1 BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION 2 DOCKET NO. 080503-EI 3 In the Matter of: 4 ESTABLISHMENT OF RULE ON RENEWABLE PORTFOLIO STANDARD. 5 6 7 PROCEEDINGS: AGENDA CONFERENCE ITEM NO. 3 8 BEFORE: CHAIRMAN MATTHEW M. CARTER, II 9 COMMISSIONER LISA POLAK EDGAR COMMISSIONER KATRINA J. McMURRIAN COMMISSIONER NANCY ARGENZIANO 10 COMMISSIONER NATHAN A. SKOP 11 DATE: Tuesday, October 14, 2008 12 PLACE: Betty Easley Conference Center 13 Room 148 4075 Esplanade Way 14 Tallahassee, Florida REPORTED BY: 15 LINDA BOLES, RPR, CRR Official FPSC Reporter (850) 413-6734 16 17 18 19 20 21 22

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т.	TAKTICITATING.
2	MICHAEL B. TWOMEY, AARP.
3	JOHN W. MCWHIRTER, JR., Florida Industrial Power
4	Users Group.
5	JOSEPH A. McGLOTHLIN, Office of Public Counsel.
6	JOHN T. BURNETT, Progress Energy Florida, Inc.
7	ERIC SILAGY, Florida Power and Light Company.
8	RUSSELL BADDERS, Gulf Power Company.
9	BILL ASHBURN, Tampa Electric Company.
10	MICHELLE HERSHEL, Florida Electric Cooperative
11	Association.
12	SUZANNE BROWNLESS, Florida Solar Coalition.
13	JOE TRESCHLER, Covanta Energy.
14	JON MOYLE, Wheelabrator Technologies.
15	ERIC DRAPER, Audubon of Florida Statewide
16	Conservation Organization.
17	LEON JACOBS, Natural Resources Defense Council and
18	Southern Alliance for Clean Energy.
19	BRIAN ARMSTRONG, pro se.
20	MARK FUTRELL, CINDY MILLER and BOB TRAPP, PSC staff.
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PROCEEDINGS

CHAIRMAN CARTER: Commissioners, we'll now adjust our schedule to give the court reporter a break and give everybody an opportunity to get settled in because our next issue will be Item 3. And staff has a sign-up sheet and they're trying to work on that. And I want to let everyone kind of get their places.

By the way, those of you that are wishing to speak, what we're going to do is we're going to have a place set up to my immediate right. We'll have one microphone for you there because it works better for us. It works better for the court reporter so that she can hear you clearly. And then we're going to, we're going to do that. And I'll get back with you later on in terms of how we're going to structure this, but staff now has a list out.

Commissioners, we're on recess until 30. (Recess taken.)

First of all, we're going to, as I said, is that we're going to have this microphone to my, to my right over here. And that works for us -- we've had some dissonance in the system before, but this allows the court reporter to be able to hear you by using this microphone here, and it works for us as well.

And the way we're going to go, Commissioners, my recommendation is that first we'll have staff to introduce the

issue. And then I'm going to recognize Commissioner Argenziano and then we'll proceed from there, Commissioners, anything further, if any of the Commissioners would like to say something, then we'll go with taking some comments. And I've got an order, I've got the list of people so far that have asked to speak, and I would like to go and I've got an order, I'd like to go from there and I'll share that with you after Commissioner Argenziano has completed.

With that, staff, you are recognized.

MR. FUTRELL: Good morning, Commissioners. I'm Mark Futrell with the Commission staff. Before I introduce the item, I'd like to note a modification to the item that I believe you received on Friday. It's a correction to a table on Page 17 of the recommendation correcting a math error and then noting those changes as they are noted subsequently in the text following the table.

To introduce the item, Item 3 is staff's recommendation to propose rules to establish a Renewable Portfolio Standard or RPS for the purpose of going to hearing. We are recommending three rules: First, the first establishes the RPS requirements for the investor-owned utilities as well as the implementation, review and reporting obligations. The second rule addresses creation of a renewable energy credit market. The last rule requires the municipal electric utilities and rural electric cooperatives to file annual

information on the standards they establish to promote renewables and data on renewables.

In House Bill 7135, the 2008 Legislature directed the Commission to submit a draft RPS rule by February 1st, 2009, for consideration. In order to meet this deadline, the staff issued a strawman draft rule on August 13th to generate discussion at public workshops held August 20th and August 26th, which included nearly 30 participants.

Staff revised its strawman draft rule based on discussion at the workshops and the written comments received. Staff has also explained in the recommendation why we agree or disagree with participants on certain points.

In Section 366.92 of the Florida Statutes the Legislature expresses their intent that the RPS rule protect existing and encourage new renewable resources, diversify the types of fuel used for electric generation, improve environmental conditions and minimize costs to ratepayers. The draft rules before you are staff's effort to balance the intent expressed by the Legislature.

In draft Rule 25-17.400 staff is recommending initial reasonably achievable renewable standards. These standards begin with our estimate that renewables currently provide approximately 3.6 percent of energy needs at this time. Over time staff's recommended standards would approximately double the contribution of renewables every eight years.

The Commission will receive additional information from Navigant Consulting at the end of November on existing as well as projected contributions from renewables. This information will give us a better feel for the reasonableness of these initial standards prior to submitting a final draft

rule to the Legislature.

This rule would also establish a process for the Commission to review the performance of the utilities and the development of the renewable market at least every five years. This process would also provide information for the Commission to adjust the standards, if necessary, based on actual experience.

As permitted by the statute, the draft rule provides additional encouragement for solar and wind in that at least 25 percent of the RPS must be from these resources and that 75 percent of the revenues available for the RPS be directed to solar and wind.

Based on the entirety of Section 366.92, staff has taken a broad view of the renewable resources to be included in the RPS to include not just resources that directly generate electricity but those that create thermal energy as well.

Compliance with the RPS would be accomplished through the use of renewable energy credits or RECs which provide a common means of verifying and tracking the production of renewable energy. A REC is a financial instrument that

represents the renewable attributes associated with 1 megawatt hour or 1,000 kilowatt hours of renewable energy. The purchase and sale of RECs through short-term and long-term contracts will produce an additional revenue stream for renewable owners and developers to meet the economic development directives of the Legislature.

The rule addresses the legislative direction to provide incentives by allowing the IOUs to recover the cost of RECs purchased and the cost of self-built renewable projects through a cost recovery clause and earn a return on their renewable investments. Also staff has included provisions for the assessment of penalties as a means of ensuring compliance with the RPS.

Staff has addressed the Legislature's intent to minimize costs to ratepayers by including a cost cap. The IOUs would be allowed to spend 2 percent of retail revenues above what they would have otherwise paid for capacity and energy for compliance with the RPS. As an example, in 2007, 2 percent of the IOUs' retail revenues were approximately \$370 million. Again, this would represent the amount of additional funding above costs otherwise paid for capacity and energy available to renewable owners and developers.

Finally for this rule, this rule requires the IOUs to file annual reports to allow the Commission to monitor the development of renewables in the state, track costs and monitor

the IOUs' progress toward meeting the RPS requirements.

Draft Rule 25-17.410 would set forth the processes for the establishment of the renewable energy credit market. The IOUs would be required to select and obtain Commission approval of a third party administrator. The structure and governance of the REC market would also be subject to Commission review and approval. The market, once established, would allow for the certification of RECs from in-state renewable resources and facilitate the ability of renewable owners and utilities to buy and sell RECs either through bilateral contracts or a spot market.

The rule identifies the renewable facilities eligible to produce and sell RECs in the Florida market as directed by the Legislature. These include utility-owned renewables, nonutility-owned renewables that sell capacity or energy to a utility, facilities that meet all or a portion of their needs from renewables, and customer-owned renewables that have not received a conservation program incentive from an investor-owned utility.

Finally, Rule 25-17.420 would require the municipal and cooperative utilities to file reports on the standards they establish to encourage renewables as well as data on the development of renewables in their respective service territories. These data and information coupled with the requirements of the IOUs will allow the Commission to monitor

the development of renewables from a complete statewide perspective.

That concludes my summary of the draft rules, and now let me speak to some procedural matters. Commissioners, our recommendation before you today is to propose rules. A December 3rd hearing date has been set aside for the Commissioners and parties to further discuss the rule that you propose. At this hearing the Commission will also review the results of Navigant's technical and economic potential study. Following that hearing, a January 9th Special Agenda has been reserved for the Commission to adopt rules.

That concludes my opening remarks. Staff is available for questions. And as you mentioned, Chairman, several parties are here to address you today.

CHAIRMAN CARTER: Thank you. Commissioner Argenziano, you're recognized.

COMMISSIONER ARGENZIANO: Thank you, Mr. Chair.

Thank you, staff. I'm just going to ask for your indulgence just for a few minutes. I know there's a lot of people who want to speak, but I want to say a few things.

And, number one, I want to thank staff because staff has been taking a beating by a lot of people, the media, some of you sitting out there, and with all -- everybody has their own opinion and their own great ideas of what we need to move forward with, but staff is charged with recommendations

according to the House Bill that passed, the legislative bill that passed. And what they did -- and there are not a great deal of specifics in some of those areas in that, in that bill, and staff does, as they have been doing, I guess, since time began, is, is make those recommendations. And I don't know how suddenly that translated into that was the decision. Staff brings forward to this Commission -- it is us who are ultimately charged with making a decision. So I, I appreciate the hard work and I know how pulling -- because you've been pulled from many, many different places and, trust me, that does occur. There are so many important issues that we're This is such an important agenda for the State dealing with. of Florida. And I do appreciate the hard work you put into this. So for all the beating that you've taken in the past week or two, I apologize for that. It really isn't appropriate. You did the job that you were, you were charged to do. Now do I agree with all of it? Probably not. anybody agree? Probably not. But thank you for the hard work and I wanted to say that publicly.

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The second thing, Mr. Chairman, that I wanted to emphasize, and we all know this but I want to, I want to get it on record because I want people to sit down and really think of this. You have the legislative branch, the policymakers, we are not the policymakers, they are, saying we're going to move forward with, with renewables, we have emphasis on, on

renewable energy in the State of Florida. And, of course, our Governor has made it very clear where he wants the state to go. And look at, look at the bigger picture. And please, again, indulge me. We're talking about many different facets. It's not just energy that we're really talking about. It's why we're doing what we're doing. Why not only the people of the State of Florida need to have a sustainable source of energy for the future, whether we're growing at the same rate or not doesn't matter anymore, we're still growing, there's still more people coming into the State of Florida, and we have to make sure we plan appropriately. That's what we're charged with. And we need to make sure that the people of Florida in the future when they turn on that switch or need that electric have it.

We also need to make sure that we're talking about environmental changes, a very large concern. Some people don't believe, don't believe -- whatever you want to believe, it's out there. The scientific community is saying, hey, you may have only a certain amount of time to turn things around as far as cleaning the planet you live on, and, and that's a very big consideration for many people, including myself.

And you have right now before us not only that, you have reduce the dependence on fossil fuels. That's, everybody knows that we need to do that. And, quite frankly, and I'm going to be very blunt, as I always have, in 1972 when I was

waiting on those gas lines way back then, we knew that back then. So if in 1972 our political leaders wouldn't have been so wishy-washy at that time, maybe we would have already moved forward and reduced our reliance upon fossil fuels. can't be playing these games anymore of just wishy-washy, and I think that's the mandate you've gotten from the Legislature and also from the Governor. As we all know, something has to be done. Now how you get there, of course, we all have different opinions on. So let's, let's look at -- you're talking about cleaning the air, reducing emissions, reducing our dependence on fossil fuels, creating a new way to get there, creating renewables, giving the incentives, the economic development involved in that because you have to, you have to have a carrot with that stick because sometimes things just won't move. So there's many different ways of getting there.

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But then you also have to look at the cost and availability, and I think that's what staff had all those factors put in there and said, okay, the cost. Because, believe it or not, we're hearing from legislators who are hearing from their constituents who are saying that, you know, we can't take bigger hits. Okay? But yet you have other factors to look at. Will, you know, will there be a time when you can't turn around the damage that you may be doing to the, to the environment? There may be a point. And at that point does rate, do rates, are rates really going to be a higher

consideration than saving your planet? And that is a legitimate question that's out there. So taking all those things together, again, I want to thank staff for coming up with something that you're being pulled in 12 or 13 different places, as we are also.

Now what I think, what I would like to propose before anybody gets up and speaks, and maybe you have time to think about this and I'd like to ask my Commissioners to think about this, I would like to see, since we are charged with a draft rule by February, I would like to see two versions of a draft rule. And the reason I want to do that is because, as I said before, some of these issues that have not been very specific in House Bill 7135 are policy issues. And I think that the Legislature, given certain pieces of information plugged into our rule and given certain pieces of information that are going to come down the pike, are truly the only people who can make the call on those policy issues.

So if we have one rule that I think is going to differ from staff's rule that says we're going to move forward very aggressively, we're going to do the 2020 date, we're going to, we're going to reduce those emissions and we have to attach costs and other items as best as we can get because they're sometimes hard to get today, but also knowing that we're right on the cusp of many breakthroughs on solar efficiency, so many different renewable breakthroughs that we cannot afford to stop

providing an incentive for that type of development to continue. Because that's what happened in '72 when everybody came out with, hey, we can do it this way, and then all of the sudden, no money, no incentive was there and that died away and we just relied on the same old same old, which got us in this position now.

So I would like to see, one, a recommendation or a rule, a draft rule, one that says it's going to be much more aggressive than what we have in front of us. Let's get to where we need to go, but also plug in as best as we can the information for those policymakers to make a determination on what, on what they ultimately decide: Will the rate, this much rate be too much on the people today or would it be acceptable or is there something else we could do to reduce the rates? But give them all that information in an aggressive approach to getting where we need to go.

And using some of the data that we have from around the country, other states like California, how is, how is their plan working, what are their pitfalls, what can we do to avoid those? And maybe in the second draft, and I'm proposing two draft rules, the second draft maybe be a little bit closer to what staff is recommending that is, is looking at the legislation that passed and saying, okay, we're going to, we're going to take a more conservative approach than Plan A, which I say we need to move aggressive on, but not quite as

conservative as the staff has, has come up with. So in doing that, of course, Mr. Chairman, there has to be certain things that need to be plugged in there because the Legislature needs to have additional information.

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And I guess my point is that some of those pieces that are missing here -- we're not the policymakers. We'd be, we'd be making a call here on some of that of making policy, but let's give them the rule that they need for those two scenarios. Because, quite frankly, what I see coming down in the legislative session is going to be a lot different, well, maybe not a lot different, but it can be changed, it's going to change. I don't think that your rule would fly through and I just don't see that happening, so I see changes taking place anyway. But let's give them the information that they need but also do what we're mandated to do, and that is to simply create the rule. But if you don't have the specifics and you find that you're down the road and the Legislature is saying -- as I said, I'm hearing, I'm sure you are too, from Representatives and Senators who are saying, hey, you know, we have enough, our consumers are screaming and the rates are something you need to take into consideration. So let's give it to them to make that determination. Show them where the aggressive approach is probably something that we need to move forward with, but here are the numbers and here's how we look at it, now you help us to get there, but we give them the rules.

And in a nutshell, I mean, I can be more specific at a later date because we don't have certain numbers right now. It's a little hard to find some of those numbers out there right now. It's a little hard to determine what's going to happen in five years. But we can't stifle what's going to happen. We can't say we'll throw it out and, you know, we'll just, we're just not going to give them the incentive. We need to give those renewable companies some assurances that the State of Florida means business and we're going to move forward and let them know they have an insurance policy. We're going to put some money where our mouth is.

So, Mr. Chairman, that's my suggestion. And I really am looking forward to hearing what everybody has to say. But I think that we need to be considering a more aggressive approach also and send it to the Legislature as proposed Rules A and B.

CHAIRMAN CARTER: Thank you, Commissioner, for your wisdom.

Commissioners, anything further? We'll go ahead with our comments. Obviously at any point in time any Commissioner that wants to be heard will be recognized for that. And anything further, Commissioners?

Hearing none, let's do this. I've got my own little mind-set in terms of how -- what I'd like to do is to kind of group, have -- we've got this microphone over here and I'm going to ask you, those of you that come up to speak, to be

respectful. We want to hear from everyone. And I know your issue is the greatest issue on the planet, but if you'd be succinct in your issue because the critical thing, as Commissioner Argenziano has said, is that we've got to hear, we want to hear from you, but we've got to make some critical decisions. And if you always do what you've always done, you'll always get what you've always gotten, and we can't do that anymore. So, please, ma'am, please, sir, be respectful as you come up.

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First -- and I'm going to ask you when you come up, if you could limit your comments to five minutes or less. And that would be very helpful because that will allow us to hear what you have to say and that will allow us as Commissioners to have some give and take. We may ask you a question or we may, something happens later on, we may want to bring you back up to ask you that. But that will allow us to have a full and forthright discussion, debate and come to a resolution of this very significant issue that's not about scoring points. It's about doing what's in the best interest for the people of Florida particularly at this point in time. And with that, first up will be Mr. Mike Twomey.

MR. TWOMEY: Mr. Chairman, Commissioners, good morning. Mike Twomey. I'm appearing on behalf of AARP, which has over three million members in the State of Florida. I always mention that because it's important, and I think it's

especially important today because along with Public Counsel and perhaps some of the industrial customers that might be here and appear today, I'm one of the few people that represent customers who are expected to pay the bills that will, increased bills that will result from presumably any decision you make in this matter today.

The -- it's important because if everybody doesn't know outside this room, the utilities will not pay for these increased costs. The costs are going to go to the customers and it's going to increase their bills, and you've seen it on the table.

It's particularly important that we just observe briefly that, that a lot of people are suffering from mortgage foreclosures, gas costs, there's insurance costs, there's increased unemployment, there's cost of, increased cost of every nature that people are trying to deal with. AARP contacts told me yesterday they're getting calls from people in their 70s who have seen 20, 25, 30 percent or more of their retirement funds disappear. So it wasn't necessarily a good time for a lot of people on fixed incomes and low incomes to have to face increased electric bills two, three, four months ago. It's even a worse situation for having to do it now.

Now as far as the, the proposed rule, AARP has been saying since the legislative session last year that we wanted to see elected officials make the ultimate decisions. And

that's going to happen, as pointed out by Commissioner
Argenziano, when it goes back to the Legislature next session.
We said we wanted to see a budget. Families have to operate
with budgets. There should be a budget, there should be a
ceiling cap, a cost cap on these expenditures. And your staff
has recommended such a cap and we agree with the staff that
there has to be a cost cap. It is essential there has to be a
budget.

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We disagree to the extent that we oppose staff's recommendation of 2 percent of the company's previous year's revenues and we agree with the Office of Public Counsel that it should be 1 percent, which is not, by the way, an insignificant number. It's -- 1 percent would be something in excess of \$185 million a year in rate increases for the customers of the five IOU utilities.

We said at the Legislature and I've said here before for AARP we want to see the most cost-effective achievement of whatever your goals are. We want to see the most renewable or clean energy attained for these consumers for the money that's going to be spent. And as a consequence, we said at the Legislature, I've said it here before that we are opposed to carve-outs for any technology. And I want to be clear that I'm speaking for AARP and not its various members, and I want to be clear as well that AARP doesn't have a policy on wind or solar or nuclear for that matter. By opposing a solar and wind

carve-out we're not in opposition to wind or solar. We're taking a position that we want to get, again, the most energy, the biggest bang for the buck, take the low hanging fruit and all those type things, and we believe and have said from the beginning that special treatments in the nature of carve-outs is wrong for any technology, solar and wind included. As you heard from your staff, 25 percent of the energy but 75 percent of the money under this carve-out would be directed towards solar irrespective of whether there were other renewables, other clean technologies that were available at a lower cost. There should be RFPs by these utilities, an essentially reverse auction that gets us the most energy for the least cost.

