those things are going to happen under a separate  
9 regulatory process which you will help guide.

10 A lot of it will be consumer driven anyway.  
11 In the same way that you've seen consumers trade in  
12 their SUVs, or try to, for more fuel efficient  
13 automobiles, I think families like mine will wake up and  
14 they'll set the thermostat a little higher, they'll  
15 replace their light bulbs, and they'll engage in  
16 retrofitting their homes, putting more installation in  
17 the attic. So all of those consumer based activities  
18 will start kicking in, driven largely by looking at the  
19 check that they have to write for their bill, based  
20 largely on increased fuel costs. So that's one factor.

21 I think another factor is in fact the  
22 Legislature's encouragement for the new housing market  
23 under the building codes, for the retrofit and what  
24 you'll see in the government buildings, again, a 7135  
25 concept. So the confluence of those activities will

1 drive a reduction.

2 Now, I wish that in the amount of time  
3 provided my organization could come up with some kind of  
4 way to calculate that for you. But I think that's going  
5 to happen on its own track, and you should let that and  
6 you should encourage it to happen on its own track. The  
7 RPS as a number I think should continue on its own  
8 track.

9 And I'll go back to something I actually  
10 thought about when I saw some of the testimony from  
11 other people on this issue, which is, I looked at the  
12 law. I looked at Section 42, and I said, "It doesn't  
13 look like the Legislature actually provided for using  
14 efficiency and demand management as a basis for your  
15 RPS." And knowing this Legislature and knowing that  
16 this rule is going to have to be approved by it, I think  
17 you've got to be very careful about the assumptions that  
18 you work into the RPS, because it would not take much  
19 for them to send us back for a do-over, however they --  
20 I mean, they have the prerogative in terms of how they  
21 handle this particular rule.

22 I hope that answers the question,  
23 Commissioner.

24 COMMISSIONER EDGAR: Thank you.

25 CHAIRMAN CARTER: Commissioners, anything

1 further?

2 Thank you, Mr. Draper.

3 MR. DRAPER: Thank you.

4 CHAIRMAN CARTER: Mr. Futrell.

5 MR. FUTRELL: Next is Mike Branch with  
6 Smurfit-Stone Forest Resources, and he is tenth on the  
7 agenda.

8 MR. BRANCH: Mr. Chairman and Commission  
9 members, thank you for the opportunity to come. My name  
10 is Mike Branch, and I've lived in Florida all my life.  
11 I'm a forester from the University of Florida, and I've  
12 worked for Smurfit-Stone for 32 years here in Florida,  
13 so I'm one of those Floridians that's lived here and  
14 worked here all my life. Thank you for this  
15 opportunity.

16 I do work for Smurfit-Stone, and we believe  
17 that we're to a great degree part of the answers to the  
18 climate change, we believe in our bioenergy in the  
19 states that we do business. We have three pulp mills in  
20 Florida, which represents 23 percent of our company's  
21 pulp and paper production, and we employ about 1,200 men  
22 and women in these three mills with a payroll of over  
23 103 million and over \$5 million in property taxes.

24 Over 60 percent of our energy at our virgin  
25 mills in Fernandina Beach and Panama City is from the

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1 form of bark, or generated by biomass in the form of  
2 bark and lignin and waste wood. And our mill in  
3 Jacksonville is a 100 percent recycle mill, and it has

4 co-ops with the Cedar Bay Generating Station in  
5 Jacksonville for steam and energy.

6 What I'm going to say has been said by a few  
7 people already, so I certainly -- with Michelle and  
8 Clay, I appreciate their presentation, but I do want to  
9 reiterate one or two. It's going to be short.

10 And the first one is not, and I haven't heard  
11 many people talk about it, but my first is that we would  
12 urge you to create a base year in light of what Eric's  
13 saying. If it goes down, that would be good, but if we  
14 continue to grow and the energy continues to be used and  
15 created in Florida and our forests continue to deplete  
16 like we think it has in the past, we're going to be  
17 really in a place that woody biomass will just not be --  
18 would not contribute to the RPS. And so we want to try  
19 to set that here and now so we wouldn't have to approach  
20 that.

21 The second is that what we do with the RPS  
22 pertaining to climate change, including biomass and  
23 cellulosic ethanol, must be done in a sustainable way,  
24 the same as what they've said. Sustainability is  
25 something that we have to reiterate. And to do that, we

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1 just think that you need to know that data. We want to  
2 promote that as you go forward with all the different  
3 aspects of the RPS, if you can know that data, what  
4 Michelle showed, what the Division of Forestry has and  
5 we have, we need to know that data.

6                   As a matter of fact, if you take the limbs and  
7                   the tops, what we call woody biomass waste is less than  
8                   1 percent of what the Florida RPS would be. So it's a  
9                   very small amount. It's 3 million tons, about 3 million  
10                  tons, but if you consider that to the amount of energy  
11                  the state produces and uses, a very small amount would  
12                  be in the Florida renewable portfolio standard.

13                  We also want to concur with her, with Michelle  
14                  in talking about the U.S. Forest Service in her  
15                  presentation. We want to concur with that, that we need  
16                  to be careful. An RPS is going -- if its pushes and we  
17                  don't have in any way any sideboards on it, then we can  
18                  see our forests in Florida go away, and not just the  
19                  trees go away, but all the aspects of sustainability.

20                  Sustainability is not just the trees, but it  
21                  is the wildlife, and it is our water and issues with  
22                  threatened and endangered species. And it is a carbon  
23                  sink, by the way, carbon sequestration and storage. And  
24                  so we want to make sure that we see those qualities in  
25                  this forest and we don't use them.

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1                   The other side of that too is that we feel  
2                   like that if you look at the carbon cycle and you look  
3                   at the young, vigorous growing trees, if you take those  
4                   trees and put them into manufactured goods such as  
5                   2-by-4s that will actually store that carbon, it's a  
6                   better idea than going out and cutting them down and  
7                   burning them in an inefficient way. So we think that

8 our forest is healthy. We want to keep it that way, and  
9 we think it's very efficient.

10 The last is, I want to talk to you about  
11 renewable resources. And again, as Michelle said, if we  
12 deplete our forest down to where it is not sustainable,  
13 then biomass would not be able to be used in your  
14 portfolio, because it's not going to be renewable. It's  
15 going to be a commodity, but it's not going to be  
16 renewable. So we have to make sure that we know that,  
17 that we don't cut out the forest, because then it -- the  
18 way it reads today, it would not be a renewable  
19 resource, because it's not growing up.

20 Agriculture, you can do that year to year.  
21 Forestry takes -- they were talking about if you were to  
22 plant some real high variety that will grow real fast  
23 for a crop, it could be five or ten years. But if  
24 you're going to grow a forest, it takes you 20 years to  
25 grow a forest compared to every day or every year

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1 whenever you come to agriculture. So it's very  
2 important that we look, and if it's not sustainable,  
3 then certainly it's not renewable.

4 And last, I would urge you to adopt a  
5 sustainable rule to assure that any woody biomass used  
6 to satisfy the RPS mandate qualifies as a renewable  
7 woody biomass fuel. In fact, we believe that you and  
8 DEP have the authority to place these plants wherever  
9 they might go to make sure they're sustainable, that

10 they can't come up beside two paper mills and other  
11 users of timber and just plop in because they're  
12 subsidized. They can beat us every day at a price. So  
13 we would think that you have that authority if you're  
14 permitting these plants, that you can look at suitable  
15 places, and especially sustainable places to place these  
16 plants.

17 Any questions?

18 CHAIRMAN CARTER: Thank you, Mike.

19 Commissioners? Thank you very kindly.

20 Mr. Futrell.

21 MR. FUTRELL: Next is Ms. Vicki Gordon  
22 Kaufman, who is representing Wheelabrator Technologies.

23 MS. KAUFMAN: Good afternoon, Commissioners.  
24 I was going to say good morning, but it's good  
25 afternoon. I'm Vicki Gordon Kaufman. I'm with the

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1 Anchors Smith Grimsley law firm here in Tallahassee, and  
2 I'm appearing on behalf of Wheelabrator Technologies,  
3 Inc. this afternoon. Wheelabrator appreciates the  
4 opportunity to appear before you today and to discuss  
5 the new important legislation that we've all come here  
6 to consider.

7 I'm not going to reiterate what many of the  
8 speakers before me have said. I think we all recognize  
9 that House Bill 7135 is a very important statement of  
10 legislative intent, policy, and directive. And we all  
11 know, not only from that legislation, but from our own



12 lives, that it's time to make a renewed, no pun  
13 intended, concerted effort to encourage and incent  
14 renewable energy in Florida. We laud the Commission for  
15 its role and the Governor's input and direction on the  
16 bill, and Chairman Carter has already made many of those  
17 remarks in his opening statement.

18           Wheelabrator looks forward to being a  
19 participant in the process and in the study we  
20 understand the Commission is going to undertake to  
21 assess the potential for renewable energy in the state.  
22 And I wanted to point out that the Integrated Waste  
23 Services Association and its member companies, which  
24 include Wheelabrator, have previously submitted and  
25 participated with you in the four workshops that you've

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1 had on the renewable portfolio standard up to this  
2 point.

3           I just want to give you some very brief  
4 information about Wheelabrator so you'll know who we  
5 are. Wheelabrator is a wholly owned subsidiary of Waste  
6 Management, Inc., and it operates 16 waste-to-energy  
7 plants throughout the United States. Wheelabrator built  
8 the first commercially successful waste-to-energy plant  
9 in the United States. In Florida specifically,  
10 Wheelabrator owns and operates two facilities in  
11 Broward, it built and operates the City of Tampa's  
12 facility, and it owns and operates a waste wood, tires,  
13 and landfill-gas-to-energy facility in Auburndale. In

14 total, Wheelabrator provides over 200 megawatts of  
15 renewable energy currently and has the ability and the  
16 capacity to produce more renewable energy under the  
17 appropriate circumstances.

18 Ms. Peterson, I guess one of the first  
19 speakers this morning, walked you through 366 and talked  
20 to you about the intent. I'm not going to go there  
21 again, except to say that the law is clear that current  
22 renewable facilities need to be encouraged and promoted  
23 and new renewables need to be developed.

24 I think Chairman Carter in his opening remarks  
25 asked for some specific recommendations, so we're going

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1 to focus our comments on the language that's in  
2 366.92(3)(b)2. And in case you don't have that  
3 committed to memory, that is the section of the new law  
4 that requires this Commission to adopt compliance  
5 measures for its RPS program.

6 I think the Legislature recognized that even  
7 with everyone's best intentions and best efforts, which  
8 we have no doubt will be put forth, that the Commission  
9 needs adopt a compliance mechanism to ensure that  
10 whatever the RPS standard is that you set is met. So  
11 we're here to suggest to you today that it's possible to  
12 implement the RPS requirements in a manner that complies  
13 with the statute and, as the statute also requires, is  
14 not cost-prohibitive.

15 The way to do this -- and this has already

16 been mentioned by a few speakers before me -- is to  
17 utilize your compliance authority through what's called  
18 an alternative compliance payment, which is abbreviated  
19 ACP, mechanism. This mechanism is already in use in a  
20 number of programs across the United States. It's a  
21 commonly used mechanism to ensure compliance with RPS  
22 standards, and it's used to encourage and incent the  
23 development of renewable energy.

24 The initial value of the ACP has to be high  
25 enough on a per megawatt-hour basis to ensure that the

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1 utilities purchase from renewable resources and thus  
2 have the incentive to seek out renewable projects. We  
3 would suggest that in this rulemaking you set the market  
4 rate for the RECs through the ACP and that you ensure  
5 that that cost is adequate to incent renewable  
6 development.

7 Now, in order to fulfill the Legislature's  
8 directives that we've already talked about, it's  
9 critical, we think, that the amount of renewables or the  
10 ACP payments required to be purchased be sufficient to  
11 create the proper incentive. Clearly, this has to be in  
12 excess of the existing amount of renewables that we have  
13 in the state today.

14 Under the ACP mechanism, the way it generally  
15 works is that the utility would be required to purchase  
16 RECs from renewable producers until the supply is  
17 exhausted. Once the supply of Florida RECs is

18 exhausted, the ACP process would be structured to allow  
19 the utility to make this alternative payment for each  
20 remaining megawatt that they need to purchase in order  
21 to satisfy your RPS standard. So the utility has to  
22 purchase RECs or make the ACP payment up to whatever the  
23 standard is that you all set in this rulemaking.

24 That has the effect of the ACP program setting  
25 the market price that's at or maybe a little bit below

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1 the ACP, because obviously, only a prudent utility would  
2 purchase a REC priced at or below the ACP. This  
3 mechanism, which I said is common in RPS programs, will  
4 let you all achieve the goal of incenting new  
5 renewables, current renewables, and it would ensure that  
6 there's not an inadequate supply of renewable energy,  
7 since the utility would buy the RECs available, and if  
8 necessary, make that ACP payment.

9 As I said earlier, the ACP requirement should  
10 be in place to set the market price for the RECs, and so  
11 we would suggest to you that in this proceeding you set  
12 that ACP price, and we would look forward to working  
13 with you and your staff on that.

14 We think you can also ensure that, as the  
15 statute requires, the cost of renewable energy is not  
16 prohibitive by setting this price at the level -- at a  
17 level which the stakeholders in this proceeding  
18 hopefully would be able to agree. Of course, this  
19 consideration and the setting of the price has to be

20 balanced by the requirements in 366.92 that we've  
21 already discussed. If you set the ACP too low, there's  
22 not going to be sufficient incentive for renewable  
23 development.

24 Now, the cost of the RPS program is also going  
25 to be affected by the megawatt-hours that you require

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1 the utilities to purchase. And again, you're going to  
2 have to look at the same balance of cost and incentive  
3 when you're deciding on that.

4 One last point on this. We think it's  
5 important that you determine what is and is not  
6 cost-prohibitive, or we fear that there may be a risk  
7 that some of us, and perhaps the utilities, providers,  
8 whomever, will become engaged in sort of protracted  
9 administrative proceedings over what is and isn't  
10 cost-prohibitive rather than working toward the  
11 development of the resources that the state needs.

12 We don't have a specific recommendation at  
13 this time for the level of the ACP, but we do feel  
14 that -- and we'll work with you, and I'm sure others  
15 will, to set it. And we feel you need to look at it  
16 annually because, obviously, it's not a static price.  
17 And we think it might be helpful for you and the staff  
18 and others to look at the other states that have this  
19 mechanism, particularly, as I understand it,  
20 Massachusetts.

21 We will be glad to work with your staff and to

22 provide further information on this aspect of the  
23 program when we have more information in hand that we  
24 can provide to you. And as I said, Wheelabrator looks  
25 forward to continuing to be a participant in this

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1 process and helping the state to meet the renewable  
2 energy goals that we're all working toward.

3 Thank you for your time and attention.

4 CHAIRMAN CARTER: Thank you. Commissioners?  
5 Commissioner Argenziano.

6 COMMISSIONER ARGENZIANO: Yes. Thank you for  
7 the presentation. I know there's the new McKay Bay  
8 plant in Tampa that has been in use, waste burning for  
9 the city. Could you possibly provide, maybe not today,  
10 but can you provide to the Commission and staff -- when  
11 you say clean energy, I would like to know the emissions  
12 and what is actually coming out. I know there's  
13 particular scrubbers and everything, but I would like to  
14 know the numbers if you have them.

15 MS. KAUFMAN: Are you talking about on that  
16 particular plant or a typical --

17 COMMISSIONER ARGENZIANO: A typical plant,  
18 which I believe that is, I think.

19 MS. KAUFMAN: I will certainly see if we can  
20 collect that information for you.

21 COMMISSIONER ARGENZIANO: Thank you.

22 CHAIRMAN CARTER: Thank you. And Ms. Kaufman,  
23 just provide it to staff, and that way we'll have it

24 available for the --

25 MS. KAUFMAN: I'll do so, Mr. Chairman.

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1 CHAIRMAN CARTER: Thank you. Mr. Futrell.

2 MR. FUTRELL: Next is Mr. Rene Silva with  
3 Florida Power & Light.

4 CHAIRMAN CARTER: Mr. Silva.

5 MR. SILVA: Good afternoon, Commissioners.  
6 Thank you for giving me this opportunity to present a  
7 summary of FPL's views regarding a Florida RPS. My name  
8 is Rene Silva, director of resource planning at Florida  
9 Power & Light Company.

10 In order to best ensure an optimal design and  
11 implementation of a Florida RPS, we believe that there's  
12 need for more education, information, and analysis of  
13 the type that is being discussed here today and will be  
14 discussed in the future.

15 We believe that the primary objective of a  
16 Florida RPS should be to reduce emissions of greenhouse  
17 gases from the production of electricity with a focus on  
18 solar and wind generation, while increasing energy  
19 security and maintaining reliable electric service and  
20 reasonable electricity prices for the customers.  
21 Therefore, a Florida RPS should foremost value clean and  
22 renewable energy sources that have the greatest effect  
23 on the objective of reducing greenhouse gas emissions.

24 For that reason, we believe that clean energy  
25 sources, such as nuclear, wind, and solar, as well as

1 carbon reduction due to energy efficiency improvements,  
2 for example, the modernization of less efficient plants,  
3 should be recognized and play prominent roles in meeting  
4 a Florida RPS.

5 To encourage the development of and investment  
6 in clean and renewable energy sources, upfront and  
7 expedited prudence determinations and cost recovery  
8 approvals with administrative finality are essential.

9 In addition, electric customers should be  
10 informed clearly of their contribution to meet the  
11 Florida RPS.

12 The Florida Public Service Commission should  
13 set and periodically review the RPS targets to ensure  
14 they can be met without imposing unacceptable costs or  
15 adverse reliability effects on customers.

16 In order to prevent Florida from becoming  
17 economically disadvantaged by higher electricity costs,  
18 a Florida RPS should be adjusted and harmonized with any  
19 federal standard should one become law.

20 And finally, and in summary, the methods and  
21 incentives for complying with the Florida RPS need to be  
22 consistent with the objective to reduce emissions of  
23 greenhouse gases from the production of electricity with  
24 a focus on solar and wind, while increasing energy  
25 security and maintaining reliable electric service and



1 reasonable electricity prices for customers.

2 That concludes my summary. Thank you.

3 CHAIRMAN CARTER: Commissioner Skop.

4 COMMISSIONER SKOP: Thank you, Mr. Chairman.

5 Good afternoon, Mr. Silva. How are you doing today?

6 MR. SILVA: Fine, Commissioner.

7 COMMISSIONER SKOP: With respect to -- I think  
8 in paragraph 3, you mentioned power reductions due to  
9 energy efficiency. Could you elaborate upon that a  
10 little bit more and how that would fall into the  
11 definition of renewable?

12 MR. SILVA: If, as we propose, one of the key  
13 objectives of an RPS is to reduce emissions of carbon  
14 dioxide, as has been stated here before, there should be  
15 a reference of what is being emitted at a certain point  
16 in time, and then actions, such as the repowering or  
17 modernization or conversion of existing generation that  
18 emits higher levels of CO2 to lower levels, should  
19 properly be considered as contributing to that goal.