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The, we don't have a position on when you should achieve 20 percent. By and large if we have a cost cap, that issue is somewhat irrelevant in terms of protecting consumers. And, again, the cost cap is essential.

The -- I want to speak briefly. I want to be very careful and tread lightly here to a suggestion by FP&L that new nuclear should be counted as, as clean. I don't think the law as written allows that. But this whole rule process is going back to the Legislature, as y'all recognize, and I would suggest to you that you may want to consider recommending to the Legislature that they consider modifying the RPS to a clean portfolio standard. I think Florida Power & Light makes a strong argument that the nuclear generation which is largely

emission-free should be counted. And I'm saying that again not because the AARP has a nuclear policy, because it does not. It did not participate, as you'll recall, in the need determination proceedings for the new Turkey Point units or the Levy County units, not in favor nor in opposition. But I've said to you, I've tried to say that AARP would like to see the best deal economically for the cards that we've been dealt to date. And some of the cards we've been dealt so far is the fact that you have approved those four units for recovery and to be built.

The projected costs for the four of them I think is somewhere in the neighborhood of \$30 billion. The companies, because the Legislature allowed early cost recovery for these nuclear units, will start seeing increased costs as soon as January 1st of next year. I think as much as \$11 or more for Progress, I forget the number for FP&L, but there are many hundreds of millions. Given that, we suggest to you that it would make sense to have customers get credit for a low emission source that they're already going to start paying for in January. Thank you.

CHAIRMAN CARTER: Thank you, Mr. Twomey. I appreciate that.

Next we'll have Mr. -- and, again, as you, we're going to continue back and forth, but I want to let everyone get what they need to say up-front so we can move forward for

1 discussion and debate.
2 Next will be Mr. John McWhirter.
3 COMMISSIONER EDGAR: Mr. Chairman.

CHAIRMAN CARTER: One second. Commissioner.

COMMISSIONER EDGAR: I was just going to say while Mr. McWhirter is coming forward, could I make just a few comments?

CHAIRMAN CARTER: You're recognized, Commissioner Edgar.

COMMISSIONER EDGAR: Thank you. And, and I wasn't sure when the best time was, early, middle, and as we --

CHAIRMAN CARTER: No better time than the present. You're recognized.

COMMISSIONER EDGAR: Well, thank you -- as we work through this. I do have, as I'm sure each of us do, some more specific questions about some specific provisions that have been suggested and some points to raise. And I'll kind of hold on that thinking that when we get into more detail.

But I did want to follow up briefly on a few of the comments from Commissioner Argenziano and also from Mr. Twomey because they are similar to some of the thoughts that I've had over the past weeks and months on this. I know I feel strongly and we have all made statements about the need for this state to work forward as an energy policy for energy security, for fuel diversity, for job development, environmental quality,

fair and affordable rates and reliability. I do think that our charge as economic regulators is to look at and help to ensure that value to the customer, the value to the ratepayers for what they are paying in their monthly bill, and we do that in many, many ways and through many mechanisms.

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When I think about this issue, some of the issues that came to my mind a few years back when we were looking at proposals on storm hardening, I think some of the analysis is similar, which is we tried to gather all the data, listen to all of the variety of stakeholders, which was vast, and then to look at what is the cost benefit, what is the value to making additional investment and how do we review that. And so I think with some of the comments that Mr. Twomey has made and that we have all made and will make again about the value to the customers and also what the interrelationship and interplay is for a strong RPS with the other things that we are doing as a Commission in this state, and with the direction of the Governor and the Legislature for additional energy efficiency and energy conservation and investments there, a potential future cap-and-trade, as we continue to review and evaluate Ten-Year Site Plans and those processes, and I'm hoping as we get into this a little bit more that there will be the opportunity to expand on some of those ideas and ask a little more specific questions.

But I think, again, how we put that together, value

to the customers, value to the state, tracking those downstream dollars so that there is oversight and accountability, and then also moving forward this very important policy for fuel diversity and for energy security with affordable rates and reliability is, I mean, a challenge that is just so fascinating, and I think today is going to be an important piece of that discussion. So thank you, Mr. Chairman.

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CHAIRMAN CARTER: Thank you. And, again,

Commissioners, at any time if you need to say something, you

would be recognized for that.

With that, good morning, Mr. McWhirter.

MR. McWHIRTER: Good morning, Mr. Chairman and Commissioners. I represent industrial and large commercial customers, and in order to understand where I'm coming from, I'll give you the load characteristics of these kind of customers.

First of all, by and large they operate around the clock and about 80 percent of their operation is during the off peak periods. Secondly, they have -- as Mr. Lily (phonetic) in the energy efficiency workshop which you've had going on correspondingly with this told about a number of things that his company could do to improve energy efficiency, but there are no credits available for that through the DSM clause or otherwise. The DOE has focused on industrial energy efficiency as a good way to save energy. That has nothing to do with this

rule you're considering today. And I think that may be one of the problems with the rule because we don't coordinate the low hanging fruit of energy efficiency with the philosophy of fuel diversity.

Second, the third characteristic of large industrial customers is that they can produce electricity as they presently do and they can sell that electricity and are presently selling that electricity on an as-available power basis to utilities at a cost less than the utilities pay for the fuel that they use in their own generating plants. And this rule, I'll talk about that in a minute, it may discourage that kind of operation.

The second -- the fourth thing I would say about industrial customers is they are just like Mr. Twomey identified them, they don't pay the electric bill. They either pass that electric bill along to the members of AARP and other residential consumers or they go out of business. It's just that simple.

It's more characteristic, if you think in terms of a grocery store, when you raise the electric rate for a grocery store, which is a high load factor consumer because they have refrigeration that goes 24 hours a day, you immediately see, they are a low profit margin company and so you immediately see it in customers' food bills. So anything that those customers pay either goes through to the customers or, to their customers

or they go out of business. And we saw that in Tampa when the steel company closed down, the brewery closed down and moved to areas where the electricity was cheaper, and that was a major reason for it.

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Now having given you the characteristics of the industrial customers I represent, I'd like to take a minute or two and ask you or tell you how this rule affects those consumers.

In the first instance, as Mr. Twomey and I think the Public Counsel does, we oppose the idea of guaranteed cost recovery clauses. When you have your hearings in November, you're going to find with the action you took today on the nuclear cost pass-through and the -- you're going to find that when you compare the 2007 operating revenues of the public utilities to the sum of money that will be collected in the next year through the cost recovery clause, it's now in the upper 70 percent of their gross revenue. So guaranteed cost recovery clauses bring in most of the money, and in your rule you've proposed a new guaranteed cost recovery clause. we're not too far away. We'll never get to 100 percent quaranteed costs, but we're a long way from the concept that the utilities proffer that they only have an opportunity to earn a return on their investment. They have a guarantee. So we oppose all cost recovery and I'll deal with that later.

Collecting capacity costs through a kilowatt hour

charge is harmful to industry and it's harmful to grocery stores and it's harmful to other high load factor customers because they're paying for capacity that is used by other people, and in some instances if they're interruptible customers, is paying for capacity that they don't have any entitlement to at all.

The third thing that gives me a little bit of concern about Rule 410(10), it says that any customer that is receiving the benefits of a DSM program from the Public Service Commission shall not be entitled to a renewable energy credit. I may be misinterpreting that, but I do know that all the utilities in Florida have a DSM program for cogeneration. They don't give any money to cogenerators other than the electricity they buy from them at an economic price. What they do is the employees' that monitor the program's salaries are paid through that. If the fact that the utilities pay salaries to their employees for a cogeneration DSM program would discourage or would prohibit an industrial customer that can co-generate and sell electricity from getting a renewable energy credit, I think that would be horrible. I don't know that it does that, but it gives me grave concern.

CHAIRMAN CARTER: Are you close to winding up?

MR. McWHIRTER: Yes, sir. Yes, sir. I'd like to reemphasize what Mr. Twomey said. I went to -- the Clerk of the Circuit Court had a session for lawyers not long ago and

she gave us a list of the foreclosures in Hillsborough County. And they were going -- a year ago there were 1,900 new foreclosures a month. This is in Hillsborough County alone. In the last week in August of this year there were 3,000 new foreclosures in Hillsborough County alone. If you read the newspaper articles about the customers who are getting discontinuance notices from utilities at the current rate, it is very high.

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Finally, I'd like to endorse two other things that Mr. Twomey said. You've got the 75/25 percent; 75 percent under this rule will go to solar and wind power, which is a popular political thing. But I think we have a good model in FP&L's recent case. It's going to spend \$688 million to build a solar array which has got to be state of the art, and that solar array, they're going to charge 83 cents for every 1,000 kilowatt hours to support that. You pay -- you approve part of it today in your depreciation charge for that. But we've gotten a number now. We've got 83 cents is what it costs a utility to produce best technology solar power.

What about Mr. Twomey's reverse auction? When you said let high technology people who can come in and sell us electricity at less than 83 cents a kilowatt hour, let's start the auction there. Anybody above that, you don't get in. But if you can sell us power at less than that, we will take it and we'll get diversification.

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And I quit, Mr. Chairman. You can get rid of me. CHAIRMAN CARTER: Thank you very kindly, Mr. McWhirter.

And, again, as I said to you, those of you who have been before us before, we want to hear from you, you know, but you can state your issue succinctly. Because this process -we are, my colleagues and I are deferring to allow you to go and say what you need to say, but we need to go through our deliberations as well. And there's some of the issues that you've raised we have questions about, but out of courtesy we wanted to give you an opportunity to be heard first. would -- my grandmama told me to always be nice in manners, so I don't want to give anyone kind of the death penalty or anything like that. But let me just give you a gentle reminder that five minutes is five minutes. Okay? Thank you so kindly.

Let's do it this way. Next we'll call up Mr. Joe McGlothlin from the Office of Public Counsel. And following him, you can just go and sit behind him, following him, Mr. McGlothlin, will be Mr. John Burnett from Progress Energy, Carla Pettus and Eric Silagy from FPL, and Russell Badders and Mr. McGee from Gulf Power, and Bill Ashburn from Tampa Electric. And also following that -- is that enough or should I continue to go? Following Mr. Ashburn will be Michelle Hershel from the cooperative association.

Mr. McGlothlin, you're recognized, sir.

MR. McGLOTHLIN: Good morning. Joe McGlothlin with the Office of Public Counsel. Usually I'm seated at the long table posing questions to the occupant of this chair, so this is, this is a bit of a novel experience.

But I want to begin by echoing something that

Commissioner Argenziano said in her remarks. In our written

comments following the workshops OPC commended the Commission

staff for the good work and hard work the staff performed in

what was a daunting task. We said then, we'll say now that the

staff approached that thoroughly and thoughtfully. And while I

may have some disagreements that I'm going to articulate this

morning, I don't want to detract from their hard work on this,

on this project.

The -- to move forward with emphasis on renewable sources of energy is a laudable goal. That goal would be constrained by two primary factors. The first factor is the amount of renewable energy that is technically available and viable. The second factor will be the amount of money that customers can afford to spend. With respect to the proposed schedule for achieving the goal, OPC has not taken a hard and fast position. It's our view that at this point the Commission will be making a best efforts attempt to identify an appropriate schedule acting on incomplete information.

As you know, the consultant, Navigant, is supposed to provide a report, a technical assessment of the availability of

technically viable renewables in December. Also, as the draft rule provides, the Commission anticipates revisiting this schedule periodically; as it stands now in the draft rule, every five years. We think the Navigant report and this opportunity to fine-tune going forward will play crucial roles in establishing the ultimate time frame for implementing the statute.

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However, with respect to implementing the schedule, I want to point out that there is within the draft rule a provision that interferes with the objective of maximizing the amount of cost-effective renewable capacity, and that is the carve-out. Consider that within the rule you have these two competing considerations. On the one hand the Commission says in the rule we want to aggressively pursue the maximum amount of renewable energy that our customers can afford, and at the same time within the same document the Commission says we require that the utility spend 75 percent of the money available on 25 percent of the credits to be purchased. Those two objectives cannot co-exist in the document. And we contend that the carve-out should give way to the overriding consideration that the Commission fashion a rule that requires the utility to give the customers the biggest bang for their, for their bucks. And there are other reasons why the carve-out should fail.

As Commissioner Argenziano commented, we are seeing

technological breakthroughs in the area of the replaceable generating technologies, and I think it would be a mistake to at this point identify a preference for one technology over the other. Instead, let the marketplace and the innovations available to those developing these renewables all compete to be identified as the most cost-effective and best candidates for consideration.

With respect to the amount that customers can afford, others have alluded to the economic downturn, we're all familiar with that, but you don't have to go any farther than the very things that are on your plate currently to recognize that the customers are under considerable pressure. Recently two of the large utilities came in for midcourse corrections to their fuel cost recovery factors, and those corrections were so large that you required them to recover them over two years instead of one, taking into account the need to temper the impact on the customers' bill. They were that large.

Today you approved the recovery of nuclear cost recovery matters. One utility asked for \$400 million in the year 2009. And, and as you are very aware, those nuclear units, the cost of those nuclear units is not assured at this point. We're in the early phases of finding out what the ultimate price tag is going to be.

The utilities have made massive investments in infrastructure necessary to conform to the requirements of the

Clean Air Interstate Rule. And it appears that even though that rule, the status of the rule is in, in doubt, apparently the utilities contend and there's reason to believe that something very much like those requirements will continue to be in force. So it is for that reason that we contend that the Commission needs to be as careful with these renewable dollars as it is with the other factors.

Now with respect to the caps that have been proposed, 1 percent, 2 percent, 5 percent, it's my impression that at times those caps are, are not described fully. As Mr. Twomey pointed out, even at 1 percent the utilities would be authorized to spend, based on 2007 figures, \$185 million. But you need to bear in mind that that is not the total amount to be spent for renewable energy. That is a premium that is going to be spent to recognize the renewable attributes of the generation. This is over and above the amount that the generator will receive for capacity energy that they sell to the utilities. And so it's a bit misleading to point to a cap of \$185 million and by omission somehow communicate that this is the whole amount that's being spent on renewable energy.

It is also worth pointing out that this 1 percent cap is to be applied to the entire revenue base of all the utilities. And then that assessment over the entire revenue base is going to be funneled down and concentrated on a relatively small portion of the total portfolio so it has a

concentrated effect. So we're not, we're not talking about small change when we say a 1 percent cap is \$185 million when you take into account this is over and above the price of capacity and energy and it's going to be spent on a relatively small number of kilowatt, of megawatt hours. And it is for that reason that we contend that 1 percent is the appropriate cap.

With respect -- I know I'm getting down to the last

CHAIRMAN CARTER: You're over, way over.

MR. McGLOTHLIN: May I make one more --

CHAIRMAN CARTER: You may make one more point though, Mr. McGlothlin.

MR. McGLOTHLIN: All right. In the strawman view, in the strawman work product there was a second check on the maximum price in the form of a, a cap that is the equivalent of \$16 per ton of avoided greenhouse gases. That was deleted and I, and I was disappointed to see that is no longer part of the product.

And in trying to communicate why I think this is an appropriate element of the rule, I thought of an illustration that comes from an unusual source but I think it makes the point quite well. In his autobiography, Ulysses Grant, before he turned to his recount of military campaigns, recalled an incident that happened when he was an eight-year-old boy. His

father told him that he had permission to go to a neighbor and try to buy a colt that Grant wanted. And so he came to the neighbor and said, "My father said I am to offer you \$20 for the colt. And if you turn that down, I'm to offer you \$22.50. And if you don't take \$22.50, I am to offer you \$25." Well, consider that at least in the opening rounds of negotiations for these renewable credits we have an immature market, an imperfect and immature market, we have perhaps a relative few players, and so until the market is truly competitive, there is the danger that at the outset those who know what the checkbook is will fashion their proposals in a way that is designed to get the maximum amount that the utilities have to spend. And so for that reason, at least until the market is mature, I think there's a very real place for this sanity check, which is the second cap on the maximum price of a, of a renewable credit, and I commend that to you.

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Finally, we do oppose in principle the additional cost recovery clause. As the Commission is aware, when, when the utility is required to recover new investments and new expenses through base rates, there's a very real possibility that existing base rates may be adequate to absorb those without an increase to the customer's bill. But when you, when you separate that out and say this is a standalone item and there's going to be a cost recovery clause, that means that the customers are going to be seeing this tacked on in a way that

increases their bills and shifts the risk from the utility to the customers at an increasing cost when that may not be required. And with that, I know I'm over time, I appreciate your indulgence.

CHAIRMAN CARTER: Thank you, Mr. McGlothlin. And I'm guessing that he paid \$25 for the coat.

Okay. John Burnett.

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MR. BURNETT: Thank you, sir, and good morning. It's hard to follow General Grant, but I'll try and I'll keep it very brief.

Commissioners, thank you for the opportunity to speak with you. Briefly, the most important thing to our company and to speak to the overall process is to support the development of renewables in a method that's achievable, affordable and equitable, and that seems to be everything, the common themes that we're hearing today. And we think that's important and we continue to look to those three principals as we go forward in this process.

We appreciate the constructive dialogue that's taken place so far between all the stakeholders, and we specifically wanted to commend the Commission for engaging in this task in a method that's been efficient, that's relied on empirical data and that's been transparent to everyone. And we appreciate that the Commission has looked at achievability, affordability and equitable treatment of these issues. We remain committed

to participating before this Commission and the Legislature, and we thank you for the opportunity to present these comments today.

CHAIRMAN CARTER: Thank you, Mr. Burnett.

Ms. Pettus and Mr. Silagy.

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MR. SILAGY: Mr. Chairman and Commissioners, thank you for having me today. I am very pleased to be here, and to reiterate that we are a strong supporter of the development of a well-designed and aggressive renewable energy portfolio. We strongly support the Governor's initiative to attain a 20 percent renewable energy standard by the year 2020, and we believe there are a number of ways for the Commission and Legislature to achieve these objectives.

We at FPL are fully committed to working with the Commission to explore alternatives that will accomplish the Governor's objectives, create environmental benefits and minimize the cost impacts to our customers. We believe the Commission and the Legislature should take a holistic approach and develop the best strategy to accomplish the goals of developing renewable resources, reducing greenhouse gas emissions, increasing our nation's energy security and, again, in a manner that would reduce the cost to our customers.

We believe that the inclusion of zero greenhouse gas emitting, new nuclear and energy efficiency projects as well as the use of a nationwide renewable energy credit market or REC

market along with Florida renewable sources, renewable resources, I should say, such as solar generation provide the optimal path to achieving the development of new substantial renewable resources here in Florida. Our approach, we believe, will achieve enormous reductions in greenhouse gases and it will minimize the cost to the customers.

We also believe that new nuclear energy efficiency and out-of-state RECs should play a role in achieving the Governor's objectives. We also believe the Legislature is looking for these types of recommendations because they will foster the development of renewable resources here in Florida, they will diversify our fuel sources, they will promote economic development and reduce greenhouse gas emissions while minimizing the costs.

We recognize, of course, that the Legislature has not included new nuclear and out-of-state RECs for the purpose of the Commission's draft rule. Nonetheless, the process established by the Legislature allows the Commission to weigh in with its expertise on these proposals such as our clean energy portfolio standard which includes components that are outside the current statutory language.

We believe that under this process the Commission can and should weigh in on the merits of these proposals such as ours to accomplish the Governor's goals for renewable and clean energy here in Florida.

recognized.

We recommend that the Commission submit to the Legislature in February along with its draft rule comments or a report addressing the merits of recommendation, recommendations such as FPL's as well as recommendations by other stakeholders that will further the development of renewable assets here in Florida, enhance the state's environment and again minimize the cost to the customers.

I'll wrap it up by reiterating our commitment to work with the Commission and the Legislature in developing renewable policy which accomplishes the Governor's objectives, brings new renewable assets to the state and focuses on continued reductions of greenhouse gases, preserves our emphasis on minimizing the cost impact to our customers. Thank you.

CHAIRMAN CARTER: Thank you very kindly.