20 As a recent example, Commissioner, we have  
21 proposed the conversion of our Canaveral and Riviera  
22 units to essentially cut significantly the emission of  
23 CO2, and that would be an example of what we mean.

24 COMMISSIONER SKOP: Thank you.

25 CHAIRMAN CARTER: Commissioners, anything

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1 further? Thank you.

2 Mr. Futrell.

3 MR. FUTRELL: Next is Mr. Bill Ashburn with  
4 Tampa Electric Company.

5 CHAIRMAN CARTER: While Mr. Ashburn is coming,  
6 Commissioners, just for the record, we have comments  
7 filed by Ms. Holly Binns, the field director for  
8 Environment Florida. Those will be within our packet.  
9 She will not be presenting today, but they will be  
10 within our packet, not only available to the  
11 Commissioners, but also to the parties. Thank you.

12 Good morning, or good afternoon, isn't it?

13 MR. ASHBURN: It is afternoon. Good  
14 afternoon, Commissioners. I'm William Ashburn with  
15 Tampa Electric Company.

16 Tampa Electric shares in the goal of the  
17 Legislature and of this Commission to promote the  
18 development and protect the economic viability of  
19 renewable energy resources in Florida to the fullest  
20 extent those resources are available within the state,  
21 while also minimizing the costs of power supply for our  
22 customers.

23 We think that it is important that the RPS  
24 rule development process called for in HB 7135 that  
25 we've been talking about today and which you're starting

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1 with this workshop should be conducted in a manner that  
2 is inclusive of all views, robust, and at the same time,  
3 realistic in setting goals for the development of the  
4 renewable energy resources that are available and

5 affordable.

6 The Legislature in HB 7135 has recognized that  
7 the pursuit of renewable energy can and should be  
8 balanced with considerations of what is truly  
9 achievable, available, and cost-effective.

10 With regard to achievable and available, I  
11 would refer you to Section (3) (a) that requires that the  
12 PSC evaluate cost and the forecast capacity for each  
13 renewable energy generation method through 2020 in  
14 developing the rule. Such information should guide the  
15 Commission in developing the RPS obligations for the  
16 utilities.

17 And with regard to cost-effective, I would  
18 refer you to Section (3) (b)2 that Ms. Kaufman was  
19 talking about, which also requires off-ramps for  
20 complying with the RPS should compliance become  
21 cost-prohibitive.

22 During the workshop process last year, which  
23 we participated in, many issues associated with RPS were  
24 brought to the table and discussed. Some of those  
25 issues have been resolved by HB 7135, for example,

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1 whether the renewable energy or RECs counted for the RPS  
2 could be produced from out-of-state resources, while  
3 others remain for this Commission to determine, such as  
4 the actual percentage goal for the RPS and over what  
5 period of time the utilities will have to achieve that  
6 percentage.

7                   We think that if you keep all these  
8                   considerations in mind as we move forward in the rule  
9                   development process, you can foster a meaningful and  
10                  effective renewable portfolio standard and at the same  
11                  time ensure that the utilities subject to the RPS can  
12                  continue providing safe, adequate, reliable, and  
13                  affordable electric power to their customers.

14                  Tampa Electric wants to commit to you that it  
15                  will be an active participant in the development of this  
16                  RPS rulemaking process, as we were last year during the  
17                  workshop process that the Commission held on renewables.  
18                  And I'm available to answer any questions if you have  
19                  any.

20                  CHAIRMAN CARTER: Thank you. Commissioners?  
21                  Thank you very kindly.

22                  Mr. Futrell, before you go, Commissioners,  
23                  we've got a little hiccup on our technology system, and  
24                  staff has asked for an opportunity to get our IT guys --  
25                  I guess it's ITT -- to look at that and revise that.

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1                  And we're pretty much close to taking a break.

2                  Let's do this. Let's go ahead on and break  
3                  for lunch, give our technology guys an opportunity to  
4                  work on that system, because we do have -- the next  
5                  presentation coming up will be on the system, and we  
6                  want to make sure that we give an opportunity for  
7                  everyone to be heard. So with that, we'll still come  
8                  back at 1:15. So with that, we're on recess. I mean

9 2:15.

10 MR. FUTRELL: Mr. Chairman, if any members of  
11 the audience wish to speak that aren't on the agenda,  
12 please sign this.

13 CHAIRMAN CARTER: By the way, those of you  
14 here in the facility, any members of the audience that  
15 want to speak, if you would like to speak, please sign  
16 up. We have cards over here for you. Please sign up.  
17 We want to hear from you. Thank you.

18 (Recess from 12:50 to 2:20 p.m.)

19 CHAIRMAN CARTER: We are back on the record.  
20 And with that, Mr. Futrell, you're recognized, sir.

21 MR. FUTRELL: Yes, sir. Next on our agenda is  
22 Mr. Bob McGee with Gulf Power Company, and he is tab 14  
23 your notebooks.

24 CHAIRMAN CARTER: Thank you.

25 MR. MCGEE: Thank you, Mr. Chairman,

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1 Commissioners, and staff for the opportunity to speak  
2 here this afternoon, and thank you for the opportunity  
3 to use the PowerPoint presentation. Thank you very  
4 much.

5 We would like to propose a framework for  
6 proceeding based on House Bill 7135 which consists five  
7 elements, in this order: First, determining objectives;  
8 second, clarifying the definition of renewable energy;  
9 third, completing an assessment of renewable resources;  
10 fourth, setting RPS goal levels and; fifth, finishing up

11 with important details.

12 Step one in this framework is determining the  
13 overarching objectives. And, of course, that's very  
14 important. It reduces confusion and conflict later. In  
15 fact, staff said it very well in their summary of last  
16 year's RPS workshops: "First and foremost, the  
17 objectives of an RPS must be clearly identified,  
18 weighted, and prioritized." There are a lot of  
19 objectives out there. Which ones are most important are  
20 tough decisions to make, but it helps the process to the  
21 extent that we have clarity to understand that.

22 Gulf would suggest that one of those  
23 objectives as a top priority is CO2 reduction. We've  
24 heard much about that today, lots of talk about  
25 greenhouse gas reduction. In fact, this goal is stated

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1 in the energy section of House Bill 7135. The energy  
2 section of the State Comprehensive Plan says Florida  
3 shall reduce atmospheric carbon dioxide by promoting two  
4 things: One, an increased use of renewable energy  
5 resources, which this is certainly doing as an RPS, and  
6 secondly, by promoting low-carbon-emitting electric  
7 power plants.

8 Another objective Gulf would suggest as a top  
9 priority is something that's embedded in the RPS law  
10 itself. The Commission's rule shall include methods of  
11 managing the cost of compliance and shall provide for  
12 methods for which noncompliance shall be excused if the

13 cost is prohibitive. So the essence of this is, number  
14 one, the law recognizes that an RPS is going to be more  
15 expensive, and number two, it encourages the Commission  
16 to establish something to manage the cost up front, and  
17 number three, to encourage sort of a safety valve if it  
18 gets out of hand later.

19 Next on the framework here is the definition.  
20 Clarifying the definition is really very, very important  
21 here. House Bill 7135 does not explicitly reference  
22 366.91(2), subparagraph (a), which is the definition of  
23 biomass and includes MSW and landfill gas. Although it  
24 does reference subparagraph (d), it doesn't reference  
25 paragraph (a), and there may be some question about

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1 whether that is actually included in the definition.

2 Next, the second big thing that we have  
3 noticed is that House Bill 7135 references two  
4 definitions of renewable energy. One is the renewable  
5 energy definition in 366.91, (d), and the other one,  
6 377.803, which is really Florida renewable energy  
7 resources. That term is not actually used in the RPS  
8 legislation. It's used in the demand-side section. But  
9 it does allow in that particular section of the law  
10 thermal solar resources, but 366.91, (d) does not  
11 apparently allow for the thermal. So there's a question  
12 there about whether solar thermal and other thermal  
13 energy types, renewable thermal types would be included.

14 Let me mention here that based on the staff's

15 recently released proposed scope of work for a study to  
16 assess the potential of Florida's renewable energy  
17 resources, it appears that this particular part of this  
18 framework that I'm suggesting here has been completed.  
19 As an example, 366.91(2)(d) is referenced as the  
20 definition in that memo to you all that will be  
21 considered in your July 15th internal affairs meeting.  
22 However, that does not include solar thermal, so that  
23 would preclude at that point -- if the assessment were  
24 going to be done, it would preclude the assessment of  
25 solar thermal, because the definition does not include

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1 that.

2 Also, based on the presentation that Ms. Webb  
3 is about to give, 366.91(2)(a) is assumed there, because  
4 it's collecting data about MSW and landfill gas. Gulf  
5 does not oppose that implied definition. What Gulf is  
6 encouraging, though, is a more explicit declaration of  
7 that definition from the Commission. I think that would  
8 be helpful.

9 The next step in this framework, of course, is  
10 an assessment, completing a statewide assessment of  
11 renewable energy potential and cost. Of course,  
12 embedded in the RPS law is language to that effect, and  
13 staff's memo to that effect is moving very much in that  
14 direction.

15 Gulf suggests the Commission begin the  
16 assessment after the definition has been clarified.



17 It's very important to get the definition before the  
18 assessment so the assessment covers all of what you want  
19 it to cover. And here is a proposed section of broad  
20 categories for renewable energy based on 366.91, (d).

21 In that assessment, Gulf suggests that several  
22 important attributes be considered. In this particular  
23 presentation, the items that are in red Gulf suggests  
24 would be considered and are not actually in the statute.  
25 The statute did not require them, but they would be

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1 additional, current level of product or process  
2 maturity, for instance, is ocean energy production in a  
3 theoretical demonstration or commercially available  
4 status currently, projected year of commercial  
5 availability. And kilowatt-hours actually are not  
6 required in the statute, but Gulf suggests that would be  
7 important because the RPS is based on kilowatt-hours.