COMMISSIONER ARGENZIANO: Could I ask a question?

CHAIRMAN CARTER: Commissioner Argenziano, you're

COMMISSIONER ARGENZIANO: Just, just a quick question. In your last statement in preserving the, you know, I guess the minimal cost to the consumer, if the Legislature were to include in the statutes, and, of course, it's not in there now, that nuclear power was clean energy and that that would be included, would you still have incentives to move forward with solar and other renewables?

MR. SILAGY: Absolutely. In fact, we would have to,

in order to meet, depending on what the ultimate standards are, we would fully expect to have to build additional solar, wind resources or other renewable energy. New nuclear wouldn't come online for FPL until, the earliest would be 2018.

COMMISSIONER ARGENZIANO: Okay. But what you said

COMMISSIONER ARGENZIANO: Okay. But what you said was the most efficient. So if solar is not as efficient as nuclear, what would your incentive be to continue solar?

MR. SILAGY: No. When I say most efficient, what I'm really getting to is the whole portfolio approach and utilizing all the resources. That's the most efficient manner for us to promote -- reduce greenhouse gases but also do it at the minimum cost.

COMMISSIONER ARGENZIANO: Thank you.

MR. SILAGY: You're welcome.

CHAIRMAN CARTER: Thank you so kindly.

Next we'll hear from Mr. Badders and Mr. McGee. Gulf Power. Sorry.

MR. BADDERS: Good morning, Commissioners. My name is Russell Badders and I appear on behalf of Gulf Power Company. Gulf Power, Gulf Power strongly supports the development of cost-effective renewable energy generation in Florida and we appreciate this opportunity to participate in the process.

First, Gulf continues to believe that ultimately the percentage RPS requirement must be based on a valid resource

assessment using realistic assumptions for both future renewable generation potential and costs here in Florida.

Otherwise, goals will not be attainable, costs to customers will be excessive and an RPS will not succeed.

when setting achievable goals, Gulf encourages all stakeholders to carefully consider the real potential for renewables in the state as well as the higher cost of those generation sources. In addition, if we do as was discussed earlier, we set a more aggressive goal timetable for reaching the 20 percent goal that is already in the rule, we would suggest that the utilities be given additional flexibility to meet these aggressive goals by removing some of the interim steps.

Second, Gulf supports the inclusion of the renewable energy cost recovery clause in the draft rule. The Florida Legislature recognized the importance of such a clause when it provided specific authority for cost recovery in Section 366.92.

In addition, Gulf agrees with staff that a renewable energy cost recovery clause, one, facilitates tracking the RPS compliance costs; two, would provide a form for addressing RPS related issues; and, three, would facilitate the development of utility self-built renewable projects.

Gulf does however have one suggestion in that rule as drafted. It's in Section 7(a)(1). There's, it's unclear as to

whether or not the separately set ROE would be separate to each project or to the RECR clause overall. Our suggestion here is to just follow the model that staff seemed to follow for the rest of the clause and follow what is done in the ECRC, which would be to take the utility's last authorized return rather than going through that process for each project.

My next comment relates to the 25 percent solar and wind carve-out or set-aside. We fully agree with AARP and the Office of Public Counsel. We believe that a carve-out or a set-aside, regardless of the level, would be an impediment to the most, or could be an impediment to the most cost-effective mix of renewables. The more of the goal that is left open to competition, we think the better the chances are that we'll have a cost-effective mix of renewable resources.

Fourth, moving to the penalty mechanism that's already in the draft rule, Gulf believes that any penalty mechanism incorporated into the rule should be symmetrical with an opportunity for both a reward and a penalty. Gulf suggests that this can be accomplished fairly easily by modifying staff's concept of 50 points, basis points penalty and splitting it into a 25 point potential reward or 25 point potential penalty.

The Commission actually has experience with this type of an approach with a symmetrical approach. If we look to the GPIF or the generation performance incentive factor in the fuel

docket, it is pretty much the same way. It's a 25 basis point reward or penalty. And this, excuse me, this penalty or reward system has proven to be fairly effective in that clause.

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Finally, Gulf believes it is of critical importance to the interests of its customers that the rule contain a mechanism to control costs. I'll not go into the discussion that we've heard already from Public Counsel and AARP, but we fully support their position on the 1 percent cost cap.

CHAIRMAN CARTER: Commissioner Argenziano.

commissioner argenziano: Thank you. I guess I should have asked this of everybody, and I'm going to, going to do that with everybody coming up. What is -- you opened up with saying that you support the most cost-effective renewables. What in Gulf's opinion now are the most cost-effective renewables?

MR. BADDERS: Well, right now I don't know that we all have the best information to know what is the most cost-effective. I know we're waiting to see more information from the Navigant study. We really need to probably wait and see what develops to see where solar, where wind, where biomass and some of these others fall out as far as costs. What do you get for each dollar that you spend, how many megawatt hours do you get with your investment?

COMMISSIONER ARGENZIANO: So if -- and they're not at this point, I guess, but if the solar and wind were the most

cost-effective five years down the road, so then you would support those or other things like that?

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MR. BADDERS: Sure. Right. I believe, I mean, as the rule is set up, I mean, we'd have to put out an RFP and you test the market, you see where everything kind of falls out as far as costs. And clearly if solar or wind or any other technology came in as the most cost-effective, that would be what we would try to pursue.

COMMISSIONER ARGENZIANO: But as of right now Gulf is not recommending any particular cost-effective renewable or do you have any in mind?

MR. BADDERS: I mean, really I think you have to look at it more on a project basis. I mean, in some instances you may find that a particular wind or solar project may end up being from a cost basis better than maybe a biomass or something else. I think you need to be able to look at it --

COMMISSIONER ARGENZIANO: And --

MR. BADDERS: I'm sorry.

COMMISSIONER ARGENZIANO: No. Go ahead. I'm sorry.

MR. BADDERS: I think you have to look at it more on a project basis rather than a technology basis when you really get down and do the analysis.

COMMISSIONER ARGENZIANO: Okay. And just one other question. With regard to the penalty and reward, as you said making it symmetrical, wouldn't the RECs be considered a

reward?

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MR. BADDERS: Well, it depends. If you're purchasing the RECs, I mean, you're, basically you're paying for it. So I'm not really sure that would be the reward. Now if you do a self-build, those would go through the clause also. So I don't really think there's a, I guess, incentive or reward to the utility for that. That goes back to the customer.

COMMISSIONER ARGENZIANO: Okay. So then you're saying that it is asymmetrical now as in the, as in the current recommendation as far as just a penalty and not a reward?

MR. BADDERS: Yes, Commissioner. Currently it's drafted as a 50 point penalty potential up to. And I'm just trying to suggest that we have experience in another docket, a docket that has a lot of costs in it obviously, the fuel docket, and it uses a 25 and a 25 penalty and reward system and it seems to work fairly well. So we're just asking maybe to, to look at that, maybe include that rather than just a penalty. I think in the past the Commissioners looked at a penalty or an incentive as both a reward or a penalty. I think you get more with that than just a penalty.

COMMISSIONER ARGENZIANO: Okay. And, Mr. Chairman, at the appropriate time if staff can address that particular part, I'd appreciate it.

CHAIRMAN CARTER: Staff is ready.

COMMISSIONER ARGENZIANO: Okay. Go for it, Bob.

MR. TRAPP: Ready any time you are.

COMMISSIONER ARGENZIANO: Thank you. Yes.

CHAIRMAN CARTER: Thank you, Mr. Badders.

MR. TRAPP: Let me just say that the basis for staff's recommendation for the separate authorization for return was to reflect some of the unique aspects of this particular rulemaking proposal.

First, I would note that your question was I think right on point with respect to the incentive associated with RECs. But if you think of it in terms of the utility's self-build option is going to most likely reflect a cost higher than what the utility would otherwise pay for generation in order to attain renewable attributes, the company will then earn an extra component of return on that extra amount that they had to spend to get those attributes. That to me is an incentive.

The 25/25 split is something certainly that staff is willing to look at, the Commission perhaps should look at. But I would like to mention that the program that that is tied to, the generating performance incentive factor, the 25 basis points is used as a cap, but the measure on how much reward or penalty you get is based on actual fuel savings, savings, not increased cost. So there's a little bit of a disconnect with respect to the philosophy used in the GPIF and the philosophy being used here.

was being proposed because it does consolidate all the renewable costs in one area where the Commission can review them in one place and take into consideration the special unique attributes associated with renewable power, and also the fact that it's being recovered through a clause and the Commission in my opinion should take into account the reduced risk associated with recovering those dollars and setting that return on equity. And those are the points that staff would make.

COMMISSIONER ARGENZIANO: I appreciate that. Thank you.

CHAIRMAN CARTER: Thank you.

And from TECO, Mr. Bill Ashburn.

MR. ASHBURN: Thank you, Mr. Chairman and Commissioners. Unlike Mr. McGlothlin, I am used to sitting over here.

Tampa Electric commends the Florida Public Service Commission staff for its efforts to comply with the renewable portfolio standard provisions included in HB 7135 and appreciates this opportunity to speak at today's Agenda Conference on this important issue.

The workshops held by the PSC and the RPS strawman developed by the staff in this matter have been helpful and the proposed rule presents a significant and thoughtful approach in

developing the ultimate program. Tampa Electric believes the PSC must actively pursue the RPS through strategies that recognize the interrelated nature of environmental, economic and energy policy. Effective renewable energy policy can only be achieved if each of these priorities are properly balanced.

Tampa Electric appreciates and supports the

Legislature's and the Commission's efforts to encourage

renewable energy, and we look forward to working within an RPS

that recognizes the full potential of Florida renewable energy

resources to be identified by the Navigant study.

We have two specific issues we wanted to bring up today. Tampa, Tampa Electric believes the evaluation of the availability and the cost of renewable energy is inextricably linked with the affordability provisions in HB 7135, and that's been brought up today, and is a vital part of balancing the Legislature's clearly expressed objectives of promoting the development of renewable energy while minimizing the cost of power to the utility and its customers.

The Navigant study is essential in ensuring the RPS targets are technically and economically achievable. It's imperative that the study is completed and vetted before the consideration of the final draft rule to be sent to the Legislature.

Another element we wanted to bring up in the draft rule is the renewable energy credit market structure is an

essential element of the development of the RPS and it must be developed in a thoughtful and deliberate manner. Tampa

Electric is a little concerned that there's not adequate time provided for in the draft rule to issue and conduct an RFP, select a winning proposal, establish an organization or contract with an independent corporation for the development, administration and maintenance of the REC market, particularly given the need for involvement of all the affected persons, and there's a lot of them as you can see here, in such a process. So we're a little concerned about the timing that's in the, in the draft rule. With that, I'd be happy to answer any questions.

CHAIRMAN CARTER: Commissioner Argenziano.

COMMISSIONER ARGENZIANO: Thank you. Same question. Has TECO looked at what they perceive in the future to get where the state is obviously heading what could be cost-effective and, as you mentioned that, you mentioned 7135 and the costs being minimal or being cost-effective to the utility as well as the customer?

Have you looked at anything as you -- is there anything that the company can share with this Commission as far as numbers or definites or anything that looks possible as far as the most cost-effective approach to moving where we need to move?

MR. ASHBURN: We certainly have been involved in

testing the market. We've had an RFP out and we're talking to people who are making us offers to sell renewable energy.

We've been looking ourselves at what kind of development to make. We look forward to the Navigant study, as was mentioned by Gulf, as being an important element of that.

I think it's important to understand too that some of these renewable suppliers are a little bit geographically dependent as well. An example would be Mr. McWhirter was talking about, say, some of the interruptible customers, the phosphate companies who are included in their renewable group, they're located in a specific area. So we have a lot of experience with them in producing power for us and so that certainly is a very cost-effective option in our area. Whereas the -- we're on the Gulf Coast. There may not be so much tidal action or current action for oceans. So, I mean, it just depends where you are on what kind of geography and what kind of renewables may be available. We are not necessarily in an area where there's a lot of forestry, so it may not be a place where we can get a lot of woody biomass. It may be better for crops. I don't know.

But the point is the study is looking at the state as a whole and each utility is looking at its own region, its own footprint as a whole, and each footprint of the utilities is slightly different. So we may have different answers to that question depending on development.

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COMMISSIONER ARGENZIANO: It seems, Mr. Chairman, that the answers are not, not there right now in many instances. But in 7135 there's kind of a couple of things going on. There is an emphasis on reducing emissions, which the Governor and I think many people agree with must take place. But there's also -- when you talk biomass and other things, even though some people argue that biomass is emission neutral or whatever, and it could be, but when it comes to the reducing emissions -- and I guess I'm trying to get from some of the companies, I'm trying to get some of the areas you might be going into that reach the -- the heavier weight on 7135 to me was reducing emissions, and cost, of course, is in there, and some of the others, other renewables may not be so aggressive in reducing emissions. Are you looking into those renewables also with the study being done that are, how do you say it, that are, you know, looking into the emissions as well?

MR. ASHBURN: Certainly. Certainly. And I think the other element of 7135 that's a big element to come is the cap-and-trade and so forth that we're all facing. So we're looking not only at developing new plant that would have less emissions, we're also looking at our existing plant and how we can, what can we do with that plant to reduce the amount of emissions coming out. Because from the cap-and-trade standpoint whether it -- it's just pure emissions is what's going to be paid for through some sort of cap-and-trade regime.

So we're also looking at our existing plants and how much emissions they're doing and what we can do to reduce those.

COMMISSIONER ARGENZIANO: Thank you.

CHAIRMAN CARTER: Thank you. Thank you. Thank you.

Just as Michelle gets ready to go -- Michelle, hang on one
second -- but as Michelle is getting ready, let me kind of give
you the batting order. Following Michelle would be Suzanne
Brownless, following Suzanne would be Joe Treschler, then Sean
Stafford, then Jon Moyle, then Eric Draper, and batting cleanup
will be Leon Jacobs. And I'll kind of give you a little
reminder just in case you missed the order.

Michelle, how are you?

MS. HERSHEL: I'm fine. How are you?

CHAIRMAN CARTER: You're recognized.

MS. HERSHEL: Thank you, Mr. Chairman, Commissioners. I'm Michelle Hershel. I'm with the Florida Electric Cooperatives Association. And I've just got a minor suggestion on proposed Rule 25-17.420.

As you know, many of our distribution cooperatives are members and get power from their G&T cooperative, and I believe it's the same situation for the municipals and FMPA. And we thought that it would be better served to have our G&T provide the Commission with a report on the information since it's readily available to the G&T and not to the distribution co-ops. We would ask for that, that change be made to the

proposed rule.

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CHAIRMAN CARTER: Mr. Trapp.

MR. TRAPP: I, I would really have to defer to our legal people to look at our jurisdiction over the G&Ts relative to our jurisdiction over the individual systems and make sure that there was enough grab there.

CHAIRMAN CARTER: Okay.

MR. TRAPP: We've had a similar problem with the Ten-Year Site Plans from different people and different authorities that we have. And we don't have jurisdiction over the Florida Reliability Coordinating Council as such but their members we do have jurisdiction over, and we have cooperated to get an aggregate for the State of Florida from FRCC by requiring it from the individual members. And I think something like that could be probably worked out, but we'd be happy to work, work that problem out.

CHAIRMAN CARTER: Okay. Michelle, maybe you and our friends in the co-op association can assist us as we ask them if they would, you know, supply staff with that necessary information. Commissioners? Cindy, you had a comment? You're recognized.

MR. MILLER: And we'll be glad to take a look at that. The statute, I think, refers to each municipal electric utility, so we'll, we'll need to take a look and see if that will fit within it.

1 MS. HERSHEL: Okay.

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know, Michelle, that we appreciate the cooperation and the assistance with the cooperative associations, and we want as much as possible to continue that, foster that dialogue and get whatever information that we can to make this -- I think Commissioner Argenziano kind of set the tone is that we, and Commissioner Edgar, is that we, one, we're open for business for renewables, and but we're doing it in a, in a responsible and economical and efficient manner. So we thank you for that and we ask that you will continue to be with us in the process. So as those that we may not have necessarily jurisdictional authority over, but your colleagues could, certainly could provide that information to us. Thank you.

MS. HERSHEL: Thank you, Mr. Chairman.

CHAIRMAN CARTER: All right.

Ms. Brownless.

MS. BROWNLESS: Thank you. First I want to thank the Commission for the opportunity for the Florida Solar Coalition to speak with you, and we are very appreciative of the staff's efforts in this area. This is by no means a simple equation.

I want to start out by saying first of all that we believe the RPS goals proposed in the staff's new rule are insufficient. Meeting a 5 percent goal by 2017 when the staff's own report indicates that 3.6 percent of retail sales

are currently being provided by renewable energy appears to be no goal at all, to be honest with you. So we are strongly supportive of a 20 percent by 2020 goal. We would like to urge that a goal be set by 2010, which was the staff's original strawman proposal.

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We have submitted a study by Crossborder Energy to the PSC, and that's in the record available to the PSC, which indicates that our goal of 20 percent by 2020 would result in a 3.4 percent increase in IOU revenues using a 15-year renewable energy contract. And basically our goals would be 2010, 2 percent, 2015, 10 percent and 2020, 20 percent. And as I say, given the fact that already 3.6 percent of the renewable energy is out there, we believe those to be doable and efficient and cost-effective manageable goals.

CHAIRMAN CARTER: Excuse me, Ms. Brownless. This won't be taken off your time. Could you back up for a second? You gave those percentages. 2 percent by -- can you give me those again, please?

MS. BROWNLESS: 2 percent by 2010.

CHAIRMAN CARTER: Okay.

MS. BROWNLESS: Which obviously would be met if there's 3.6 percent currently.

CHAIRMAN CARTER: Okay.

MS. BROWNLESS: 2015, 10 percent and 2020, 20 percent. However, if the Commission takes the position that

no goal should be set until 2017, then we believe it's inherent upon the Commission in order to encourage third party renewable generation, which is part and parcel of what this rule is also supposed to be doing, to set a price for RECs, a cents per kilowatt hour price. I know Mr. Twomey indicated to you or I believe Mr. McWhirter that FP&L's price was 83 cents a kilowatt hour. What we're talking about is something substantially less than that that would be sufficient incentive for third parties to develop renewables. And we would provide the exact cents per kilowatt hour charge in our comments on December 3rd at the rule hearing. But I can tell you it would be somewhere in the neighborhood of 22 cents per kWh, so it's significantly less than FP&L's number.

We think it important that third party construction of renewables be encouraged as well as investor-owned utilities. And as the staff's proposed rule is now with the, with the separate incentive clause in which an IOU can put its cost of construction, fixed O&M, and I'm not sure about variable O&M but I believe so, and the price of the REC passing through the clause, that's an, that's an automatic incentive because that's automatic cost recovery.

I have been doing this long enough to when I started the only thing that came through a cost recovery clause was fuel, and that was a direct result of the Arab oil embargo crisis in 1974. As Mr. McWhirter pointed out, now 70 percent

of a utility's revenues are being generated through cost recovery clauses. You are moving more and more away from the rate base cost of recovery model for regulation. I don't necessarily perceive that as a good thing because you're moving more and more away from any opportunity at one point in time to look at the entire picture for an investor-owned utility. So I think that is a bad thing.

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And what I would suggest is that you do this, is that for investor-owned utilities you rate base their renewable projects, they be treated like any other project, and that you recover the cost as originally proposed by staff of the RECs generated by that IOU project through a cost recovery clause. That limits the scope of the cost recovery clause and it encourages the development of third party renewable sources. Because what you're seeking is a balance between IOU constructed facilities and third party constructed facilities. If you don't have the third party constructed facilities, I do not think you appropriately encourage a green industry in Florida. You don't appropriately incent the small businesspeople who are out there now building solar hot water heaters, pool applications, the types of solar applications that are the low hanging fruit, the easiest to implement and in fact are being implemented now. So you want an incentive for the larger photovoltaic projects.