8 Lastly, the thing that we would add  
9 additionally to the statute to encourage is the CO2  
10 emissions in pounds per kilowatt-hour. Of course, that  
11 assumes that greenhouse gas reductions is an important  
12 objective of the RPS.

13 On RPS goal levels, step four of this  
14 framework, of course, would be done after the assessment  
15 was complete. And Gulf would encourage consideration of  
16 all economic impacts to RPS goals. We've heard some  
17 talk today about the goals -- I'm sorry, the jobs that  
18 would be brought to Florida as a result of renewable

19 energy, and that's a good thing. But what we also need  
20 to consider is the result of higher electricity prices  
21 on the economy in the State of Florida, as well as the  
22 potential jobs that might be displaced, as was talked  
23 about from the pulp and paper industry earlier.

24 In terms of details, there are a lot of  
25 details to be worked out, and Gulf looks forward to

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1 working with all parties in the coming months as these  
2 are working out.

3 Let me make a brief comment about one item  
4 that I personally spoke on last year in the RPS  
5 workshops, and that is the set-asides versus  
6 multipliers, and there was some discussion of that  
7 today. It is my opinion that Florida actually has a  
8 unique opportunity here to set a multiplier for solar or  
9 wind, if that's the desire of the Commission, to  
10 emphasize those, in a way that is effective, and be  
11 effective and be the first state in the United States to  
12 actually have an effective multiplier in place rather  
13 than using the set-aside methodology. It's much more  
14 flexible for the utilities. There are a lot of benefits  
15 to it. I won't go into those details right now. But I  
16 think the track record of other states on multipliers,  
17 as an earlier presenter mentioned, probably is the  
18 result of the fact that the multipliers are set too low,  
19 and you have an opportunity to fix that and do it well  
20 here.

21                   So let me wrap it up by saying that this is  
22                   just a high level framework that we propose, and we very  
23                   much appreciate the opportunity to participate.

24                   Any questions?

25                   CHAIRMAN CARTER: Thank you. Commissioners,

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1                   as we're kind of getting together, I wanted to ask, when  
2                   you were talking about the definitions section, were you  
3                   talking about in that context it should have included  
4                   solar thermal and geothermal, or did I just kind of pick  
5                   that out of the air?

6                   MR. MCGEE: Well, Gulf Power, as you may know,  
7                   has a very strong geothermal program, and we believe  
8                   that if a solar thermal device were used, a geothermal  
9                   device might also be able to count. There's a bit of  
10                  difficulty with that, because a solar thermal unit can  
11                  be counted on Btu output. Geothermal can't. It's more  
12                  of an avoidance, more like a conservation method. So  
13                  that may be better handled in the energy efficiency with  
14                  FEECA, demand-side management side. If the Commission  
15                  desired to include geothermal or solar thermal in the  
16                  RPS, Gulf Power would very much support that.

17                  Does that answer your question, sir?

18                  CHAIRMAN CARTER: Thank you. Yes, it does.  
19                  Commissioner Skop had asked some questions earlier about  
20                  the set-aside and the multiplier. Commissioner, if it's  
21                  okay, I'm just going to ask if he would speak to that.  
22                  Do you mind?

23 MR. MCGEE: Yes, sir. Just some more detail  
24 on it?

25 CHAIRMAN CARTER: Yes. You were saying that

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1 in some states, the reason that it has not worked is  
2 that it had been set too low.

3 MR. MCGEE: Yes, sir.

4 CHAIRMAN CARTER: Obviously, if we're looking  
5 at this and we're looking at things now, we want to look  
6 at something in terms of best practices, not worst  
7 practices.

8 MR. MCGEE: Right. The multipliers that you  
9 see across the state for solar are around the range of  
10 3, 1-1/2, something like that. And really, what you're  
11 trying to do is trying get the cost of solar down so it  
12 competes with other types of renewable energy. So if  
13 solar costs, let's say, 24 cents a kilowatt-hour, and  
14 you want to get it down to 8 cents a kilowatt-hour or  
15 5 cents a kilowatt-hour so it competes with others  
16 effectively, you've got to divide that 24 cents by five  
17 or some number large enough to get the effective price  
18 of solar down to the effective price of other competing  
19 renewable energy types.

20 Let me sum it up by saying a multiplier for  
21 solar would need to be on the order of 5 or 4 rather  
22 than 3 or 1-1/2.

23 And I'll add to that that, as we talked about  
24 last year in the workshop, and the spreadsheets and the

25 stuff is still there with the staff, as we proposed, it

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1 would fade out over time. So as the solar industry  
2 projects their costs come down, this multiplier would  
3 fade out over time in accordance with that cost curve  
4 that has been projected by the solar industry.

5 CHAIRMAN CARTER: Thank you. Commissioners?

6 Mr. Futrell.

7 MR. MCGEE: Thank you.

8 MR. FUTRELL: Thank you, Mr. Chairman. As the  
9 Chairman mentioned earlier, Holly Binns provided some  
10 written comments. She was unable to attend the  
11 workshop.

12 The next speaker that is here is Bob Niekum  
13 with Progress Energy Florida, and he's on tab 16.

14 MR. NIEKUM: Thank you, Commissioners, for  
15 giving us an opportunity to talk about the RPS.

16 Progress Energy Florida has been working on  
17 what we've called a balanced solution for the last few  
18 years, which has included building new power plants,  
19 including nuclear technology and advanced fossil  
20 technology. We have also been working to add to our  
21 energy efficiency programs and DSM programs, and we've  
22 tried to be more aggressive and creative in trying to  
23 add renewable energy to our portfolio. This RPS process  
24 is really kind of a continuation of a way to add to that  
25 renewable portfolio.

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1           In looking at what the Florida Legislature has  
2       laid out before us in working on this RPS, we see that  
3       there really seems to be three fundamental issues that  
4       we're dealing with. One is how much can we do, how much  
5       will it cost, and what should really count in the goals.

6           In looking at what can be done, the inventory  
7       idea is really an excellent one. We just have to  
8       maintain an intellectual honesty of maybe it's not going  
9       to be what we want, but it is going to be what resources  
10      we have in this state and what will really work.

11          The technology issue is going to be a tough  
12      one. We don't want to just extrapolate out the  
13      technologies we have today, but we don't want to also be  
14      dreamers thinking that something new in technology is  
15      really going to save us.

16          Another in looking at what we can do, remember  
17      that RPS is just for the investor-owned utilities. The  
18      municipals and cooperatives are probably also going to  
19      be looking at programs that they have to do, and we just  
20      need to make sure that as all these utilities are  
21      competing for the same resources that exist in the  
22      state, we've just kept account of that so that we're not  
23      double counting what everybody can do because they're  
24      both looking at the same resource.

25          And lastly, and I'll just speak to this from

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1       personal experience, it takes longer than you think.  
2       The delays, the technical difficulties you run into,

3 even the best laid plans, and when everybody is pulling  
4 in the same direction, it just seems to be more  
5 difficult than it would appear.

6 In looking at what it costs, the evaluation of  
7 these costs are going to be difficult as well. We just  
8 need to be flexible in looking at them, and again,  
9 maintain intellectual honesty of what we think these  
10 things really are going to cost us. Different ways of  
11 looking at it, but the term was used before, a safety  
12 valve in the event that the costs do exceed what we  
13 really think they're going to be is some protection for  
14 the consumers of what this is ultimately going to be,  
15 going to cost them.

16 But again, taking into consideration there is  
17 an economic value in keeping this business in Florida,  
18 again, another tough calculation of what that benefit  
19 is. But at the same time, by keeping it in Florida, I  
20 think that's part of the overall cost of what we think  
21 this is going to cost us.

22 And finally, what do we count towards the  
23 goal. Again, it's looking at the resources that are  
24 available in Florida. Sometimes in Florida we look at  
25 things that maybe other states don't look at, but they

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1 have a real significance here, like municipal solid  
2 waste. Exothermic reactions from some of our industrial  
3 processes may not be universally accepted as renewables,  
4 but they may be a good resource for this state, and we

5 have to consider them.

6 As far as the preferences for wind and solar,  
7 if that's the choice, I would at least encourage you to  
8 incentivize the people who are most efficient and make  
9 it cost-competitive. Our experience seems to be there  
10 are some who are innovative and driven to get their  
11 costs down. Others are looking to be subsidized for the  
12 costs as they see it with no real aggressiveness to  
13 go get those costs down and solve the engineering  
14 problems, solve the cost structure problems. And  
15 there's definitely a difference. They're not all the  
16 same. And the good ones are doing the right thing by  
17 trying to get their costs down, and there are some other  
18 people, for lack of a better word, that are just not as  
19 energetic at getting the job done.

20 And finally, we just need to look at it in the  
21 total context. We have, you know, the whole issue of  
22 other low carbon generation sources. How do they fit  
23 into the overall calculation at least has to be a  
24 consideration.

25 As a company, our goal is to support the

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1 process and be a part of the process, and we're looking  
2 forward to making our contribution to it. Thank you.  
3 If there's any questions --

4 CHAIRMAN CARTER: Thank you. Commissioners,  
5 any questions?

6 Thank you. Mr. Futrell.



7 MR. FUTRELL: Thank you, Mr. Chairman. And,  
8 Commissioners, I apologize for any confusion.  
9 Mr. Niekum did not submit any comments prior to the  
10 workshop.

11 Next -- we're finished with the speakers who  
12 expressed a desire to appear before you today. Next we  
13 have a staff presentation from Ms. Karen Webb.