We do agree with the 25 percent set-aside and the

75 percent money cap because that recognizes the fact that there are, there is an increased price for certain technologies in the market today. We believe that that price will come down. I think that's been borne out if you look at what's happened in Germany, if you look at what's happened in Europe. And if you set a price for the REC contract, then, of course, the REC contract price should decrease over time as well because you're starting a market and the incentive should decrease.

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I do want to take a minute to say that the staff has indicated and several people have commented that you need the Navigant study. We absolutely agree with that. We only have one problem with the Navigant study, and for us it's a very significant issue. While your staff has included solar hot water in, in its definition of the technologies available for the RPS goal, Navigant has excluded all of those technologies except greater than 2 megawatts and also except greater than those that can be mounted on a roof.

Now in thinking about who that would be that would be included in the Navigant study, other than Disney World or something where you have a large, a large facility that's using that, a significant amount of electricity, there's not very many people that are going to use more than 2 megawatts of solar thermal capacity. You are excluding everybody in the residential area. And I appreciate that there is some thought

that they can be picked up in the demand-side management programs in the conservation goal docket that's coming before you next fall, but the point is that they should be picked up here as well. So I would request respectfully that the Navigant folks be instructed to include them in their study.

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Finally, I want to follow up briefly -- CHAIRMAN CARTER: Ever so briefly.

MS. BROWNLESS: Yes, sir -- on the comments made by Commissioner Argenziano, which I greatly appreciate, as to exactly the unique nature of what you're doing here. This is a draft rule. This is not the normal course of events where legislative authority is delegated to an agency. You are also the only legislative agency in the State of Florida. You share a distinctly unique posture. So with respect to Commissioner Argenziano, I believe in this instance what you have been asked to do is apply your uniquely specific legislative mandate. What did the Legislature create you for? The Legislature originally created you to give thought to the policies, thought to the policies. So I don't think it is inappropriate for you to, to pursue Commissioner Argenziano's ideas with regard to a range of options. I think that is exactly appropriate. Because in, in part what they've done is asked you for your opinion as to what the policy should be based upon the data and the expertise that you have. And so I would urge you to give them options not that you think can pass the next legislative

session but options that you think should pass the next legislative session. Thank you.

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CHAIRMAN CARTER: Yield for a moment, Ms. Brownless.

Commissioner Argenziano.

COMMISSIONER ARGENZIANO: Thank you, Mr. Chair.

A couple of things. The question about why you think we were created is a far lengthier answer that I'll probably give you at another time. And as far as us being a legislative -- we are a creature of the Legislature. We work for the Legislature. They are the policymakers, the only policymakers. They do not want us to make policy. Trust me. I was a legislator and I can tell you that is a fact. So what they send down to us -- and one of the things you object to I quess was the moving more and more away from the rate base recovery. That's the legislative policy that's been mandated to the Public Service Commission. So it's not our decision. And when we give them our opinion, they say that's nice and we want to know your opinions about things we mandate, but don't create policy. So I want you to make no mistake that while we can give them opinions on what they ask us to do, they are the policymakers. So we have our hands tied even if we personally agree that, you know, something should be a different way, then we have to become legislators in order to get that policy moved forward.

And I understand that, you know, within our capacity

we can give opinions and they're asking for that in the rule, this is what we want to do. But also in the legislative process for rulemaking there are criteria that we have to meet, and the criteria is that we develop a product that is sufficiently developed, I guess, to then go on and move to ratification. Now if you don't get specifics from the Legislature, here's a general idea of what we want to do but we don't have specifics to it, then we can't develop, to me, sufficiently develop a rule to send to them without saying, okay, we need more specifics from you. You know, when you say give weight to solar or renewables and so on, are you including also the rates and the costs and so on to that?

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So part of -- and I guess the other part of the question that I do have for you is in, in your support of the 25 percent carve-out, do you take into consideration the rates?

MS. BROWNLESS: Yes, ma'am.

COMMISSIONER ARGENZIANO: And I heard you say that they come down eventually, but --

MS. BROWNLESS: We did provide a study to you, the Crossborder Energy study, that in fact takes our proposed RPS goals and tells you exactly what the rate impact is for those goals.

COMMISSIONER ARGENZIANO: I know. Do you consider those the most cost-effective? Because that's what Senators and legislators are asking me.

MS. BROWNLESS: I do consider those to be cost-effective.

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COMMISSIONER ARGENZIANO: Not asking me, asking us to do as a, as a body.

MS. BROWNLESS: For exactly the reason that you gave with regard to the example of we started out this process in the '70s. And what did we do with it? Absolutely nothing.

And we didn't do anything with it because the emergency was over, the price of gas and oil derivatives and natural gas fell and everybody said, oh, great.

COMMISSIONER ARGENZIANO: Right. And I said that at the beginning it was great, and I blame our leaders at that time for not moving -- wishy-washy is the word I used. So we have things on the table now that we're looking at, but we're also instructed and we, as the Public Service Commission, have to look at rates.

MS. BROWNLESS: And I think you should look at rates. But my point is this, I think it's clear that everybody understands that is this going to cost more than traditional generation? Yes. Just like nuclear power initially is, the capital cost of nuclear power is a significant issue. That's why the investor-owned utilities came in here and said, oh, by the way, this is such a significant issue that we have to have a separate cost recovery clause for it.

This isn't going to be inexpensive, but the broader

policy goal can only be met by having more renewable energy.

And based upon historical factors it is clear that the investor-owned utilities in the past left to their own devices have not pursued that for a raft of reasons that we could discuss at length otherwise.

COMMISSIONER ARGENZIANO: Right. And I'm not arguing that and there are, we need to have incentives and we were told there needs to be incentives to move towards renewables and I don't think you're hearing an argument there.

Just one other question. You referred to Germany and I tried to look at Germany as an example about their costs coming down. I've seen the opposite. Can you help me, maybe either provide something to Larry or my staff?

MS. BROWNLESS: Sure.

COMMISSIONER ARGENZIANO: Because I've looked at Germany and I found that I think -- Larry, am I right -- 55 cents per kilowatt? And that's, that's kind of a shock.

MS. BROWNLESS: It's 55 cents per kilowatt in Germany, a state that has much less solar capacity than here. But if you look at the entire legislative package for Germany, and I think we have provided an English translation of that to your staff, then what you see is that the cents per kilowatt has rapidly decreased, it's on the decline. It is not on the ascendancy. And so as the incentives have kicked in, more players, more market competition has come in and the technology

has developed, the price has gone down. 1 2 COMMISSIONER ARGENZIANO: Okay. You have sent that 3 to my staff already? MS. BROWNLESS: I have sent that to someone on the 4 5 PSC staff. But, Commissioner, I'll make sure you get it. 6 COMMISSIONER ARGENZIANO: Thank you. I appreciate 7 Thank you, Mr. Chair. it. 8 CHAIRMAN CARTER: Thank you so kindly. Thank you, 9 Ms. Brownless. 10 COMMISSIONER SKOP: Mr. Chair. 11 CHAIRMAN CARTER: One second. Commissioner Skop. 12 13 COMMISSIONER SKOP: Thank you, Mr. Chairman. 14 Good morning, Ms. Brownless. 15 MS. BROWNLESS: Yes, sir. 16 COMMISSIONER SKOP: I'd be also interested in seeing 17 that study --18 MS. BROWNLESS: Sure. COMMISSIONER SKOP: -- in detail. I mean, I'm 19 20 familiar with renewables, familiar with the technology, 21 familiar somewhat with what's going on in Germany and the UK 22 and Europe. 23 I guess my concern is, is the assertion that the costs are coming down. I haven't seen that. I've recently 24 25 seen some data from the largest array in Florida that causes me to, to doubt some of the, the values that are, that are being offered in terms of the cost-effectiveness. And so I'd be interested in seeing any data that you have that would independently substantiate that position. Because, again, I've done some additional analysis which I'll get to later in the discussion today, but I just can't -- for whatever reason, the economics are, are what they are and I'm just not seeing that, that decreasing cost scale. I'm seeing a very significantly expensive cost driver for solar technologies. And I wish it was different, but, again, I can't reasonably convince myself in light of what I've seen that the costs are not substantial.

MS. BROWNLESS: I think it depends on the study you look at. Obviously there's different types of solar technology; there's thermal, photovoltaic, I mean, there's concentrating, there's a whole, a whole range.

What we are advocating is the structure that's been proposed here because of the legislative mandate, and I appreciate that, is that there would be a renewable energy market, a REC market that was a competitive free market system. We don't have a problem with that. But what we are saying is that as an alternative to that one can have a set price that decreases over time with the original price recovering a reasonable return. It is the equivalent, if you will, of allowing the investor-owned utilities to put their construction costs, their O&M costs into an accelerated cost recovery

clause. What we are looking for is parity between investor-owned utility self-build options and third party options.

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that. Again, I'm familiar with New Jersey and California. But New Jersey, the REC rate or the maximum cap for REC rate is approximately \$711 per megawatt hour, that's one REC, and at least that's based on me speaking directly to the coordinator in New Jersey. So, again, in relation to, again, things I've seen recently, the costs seem to be what they are. I mean, I wish I could do the "I Dream of Jeannie" and nod my head and make the costs go down, and maybe that will happen in time with advances in technology. But, you know, I just would be interested in seeing the additional studies that you'd like to proffer. I think it would be informative to making a well-reasoned decision on my part.

But I do see a substantial cost driver for particularly the, the solar technologies including solar thermal and solar PV. I'm not against them, but, I mean, I have to be equally cognizant of the cost as well as the net capacity factors. So, again, I think the data that you can share with me would be very helpful.

MS. BROWNLESS: Thank you so much.

CHAIRMAN CARTER: Commissioner Argenziano.

COMMISSIONER ARGENZIANO: Thank you. And just one

more thing. If you have any information, I've got some information, and anybody out there who may have the information. Because as, as solar could be, could be more expensive right now, her point is well taken. The cost of building a nuclear plant has risen quite a bit also. But there are, as I mentioned earlier, we're right on the cusp of a lot of, of breakthroughs in solar with greater efficiencies that are not here yet but they're right there. So at the same time you can't close the door because they could wind up being an incredible asset to all of us in the future and I don't want to see us closing the door. And if you close that door even halfway, you may shut down that incentive to move forward like we could have if we started in '72, and I don't want to do that either.

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But there is something, and you may be able to help me or someone else may, I need more information on the, on the breakthroughs with some of those new solar panels as far as gathering more light from the sun. And I think at one area, one lab came through a 47.7 percent efficiency rate. And I know that sounds very high but I know I read it and saw it somewhere. And if you have any information, I'd love to have that.

MS. BROWNLESS: Thank you, ma'am.

COMMISSIONER ARGENZIANO: Thank you.

CHAIRMAN CARTER: Commissioner Skop.

COMMISSIONER SKOP: Thank you, Mr. Chair. Commissioner Argenziano's point, which I think is a, is a very good one, I think that there are some emerging technologies which would significantly, if proven commercially viable, would significantly reduce the deployment costs of solar. One of those is a very thin film solar which actually, I think there's a, there's a company, the name eludes me, but I believe it's on the west coast and they're actually using something analogous to a laser-jet process to deposit the film. And it's almost like running something through a printing press and you get a solar panel at the end. So certainly if that technology proves viable, that would be one of those quantum leaps where you would expect to see huge economies of scale in cost reductions. And hopefully those with the proper incentives and support, again, being cognizant of costs, will nurture and develop those technologies in a short time frame.

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CHAIRMAN CARTER: Of course I run the risk of saying something I probably shouldn't say, but on a visit to one of our military installations I saw some of the emerging technologies as Commissioner Skop is mentioning in terms of solar because a lot of times when they go to different places they have to take everything with them, and it would be interesting to see if some of that is moved over to the civilian side of the house in terms of R&D and applications and all. And that's an exciting time for us, but that's all I'll

say about that.

Thank you so kindly, Ms. Brownless.

MS. BROWNLESS: Thank you.

CHAIRMAN CARTER: Joe Treschler.

MR. TRESCHLER: Good afternoon, Commissioners. My name is Joe Treschler. I work for Covanta Energy and have represented my company in the Tampa Bay area for over 20 years, and I appreciate your time today and the ability to comment.

Just taking a moment just to remind you who Covanta

Energy is and what we do, we operate energy from waste

facilities, facilities that take what's left over after a

community's recycling program and take that material, use it as

fuel, generate renewable energy in the form of steam or

electricity. We operate four of Florida's 11 energy from waste

facilities.

Basically I hope you take three things away from my comments today: That energy from waste can and should significantly contribute to Florida's renewable energy going forward. That the PSC rule as it's written right now, we don't see that it supports renewable energy generation. In fact, we think it inhibits it dramatically. And, three, a restructuring of the avoided cost calculations would be a significant step in creating a true competitive and job creating market for renewable energies.

Right now in Florida the 11 facilities that are in

operation generate about 517 megawatts, and what we reported to staff as potential in the future could be as much as an additional 1,600 more. But the problem comes down to is do we really have a competitive marketplace for independent power production under the rule as proposed? And I was glad to see that Commissioner Argenziano was open to the idea of rethinking or relooking at the rule and providing alternatives. Because right now we see that the rule is leaving what we see as the low hanging fruit, the biomass, not just the waste but the biomass, on the tree. Okay? There's no incentive for independent power producers like ourselves, Florida Crystal in the counties we serve. And it places, the rule right now places the control and responsibility and the incentives that exist in the hands of the investor-owned utilities.

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Staff in the workshops has given us the impression that avoided cost concept will remain the law of the land. This has stopped independent power development of renewable energy in the state since the early '90s, except for the recent expansions in Lee County and Hillsborough County of their energy from waste facilities. And those were made basically purely on environmental reasons, not because they were going to get fair payment for their electricity.

I'd like just to discuss the avoided cost issue problem as we see it, which we thought went away in the legislation last year but we don't think it has. The challenge

is that under the current rules the avoided cost rate offered for new capacity is very low. Despite what everybody tells you, currently in negotiations it's about six to seven cents per kilowatt hour. That does not get a project done or move it forward.

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Prior to 1991, the last time our industry was able to create a new greenfield energy from waste facility, the calculation of avoided cost took into consideration the capital investment the project owner or developer was making in that baseload type facility and included the capacity payment that reflected that investment for a baseload type facility. After '91 the calculation was changed allowing the investor-owned utilities to consider the capital investment the utility would make in a peaking power unit that had a much lower capital cost and a much higher fuel cost. Hence, the capacity payment offered to communities for their baseload type facility became much less and they were allowed to go away with paying an energy and a low capacity payment. That leaves the fuel risk. If a new renewable, renewable energy project doesn't go forward and that option is a gas turbine or such gets built, which is low in capital (phonetic), leaves the fuel risk in the consumer's hand because it's a pass-through. So it's not helping the situation.

Communities in fact like Hillsborough County and the City of Tampa, two governments that committed to renewable

energy early on, are currently negotiating renewal of their existing power purchase agreements from the 1980s. And unbelievably they are being offered less for the renewable energy going forward than they're currently receiving under their old contracts that expire in 2011.

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Here's why it's important to all of us, Covanta and all and everyone else, in an industry, in our industry we think competition is good. We compete though against not only other energy from waste companies that work for communities, we compete with landfills, the absolutely worst and least desirable way to handle what's left after a community's recycling program. And even though our government clients retain 90 percent of the electrical revenues generated by the facilities we operate, under the avoided cost rules it's still cheaper to bury garbage than to build a renewable energy facility because of what they're being offered in exchange for the electricity. It's a very complicated, you know, complex calculation. The staff constantly asks for things like heat rate and other things, but that's really not the issue when you're building an energy from waste facility. How do you offset and balance the costs of that operation and what electrical revenue is necessary to make that balance and be cost competitive with the landfill, which is your true competition in this area?

We thought the 2008 legislation specifically

addressed not using avoided costs as the main criteria, but from what we've seen staff seems to see it as the alternative of not using avoided cost as the choice of last resort. And until that changes we don't believe that the contribution that could be made by energy from waste or other biomass facilities will be truly recognized, and that is the true low hanging fruit that could be brought online in a very short period of time to help stem the gap. I thank you.

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CHAIRMAN CARTER: Thank you so kindly.

All righty. Our next person will be -- in this order we'll have Sean Stafford, Jon Moyle, Eric Draper and then Leon Jacobs.

MR. STAFFORD: Thank you, Mr. Chairman. I'm Sean Stafford. I represent Florida Crystals. Florida Crystals, as many of you know, owns and operates North America's largest biomass electric plant that sells to the grid. It's a 140-megawatt plant located at the Okeelanta facility. Florida Crystals is primarily a sugar company, but uses its left over waste or bagasse to generate this electricity. About 1 million dry tons a year of sugar bagasse are burned in the facility alongside one million dry tons of wood waste that comes from municipal solid waste authorities.

Florida Crystals has currently a, an application with the Palm Beach County, Palm Beach County Commission to expand, to expand its facility. But we do not believe that under the

current draft if it was adopted and became the law of the land that, that, we don't believe it's enough incentive for Crystals or other biomass producers to actually move forward, expand existing operations, or go into other parts of the state and create new renewable energy facilities.

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We believe there are a couple of problems with the, with the staff proposal. The targets are too timid. We agree with Governor Crist that we believe 20 percent can be achieved by 2020. Additionally, we believe the price caps, imposing a 2 percent price cap is, is too restrictive. Our general survey of the land of other states that have renewable portfolio standards, the 28 or so RPSs have on average about a 4 percent price cap. We believe 2 percent is just not enough room to move, especially when most of that price cap by a 3-to-1 ratio is geared towards Tier 1 technologies.

We believe, as the Commissioner of Agriculture indicated in a letter to you a few weeks ago, that biomass is Florida's renewable energy resource. Florida has a tremendous growing season. We have the best climate and soil in the country to grow these biomass energy crops. We believe that this number that the Commissioner of Agriculture recommended to you, which was that the state can produce somewhere around 92 million dry tons of biomass, is a reasonable number and it's achievable. We look forward to working with Navigant to, to see what, what their number is, what their recommendation is on

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Biomass, and to specifically address Commissioner Argenziano's point, we believe biomass is the most cost-effective way to generate renewable electricity in Florida. We believe it is cheaper than other, than other technologies. We believe it is going to provide baseload generation capacity, 24/7 renewable energy. We also believe that it is going to create an enormous amount of job growth in this state. Additionally, biomass -- and we were very pleased to see that staff recommended or agreed to referring to biomass as, as carbon neutral. Biomass is a carbon neutral process, the burning of a biomass plant. What you sequester when you grow your crop is the equivalent amount, is the equivalent amount of carbon that you burn when it is burned in the boiler. So you are not emitting any more than you grow. And when you have a sustainable farming operation, you are essentially creating what's called an open loop cycle, which is very, very environmentally friendly and provides, provides that carbon, that carbon neutrality that we know is going to contribute to, contribute to offsetting greenhouse gas emissions.

We have submitted on a number of occasions a study that was conducted by Tony Villamil with the Washington Economics Group back in 2003. This was back when fuel costs were far cheaper than they are today, traditional fuel generation costs. That study indicated that when you look at a

biomass plant, when you look at how you grow your fuel, the farmers that grow it, the farmers that harvest it, the folks who transport it and then the energy facility itself, 85 percent of the dollars that go into the cost of producing that energy stay in the local economy. That translates into a huge job growth boom. And we believe that, that, that economic model applies to other renewable technologies as well.

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Specifically in our study and then recently the Gainesville, I believe the Gainesville Regional Utility study there were specific quantifiable job numbers. Back in 2003 when gas prices were far lower than they are today, it was a conservative estimation that 11,000 jobs would be created in Florida by a 7 percent RPS by the year 2017. We believe -- and these jobs would be growers, farmers, land managers, harvesters, people who transport this fuel source, people who operate and maintain the plant. These are real jobs, they stay in Florida, they don't get, the funds don't get sent over to other states, they don't get sent to the northeast for coal, they don't get sent out west for natural gas, they stay right here in our community.

We believe energy diversity is critical. When you weigh the needs in 7135, and obviously part of the energy diversity argument that we're going to make coming from a biomass facility is that, is that 70 percent reliance on natural gas just isn't an appropriate way for Florida to move

forward with its energy policy. We believe biomass must play a large role in Florida. We do not support the carve-outs, the solar and wind carve-outs. We believe that there ought to be an open marketplace, that this open marketplace will eventually drive down costs. You will, you will, you will get to your most cost-effective options when you put all the technologies on the table and you then ask for the, the best bang for your buck. We believe biomass is that, is that option.

We are committed to working with the Commission. We appreciate the hard work that staff has put in this proposal. We're also committed to working with the Legislature moving forward, and thank you for your time and we'll answer any questions.

CHAIRMAN CARTER: Thank you. And hang on one second, Sean. Thank you.

Commissioner Argenziano.

COMMISSIONER ARGENZIANO: Thank you. Thanks, Sean.

There are, I guess, some, some in the community that disagree with the carbon neutral position that Agriculture has taken on, you know, growing and burning. And if you could provide, I guess, maybe more specifics on the emissions, it would be important. And also land, the amount of land that you would need. From what I have read and heard, that in order to meet a substantial amount of the electric or energy that we would need, you'd have to acquire a lot more land in the State of

Florida. And is that being considered as far as cost of land and is that correct, or what could you meet with the existing farmlands that we do have now?

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MR. STAFFORD: Thank you. And I will, excuse me, I'll answer your first question.

On carbon emissions we will provide you a specific study that, or specific white paper that we've developed on that issue. But if you are -- to be very specific, the only time we believe that you will, you provide a negative carbon contribution to, to the atmosphere is if you are in an unsustainable growing model; that is if you just cut and move on, cut and move on, cut and move on. What you're essentially doing is you're taking forestland or growing land that ordinarily would sequester carbon and you are, you are then stopping that process and you then have, of course, carbon leach into the atmosphere. A sustainable model where you have a dedicated land source and it is, your fuel is grown sustainably we believe is absolutely not only carbon neutral, but when you take into consideration that we also burn wood waste that would go to a landfill that would produce methane, it's actually a net, net reducer of carbon emission.

On the land costs there are several issues I guess that biomass companies are looking at today when looking at securing land. First, what are you going to grow and what are, you know, what's the best fuel source today to grow in Florida?

Is it an energy cane? Will an energy cane grow in North Florida? It will grow in North Florida, but when a cold snap comes it will die off. So you will have a time where you will have a, you know, cyclical crop on part of your land and you might have to use another crop on another part.

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The cost of land is certainly an issue. Most, we believe most biomass facilities are going to lease their land much the same way that you find pulp and paper mill operations lease their land today. They actually divested themselves of their land holdings years ago; I guess two or three years ago most of them did. Companies, biomass companies are likely going to go in and, and go to existing farmland or, or existing forestlands in all parts of the state and negotiate land leases.

COMMISSIONER ARGENZIANO: Can I ask you a question to that point?

CHAIRMAN CARTER: You're recognized.

COMMISSIONER ARGENZIANO: I'm a proponent of preserving farmland. I've been known for that in the Legislature. But what I found is that the farmer can't make a living today, and that's a shame because I hate to think of us having to be reliant on any other country than our own for our food source. But what I found is that in many cases even when the farmer does not really want to stop farming but it's, but it's more, I guess it's a better investment to him or if he

makes more money selling his land to development. So for leasing, do you think that's going to be sustainable? If, if someone has large tracts of land that could be used for biomass, wouldn't it, wouldn't it start disappearing to the development who, you know, would obviously have more money for the farmer or the family who owns the farm to sell off rather than lease land?

MR. STAFFORD: Well, we advocate -- you know, Florida Crystals owns all of its land, its 160,000 plus or minus acres in South Florida. And I don't -- no decision from what I understand has been made as to whether or not a lease is preferable to a purchase. It's an option to put on the table. But we would suggest to you that there is no better way to, to, to revive a farming community that may have been hit hard by trade issues, that may have been hit hard by CAFTA or NAFTA, than to actually allow them to on their land today make more money growing an energy crop.

And we may, we may not know today what the energy crop is going to be five years from now. I mean, IFUS, the University of Florida, many folks in this country and frankly around the world are developing new energy crops every day, new ways to grow, new ways to, new ways to maximize the cellulose that's grown in these, in these crops that can be used. We don't know what those are going to be. And we would suggest to you that, that there is no better way to, to create these jobs

and to revitalize these farming communities than to go down this path and incentivize biomass as a, as a clean renewable energy resource.

COMMISSIONER ARGENZIANO: And I'm not arguing that.

I guess what I'm looking for is what percentage of our energy needs do you think biomass can really realistically provide, given the land issue, you know, and the amount of crop it would take?

MR. STAFFORD: Well, we believe that when you look at the, and I think it's going to be real interesting to see

Navigant's study and the numbers they come up with, but the numbers that the Commissioner of Agriculture has said, around 92 million dry tons are going to, we believe -- and those are dry tons growing existing, existing crops that are today in Florida. This is without any advancement down the road and growing better crops that are more cold tolerant, crops that grow faster, crops that are maybe drought tolerant in some of the soils that don't get as much water. We believe biomass could provide at a, at a bare minimum 10 percent of Florida's renewable energy resources.

COMMISSIONER ARGENZIANO: Thank you.

CHAIRMAN CARTER: Thank you.

Next we'll have Jon Moyle.

MR. MOYLE: Thank you, Mr. Chairman. For the record, I'm Jon Moyle with the Anchors, Smith, Grimsley Law Firm, and

I'm appearing before the Commission today on behalf of Wheelabrator Technologies.

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Wheelabrator Technologies is a renewable energy producer that uses biomass to generate electricity specifically in the form of municipal solid waste.

Before I get to specific comments, and a number of folks have said this, I mean, this is, this is a very difficult issue that has been wrestled with quite some time, not only by staff but by the Commission. We've had workshops, I think, for darn near a couple of years on this issue. There's been a lot of work that's gone into it. And I think, you know, staff has worked hard and we'd like to publicly thank them for the efforts.

From Wheelabrator's perspective there's still some room for improvement, and I think you've heard comments today from a lot of people believing that there's room for improvements in certain areas. And at the end of my comments I want to put something on the table that I'd ask you to consider that hopefully may be viewed as a constructive option to consider.

But in going through and preparing my comments I read the staff recommendation and noted that the Florida Alliance for Renewable Energy, the Sunshine State Solar Power Group, Clean Energy Group, Florida Crystals, Covanta, Wheelabrator and FPL under certain circumstances all indicated that they could

support an alternative compliance payment. And an ACP as it's termed is something that Wheelabrator has put forward comments on. In addition to the entities that I just named, and the staff recommendation, I think, notes this, that of all of the states that have enacted a Renewable Portfolio Standard, over half of them have in place an ACP mechanism. And an ACP provides the ability for, for a utility to be compliant by making a payment if they don't achieve the percentage of the RPS that has been established for them. And I am told by folks that it really works as a, as a ceiling, a price cap, and there's been a lot of discussion about price caps and what not. But as we move forward, I would urge you to consider and maybe take another look at an, at an ACP.

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And I wanted to comment, staff has looked at and I think they have contacted other states, we think it's a good idea that should be further pursued, but staff has indicated that it has questions about whether it has the express legislative authority to move forward with an ACP. I would suggest that there is such express legislative authority.

366.92(3)(b), and it's referenced in the staff recommendation, the Legislature did give particular directives to you all, and one of the things they said is that the rule should provide for appropriate compliance measures. We would argue that express language saying the rule should provide for appropriate compliance measures is a strong indication that an ACP is

something that can be considered.

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Now staff is concerned about, well, if we put that in place, we're not sure we have the authority to spend the money. You know, given these times, I'm sure the Legislature can come back and figure out where to spend the money. I don't think that's going to be, be an issue. So we would encourage you to take another, another look at the ACP.

I wanted to comment briefly, there's been discussion about what the right numbers are in terms of the RPS. On Page 17 of your staff recommendation there is, I think, a pretty helpful column that shows the RPS draft rule as it's currently proposed and then the RPS strawman draft which was originally proposed.

And the first sentence on Page 17 says that, quote, the standards are based on an estimate of currently available renewable energy resources, which is currently 3.6 percent. So the way I'm reading this is if we currently have 3.6 percent renewable energy in the state and under the proposed rule in 2017, nine years from now, we're looking to get to 5 percent, that's a net increase of 1.4 percent over the next nine years, which I think is, is, I think we can do better than that. Staff suggested about doubling every eight years in other portions in the rule. And even if you double, double the 3.6 percent, you're at a 7 percent number in the year 2017.

Another comment on the year 2017, you know, we've

been at this for a couple of years. The Governor issued his executive order a couple of summers ago. The Legislature has looked at this issue. I think 2017 is a long time away.

Mr. Twomey and others got up and talked about the difficult economic situation and that you should be hesitant to pass on costs at this point in time. Well, if we're not going to do this until 2017, I sure hope that the economy has improved by then. I think the 2017 time frame is, is too long before you implement the RPS.

In talking to some others here, we kind of came up with an analogy of if Florida had a renewable general store, what would the sign in the window say? Would it say open? I'm not sure. Would it say closed? Florida Crystals might suggest that it would if they testified to you that they are not inclined to expand given the current scope of this rule. I'm not sure exactly what it, what it would say. I know that there hasn't been an aggressive development of renewable energy, but I sure hope it doesn't say we'll be back later and the later is nine years. So the point is I think, I think we can do better than deferring this decision out for, for nine years in terms of implementing the RPS.

The final point that I wanted to make because, you know, you talked about your grandmother, Chairman Carter. I mean, one of the things that I was told is, you know, you can, you can be critical but sometimes it is important to also offer

suggestions. And this is a difficult rule. In thinking about this -- I spent some time over in the Legislature. I know, Commissioner Argenziano, you know, you served over there as a Senator for a number of years and Chairman Carter was involved in the legislative process, as was Commissioner Edgar, sometimes when we have tough issues over there, the chairman of the committee will gather the affected interest groups and say we've got to get this done and they'll put them in a room and everybody sits around the table and they work to come up with a product that is acceptable to everybody. It's a give and take negotiated process. And I've seen it happen, been involved in those meetings. And sometimes it works, sometimes it doesn't. But I think it is a good concept that has been employed in the legislative halls for quite some time.

I've heard everybody that comes up today say we're supportive of renewable energy, we're supportive of renewable energy. I think everybody is supportive of renewable energy, but it's not getting done. And, you know, I think it's incumbent on the Commission, on us as participants in this process to figure out a way to get it done and to move it forward. You know, watching the debates, I think the energy policy is a significant issue in our country's future and we're trying to reduce the dependence on oil. There's still a lot of oil that's being used in our power plants. So, so I think, I think that this is an issue that's of great importance to the

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And what I was going to specifically refer you to is there is a process for a negotiated rulemaking that's in Section 120.54(2)(d)(1). And I'll quote, it says the agency should consider the use of negotiated rulemaking when complex rules are being drafted or strong opposition to the rules is anticipated. I think this rule qualifies on both counts. There's opposition and it's, and it's pretty complex. throw that out there as a, as a suggestion. You know, given the time frame, I know a draft report is due to the Legislature in February, but if we're not talking about implementing this until 2017 and what not, I would encourage you to consider whether there might be some process that could be pursued that would put the interested groups in a room and see if there could not be a negotiated rulemaking. The statute has more detail, I've talked with your counsel about it, and there's some obstacles to it. But I think if we roll up our sleeves and are creative, we might be able to, to look at this as an The worst-case scenario is it doesn't, doesn't result option. in a rule.

But Commissioner Argenziano was talking about another option, maybe we'll propose a second more aggressive draft.

You know, you might consider moving forward with some type of negotiated effort because if the Legislature has everybody and they say we've spent time and we've worked this out and there's

been give and take, I think they're more inclined to ratify and move forward with an RPS, which at the end of the day is important for our state. So, Mr. Chairman, I hope I didn't exceed my five minutes there, but thank you for the opportunity to comment.

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CHAIRMAN CARTER: You doubled, but that's okay.

Commissioner Argenziano.

COMMISSIONER ARGENZIANO: Well, first of all, I want to clarify I also served in the House, six years in the House, five and a half in the Senate. And I appreciate the suggestion because it's great. People come up all the time and never have any suggestions. So I do appreciate that.

However, I don't think that that's in my opinion where we need to go. I think you should, I think your emphasis should be with the legislative body to get everybody in a room and say here, here's where we need to go because there's not enough definition or specifics in, in some of the ways we need to move forward, and I think that's a policy issue. I don't think that should go to an outside negotiator. And what you read from, I believe, is from the typical agency, which is the executive branch agency. Not that there's a difference. You probably, we probably could still go out there and negotiate, but I don't think that's the problem. I think the problem needs to be more specific from the legislative branch, the policymakers. But I do appreciate the suggestion.

And I guess I needed to ask you a question. You mentioned 366.92(3)(b)? Are you sure? Because there is no (3)(b).

MR. MOYLE: I might have cited it wrong. I'll tell you in a sec.

COMMISSIONER ARGENZIANO: I was trying to go read it right away and --

MR. MOYLE: If you look at Page 3 of the staff recommendation.

COMMISSIONER ARGENZIANO: Okay. What is -- instead of me flipping channels, pages here, is it referring to a 366?

MR. MOYLE: Yeah. It says, "In addition to establishing RPS percentages and timing, Section 366.92 requires that the Commission's RPS rule include the following," and there are a number of bullet points set forth in the staff recommendation. And the second one down says, "Appropriate compliance measures and conditions under which noncompliance can be excused when the supply of renewable energy is not adequate or the cost of securing renewable energy is cost prohibitive."

So I read that to say it ought to have two things:

Conditions under which noncompliance can be excused and

appropriate compliance measures. And so the, you know, the

concern about not having express legislative authority to come

up with compliance measures I think is clearly addressed by

1 this language. 2 COMMISSIONER ARGENZIANO: If staff could address that. And it's not (3)(b) then. It's just, you're talking 3 about the whole section, 366.92 (1), (2), (3) and (4)? 4 5 MR. FUTRELL: Commissioner Argenziano, it's actually, 6 it's (3)(b)(2). There's a (2) is the quote that Mr. Moyle gave 7 from. COMMISSIONER ARGENZIANO: And we're talking about 8 366.92? Do you see a sub here? Am I in an old book? 9 MR. FUTRELL: Does that reflect the 2008 update? 10 COMMISSIONER ARGENZIANO: That's what it is then. 11 12 Okay. 13 MR. FUTRELL: It may be just two thousand -- that's 14 the 2007 statute book. 15 COMMISSIONER ARGENZIANO: Okay. We need to get new 16 statutes up here. 17 MR. FUTRELL: Yes, ma'am. 18 COMMISSIONER ARGENZIANO: Okay. I thought they would 19 automatically be the new statutes. Okay. That's what the 20 problem is. That's why you need to ask. 21 Okay. So it's (2)? 22 MR. FUTRELL: It's (3)(b)(2). 23 COMMISSIONER ARGENZIANO: Okay. 24 MR. FUTRELL: It starts with --COMMISSIONER ARGENZIANO: "Shall provide." 25

FLORIDA PUBLIC SERVICE COMMISSION

MR. FUTRELL: -- "Shall provide." 1 COMMISSIONER ARGENZIANO: Okay. That's what I 2 needed. Thank you. 3 CHAIRMAN CARTER: Commissioner Edgar. Oh, one 4 5 second. COMMISSIONER ARGENZIANO: Mr. Chairman, could we get 6 7 new statutes? CHAIRMAN CARTER: Staff was listening just before you 8 said it. They said we need to get the appropriate set of 9 10 statutes for the, for the bench. Thank you. Commissioner Edgar. 11 COMMISSIONER EDGAR: And I was, just to follow up on 12 that as well. Mr. Chairman, I expect that here in a little 13 while we'll have the opportunity for a little more discussion 14 15 back and forth. CHAIRMAN CARTER: We will. 16 COMMISSIONER EDGAR: I know I have a couple of points 17 in general but more specific on the rule that I would like to 18 ask staff to do some additional analysis and help us flesh out 19 a little more data gathering on. And one of them, and I'll 20 save the others, but one of them is this question of 21 alternative compliance measures. And I understand the 22 discussion, I think it's on Page 29 in the write-up, but some 23 of the concerns that staff has expressed about statutory 24

authority. But this larger question of alternative compliance

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measures and what may or may not fall into that is something that I'd like to ask for some additional work and discussion.

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And then one question, Jon. I think I heard you say in your earlier comments that in the staff proposed draft as of today that implementation would not be until 2017. And I'm assuming that you're referring to the fact that the first date that would be given as required is 5 percent by 2017, again recognizing a draft for discussion. But yet in my mind there are a number of things that would be happening prior to that, at least I'm hopeful a number of things would be happening prior to that that I would think of as implementation. In other words, the first mandatory deadline does not seem to me as the point of implementation. But if you could just elaborate on that.

MR. MOYLE: Sure. In thinking about this, I mean, the RECs are an important component of this, as I think has been recognized, that you have a REC market, and part of the legislative intent is to encourage economic development, let's, let's get Florida out front on renewable energy. One of the things that, that banks, I believe, are going to look to is, is how is the project going to be financed, and the REC payment is a key piece of that. What is the revenue stream associated with, with the REC? And it doesn't contemplate that RECs will be tradeable, if you will, to meet the compliance requirement until the year 2017. So in 2016, you know, people can have

renewable and what, renewable energy, but there's no requirement that requires anyone to show their RECs and that they've purchased these RECs and that here's where they are with the RECs. The whole REC market does not come into being until the year 2017. And I will, I will recognize that maybe 2010 is a little early because you're having to go out and get an independent administrator and conduct an RFP. I would think that there is a point in between 2010 and 2017 that would be probably the rational point to settle on with respect to establishing a REC market.

Because, again, I think part of what you're doing is sending a signal. You know, what does the sign on the front door of the renewable market say: Open, closed, be back later? And I think if you establish a REC market, then bankers and people who would lend money on these renewable projects will, will have that certainty that that's available to help with the financing decision for the project.

COMMISSIONER EDGAR: And just to follow up on that.

Thank you, Jon. I'm going to just throw out there for discussion later the number that keeps banging around in my head is 2012, but I welcome discussion about that as more of a market, REC market implementation point for lack of a better term at the moment.

But then also that brings me back to the point, and this is just for later discussion, as to the relationship

between a time period, a mandatory initial time period that we may or may not decide to propose and the relationship with a retail sales percentage cap and how those, those two kind of will or will not work together, and, again, for later discussion.

CHAIRMAN CARTER: We'll do that. Thank you.

Jon, you did, you did almost fine except you forgot the major sign that says gone fishing.

MR. MOYLE: Right.

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CHAIRMAN CARTER: Mr. Draper.

MR. DRAPER: Thank you. Eric Draper, I'm Deputy

Director for Audubon of Florida Statewide Conservation

Organization. We generally have -- I'm going to make comments.

I'll try and be brief with them.

We're generally aligned with the Southern Alliance for Clean Energy and contributed to the comments they gave on the rule, and I appeared before your staff on one of the workshops.

I generally agree with, I want to say Senator, I'll say Commissioner Argenziano, that your staff worked hard on the recommended rules and deserves credit for their effort. And to the degree that there's been public criticism of the staff rule, I think that's just the nature of the narrative of public debate and can be expected as the public starts engaging specifically in this very, very meaningful process.