14 CHAIRMAN CARTER: Before you do that,  
15 Mr. Futrell, before Ms. Webb, are there any of the  
16 speakers that came that didn't get a chance to get their  
17 presentations in that want to speak?

18 MR. FUTRELL: There are a few folks from the  
19 public that would like to comment, so --

20 CHAIRMAN CARTER: I'm saying before we get to  
21 the public, are there any organizations that wanted to  
22 that didn't get their presentations in in time?

23 Okay. Hearing none, you may proceed.

24 MR. FUTRELL: Thank you. Ms. Karen Webb with  
25 the staff is going to provide some remarks on the data

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1 requirements that are a part of this new statute.

2 MS. WEBB: Good afternoon, Commissioners. I'm  
3 Karen Webb with staff. I'm going to talk to you a  
4 little bit about the data requirements associated with  
5 the renewable portfolio standard as it is outlined in  
6 Section 366.92. As you are aware, the statutory  
7 amendment requires the Commission to evaluate the costs  
8 and the technical potential associated with renewable

9 technologies going out through the year 2020.  
10 Particularly, we have to evaluate the installed  
11 capacity, current and forecast, and the levelized costs  
12 in cents per kilowatt-hour of both current and forecast.

13 We're going to need assistance in collecting  
14 the data that's required to meet this charge, and to  
15 that point, staff will be issuing within the next week a  
16 set of data forms requesting very detailed and specific  
17 information relating to the technical potential, the  
18 costs, and the environmental impacts associated with  
19 each of the renewable technologies as well as with the  
20 conventional technologies. So we want to emphasize that  
21 stakeholder participation is going to be crucial in  
22 determining and accurately assessing what Florida's  
23 renewable potential can be.

24 So we're going to discuss some of those items  
25 today, or I'm going to discuss some of those items today

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1 and try to clear up an understanding of what the data  
2 forms represent, what the intent is behind them, and  
3 answer any questions that you might have.

4 Here is the overview of the types of data  
5 we'll be requesting. All five components are necessary  
6 for building that part of the RPS that requests a  
7 specific percentage by a certain year.

8 First of all, we're going to be giving a  
9 listing of renewable energy generation methods along  
10 with these data forms. It's a fairly comprehensive list

11 that we acquired from the prior Florida Energy  
12 Commission. It lists out, as you'll see -- I'll give  
13 you a glimpse here in a moment -- several renewable  
14 technologies, as well as the different methods within  
15 those technologies.

16 We'll want to know what is currently installed  
17 and what is in the pipeline to be installed through the  
18 year 2020. We'll also be asking about the commercial  
19 availability, the whens and the how soon with each  
20 technology, performance characteristics, environmental  
21 characteristics, as well as the costs.

22 As you can see here, this slide and the next  
23 two slides, these are snapshots from that Florida Energy  
24 Commission compilation of technologies. It's fairly  
25 specific. As you can see here, it breaks down biomass

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1 into direct combustion, conversion to liquid, conversion  
2 to gas. It separates out landfill gas and municipal  
3 solid waste. We feel that's important because it will  
4 provide us a more specific broad picture of Florida's  
5 renewable environment. And, of course, any other  
6 sources that the parties might feel they need to add  
7 would be welcome.

8 In evaluating the commercial -- I'm sorry.

9 CHAIRMAN CARTER: Excuse me. Would you put  
10 the forestry? Would you put that with the biomass?

11 MS. WEBB: Direct combustion, I believe, sir.

12 CHAIRMAN CARTER: Okay.

13 MS. WEBB: In evaluating the commercial  
14 availability of each technology, we'll be asking such  
15 things as when is the first commercial in-service date,  
16 how soon could that technology be implemented, what's  
17 the required lead time for permitting and construction,  
18 and what's the life cycle. As you can see, these are  
19 fairly basic questions that should be self-explanatory  
20 and should be readily available to the parties.

21 The forms will also be asking information on  
22 the performance characteristics of each of the  
23 technologies, items such as the estimated capacity,  
24 energy output, availability to operate during the year  
25 expressed in a percentage, contribution to summer and

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1 winter peaks, and the fuel efficiency of each  
2 technology.

3 We'll also be asking for information on the  
4 environmental characteristics. And again, this will be  
5 on the renewable technologies and the conventional  
6 generating technologies. We'll ask for a quantification  
7 of the emissions of CO<sub>2</sub>, SO<sub>2</sub>, nitrous oxide, mercury, as  
8 well as the water use associated with each technology.

9 And finally, we'll be asking for cost  
10 information. We would like to see the total cost broken  
11 down by their components, capital costs, O&M costs, fuel  
12 costs, and separately in a separate column. We'll ask  
13 for those costs to be levelized over the life of the  
14 method and expressed in cents per kilowatt-hour.

15                   Just to recap, staff is sending out this  
16 information within the next week. We want to stress the  
17 importance of participation by the parties. We've  
18 compiled a list over the last year or so of workshop  
19 attendees, interested parties, and anyone who has  
20 expressed an interest in receiving information from the  
21 PSC on renewable energy. And, of course, everybody  
22 who's in attendance today who signed the form at the  
23 back of the room will be included on that mail-out as  
24 well.

25                   So we ask for specific and detailed

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1 information, because that is absolutely necessary to  
2 draft the renewable portfolio standard. And to that  
3 end, I'll take any questions you might have.

4                   CHAIRMAN CARTER: Thank you. Commissioners?  
5 Thank you so kindly.

6                   Now, Mr. Futrell, I guess now we need to break  
7 into the public comment individuals.

8                   MR. FUTRELL: Yes, sir. There are three  
9 individuals that have expressed a desire to speak.

10                   CHAIRMAN CARTER: And there are no other  
11 organizations? I just wanted out of an abundance of  
12 caution -- if there's any organizations that wanted to  
13 speak that didn't get an opportunity to do so, we would  
14 love to hear from you.

15                   Hearing none, we'll move now, Commissioners,  
16 into our public comments section. Mr. Futrell.

17                   MR. FUTRELL: First up is Mr. Mike Twomey  
18 representing the AARP.

19                   MR. TWOMEY: Good afternoon, Mr. Chairman and  
20 Commissioners. Mike Twomey appearing on behalf of AARP,  
21 which I'm proud to say now has more than 3 million  
22 members in the great State of Florida.

23                   Mr. Draper mentioned to you that he had just  
24 received on his BlackBerry a University of Miami poll  
25 which said that 65 percent of those polled believed

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1 there should be a 20 percent RPS and that they would be  
2 willing to pay up to \$100 a year more to achieve that  
3 end.

4                   And the first thing that struck me,  
5 Commissioners, when he said that was wondering whether  
6 the University of Miami polled the Miami-Dade school  
7 officials, who testified to you all a week ago Tuesday  
8 during the fuel adjustment hearings, the people that  
9 came up, as you'll recall, in force and said they didn't  
10 have the money in the budgets for the level of increases  
11 that were being requested by Florida Power & Light. And  
12 although no one came from the St. Pete area, one would  
13 assume that the same thing was true for the school  
14 boards in Progress's service territory as well.

15                   And I think you -- in the end, I perceived  
16 that you felt their financial concerns and their pain  
17 when you went ahead for those two companies and spread  
18 out the recovery of three-quarters of a billion dollars

19 for FP&L over 17 months and the roughly quarter of a  
20 billion dollars for Progress over 17 months as well,  
21 spread it out.

22 Now, I mention that because you recognized, I  
23 think, and we all do, that there are people at the  
24 margins that are really going to feel those increases,  
25 and a lot of us expect that fuel next year, in addition

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1 to having the spread-out moneys from this year, the  
2 under-recoveries added to next year as well, we're  
3 likely to see additional increases in the cost of coal,  
4 oil, and especially natural gas that will further burden  
5 the customers of these electric companies.

6 In addition to that, of course, we're looking  
7 at early cost recovery for the nuclear plants, the  
8 possibility of base rate increases next year for a  
9 couple of those companies as well.

10 I mention that again because we can expect --  
11 we've seen already that the people that you set rates  
12 for, their customers, we've see increases now, and we  
13 expect more next year on several fronts. People going  
14 to be hurting. Individuals and businesses are going to  
15 feel the pain.

16 Now, I haven't heard -- I've been here most of  
17 the day. I haven't heard anybody that has spoken to you  
18 suggest that establishing an RPS and employing it is  
19 going to be cost-free. I don't think anybody has said  
20 that. I don't believe anybody in this room thinks

21 that's going to be the case.

22 Mr. Draper said the poll said, well, these  
23 people, these 65 percent are willing to pay up to  
24 \$100 more per year. What about the other 35 percent?  
25 And our concern as an organization is that even if you

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1 believe that setting rates and establishing government  
2 policy by a poll is a wise idea, which I might question,  
3 even if you did, I think you would want to say -- if  
4 people will take a \$100 hit next year, I would say to  
5 you, don't make it 101, don't make it 120 or 200.  
6 There's a limit to how much people can pay.

7 That's the foundation for suggesting to you  
8 that, as AARP said before a couple of legislative  
9 committees during the last section, we want to see  
10 whatever the goals are -- and by and large, they're  
11 going to be set ultimately by the Legislature, since  
12 this is subject to ratification, your work and DEP and  
13 the new energy commission. Whatever the goals are, AARP  
14 would like to see them achieved in the least cost method  
15 possible that meets the goals.

16 Mr. McGee said a minute ago, and I think  
17 someone else suggested as well that amongst the  
18 different goals and intentions of the Legislature,  
19 probably we can assume that reducing greenhouse gases is  
20 the most critical. The whole business of preventing  
21 additional global warming is all keyed on greenhouse gas  
22 reductions. I think that's probably correct.



23                   But if that's your goal, then I think what  
24                   we're going to expect out of the legislation and this  
25                   process is that you in conjunction with DEP are going to

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1                   have a hierarchy of methodologies, and they're going to  
2                   have a cost per -- cents per kilowatt, as Ms. Webb said  
3                   a minute ago. And as suggested by you, Commissioner  
4                   Argenziano, we're going to also have worked in there how  
5                   effective those different methodologies are in reducing  
6                   greenhouse gas emissions. I mean, a given technology  
7                   may meet the goal of having a renewable resource. We've  
8                   already heard how wood is kind of off the table, woody  
9                   biomass. But you may have something that provides a  
10                  renewable source but is not as clean as others. And one  
11                  would hope if you had two that had the same cost and one  
12                  was dirtier than the other or one that was cleaner than  
13                  the other that you would give preference to the one  
14                  that's the cleanest.

15                  The Legislature said and the statute says that  
16                  you may give preference to solar or you may give  
17                  preference to wind. Mr. Draper, in the interest of  
18                  protecting the birds possibly, suggested that you  
19                  minimize the business on wind. We don't know how  
20                  successful that's going to be in the State of Florida in  
21                  any event, but you're going to find out through this  
22                  process, and you're going to put a cost on it.

23                  I would say to you that you ought to look at  
24                  not giving any advantage to solar either if it turns out

25 that means taking solar out of the hierarchy of costs,

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1 because in our view, doing so would violate the notion  
2 of least cost. Our goal, our hope is that your exercise  
3 here will establish the ordering of fruit, if you will,  
4 and our goal and request to you is to see that we take  
5 the lowest hanging fruit first so that you achieve the  
6 goals set out by the Legislature in terms of reducing  
7 greenhouse gas emissions and having alternative fuel  
8 sources and fuel security, but that, again, you do it  
9 with the least cost, least financial impact to the  
10 millions of customers served by these utilities.

11 And I thank you, and to the extent that we can  
12 help in the process going forward, we would enjoy doing  
13 that.

14 CHAIRMAN CARTER: Thank you, Mr. Twomey. We  
15 look forward to you participating with us.

16 Commissioners?

17 MR. TWOMEY: Thank you.

18 CHAIRMAN CARTER: By the way, I polled my  
19 neighbors, and none of them are in favor. In fact,  
20 every time I see my neighbors, as I'm sure most of my  
21 colleagues, they're asking about when you're going to  
22 reduce things.

23 Mr. Futrell.

24 MR. FUTRELL: Next, Mr. Chairman and  
25 Commissioners, is Mr. Roy Ratner with Atlas Solar

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1 Innovations. And he has provided some materials that  
2 Mr. Clements is going to hand to you. And just so  
3 everyone knows, we will be posting these materials onto  
4 our website so that everyone will have access to them.

5 MR. RATNER: Good afternoon, gentlemen and  
6 ladies. Thank you for giving me this time to comment.  
7 My name is Roy Ratner. I'm director of operations for  
8 Atlas Solar Innovations, which is a subsidiary of All  
9 Atlas Roofing of South Florida. We're a member of all  
10 the solar power associations, USGBC. We design and  
11 integrate building integrated photovoltaics, and we also  
12 do solar thermal water heating and pool heating. Next  
13 month we also are breaking ground on our new  
14 headquarters, which will be one of the first LEED  
15 Platinum design buildings in South Florida.

16 The reason I decided to comment is, between  
17 WIREC, which was the Washington International Renewable  
18 Energies Conference we attended, and two weeks ago we  
19 were with Governor Crist at the Florida Solar Global  
20 Climate Change, we learned about a very effective  
21 renewable energy policy that we believe can make Florida  
22 a leader in clean renewable energy. In Europe, this  
23 policy is called feed-in tariffs, FITs for short, and it  
24 has been proven that this is the world's most effective  
25 renewable energy legislation. Here in North America,

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1 it's being called renewable energy payments.

2 REPs are incentives for individuals and  
3 businesses to become producers of renewable energy.  
4 They direct utility companies to provide access to the  
5 grid for anyone or any group producing renewable energy,  
6 to buy all the renewable energy available at established  
7 prices per kilowatt-hour for a set period of time,  
8 usually 15 to 20 years. The prices vary according to  
9 the type of technology, the size of the system, and its  
10 location.

11 The increased cost of the utilities is paid  
12 for by adjustments to all their customers' electric  
13 bills. In Germany, this has meant an increase of around  
14 \$3 a month for the average homeowners, about the cost of  
15 a loaf of bread.

16 A board is established that meets periodically  
17 to review the policy and to adjust the rates for new  
18 contracts.

19 Adopting a REPs policy in Florida will  
20 encourage our energy entrepreneurship, expand our green  
21 energy marketplace, create jobs, and stimulate our  
22 economy, all this while significantly reducing pollution  
23 and greenhouse gas emissions. We urge you to develop  
24 and pass legislation and investigate this policy. There  
25 is a website, [allianceforrenewableenergy.org](http://allianceforrenewableenergy.org), that has a

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1 lot of information on this.

2 I do have a little but more of a definition of  
3 a REP. It's simple. It really is simple. Producers of

4 renewable energy are paid a premium rate for each  
5 kilowatt-hour of energy they feed into the grid.

6 Everyone who produces renewable energy is  
7 guaranteed that they can connect to the power grid and  
8 sell their energy to the utility company. There is no  
9 limit to the amount of renewable energy that can be sold  
10 to the utility companies.

11 The utility companies sign 15- to 20-year  
12 contracts with all their renewable energy producers.  
13 All contracts are transparent and open for inspection.

14 The contracts include long-term agreed-upon  
15 prices that the utility companies will pay for the  
16 energy they buy. The prices are set high enough to be  
17 an incentive to new producers and for existing producers  
18 to expand their production capacities. Prices vary  
19 according to the source of the energy, sun, wind, water,  
20 biomass, et cetera, and the size of the energy producing  
21 installation.

22 The utility companies can recoup their  
23 increased costs by paying higher prices for renewable  
24 energy by spreading these costs among their customers.

25 An independent review board is established by

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1 the government that periodically sets prices and terms  
2 for new contracts.

3 REPs are incentives for homeowners, farmers,  
4 businesses, et cetera, to become producers of renewable  
5 energy or to increase their production of renewable

6 energy. As such, they increase our overall production  
7 and use of renewable energy and decrease our consumption  
8 of burning of fossil fuels.

9 In a recent article in EnergyBiz magazine, the  
10 May-June issue, Lois Barber, who is the co-founder and  
11 executive director of EarthAction and an energy advisor  
12 to the World Future Council, wrote an article. I'm not  
13 going to read you the whole thing, but I am going to  
14 read you a few excerpts from it.

15 She mentions that in September, Michigan  
16 Representative Kathleen Law introduced House Bill 5218,  
17 the Michigan Renewable Energy Sources Act. It included  
18 all renewable energy sources without discrimination,  
19 hydro, wind, solar, geothermal, biomass, and biogas. It  
20 sets a 20-year contract and gives reasonable returns on  
21 investment. Proponents of this legislation point out  
22 that over time, any short-term increases will eventually  
23 turn into long-term savings as utilities switch from  
24 buying increasingly expensive fossil fuels to clean,  
25 free fuel like Florida's wind and sunshine. Savings

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1 will also come from not having to deal with health and  
2 environmental damage stemming from coal and nuclear  
3 plants.

4 A REP law could help Florida meet its  
5 renewable portfolio standard goal currently being set in  
6 the state Legislature and produce lost jobs with  
7 hundreds of thousands of new ones in the renewable

8 energy industry.

9           Following in 2008, following Michigan's lead,  
10 legislators in Illinois, Rhode Island, and Minnesota  
11 attachment introduced similar bills. California, while  
12 it doesn't have a statewide FIT law, is expanding its  
13 use of FIT policies in specific areas. Washington State  
14 already has a limited FIT law that pays up to 54 cents  
15 per kilowatt-hour for a seven-year period for  
16 electricity produced from solar technology manufactured  
17 in the state. To help turn the State's famous sunshine  
18 into energy --okay.

19           In addition to the burst of activity at the  
20 state level, Representative Jay Inslee is working on  
21 federal legislation that he unveiled in March 2008 at  
22 the Washington International Renewable Energy  
23 Conference. Islee's bill will give incentives to  
24 American consumers and businesses that generate  
25 electricity from renewable sources and will guarantee

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1 producers of clean energy connection to the grid and  
2 predetermined rates for their power. His bill is  
3 expected to be introduced later this spring and summer.

4           It was co-sponsored -- and it also says that  
5 investors prefer feed-in tariffs over other policies  
6 because they create long-term market certainty and a  
7 stable investment environment. In a full-page ad in the  
8 issue of Politico that was distributed at WIREC, Goldman  
9 Sachs listed feed-in tariffs at the top of the list of

10 how to power alternative energy. With 15- to 20-year  
11 contracts and set prices for the energy produced,  
12 investors are eager to loan money for renewable energy  
13 projects. Predictability is essential, whether it is a  
14 family deciding to invest in buying solar panels for  
15 their roof or a major bank deciding to invest in a  
16 megawatt installation. With market certainty,  
17 innovators and inventors will try out to compete in --  
18 will turn out to complete in the market for renewable  
19 electricity.

20 That's all.

21 CHAIRMAN CARTER: Thank you very kindly.  
22 Commissioners.

23 Thank you. Mr. Futrell.

24 MR. FUTRELL: Next we have Mr. Joe Treshler  
25 with Covanta Energy.

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1 MR. TRESHLER: Good afternoon, Commissioners.  
2 Thank you the opportunity to make comments. My name is  
3 Joseph Treshler. I'm vice president of business  
4 development for Covanta Energy based in Florida. I'm a  
5 28-year resident of the Tampa Bay area.