I note that the staff did follow the narrow, if somewhat confusing, legislative direction, and I agree with Commissioner Argenziano that it's likely that we'll be clarifying this in the legislative process next year. And, and I think that as that, as that takes place, I think that what was missing in the legislative direction on this and something I really would urge you to consider today even though it's not in the rule, which is that this is, of course, a much larger issue than simply an issue of providing reliable electricity at an, at an affordable price to our consumer. I mean, it's way bigger than that. And it's unfortunate in a way that this

In that sense, you know, I think that as the discussion of, as we saw, the climate change issue matures, that I would expect that you're going to get additional direction on how to, how to use this particular solution, renewable energy, to advance that. And in that sense as we can look at that, we can look around the horizon, we can look around the curve and know that's coming. You know, I would encourage you and your staff to be as ambitious and as open-minded as you possibly can given your constraints as an agency about how we can accelerate the solutions that are implied in renewables.

debate, you know, by the function of the PSC, you know, has to,

has to have its consideration that limited.

Now since we heard earlier discussion that basically

follows a logic, which I don't agree with, that since some people can't follow their mortgages, therefore, there should not be additional costs that are imposed on consumers in the State of Florida, I don't get that, I'm going to take the liberty of going outside of where I would have generally narrowed my comments onto just the rule-based issues.

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Certainly, you know, your job of providing -- you've done a great job, by the way, the Public Service Commission, over the past 30 years or so since I was a teen-ager and remember, you know, in Florida the rapacious utilities and how the PSC had to step in and kind of rein them back. But you've done a great job in making sure that there's reliable and affordable electricity in the State of Florida, but we can't deny the fact that the provision of that has tremendous environmental costs. I don't usually lecture about that. I usually stick to the issues. But it's very important that we not stick inside that little box of consumer protection which is, in fact, shortsighted and ignore the need to induce the twin strategies of conservation and renewables.

And so with that said, I think that a 20 percent by 2020 is a reasonable target to really give some consideration to and to get your, get your arms around. That would, that standard which was called for by Governor Crist, you know, has been backed off from. And if, in fact, considered in the staff recommendation based largely, as far as I can tell, on the fact

that you're looking at forecasts rather than what could in fact be potential if in fact incentivized by an aggressive rule, and I'm not sure that's exactly what the Legislature wants you to do was to incentivize things.

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If you look at the previous legislation, not just what was passed in 7135, it definitely seemed like the Legislature wanted to incentivize renewables. I'm not sure that this rule gets there. So I would encourage you in your considerations, your deliberations to look at that question of incentivizing and really pushing the market forward.

Now the cap, you know, on the cost, of course, you know, should be somewhat data driven. I'm not sure that the 2 percent cap is completely data driven. I started thinking a little bit once I heard the staff today in reviewing the rule, and I really do appreciate their clear explanations of what they've done, recommended \$360 million. What is that? You know, on a monthly basis, that's, that comes to about \$1.50 per person. You know, I thought about that in context of other government budgets that I work on, other kind of big picture things. I think, well, that's just about how much the South Florida Water Management District collects from its taxpayers to run the water supply system in South Florida. So if we think about that as a cost, if that was the cost you go with, is that really, you know, exceedingly unaffordable for the collective people in the State of Florida, all of us as

consumers and shoppers and users of the businesses that would pay this? I don't think that's an exceptional cost when you think about it in the context of our gross state product, project -- product and, in fact, all of the other costs that we have associated with getting, you know, the other public needs that we have. I think particularly relevant to that South Florida Water Management District thing, when you think about it, that's just the cost of like making sure that people have water in South Florida and, of course, cleaning up the Everglades.

I'm going to just conclude here by saying that this, this discussion when it is expanded, you may not be able to do it here, but the Legislature is, I know they're going to be looking for, for what your recommendations are, not just technically what is in your rule. But when we go to that legislative process next year, they are going to be looking at what you have to say in a general sense. In other words, we would have made a rule that would have done this except you didn't give us the legislative direction to do that and give us additional legislative direction. I'm almost reading that, Commissioner Argenziano, into your words in deferring to the Legislature as a, as a policy driving body.

And so let's look at what is really the back story of renewables. We could be using this right now to create jobs in the State of Florida, get all those people. Now I'm only

saying this, I'm only saying this because I think that the people from the consumer point of view said, oh, watch out for the economy and the poor people that are suffering. And, by the way, I'm one of those too and my family. But, you know, we could use renewables, as long as we're expanding the scope of this discussion, we could use renewables to put a lot of people to work right now. Not just -- I mean, with the construction of nuclear power plants we'll have people working over the next ten years. With the construction of biofuels programs and, and, and solar collector programs, solar farms you could be putting people to work within the next year. We could solve a tremendous number of environmental issues which are very, very pressing.

And finally in the context of this discussion, let's not be focused simply on short-term costs, especially as they appear in rates or in charges on a, on a person's bills. Let's also make sure that we're considering something that you would be required to consider certainly as soon as the cap-and-trade concept goes into effect at the federal or state level, which is long-term costs. And let's look at what those long-term costs are and know that the long-term costs at least associated with renewables is going to be much, much less for our children, if not for us. And let's also think about what those long-term costs are for the environment because one of the things that I'm having to work on right now is coastal

strategies.

Senator Argenziano, Commissioner Argenziano, you know from our work in the Legislature we looked at, we worked a lot on water supply issues. Water supply coastal issues are going to be dramatically affected, of course, by the climate change issues that we're facing in the not too near future. So as we're working on this, let's look at renewables. I know this is not new information, but as long as the debate has been expanded let's make sure that we're injecting into this discussion and send back to the legislators like we need to, to look at some long-term costs here too. We can't be constrained simply by narrow questions of affordability and impacts on ratepayers right now. Thank you very much.

CHAIRMAN CARTER: Hang on before you go.

Commissioners, let me just, before I lose this moment, let me just ask you this. You've been here all morning? Were you here all morning when we started?

MR. DRAPER: Yes.

CHAIRMAN CARTER: Do you remember when I had asked Ms. Brownless about her recommendation on the percentages, she said 2 percent by 2010, 10 percent by 2015 and 20 percent by 2020?

MR. DRAPER: I think a schedule approximately like this is, is, is a good recommendation.

CHAIRMAN CARTER: That's pretty much what you were --

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MR. DRAPER: Yes.

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CHAIRMAN CARTER: I mean, you won't have a problem

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with that?

MR. DRAPER: No.

So I certainly wouldn't say that.

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CHAIRMAN CARTER: In the process of that we got into

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a discourse about the costs and we looked at solar and the

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set-asides and we looked at the information that we'll be

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getting from the Navigant study and all. I mean, so you're not

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saying that we shouldn't consider the cost of this, are you, in

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the context of looking at these percentages, are you?

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MR. DRAPER: No. You've got to consider the cost,

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particularly given the legislative direction in the rule and

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what your responsibility is as the Public Service Commission.

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CHAIRMAN CARTER: Commissioner Argenziano.

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.6 COMMISSIONER ARGENZIANO: Thank you. And it's

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still -- you know, the funny thing is when I left the House,

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they said, well, when you leave the House of Representatives

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they'll never call you Representative again. But when you leave the Senate, you can always be called Senator. That's one

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thing I'm proud of. So that title still remains, so no

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problem. But, and I just say that jokingly because people

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don't know what to call me anymore. Just Nancy is fine with

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me.

But in going back to what I've been trying to say all

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FLORIDA PUBLIC SERVICE COMMISSION

morning is this is really difficult. You know, coming from the legislative branch and then coming here, this is difficult because we are not the policymakers. We could sit here and say it makes a lot of sense to do this and that or my personal belief is and my personal and so on and so on. But we are confined. This is really for the media to get out to the public that we are confined with what we are mandated to do.

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Now what I see is that the, the staff did what they could with what they had. Some of our mandates, as you say, the box of consumer protection, we are there for the consumer protection. We have a mandate that says costs will be looked at. This is why I say we need to send something back to the legislative branch to say you have to give us more policy here, because if you want us to fill in the blanks, and there's probably a lot of reasons why you may want us to fill in the blanks, we can't do that. And being from the Legislature, I am not about to create policy here. I can make suggestions to the Legislature, my colleagues there, and I do and I will, but the hard part is getting to the costs. We have to look at costs. Now but what I want to get forward is that those costs could change. Like I said before, you can't close the door on something that three years from now could have a dramatic change in cost and you can't not provide incentive for them to keep moving in that direction so that three years or five years from now they come up with something that could be an

incredible way to go.

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I, I personally believe that, and this is my personal opinion, that in this, this, all of this discussion is not just about providing energy, even though that is our charge too, making sure the people of the State of Florida have enough energy for the future, and I'm going to ask staff a question about that in just a few minutes. But it also is in my opinion -- when you look at it because sometimes it looks like there's conflicting language in that statute: Well, how do you do low emissions if you're going to include this and that and that? Part of it is to reduce our dependency from, from that oil dependent status quo that we've been in for so long. If it falls Because if they cut us off, you see what happens. off and it's not there anymore, you see what happens when you get to the gas station and you have no gas and you have no way to do what you've just taken for granted for so long. So there is a real, a real movement to get, get us off that dependency and that's very important.

But there is also an environmental compact to that part of that, and I think that's where the Legislature is going to have to have more policy direction. What is it that you want from us environmentally? You want the least amount of emissions possible. There are, there are energies out there that are very clean. Do we need to look more into those? But so, and I guess the reason I'm saying this is because I want to

emphasize again to the media who may be in here that understand we are, we are in this box that we have. And I think that sending back a recommendation that is similar to staff's, maybe less conservative, and one that's really aggressive that says if this is where you want to go, you are the policymaker, now take the bull by the horns and figure out what you want to give us from this. So what I'm asking everybody here today is while -- I'm going to ask my, my colleagues if they want to go with a Plan A and a Plan B so that the Legislature understands we need more guidance and more direction and put little fill in the blanks, Plan A will do this now and Plan B will do this. Does it meet the goals? And take into consideration the costs and understand that the costs could come down, the costs could go up.

So I guess any suggestions that you have in sending a draft, two drafts to the Legislature, and one that is much more aggressive that we have in front of us, that kind of, because we have ten different directions and very good arguments on either side, whether it's for energy dependency or environmental, we need to get that to the Legislature. And just again, and I hate, you know, beating a dead horse --

CHAIRMAN CARTER: You're recognized.

COMMISSIONER ARGENZIANO: As I told you, that is illegal in the State of Florida, but to make sure that we get better policy guidance. And, again, going back to a

sufficiently developed rule, you can't sufficiently develop a rule if you don't have more specifics in the policy. So, and I think our legislators are probably learning a lot more since that last session and I know a lot of you are going to be there giving input. But if you can give us input into possibly, if we decide to go with, with a couple of different ways to send the rules, we'd love all the help we can get. And I appreciate you allowing me to take the time to say that, Mr. Chairman.

CHAIRMAN CARTER: Thank you, Commissioner Argenziano. This is -- it's a fascinating time to be on the Florida Public Service Commission, and it's a great opportunity for us to move forward as we take these directions and move Florida forward and provide, as you say, to the policymakers the things that they may -- you know, there are some, some fine tuning and some -- you know, as they say, the devil is in the details. Thank you so kindly. Excuse me one second. We're off the record.

(Discussion held off the record.)

All right. We're back on the record.

You're recognized, sir.

MR. JACOBS: Thank you. And good afternoon, Mr. Chairman and Commissioners. I couldn't agree with you more; an incredibly important time, an opportune time for you to be in this position.

First of all, I think it's really important that

we -- I join in the comments of others that this is a challenging subject matter. You've been put in a position that probably is somewhat uncomfortable. You were asked to start a new market, relatively new market and using traditional regulatory tools, and those tools are probably not as best suited to carry out all the objectives of establishing this market. So it is a very challenging and daunting task and we appreciate that.

We also -- first of all, I'm here on behalf of the Natural Resources Defense Council and the Southern Alliance for Clean Energy, and we do appreciate the work that you and staff have done to put forward this, this public debate. It is, it is a difficult thing to do and we recognize the challenges that staff is facing. We believe that the work has been very credible and we also believe it's an important work in progress, and so we're here today to, to constructively add to that debate.

Timing is always incredibly important, and if you were to wait to 2020 or 2025 to establish any kind of a renewables requirement, we'd be talking much different circumstances, much different issues, much different challenges today. The Legislature has said it wishes to do now, put renewables into the mix of this energy, of the energy plans of this state now, understanding some of the, many of the challenges, certainly not totally understanding but having some

grasp and consciousness of those challenges, and let's figure out how to do it the best way we can.

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We would suggest to you that the, that the draft rule that you have before you is a start, but clearly has some, some substantial flaws. We would suggest to you that the fundamental purpose that you want to, we all want to be here today is because you see the need to establish renewables as a legitimate sustainable marketplace in Florida. And in order to do that we are, we are, we are absolutely convinced that the rules of that market have to be evenly, evenly established and have to be supportive of a diverse marketplace. We believe this rule fails to do that. It favors incumbent producers without adherence to true economic drivers.

We believe that when you, when you establish this market, there must be incentives to bring in diverse players. Those players must be able to get the message and communicate to their funding that they're going to have sustainable revenues if they come to this market. We don't believe that that's set out here. We believe that on the contrary the disincentives to those new interests are pretty substantial. And we believe that if you're going to do a market in Florida, diversity will be absolutely vital. You have a nascent market here that's gone on for some time, you've had independent power producers, you've had some biomass and waste to energy. They've existed here on, on a fringe and have done so by very

awkward rules that exist, and they've done, and some of them have done so very successfully, but that won't make it with setting up this marketplace. We suggest to you that much more stability, much more clear messaging to this market is going to be critical.

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In this proposal the, the incumbent utilities will design the rules of the market. Your rule, I believe, requires that they put forward the rules of the REC marketplace for your approval. We suggest to you that's, that's, that's probably not a good course of action. We don't think that they'll do anything that's harmful to the state. We just think that in order to set a good, solid market foundation you want to have open voices in those rules.

In the past that, the idea of these, these, doing the cost recovery clauses has, has, while being expedient and convenient, I would, we would suggest to you has not proven to be the best possible result for consumers. And we suggest to you that in establishing this marketplace that we will probably go along with some of the recommendations that were made by Ms. Brownless, that it's probably more appropriate that, particularly for the utility's self-build options, we want them to participate in this market. But your concern, I would suggest to you, should be that they bring, they deliver power to this market that's on par with what's reasonable, as should the third party providers. And so if you're going to do cost

recovery, you want them to appreciate the risk and understand what this market requires in terms of cost.

There's some implication that the projects that have already been done, those costs are going to be out of line with what traditional prices would, would give for solar projects.

You want to have in place mechanisms and methods whereby you can ensure even if those projects are done, they're going to be delivered to the ratepayers at rates that are reasonable.

Ms. Suzanne is one way, by Suzanne Brownless is one way of doing that; i.e. that those projects will be done by putting them in the rate base. We would even suggest that in the prudency process and putting them in rate base that you apply that filter. Are these -- is this price being -- is this power being delivered at a cost that we deem to be reasonable? What does reasonable mean? You can use a national average standard, you could be, you could use industry standards, you could look at -- it's your discretion to look at what it means that those delivered prices be reasonable.

I hear, I hear your concern about cost. I think it's very important to talk about what you're defining as cost. Are we talking about the cost to produce renewable energy or are we talking about the cost to buy RECs? I think I would, I would propose to you that there's every evidence around the nation and around the world that the cost to produce renewable

technologies is declining. The time cycle that you look at, it varies. But I believe there's irrefutable evidence that the cost to produce renewable energy is declining.

Now the challenge is how to deliver that cost curve to this state. I would suggest to you, Commissioner Skop, that if it turns out that REC prices are hovering at \$700, the market is out of whack and your oversight is absolutely and desperately needed in that circumstance. I do not believe that if you do the market rules right over the course of time by 2020 you'll have the challenge of a utility facing either a \$700 REC or building a plant that's out of line. I think that the market dynamics, if you do it right, will give them the option of doing a self-build that's reasonable for them or going, buying that power from an independent producer who can, who can make it work in this market. That's the conundrum — that's the, that's the circumstance that you want to create and not the conundrum of sitting there trying to figure out how to deal with those kind of REC prices.

I think this rule takes an appropriate attention to cost management as the statute allows. I think it takes that attention too far. It overwhelms the desire to set a firm foundation for markets. Experience that we're just now seeing emerge indicates that RPS programs can generate substantial investment, diverse investment in renewables at negligible ratepayer impact. There's some studies out now that indicate

that if you take what the experience is now, and we, we acknowledge that that experience is somewhat limited in the, in the U.S., but if you take what the trends are developing now in RPSs and you project them out over 20, out to 2020, the rate impact will probably be around 1 to 3 percent.

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Now I'm not endorsing a cost cap at that level. I'm suggesting to you that the overriding concern that there will be something grossly out of order with that is inappropriately placed. We think that there's much more worthy attention to be placed on how do we attract strong, competitive, independent providers to the state? We think that much more appropriate attention should be placed to how do we incent larger projects by ratepayers, maybe by increasing the net metering opportunities that, that ratepayers might have to do projects above 2 megawatts. We think that those are some much more appropriate issues that could be looked at and keeping in balance the concern for cost. We don't think that that should be the overriding prevailing consideration that you bring to this discussion.

We, we, we think that specifically there are some, that this should start before 2017. We think 2010 is good, 2012 at, 5 percent at 2012, but we do think 2010 is appropriate at 3 percent. That would be a good starting point.

The compliance provision, compliance is an absolute -- all the, all the literature, everything you see

indicates that compliance provisions are an absolute critical ingredient of an RPS. They must be clear, they must be adequately enforced. We don't believe the draft rule reaches that level quite.

There is, there is little indication that we would give appropriate value to things in this marketplace other than cost avoidance by the utility. There must be value given to those other attributes in this marketplace because those are, those are driving factors about why the Legislature and now why you are considering renewables. Diversity, fuel diversity, that's an important consideration; carbon reduction, that's an important consideration; environmental advantages. Those things are driving why we're talking about this now.

Otherwise, we would wait until 2020 or 2025 before we would do renewables. We're doing them now because they have societal and public benefits now. And so I think we have to think about how to do them most constructively and most effectively now, and I think to do that, by slanting the marketplace overwhelmingly towards incumbent providers won't get it done.

A classic example that, that I would suggest to you is if, is where you can look at ways to cost manage, as I believe the statute says, but yet make sure that you're doing things that will allow out-of-state, independent, not necessarily out-of-state but independent providers to locate in Florida, to create the jobs, to give the overall, expand the

economic base of the communities where they locate. Those, I think, are legitimate considerations, although not normally part of your regulatory concern.

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To sum up, I really want to encourage you to consider this more broader perspective. I think the point brought out by Mr. Draper about how you measure cost is a vital issue here. I think the long-term -- if you look at a snapshot analysis of these costs, if you look at a snapshot analysis of renewables, they're going to probably lose out, just to be blunt. make sense when you look at them over, over a life cycle They make even greater sense when you determine that horizon. you can, you can bond the renewables policy with energy efficiency policies, which this state is, is a very great need in this state. Consumers are paying more in the state per capita for energy and they're using more of that expensive power. So if you can figure out a way to help them reduce their consumption and help them pay less in a high demand time, you've done a great deal.

And finally I'll leave you with this. The idea that consumers won't understand this I think is not well taken.

Consumers have exhausted the incentives for solar rebates every year that they've been there and in the last few years have sat in line waiting for the Legislature to give more money. This year the entire allocation for solar rebates was already taken up by those who were waiting in queue. Consumers understand

the value here. In other states we're starting to see innovative things done in the business side where you see third party providers who go out and buy roof space for, for, that they will use for solar entities and then enter into various elaborate and sophisticated arrangements as to how that solar power gets sold. We're not going to get the benefit of that innovation under this rule. And I thank you for where we are and I'm encouraged because I know we're going to continue to go farther and do more. Thank you.

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CHAIRMAN CARTER: Thank you, Mr. Jacobs. And I look forward to, as we get into more of a discussion here, talking to you about some of the issues that you raised at, later on, particularly as it relates to the self-build versus the third-party option on that. I was intrigued by some of the things that you said. I'd like to get with you on that.