6 Covanta Energy is a renewable energy company  
7 that operates four of Florida's waste-to-energy  
8 facilities, four of the 11 waste-to-energy facilities.  
9 Commissioner Argenziano mentioned the Tampa Bay  
10 facility, McKay Bay facility. That's another one of the  
11 11 facilities. And like Wheelabrator, we're also



12 members of IWSA, our business or trade group.

13           Together, Florida's 11 facilities, their  
14 waste-to-energy facilities, represent 518 megawatts of  
15 installed capacity at present. That's approximately  
16 1 percent of the state's generated capacity. It also  
17 represents an offset of the release of about 3.7 million  
18 tons of new CO2 equivalents that would have been  
19 released had other fossil fuel or traditional methods  
20 been used. Nationally, Covanta operates 34  
21 energy-from-waste facilities and offsets the need for  
22 15 million barrels of oil a year that would have been  
23 imported to generate that same energy, while also  
24 offsetting 15 million other tons of CO2 equivalents.

25           The newly signed energy legislation reinforces

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1 the role that energy-from-waste facilities currently  
2 play and the expanded role they can play going forward  
3 to meet our state's commitment to an efficient, reliable  
4 renewable energy future, while continuing to meet our  
5 original legislative mandate to protect the air, water,  
6 and land resources of the state that was issued by the  
7 Legislature back in the late '70s.

8           With over 20 years of operational experience,  
9 Florida's 11 energy-from-waste facilities have proven  
10 they can provide stable, environmentally sound, base  
11 load electric generation capacity under predictable cost  
12 structures.

13           The EPA has set very stringent standards for

14 our industry in the Clean Air Act of 1999, which we have  
15 demonstrated as an industry we can achieve. This  
16 resulted in EPA actually recognizing our industry, that  
17 it produces 2,800 megawatts with less environmental  
18 impact than almost any other source of electricity.

19 The nonrecycled portion of our communities'  
20 waste streams is an indigenous resource. It's one of  
21 Florida's only indigenous fuels. And the collection or  
22 harvesting system is already in place in every  
23 community, in every municipality. Every county has the  
24 responsibility to collect that waste under the current  
25 state mandates. It's just a matter of providing the

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1 market conditions necessary through the RPS to allow  
2 more Florida communities to choose the dual public  
3 purpose benefits that waste-to-energy can provide.

4 The door has been opened, based on the  
5 direction and latitude the Legislature has now provided  
6 via House Bill 7135 to recognize the added value, the  
7 fuel diversity, and dual public purpose renewable  
8 electricity generated from energy-from-waste facilities  
9 provides. The permitting requirements and the siting  
10 process are known and demonstrated to be achievable, and  
11 we believe that up to 1,600 megawatts of new renewable  
12 energy-from-waste power can easily be online in five to  
13 seven years in the state based on DEP's own records of  
14 what's being landfilled in the state after recycling  
15 efforts.

16                   We fully support Governor Crist's 20 percent  
17 renewable energy goal and look forward to working with  
18 the Commission to make these new renewable megawatts a  
19 reality.

20                   Thank you very much.

21                   CHAIRMAN CARTER: Commissioners? Commissioner  
22 Argenziano.

23                   COMMISSIONER ARGENZIANO: This may be the same  
24 question that I asked before when I mentioned the McKay  
25 plant, McKay Bay plant. Could you provide the emissions

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1                   that --

2                   MR. TRESHLER: Yes. I talked to Vicki in  
3 between. IWSA does a compilation of all of the states'  
4 emission status, and I think you'll be pleasantly  
5 surprised. We're going to make sure that you get a  
6 compilation of what typical emissions are for all the  
7 facilities in the state, the 11.

8                   COMMISSIONER ARGENZIANO: That would be great.  
9 Thank you.

10                   CHAIRMAN CARTER: Thank you so kindly.

11                   Mr. Futrell.

12                   MR. FUTRELL: Mr. Chairman, those are the only  
13 three members of the public and other parties that have  
14 signed up.

15                   CHAIRMAN CARTER: Let me just take a moment to  
16 see. Is there anyone here that wanted an opportunity to  
17 speak today that did not get an opportunity to speak,

18 either from the public or from an organization,  
19 whichever? Anyone that wanted to speak today that did  
20 not get an opportunity to speak, we offer you this  
21 opportunity at this point in time.

22 Hearing none, Mr. Futrell.

23 MR. FUTRELL: Thank you, Mr. Chairman. I  
24 drafted a slide to give everyone a sense of the schedule  
25 we're facing. This schedule will allow the Commission

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1 to --

2 CHAIRMAN CARTER: That's F in your --

3 MR. FUTRELL: Yes, tab F in your notebook.

4 This schedule will allow the Commission to meet the  
5 requirement to submit a rule to the Legislature by  
6 February 1st, 2009. And I would like to go over for you  
7 some of the immediate milestones we're looking at.

8 As Ms. Webb mentioned earlier, we are  
9 developing data forms. We expect to finalize those  
10 forms Monday morning and issue those to everyone on our  
11 contacts list. We ask that anyone that would like to  
12 receive those forms to make sure they sign up on the  
13 form in the back of the room.

14 We expect the utilities to respond to that  
15 data request, either jointly or individually, and we  
16 would invite any other party here today or on that  
17 contacts list to provide a response to those data forms.

18 We expect to have the transcript from this  
19 workshop available on July 16th. We will post that to

20 our website as soon as it's available. And we would ask  
21 that comments be provided, post-workshop comments to  
22 this workshop be provided by July 18th, next Friday.  
23 And again, those comments will also be posted to our  
24 website.

25 We ask that -- and we will include this in our

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1 note, in our e-mail when we send out the data forms --  
2 that we would like and expect the responses to those  
3 data forms be returned to the staff by July 21st.

4 And we have scheduled a meeting, and a notice  
5 will be going out shortly of a technical meeting to  
6 discuss the responses to those data forms. That will be  
7 held July 25th, a Friday, in Room 140 of the Easley  
8 Building. That's the internal affairs room. And  
9 Commissioners may participate if they wish in that  
10 meeting, but the focus of that will be to discuss the  
11 responses and to clarify the responses. We've got to  
12 begin dialogue of the data that the Commission is going  
13 to need, and this may very well be the first of several  
14 meetings to clarify the data that the Commission needs  
15 and the responses.

16 CHAIRMAN CARTER: Commissioner Argenziano.

17 COMMISSIONER ARGENZIANO: I'm sorry. Could  
18 you repeat the first meeting date?

19 MR. FUTRELL: Yes, ma'am. July 25th will be a  
20 staff technical meeting to discuss the data responses  
21 from staff's request, and the Commissioners may attend

22 if they wish.

23 Our next milestone is going to be -- we'll be  
24 sending out a Commission notice of the workshop on  
25 August 20th. That notice will go out August 13th.

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1 Included in that notice will be the agenda for that  
2 workshop, as well as a draft RPS rule. This will be  
3 noticed as a staff workshop, but Commissioners again may  
4 participate in that workshop if they wish. And again,  
5 following that will be again a tight turnaround on  
6 comments as well as the transcript.

7 For parties wishing to submit comments,  
8 responses to data requests, and any other information  
9 they want to provide the Commission, please submit your  
10 comments and responses to Ms. Cindy Miller of our legal  
11 staff and Judy Harlow of our technical staff. Please  
12 send it to both parties so that we'll make sure we have  
13 a record of your responses. And if you have any  
14 questions, you may also contact me, and that's our  
15 contact information up there on the screen.

16 That's all I have, Mr. Chairman.

17 CHAIRMAN CARTER: Thank you, Mr. Futrell.

18 Commissioners, before we break, I know that  
19 you were waiting patiently to allow people to speak and  
20 all like that, but before we adjourn, I want to give  
21 each one of you an opportunity to make whatever  
22 observations you deem necessary.

23 Let me start today to my right. I'll start

24 with Commissioner Argenziano, then Commissioner Edgar,  
25 then I'll go to my left, Commissioner Skop, and then

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1 Commissioner McMurrian. Commissioner Argenziano.

2 COMMISSIONER ARGENZIANO: I have no comments,  
3 other than I'm looking forward to working on getting the  
4 State's policy come to fruition and doing the best job  
5 we can and looking forward to good work from everybody  
6 along the way.

7 CHAIRMAN CARTER: Thank you. Commissioner  
8 Edgar.

9 COMMISSIONER EDGAR: Thank you, Mr. Chairman.

10 I note this is another important step in the  
11 multistep process that this Commission has been doing to  
12 data gather as we work towards an RPS. I appreciate all  
13 of the comments, but in particular, the comments about  
14 thinking through carefully and being realistic about  
15 time frames and about costs resonate a great deal with  
16 me. And I look forward to having many people  
17 participate in our process. Thank you.

18 CHAIRMAN CARTER: Thank you. Commissioner  
19 Skop.

20 COMMISSIONER SKOP: Thank you, Mr. Chair.

21 Are we -- this is my understanding, but  
22 correct me if I'm wrong, that the Commissioners are  
23 going to perhaps provide some input to staff with  
24 respect to RPS at this time.

25 CHAIRMAN CARTER: You can either do it now or

1 at the workshops. What staff has done, Commissioners,  
2 just so we all know, they've noticed the workshop so  
3 that we can participate if we wish. That way,  
4 obviously, if there's something that we thought of today  
5 that we didn't get a chance to get to them, we can  
6 submit that to staff and they'll make that part of the  
7 record.

8 COMMISSIONER SKOP: Okay. I guess I would  
9 just like to hit upon what was discussed today. I  
10 appreciate all of the participants and the presentations  
11 that were given. I think they were very informative and  
12 instructive and will factor prominently in staff's  
13 analysis and benchmarking on what we do on a  
14 forward-going basis.

15 I guess at least for me, I'm firmly committed  
16 to building renewables and facilitating economic  
17 development within the State of Florida, but doing so in  
18 a manner that's the most cost-effective for consumers.  
19 I think Mr. Twomey hit some of those points in his  
20 analysis between various emission-free renewables. Some  
21 are obviously cheaper than other alternatives, and to  
22 incentivize one over a more cost-effective alternative  
23 doesn't result in a least cost analysis.

24 I guess as we move forward in this endeavor, I  
25 think it should be an open, collaborative process. I

1 think each of my colleagues have expressed some



2       excellent views as we've moved forward today. I guess I  
3       would like to just quickly share a few of my views, and  
4       they're just solely mine, perhaps with respect to the  
5       goals and objectives that we might want to consider as  
6       we move forward in developing the RPS.

7                I just think, having sat through a couple of  
8       the staff workshops previously and following the  
9       discussion, as well as some of the Commission workshops  
10      that we went through previously, I guess one of my  
11      concerns or preferences would be to emphasize a capacity  
12      based rather than an energy based RPS. I think that the  
13      rationale for that is clearly to support economic  
14      development and jobs in this state.

15               I guess a corollary to that is, from my  
16      perspective, and my perspective alone, purchasing  
17      out-of-state RECs is tantamount to like buying thin air.  
18      It really provides no economic or environmental benefits  
19      to our state. So to me, you know, it's more of a  
20      selfish nature: Keep the money in our state and use it  
21      for the benefit of our state, to do the right things to  
22      fulfill the legislative and executive policies of the  
23      State.

24               But moving a little bit further from there, I  
25      think that there has been some interesting discussion

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1      today about set-asides, carve-outs, multipliers, and  
2      perhaps tiering. And I think there was some very good  
3      discussion today. I guess what I would ask our staff

4 and I hope that the Commission will do is seek to  
5 balance the differences, both pro and con, between  
6 set-asides, carve-outs, the multipliers, and the  
7 tiering.

8 Certainly set-asides and carve-outs have  
9 worked in some instances, but some of the participants  
10 today have suggested that other states that have used  
11 multipliers, probably their lack of success is that the  
12 multiplier levels weren't appropriately set in terms of  
13 best practices, so in a sense, it might have been doomed  
14 to failure from the start.

15 But, you know, with respect to set-asides and  
16 carve-outs, I look at what has happened in New Jersey  
17 and California, and the price of those RECs is in some  
18 instances higher than the spot price of electricity in  
19 the free market. And so again, the cost-effective side,  
20 I think as Mr. Twomey has alluded to, and I think all of  
21 us share that concern, is a factor. So I am a little  
22 concerned about if we go that way with the set-aside and  
23 carve-out, what is that going to do to the overall  
24 pricing.

25 But also too, if there's a set-aside or a

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1 carve-out that always favors one particular segment of  
2 an emission-free source and disadvantages other  
3 emission-free sources, that might not facilitate the  
4 development of fuel diversity amongst all emission-free  
5 sources.

6                   But just in relation to that, multipliers I  
7 think, you know, essentially accomplish the same thing  
8 as carve-outs. They incentivize or could be used to  
9 incentivize migration to emission-free renewables in a  
10 more cost-effective manner and providing additional  
11 flexibility and options. And also, there's the tiering  
12 option that a lot of the participants have mentioned.

13                   So I think that the -- I don't have any  
14 preformulated opinion. I'm trying to look at the pro  
15 and con. And I think as staff and the Commission moves  
16 forward, certainly that's going to be one of those  
17 delicate balancing acts as to what provides the best  
18 motivation and incentive to cause that migration towards  
19 developing all renewables. I mean, certainly biomass is  
20 a big part, but we have the 100 percent emission-free  
21 too. And certainly without some sort of incentive, then  
22 everyone is going to migrate towards the cheapest  
23 alternative, so I think it's important to have that  
24 balance.

25                   I think just in closing too, there has been

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1                   some discussion about public benefits funds, a system  
2 benefits charge, alternate compliance payments. To me,  
3 anytime that you have a fund and it's not very expressly  
4 stated what the fund can be used for, there's an  
5 opportunity to come in and raid the fund for other  
6 things. But to me, a renewable energy charge, at least  
7 that plainly states the clear intent and purpose of what

8 the money is for, so that should be an interesting  
9 discussion in itself.

10 But I just kind of wanted to share some of  
11 those views which I think adequately summarize the  
12 breadth of the discussion that we've had today, and I  
13 look forward to moving forward in the process with all  
14 the participants and staff and my colleagues and trying  
15 to develop the best possible RPS that will gain  
16 legislative ratification. So thank you.

17 CHAIRMAN CARTER: Thank you. Commissioner  
18 Argenziano.

19 COMMISSIONER ARGENZIANO: Yes, Mr. Chairman.  
20 Thank you. I'm not going to express any opinions today  
21 on anything right now, because I really need to wait,  
22 but what I wanted to make sure that I did is mention  
23 that the policymakers have in that bill told us what to  
24 do, and there are some areas that we have to be a little  
25 bit more flexible on, but there are certain mandates in

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1 there, and I hope that staff, and I know that staff will  
2 stick to those mandates.

3 And also, if we cannot reinvent the wheel in  
4 some places, let's go to the other parts of the world  
5 where maybe they have utilized some of these initiatives  
6 and mechanisms that we heard today, and even if we  
7 haven't heard today, I hope that we look to some of  
8 those other countries that may be able teach us how to  
9 move forward quickly and what has worked best for them.

10                   So with that, thank you, Mr. Chair.

11                   CHAIRMAN CARTER: Thank you, Commissioner.

12 Commissioner McMurrian.

13                   COMMISSIONER McMURRIAN: Thank you, Chairman,  
14 and thanks to my colleagues for their input. And I,  
15 like Commissioner Argenziano, am probably going to hold  
16 off before I form too many opinions yet. But I have  
17 learned a great deal today, and I thank all the  
18 presenters for the information that you've given us and  
19 thank the staff for all the hard work that they've put  
20 in just getting us to this point. And looking ahead at  
21 the schedule, there's a lot of hard work to come, so I  
22 just want to thank them for that.

23                   I do have one question of Mr. Futrell. Are  
24 any interested persons able to give input on this at any  
25 time during this process, or are these deadlines strict,

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1                   that you have to give input by July 18 as far as  
2 post-workshop comments?

3                   MR. FUTRELL: That's just more -- sure, folks  
4 can give comments at any time. We were just trying to  
5 keep things moving along and keep things with some sort  
6 of a schedule where we can collect them all and then  
7 provide them to the other parties and start reviewing  
8 them, have time to review them as well. We want to have  
9 plenty of time to review their comments and take their  
10 comments into consideration as we draft the rule. But  
11 certainly folks can participate at any time in this

12 process.

13 COMMISSIONER McMURRIAN: Well, thank you.

14 And, Commissioners, the reason I asked that question is,  
15 I was just looking at that tight time frame, and since  
16 the transcripts don't come out until the 16th and the  
17 workshop comments are due the 18th -- I realize that  
18 there's really not enough days in the schedule.

19 But I guess in my opinion, I would like to see  
20 in the workshop comments -- I would like to see people  
21 respond to some of the ideas they heard from other  
22 presenters today. I think that could be most helpful,  
23 because I think we've heard a lot of good ideas, but we  
24 really didn't -- because it was all prepared  
25 presentations, we didn't get as much feedback from

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1 presenters to other presenters, and I think that would  
2 be very helpful to us too.

3 And I realize that's a couple of days, and  
4 people probably took good notes like I did today and can  
5 comment on that, but I wanted to make sure there was  
6 time if they have additional things. And I suppose they  
7 could even in their data request responses add  
8 additional information if they needed to, so I just  
9 wanted to say that.

10 But again, I look forward to moving ahead on  
11 this, as my colleagues have stated, and thank you,  
12 everyone.

13 CHAIRMAN CARTER: Thank you, Commissioners.

14 Before we break, I just kind of want to reiterate. The  
15 most significant thing, as Commissioner Argenziano says,  
16 is that the Legislature has told us exactly what to do,  
17 so we've got to make sure we get everything together  
18 based upon this schedule. The schedule is in stone.

19 The other thing is that we made available to  
20 both Commissioners and the public at large and the  
21 parties, all stakeholders, an opportunity to be heard,  
22 and that's why we have these. Mark will make sure that  
23 everyone gets another copy of the schedule if you do not  
24 have one.

25 Every point in here, we have an opportunity

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1 for you to be heard, because we want full deliberation  
2 on this rule, because the Legislature wants us to give  
3 them the best possible thinking that we can get.

4 I think that we can look at some of this  
5 analysis of some best practices, not just here in the  
6 United States, but internationally as well, because we  
7 do want -- I notice that when the Governor had the Serve  
8 to Preserve last year, the first year, we had people  
9 from all over the world to participate. So I think that  
10 if we can take some great ideas and make them better,  
11 then we can continue to be that beacon on the hill in  
12 that idyllic paradise called Florida.

13 And with that, Commissioners and those  
14 participating, thank you for your participation. We are  
15 adjourned.

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(Proceedings concluded at 3:17 p.m.)

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CERTIFICATE OF REPORTER

STATE OF FLORIDA:

COUNTY OF LEON:

I, MARY ALLEN NEEL, Registered Professional Reporter, do hereby certify that the foregoing proceedings were taken before me at the time and place therein designated; that my shorthand notes were thereafter translated under my supervision; and the foregoing pages numbered 1 through 181 are a true and correct record of the aforesaid proceedings.

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

DATED THIS 16th day of July, 2008.



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