Let me do this, Commissioners. Any further questions for Mr. Jacobs? Before I make any decisions on where we go, everybody kind of hold in place, let me just ask this, is there anyone here that wanted to be heard this morning that did not get a chance to be heard? I obviously want to, you know, want to do that because once we get into our deliberation and our discussion, the issues may not flow based upon some agenda. It's going to flow based upon where we are at the bench in terms of the issues that are important to us that we may want to get some feedback from any or all of the parties or

discussion with one another.

You're recognized. Come on up and for the record state your name and we'll go from there. Anyone else? Is there anyone else? We want to make sure we heard from everyone that wanted to be heard today. And we're adhering to the modified five-minute rule.

MR. ARMSTRONG: Mr. Chair, I'll be brief. I know everybody wants to get to lunch, so this is a dangerous place to be in. But my name is Brian Armstrong and I'm here as an individual. I have listened very closely all morning and I do want to repeat some of the things I heard or second some of the things I heard lately from the last couple of speakers.

Mr. Chair, I really think that I know your position.

I've represented investor-owned utilities, government

utilities, water, wastewater, electric. Sometimes there's

things to be learned from representing different utilities in

different industries. And one of the things I've heard today I

really hope, I know this Commission will consider is the

long-term costs.

Having worked in the water industry for many years, in Southwest Florida starting in the 1990s through about 1995 there were many significant issues about water quality. They couldn't just pull water out of the ground and treat it with chlorine like they could in other places. They had to go to reclaimed water, they had to do a number of things that were

very expensive, reverse osmosis, desalination, a number of things that were very expensive. Southeast Florida down in Miami, Northeast Florida, Northwest Florida, they all could treat their water with just chlorination. They could all dispose of their wastewater very cheaply. So when everything — the problems going on in the early '90s in Southwest Florida, everybody said, well, that's not our problem. That's somebody else's problem. We can do it cheap and we have good cheap rates, we're fine and dandy. But, you know, in the last couple of years there's been even statewide analyses done and it's no longer sustainable in Southeast Florida, no longer sustainable in Northeast Florida to just chlorinate water and have it be cheap.

My point is if when the problems were first surfacing in Southwest Florida everybody, instead of saying we can do it cheap, let's do it as cheap as we can for as long as we can, if they had said look at the problems over there, we might experience that same problem in the future if we don't change the way we do things, if they had started saying we're not going to just send our wastewater to the ocean outfalls in Southeast Florida and say we'll treat it and use reclaimed water here and we'll send it back on to the farms, we'll make farmers use it, then maybe the water wouldn't have been degraded. What used to be huge supplies of fresh water were degraded and now you can't use that water anymore and the Water

Management District won't let them.

My point is now they're spending billions and billions and looking at huge amounts of money to correct water and wastewater issues in Southeast Florida. They're looking in Northeast Florida at desal and reverse osmosis. And the problem is because they didn't address the problem when it would have been a lot cheaper to do. If they had just done some of these things on an interim basis of, of reclaimed water and a few other things, they might have had a, maintained a good water quality all these years and that cost would have been a lot less.

So I really see the same thing coming here if we don't make sure that we consider the fact that, hey, if we continue to do what we're doing right now, we are degrading the air quality, we are causing global warming, we are causing problems. Let's do the things that we can do now, and it's the utilities that have to do it. They have to be asked and sometimes they have to be forced to do it to look at these other things. Might it cost more now on an avoided cost basis to another supplier? Yes. But in the long-term it's going to be cheaper.

And I really hope, and I know this Commission is really -- I'm encouraged by hearing several of you, I think all of you saying something to that effect, but I really think that's something we really need to make sure that we address in

this rule because this is going to set, this is going to set the course for a long time.

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And, Commissioner Skop, I heard you mention earlier about are the costs coming down? I can just -- the experience in the water industry, in 1990 and early '90s they were doing reverse osmosis for the first time in the State of Florida. Costs were huge, capital costs were huge, power costs were huge, the operating cost was huge. I can tell you for sure that as other parts of Florida started to use that technology and had to use it, the costs have come down for the equipment and for the operating costs and the electric costs. That will happen in this industry as well. That will happen. But we have to make sure that there's a market for that industry, for the renewables. The market is key to make sure that it's not just the investor-owned utilities that have to do it, but we have other people coming in and making investments here in Florida to make sure there's a market, and they're not going to come unless they have some reasonable renewables requirements here in this state. We fought those battles a few years back with the, with the City of Tallahassee in a proposed coal plant. And it's very, very clear that if we suggest that business is going to be as usual, we're not going to see the alternatives coming like we otherwise would have. We're not going to see the cost decreases in the capital costs and the power costs as we would have.

So I just encourage you. I was kicked out of bed this morning from my wife saying come down here and listen to what's going on. And I really feel strongly about this. I do intend to participate in this process with you all. Like I said, I'm encouraged by what I hear. We just have to make sure we're moving forward and not just in baby steps. We have to move forward a lot more quickly than what I see in the staff rule. And I thank you.

CHAIRMAN CARTER: Thank you.

Commissioner Argenziano.

COMMISSIONER ARGENZIANO: Excuse me. Thank you.

I agree, we need to move forward. I think everybody knows that. And, again, I'm going to emphasize on you need to also participate in the legislative deliberations because -- and I'm going to harp on that because no matter what I agree personally, I have to look at what we're charged with. We cannot discard, not look at costs. We are mandated to be prudent and look at prudent and reasonable costs. And it's kind of like here's what we want you to do -- and I was jotting down some things that the Legislature and the statute says. You know, we need to, we need to look at the needs, energy needs of Floridians, we need to diversify fuel types, we need to encourage investment, absolutely right, instate, as they say, minimize volatility, yeah, volatility of fuel costs, improve environmental conditions and make Florida a leader in

new and innovative technologies. And then it also says we need to be prudent and have reasonable costs. And it also says add, we may give added weight to solar and wind over other forms of renewable energy.

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Now, you know, given a question to consumers out there today, if you asked the question, you know, the environmental question, which is one my son talks to me about and I talk to him about and says, you know, let's say the scientific community is right and, you know, and a lot of people believe it is, some don't, that if you reach a certain point of no return, then you've killed yourself and your planet, so what would anything else matter beyond that point? So that is something you all have to take into concern along with all of these other things. And most people would say, who believe that that's happening, yes, that needs to be done.

Now given the question, ask another question: Would you like for us to be encouraging more renewables? Most people, yes, they're out there, voluntary programs, they want renewables and say that makes sense, let's do that. And we know, just as we had when we were kids, a little Brownie, this is going to say how old I am, the camera that improved to the -- remember the Instamatic that came out? Wow, that was technology. Into what you have today in digital and so on. And your hi-fi, remember it was a Victrola. Most of you are too young. And then it moved on to all -- it's going to

happen, okay, but you have to provide the -- so most people would say yes. And if you tell them, do you think we should get off the oil dependency that we're on now because, after all, we're going to run out of that stuff sooner or later and look at how they're holding us over a barrel and look what it's doing to this country and what it could do to this country? And you know what the answer would be? Yes, heck yeah, we need to get off this oil dependency. So everybody is in agreement there.

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Now though when you have legislators calling and their constituents calling them at a time when we are at a financial collapse, you ask them to say, okay, do you think cost should matter right now, you know what they say? now not being a policymaker and being in a box that says the, that we're mandated that we must look at reasonable and prudent costs and to take into consideration these factors while we want you to do everything else, and of course we do, we all want to get there, now it's time for the Legislature to make the decisions. And that's why I say, and I'm sorry to repeat it again, is that a couple of different scenarios need to go. Let's send that aggressive recommendation there that says, okay, you know, it emphasizes do you really want us to look at, add weight to solar and wind over everything else? what you really meant? And then let's look at the cost to do so. Is that okay with you, or are there other mechanisms in

reducing that cost, providing more incentives and lessening the impact on the consumer and still enable the companies to be able to come in and say, okay, Florida has put its money where its mouth is? And then, of course, go with something a little closer to what the staff's recommendation is that would send, not that conservative though, and says, okay, this is what this is and this is what the ramifications of this will be.

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So, and the reason I repeat that, and I won't do it again, is because while you're sitting there, you're 100 percent right with the water issues. But you know what the truth of that is too? In 1935 the west coast, the coastal areas of the State of Florida knew that they shouldn't be developing in those areas, the tidal influence was too much and they knew that overpumping would cause the potable zones to disappear, and they did. And in 1942 the Florida Handbook came out and said do you know what you're doing to the State of Florida? So it was a lot more than just putting money -- it was a lot of politics involved. And I think it's gotten to the time where our legislators even understand that, that politics, this goes beyond that for all the reasons I mentioned, whether it's your planet, whether it's diversity of fuels, all those reasons. So it's gotten too big.

So what I guess I'm telling you is please also be involved with the legislative branch because as a, as a Commissioner sitting here now I can see that we're the ones,

we're being -- don't just think of cost. We have to. We're told we have to. So we need a little bit more direction from the Legislature, and that would be most helpful if all of you can do that.

MR. ARMSTRONG: Commissioner, I appreciate the comments too. I appreciate what you said about 1945 and the west coast. I guess that makes the point too that we both have and that is it's still happening --

COMMISSIONER ARGENZIANO: Actually, it was actually '35 they ran out of potable zones.

MR. ARMSTRONG: '35. And it still happened in Southeast Florida. I mean, they still let it happen again down there and have the problems and the lack of sustainability if they kept doing it the way they were doing it.

thing, and I'm sorry, just to show you what innovative thinking sometimes does? The City of Dunedin, okay, right in the middle of Pinellas County -- Pinellas County was your true water wars in the State of Florida. That's where all the litigation took place, that's where we, where they were stealing and mining the aquifers, poor Pasco County was sinking and all kinds of stuff, their lakes dried up and everything else. But the City of Dunedin had the unbelievable innovation, and it started out because there was too much iron in the water and then they realized that, my goodness, we have a water shortage problem

think there was a water shortage. But what they did was they created an RO plant. And if you're familiar with Dunedin's RO plant, what they did was retrofitted the city, put lines out to say, you know what, we're going to have this reverse osmosis plant. By the way, when they got finished paying off the capital outlay of dollars, their cost per thousand gallons were like 55 cents, which is unbelievable. But even before that it was like 88 cents per thousand gallons, cheaper than anywhere else using RO membranes. And the way they did it, my point is they had the innovation and the insight. And now it's time to do that for this issue because it encompasses so many different facets of sustaining our life the way we know it.

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So -- and I'm sorry to go off on that, but that's the truth and that's what we need to do. And I think everybody in this room is trying to do that and we're trying to get there. It's just that this Commission -- and there's a lot of misunderstanding about what this Commission can and cannot do. So that's what I'm saying, we may be in a box. And I don't think the Legislature did it on purpose. They have great initiative and the Governor has this great initiative and says let's move forward. But now it's time we realize we've got to refine it because you can't say do all these things, but, or we want this, but. It's going to have to be you have to make the decision now.

MR. ARMSTRONG: Commissioner, this board is aware of a water utility that was out there in Pasco County, Florida, which we are now hopefully on behalf of a number of local governments we're buying. Just what's important here is the education process. You mentioned that, yes, the costs will be higher, may be higher short-term, but over the long-term they might, they might be lower.

We were able to buy that utility because we worked with customers and said, yes, your rates are going to go up but they're going to go up a lot less than they otherwise would have. And how did we do that? Through an education process.

I have heard, I've had the benefit of hearing several CEOs of the IOUs, the electric utilities in this state say recently as a result of the Governor's action and probably just before that, yes, we recognize renewables and conservation have to be done, they have to be given high, high priority. I and everybody else who heard them say that took that to heart and we were very encouraged by that. And I guess my point would be let's -- the staff rule I don't think gets us far enough quick enough and I don't think it really stands behind the comments the way I heard those comments made in the last couple of years. So I encourage this Commission, as I know you're doing, we can push them. You know, utilities can be pushed, private utilities can be pushed, government utilities can be pushed to do the right thing on a long-term basis and ultimately the

bottom line is going to be it's going to cost less. Will rates go up? Yes. But they'll go up less than they would have otherwise. And I appreciate the fact that you are looking at that.

CHAIRMAN CARTER: Thank you so kindly.

What we're going to do is -- and I sincerely appreciate the patience of our court reporter. I've kind of gone over time with her and allowing her to get a break. We're going to have an opportunity, Commissioners, for each one of us to go through -- I wanted to hear from everyone and we've heard from everyone that wanted to be heard first and we can go into our deliberations. But before we do that, I want to give the court reporter a break, give staff a break, give everyone else an opportunity because now we'll be in our give and take. And let's do this. Let's, let's break and come back at -- I'm looking at -- I've got a different time on each one of them.

2:35, does that work?

COMMISSIONER ARGENZIANO: That is one hour?

CHAIRMAN CARTER: An hour. Let's do an hour. So
we're on recess until 2:35.

(Recess taken.)

CHAIRMAN CARTER: We are back on the record.

When we last left, I had a call from some people that wanted to be heard. And let me just make this one final announcement. Is there anyone that wanted to heard this

morning that was not heard when we were taking information from the parties? Okay, good. 2 With that, Commissioners, let's move into Phase II. 3 And in Phase II what I would like to do -- and let me, first of 4 all, say to you how much I appreciate your patience from this 5 morning for allowing the parties to be heard. I mean, just 6 deferring your time to allow that to occur. And now we can 7 move into our deliberations and questions and concerns. 8 Commissioner McMurrian, are you still with us? 9 COMMISSIONER McMURRIAN: I'm here, Chairman. Thank 10 11 you. CHAIRMAN CARTER: There you go. Okay. Well, let's 12 do this. Commissioners, I had a coin I was going to flip to 13 see who went first, but I couldn't find a five-sided coin, and 14 the guy outside of the record store that was trying to sell it 15 to me, you know, he said that I had to give him a \$20 silver 16 gold piece in order to get it, and I couldn't find that, so I'm 17 at a loss here. So, who is on first? 18 COMMISSIONER ARGENZIANO: (Inaudible. Microphone 19 20 off.) CHAIRMAN CARTER: Sleep deprivation, that's what it 21 is. 22 Commissioner Edgar, help me out here. 23 COMMISSIONER EDGAR: Okay. If I may, Mr. Chairman, I 24 will jump in and see where it takes us. Thank you. 25

I think that the morning, although long and I was getting very hungry, I think was real helpful. I realize that many of the people who spoke to us this morning have participated -- I think all, if not all, certainly most -- in the workshops, and have sent us written comments, and I know that that has been very helpful to our staff, it is very helpful to me, and probably to each of us.

But yet, you know, when we hear comments and read some of the written comments and testimony, as well, sort of at an earlier stage in our administrative process, then it also can be very helpful to hear some of those comments or refinements of those comments as we work further through the administrative process. So I realize that it may have been repetitive to some of the speakers, but I thank them for their patience and for sharing their comments, again, with us.

From the discussion that we have had this morning and the workshops and all of the written material leading up to this point, I mentioned earlier that there are a couple of areas that I still have more questions in my mind that I would like to ask our staff to maybe do some further work on. They may already have all of this information. I know that some of it is in the written material, but yet some additional data gathering, and maybe written analysis would be helpful to me. So I'll lay out just a couple of those issues here in just a moment.

My thinking is this, if I could make a few comments

CHAIRMAN CARTER: Certainly.

procedurally, where we are. I know that when the legislation was passed and the Legislature directed us to put forward a rule and for it to go to them by February 1st for their additional review and ratification, one of the first questions I asked, and probably many of us did is to our staff is, okay, how do we do this. What is the process. What are the requirements under Chapter 120. How do we get from Point A to Point Z through that process. And realizing all the notice requirements that we have, and the time frame under the FAW, and trying to meet all of those, we laid out a process that is part of, you know, having workshops and that has brought us to agenda today for this item.

We designated a day, and I've got it here somewhere, but not right in front of me, but a day coming up in a month or so roughly that we have on our calendar for a hearing, and then a day in January to come back and have some further discussions. So my thinking is since we have those dates identified, that maybe I can lay out some of the areas that I have questions. I expect that each of us may have a few of those areas as well that we would like some additional analysis done, that we use that date we have scheduled to then come back

in what I would think of as -- I would, in my mind, call more of a workshop rather than a hearing, but whatever we need to call it is what we need to call it, but I'm thinking of more of a workshop. Have some further discussion. Have some additional data shared with us from our staff. And then work through on that day with the idea of coming back in January and proposing some language that would go forward to the Legislature.

It may well be that that language has options in it.

It may well be that some areas in that language has ranges.

You know, I don't know that I'm quite ready yet in my thinking to say it needs to be two different sets, or one, or three, but I think that there is time and a few more bites at the apple that we can work our way through that process administratively.

So, that is kind of my thinking. I just feel like to try to vote on some specific language, realizing that we are going to come back in this process and have additional discussions, feels a little premature to me. But I am very, very, very mindful of the deadline that has been set for us, and I know that we can meet it and that we can meet it with a good product. I'm just not quite sure what it may look like yet at this point. So those are my thinkings procedurally.

Mr. Chairman, would you like for me to go through some of my points and then we can go from there?

CHAIRMAN CARTER: You're recognized.

potentially that's proposed in the draft language right now versus a rate base analysis or accounting treatment. You know, how much may be considered O&M, how that type of discussion or accounting treatment, rate base clause, or some other or some blending relates to where we are with the settlement agreements. I think that would be very helpful for my thinking. So that's one point.

would like to ask for a little additional information and

analysis of is this issue of the cost-recovery clause

COMMISSIONER EDGAR: Okay, thank you. One thing I

A second would be -- and I mentioned this earlier, but the interrelationship or interplay between a retail revenue percentage cap, whatever that number may or may not be, and the relationship or interplay between that, the revenue percentage cap, and a phased-in mandatory time frame, whatever those time frames may be.

The third area would be additional ways or how it is already in there, but I'm thinking it through a little more about providing oversight and accountability for the downstream dollars. There may be a better way to say that, but that is kind of the way I think about it in my mind. I think that oversight and accountability and accounting goes right to the heart of the cost-effectiveness, and also something I mentioned earlier and others have about providing good value to the ratepayer. So that's an area I would like to look at a little

more closely with the help of our staff. I'm almost done.

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Then also the interrelationship of the Ten-Year Site Plan review process by the Commission. The revenue and programs for investments in energy efficiency, and potentially maybe a cap and trade program. And I say all of that, and I'm not quite sure how to do it, which is why I'm asking staff to look at it, but I think that each of those and probably some other things too, but, RPS, Ten-Year Site Plan review, energy efficiency programs, and a potential future perhaps cap and trade program really are very related when we look at the overall energy policy. But also, again, dollars that may be charged and passed through through customer bills and on to ratepayers. And there may be some offsets in there, too. And obviously that would be great if that is the way it turned out to be, but I would like to just look at that a little more and help think it through.

And then I mentioned earlier the potential role of alternative compliance measures. We have discussed that a little bit, but I'd like to look at it a time a little more.

And, Mr. Chairman, that is where I am in my thinking. You know, if there are other areas that my colleagues have to maybe ask staff to do a little bit more work on. I have spoken frequently about how excited I am to have the opportunity to continue to work on these issues. I am just reminded again and again how important for Florida's energy future our actions in

conjunction with the Legislature and the Governor and all the stakeholders will be. And it's very exciting, and I know that we can come up with a good proposal by the deadline we have been given.

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CHAIRMAN CARTER: Thank you, Commissioner.

The interesting process that we have before us here -- it's a very exciting time to look at where we are as a state, indeed, as a nation, as we try to go to things like dealing with the impacts of climate change, the results of being energy independent, energy security, the process of going to 21st century technologies. I'm convinced that with the 11-state university system schools that we have in the state of Florida, with all of that great brain power of our students out there, as well as the private colleges here in the state of Florida, and a lot of our policymakers, as well as moms and dads, I believe that within the collective intelligence and energies that we have here our best is before us.

And the more that we can look at different things from a different perspective the better off we are going to be. So I agree about some of the technologies that we may need to get where we need to get to may or may not be fully developed at this point in time, but I was reading an article the other day -- Commissioners, I'm just slightly digressing. I was reading an article the other day about a process in Florida where a lot of the -- like FSU at the mag lab, the University

of Florida in terms of what they are doing there with renewables and cellulosic ethanol, and FAU with the wave energy, I mean, we are on the verge of so many fantastic things that it kind of seems like Buck Rogers. I may be dating myself when I say Buck Rogers, but whiz bang kind of things.

But I do believe that what staff has done is -- and, Commissioner, you're right about what people said in the press, but what staff has done is at least put together a framework for us to work from. You know, you may disagree with the percentages, you may disagree with the caps, you may disagree with the process and all like that, but what they have done is provided us a framework from which we can work. And I'm exciting about it.

I think that the Governor's Executive Order last year in terms of where he wanted to get to 20-by-'20 is something that's out there that we can look at. I mean, I don't see any reasons why -- you know, nothing is off the table in my mind. And if nothing is off the table, that means everything is on the table. And I believe that it's time for us -- Commissioner Skop has spoken so eloquently before when he made reference to John Kennedy who said that, you know, I'm convinced that if we, as a nation, will put our resources together, we can safely land a man on the moon and return him safely back to the earth in the next ten years. And we don't have ten years, ya'll.

Commissioner, I think that we can get there. I think

that our goal and our vision is no less significant now than it was back in 1960, and I think that with what the Governor has set forth in his executive order, with what the Legislature has set forth in House Bill 7135, and with the commitment and the profound intelligence and respect of my colleagues here, I know we can get there.

And we have had some great discussions this morning, some good ideas. We had an opportunity -- a lot of us came in and sat in when staff was holding their workshops, and it was great to see a lot of the comments. And to some of the parties that were here, just because you didn't make -- your comments were not necessarily within the context of the draft rule that staff put, that doesn't mean that we didn't hear you because we did. That's why we participated. And we wanted to make sure at that point in time that the parties had an opportunity to be heard. And you were heard, and we hear you, and we are looking.

And I just wanted to say from a standpoint of -- from a global view is that these are very, very, very exciting times for us. And from the standpoint of a more pedestrian level, we do have to be efficient, economical, reliable, reasonable, safe. So while I've got my head in the clouds, I've got my feet on the ground.

I think that's probably enough pontificating for now. But, again, Commissioners, as we go forward with this, I think

I saw something in one of the press reports where they said that we are dead last. And being a former football player back in the day is that I used to watch the cheerleaders in between plays, and I got familiar with a lot of their cheers and all like that. I never heard them saying we're number two. They always said we are number one. And, as Florida, as we move forward our goal is to be second to none.

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And with that Commissioners -- Commissioner Skop, you're recognized, sir.

COMMISSIONER SKOP: Thank you, Mr. Chairman.

I guess I will just kind of chime in and, I guess, express some concerns having listened to my colleagues and the parties that appeared before us.

I guess first and foremost, I just want to come out and say that I fully support Governor Crist's vision of achieving a 20 percent RPS by 2020. You know, House Bill 7135 provided the comprehensive energy policy legislation that embarked us down this path, and I commend the Legislature for their actions.

And in furtherance of reaching the Governor's goal, I do equally feel that it would be appropriate for the Commission as expressed here today by some of my colleagues to provide the Legislature with various options that they may wish to consider during the ratification process. I think that, as Commissioner

Edgar has alluded to, I think there is still quite a few questions that I have, I think each of us have, you know, in terms of what goals are achievable. Anything is possible. We sent a man to the moon. It is just a matter of what resources are available to allocate towards that. What cost impact analysis there is, and recommendations as to how we can achieve goals of various options that, again, exist.

I guess to my point, I looked at the staff recommendation, and I noticed that, you know, there's a lot of emphasis being placed on waiting until the Navigant consultant report comes in, and that is very late in the process. At least as the basis for discussion, I tried to at least do a very quick-look analysis, which I think I provided to my colleagues that tries to at least identify what might be achievable as a result of some of the price caps from one percent up to five percent. I think I stopped there.

Again, the analysis is very perfect world, a utopia, if you will. There's no resource constraints. I didn't try and account for production tax credits, or investment tax credits, or anything of the like. I just tried to see as a quick sanity check if you had a certain amount of money at each cap, and you invested that money, kind of like compounding on a year-to-year basis, in that renewable resource, what you could logically get to based upon a realistic estimate of what the installed cost per capacity would be on a megawatt hour, the

net capacity factor, what production you could expect.

Because, again, at the end of the day, we have been tasked by the Legislature to relate it back to a target number based on a prior year production. And so that's what -- the analysis that we have that I provided to my colleagues, and I think staff has it, as well as some of the aides. It attempts to just do a quick look analysis at that. And, again, it's very idealized in terms of it's a capacity-driven analysis where resource constraints are not really considered.

But if you look at some of the comments made today, I think for biomass one of -- the spokesperson I think for Florida Crystals mentioned that they thought at minimum a 10 percent biomass would be doable. Well, if you look at the first top left-hand column, at 2020, assuming a one percent cap, lo and behold, biomass is at 10.18 percent. So that comports pretty well with some of what we heard, and that is probably more a realistic expectation noting that resource constraints do exist. And, again, this is an idealized version of that.

But going to the two percent cap that staff has recommended, at least in 2020 if you had unlimited feedstock and you could bring these biomass plants or renewables into operation each year, which is, again, somewhat of an realistic assumption, but it is just a matter of a quick look to see what might be possible. Clearly, at least my limited analysis would

show that, you know, 20 percent in 2020 would be achievable on biomass.

I think that if you look at some of the other numbers that I have put there for wind and solar, again, solar is exponentially more expensive at least from what I have seen. I reran my numbers, even at the two percent cap, and even if solar came down 66 percent in terms of its cost, to \$4 million per megawatt hour of PV solar -- excuse me. I talk too quick at times. -- \$4 million per megawatt installed for solar PV, which is, again, probably one-third of what the real cost is today, you could only achieve, basically, 2.18 percent at a 2 percent cap. So, again, solar is expensive, but I hope we will see those quantum leaps in technology.

But, again, the economics are what they are, and I really can't change that. So what I'm trying to do is just visualize or put some sort of rational basis towards what might be achievable as we move forward as a Commission to try and determine what some of the best decisions that we could recommend to the Legislature would be.

On the second page of the analysis, and, again, I want to emphasize the analysis I did just due to the math involved, it is only for FPL. I took the largest utility and basically took their generation numbers that were provided by staff and ran those numbers for FPL. So this is what FPL as Florida's largest utility might be expected to accomplish if

funds were continually invested into a single renewable resource.

The analysis, I think, would be scalable because, again, if it works for one utility then there might be some slight variances, but you could extend the analysis as a statewide initiative. But looking at a one percent cap and a summary for FPL-only economic investment and achievable capacity through 2020 on the second page, at least with the one percent cap, and I think as Mr. McGlothlin accurately stated, there is the cost of the cap plus the avoided cost. And my analysis encompasses those in terms of my total dollars available comprise the avoided cost plus the revenue cap.

So I have incorporated those into the analysis. And under a one percent cap a total economic investment in the state through 2020 could rationally be expected to be \$4.1 billion. And those are some of the numbers for installed capacity that might be achievable by renewable type. For the two percent investment, I mean, two percent cap, it goes up to 8.2 billion; 3 percent, 12.3 billion; 4 percent cap, 6.4 billion; and 5 percent cap, 20.5 billion. So as you see with the additional economic investment and revenue stream, certainly that creates jobs and develops renewables. But, you know, some renewables as correctly noted provide more bang for the buck to the extent that they are nearly equivalent to base load generation such as biomass, where other cleaner

renewables, admission free renewables are intermittent resources and have lower capacity factors and cost a lot more, particularly solar PV.

But I guess putting it into somewhat of a perspective, unless something substantively changes with the cost of solar, by 2020 investing 5 percent solely in solar you would be essentially -- it would be the equivalent cost of a nuclear plant. And you could only theoretically achieve two percent of your total prior year generation in terms of what that investment would be rationally expected to deliver, at least based on my math, subject to check.

And so, again, you know, I just wanted to provide some basis. Again, I would not say that my numbers are gospel by any means, and I look forward to looking at the Navigant consultant report. But, again, my quick look analysis attempts to rationalize what could be theoretically achievable if we had a pool of money that we could invest in a renewable type and running that through 2020. And I would hope that, you know, as a basis for discussion that that might be useful to not only my colleagues, but to staff, and perhaps even maybe the Navigant consultant.

But just as a rational basis check, the numbers that I used for installed costs in terms of dollars per megawatt for biomass was about 1.9 million per megawatt; wind, 2.3 million per megawatt; solar thermal, 11.2 million per megawatt; and

solar PV about 12 million per megawatt. I realize that those numbers could be debated or what have you. They may be a little bit lower, they may be a little bit higher. But, again, the magnitude really doesn't change no matter what the numbers are. Base load generation obviously provides more generation, which is critical towards achieving the goal sooner rather than later to the extent that the goal is based on past year generation in terms of the current year.

A very idealized analysis, and so I don't think too much should be made of it, but at least it shows that the Governor's vision is achievable in some regards. And I think that it's important to move forward with that and provide the Legislature with options to consider. And, again, I think that that is a policy decision that's best left to the Legislature in terms of what they feel that the consumer is able to burden, and what the long-term policy benefits to the state are in terms of the environment. And it's, I think, better left to them to make those value choices.

Just briefly commenting on two of the comments that were made by some of the presenters. I look forward to reviewing some of the solar data that may be available in terms of the report. Again, I'm just basing it on numbers I have seen currently, and just a reasonable cost of what I think solar PV would be on a cost per kilowatt or cost per megawatt hour basis. Also, too, just briefly touching upon FPL's

comments, again, this gets down to we're not the policymakers, but if I understand FPL correctly, they are effectively asking the Commission to somewhat legislate or make recommendations. And at least from my perspective, you know, we are not in the position to make policy in contravention of the statutory provisions that were enacted by the Legislature. And I guess as a lawyer, I kind of, you know, I tread lightly.

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So with respect to the position that was advocated for weighing in with expertise or on the merits of nuclear, I think I would be deferential to the Legislature at this point. I have my own personal views, but I would be more inclined to be deferential and not really take a position currently.

But with respect to the comments that were made in support of having a national REC market in terms of the benefit to consumers and such, you know, while I respect FPL's argument and really can't fault them for asking, I guess, you know, my view is very consistent with the legislative mandate that has been given to the Commission, to the extent that at least my personal view is buying out-of-state RECs is analogous to buying thin air.

And to me it provides no economic benefit to our state, and it would be troublesome to me, at best, to in good faith recommend that we ask Florida consumers to contribute to something that really doesn't have that tangible nexus or benefit to our state. And I respect the argument that is being

advanced, but it's also, in a sense, somewhat self-serving to the extent that -- well, you know, the unregulated subsidiary would stand to probably benefit financially from adopting that position.

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So in good faith I just could not support that just because, again, I think it would be inherently unfair to ask consumers to step up and the state of Florida to pay for something that is out of state. And so I respectfully acknowledge the request, but I just couldn't support it just because of the dollar amounts involved. And if we are going to ask people to make that commitment, we ought to recognize the in-state benefit of that commitment. And if we can do it in other states we certainly can do it in Florida, and it brings that business here.

So that's basically all I really had to say. I look forward to moving forward. I think Commissioner Edgar made an excellent point with respect to looking at alternate compliance payments and some of the other points that she mentioned. And I think as we move forward, you know, certainly we are on a very tight frame. It's unfortunate that we will be getting the Navigant consultant report late in the game. I mean, I don't have the ability to really talk to the consultant at this point, so that's why I took a little initiative and tried to come up with the analysis that I did as a basis for discussion.

I hope it helps, or at least provides a little bit of

visibility towards that. But, like I say, I think moving forward in the process, it's an exciting time in Florida to be working on these policies. And it's a great time to have the honor and privilege of serving as a Commissioner with my colleagues. So, thank you.

CHAIRMAN CARTER: Thank you, Commissioner.

Commissioner McMurrian.

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COMMISSIONER McMURRIAN: Thank you, Chairman.

Can you all hear me okay?

CHAIRMAN CARTER: Yes, ma'am. We can hear you fine. You're recognized.

COMMISSIONER MCMURRIAN: Thank you.

Well, I guess I will start off by saying that I'm very encouraged by all the things I have heard today, particularly from my colleagues. I think that it is an exciting time. And I am very optimistic about what we can accomplish when we are putting our heads together on this issue. And I've heard a lot of the things today from all of you that I have some concerns about, but I think that we are hearing -- I think we are coalescing around some agreement in some areas, and also identifying the areas where we need more information.

The Governor and the Legislature recognized the need to address this issue for all the reasons that you all have mentioned today, and a lot of the stakeholders, and also for

the reasons that are so clearly laid out in the statute. And obviously we need to address it, too. But I do agree with some of what has been said about taking time to get the information we need in order to address it in the most effective way. And I guess the way I have been approaching this are what things can we do to move the ball forward and to show that Florida is open to the renewables business, but while balancing the concern about the cost to the ratepayer.

And, of course, I have listened to the comments today about the short-term versus the long-term cost, and I think that's something we definitely have to keep in mind as we try to make the best recommendation we can to the Legislature. But I think those answers about what we can do to move the ball forward, those should be in whatever we submit to the Legislature. And I listened intently to the comments by several of the speakers. I know that Mr. Twomey, I think, was the first that talked about if we had suggestions that perhaps we were concerned about our authority to put forward at this point, that maybe we ought to consider at least sharing those and making the best recommendations we could to the Legislature.

I agree that ultimately, just like Commissioner

Argenziano said, that the Legislature, they are the

policymakers and it's up to them to divvy out the tools. But

it is also our responsibility, I believe, to let them know if a

certain tool may be helpful in striking the right balance as we try to get to that answer.

And in the spirit of Commissioner Edgar's list of things that she would like to follow up on and get some more information about, and I have heard comments today along these lines from at least a couple of the speakers about nuclear.

And, of course, I feel strongly about taking full advantage of our nuclear resources. Certainly the new ones, and perhaps even the old ones could be accounted for in some way because they are clean resources and because the ratepayers have paid for them or will be paying for them in the future. And it seems that that should be recognized as a clean resource.

I realize that the current statutes probably do not allow us to recognize it as a renewable source, but I think there are probably some options out there for taking advantage of it in some way or another, whether it's looking at the denominator that we are applying the percentage to, or perhaps looking at the definitions, or those sorts of things that have been raised.

I don't think that -- I think it is hard at this point to say exactly what the answer should be, but I think we are at least coalescing around a list of things that we want more information on. And they can help move us to that best possible proposal that we can put forward in February. But I agree that we should take full advantage of the time that we

have left and continue to work on the best product that we can.

CHAIRMAN CARTER: Thank you, Commissioner.

Commissioner Argenziano.

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COMMISSIONER ARGENZIANO: Thank you.

First, let me say that when we broke, my staff handed me a little sheet of newspaper that there was an article I guess on the Internet already that was titled "Argenziano Tells Legislature to Finish Their Job." Well, none of you heard me say that today, and I want to make it very clear I did not say anything like that.

What I suggested was that just as we have before us -- and first I suggested that the Governor and the Legislature took the bull by the horns and said we're going to do something. And then just as I said here many times today, almost ad nauseum, was that we found in deliberating what they were trying to get out that there are more questions, obviously more questions that we need answered. And some of those questions are policy, are answered only by the policymakers. So let's rewrite that headline and "Argenziano Says Policy Decisions Should be Made by the Legislature. Standby for Part Two of the Energy Bill." So there you go with headlines for newspapers.

In making that clear, what I said before is that staff came up with a product within our jurisdiction and worked very hard at coming up with something, and did what they could

within our parameters and the information we had. In looking at the language of what we are asked to do as a Commission, what we shall have in rulemaking authority, they are talking about in developing the rule the Commission shall evaluate the current and forecasted levelized cost in cents per kilowatt hour through 2020, and current and forecasted installed capacity in kilowatts for each renewable energy generation method through 2020.

I'm having a really hard time coming up with those numbers, and so did staff. They are hard to just pull out of the air. And if we are supposed to be putting those into a rule, then we have to have some kind of a clue as to where to go and what they should be. And on the other hand, we have in the statute, and I know that the Legislature had to get this together very quickly, and I'm sure my colleagues over there in the Legislature are going to be coming back with us with other things that they are finding that they need to add to this legislation. Other things that some of you here today have said, look, we need to look at this, we need to look at that, and some have said, look, don't pay attention to costs. Well, we have to pay attention to costs because in this statute it says that's what we should do, also.

So what I think, because I have been waiting since 1972, waiting on those lines, personally thinking that we should have moved ahead a long time ago, is that while we have

so many other questions to answer, and while we know -- I am certain that the Legislature in its wisdom is going to come up with Part B and other things that need to be addressed in this great bill that they did pass, and with the Governor's initiatives, that there is going to be more that we have to look at. It is just not as simple as saying that is what we want to do.

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They did a great job, and now something more is coming at us, I am certain. But at the same time I don't want to sit and wait and do nothing. I want us to move forward, and my suggestion still remains that incorporating all those things that we have discussed is that we need to move forward with an aggressive approach, an aggressive recommendation that says by 2020 this is what we're going to do and this is why.

Now, what I would like to ask the Legislature along with that is if you want us to do this, do you still -- I know, I realize that the statute says we may give greater weight to solar and wind above all other forms of energy. Are you certain that is what you want if the costs are this way? And please give us some direction, and to that specifically, because there are a lot of renewables out there that want to be part of that and can be a great part of that economic development and including that energy. We need that policy direction.

But I would like to move forward with that, but also

keeping in mind you have two different forces here. We have the Legislature, who really -- and I'm going to ask staff, because I read it, but I want to make sure, because I want to get this on record. Did the Legislature give us a time frame, and a percentage, and a date to do it by?

MR. RUDD: Ryder Rudd of staff. The Legislature did give us a time frame when to submit them a draft.

commissioner argenziano: No, I mean to implement a reduction of any particular type, or kind, or when, and where, and how much did it cost.

MR. RUDD: No, ma'am.

Governor's proposal, which I happen to think is a great proposal, okay, that says we need to move forward. You know, we need to go here. But now we have the Legislature, who I'm not going to sit here and ignore what they said, okay. I'm going to say, okay, I have the Legislature's statute here in front of me that this is where they want to go. Now I want them to tell me if we can give them two scenarios. Let's give them a more conservative, maybe not quite as conservative as staff came up with, and that's another thing the article got wrong. It said that the second part of my recommendation was a more conservative approach. No, a more conservative than Option 1, but here is Option 2. But it also says, okay, give us some kind of policy direction as to when, and knowing that

there is some cost that we could possibly plug in here, and also letting them know we are not sure of all the costs yet because they are ever changing.

You know, we could maybe give a guesstimate of what today's costs are for some of the renewables, but what will they be two years from now. And what do we do in the case in two years from now in incorporating a rule, and I know we can always go back and change the rules. But having those two scenarios makes me feel more comfortable that I did not neglect either one of those great proposals by our Governor or the Legislature. And I think that they can come back and give us the policy direction.

When we are talking about rulemaking we are not talking about policy. We are talking about rulemaking. Now, give me the policy with specifics to how I can go about developing a rule to that specific policy. And all I'm saying is there is some missing components there, and there are very good competing renewables out here that we need to understand how we incorporate those into a rule, and just to what degree, and how much is cost a factor. And I'm going to ask the Legislature that because we need to know.

And I'm sure they are going to hear from their constituents, and some of those constituents are going to say, you know, I don't mind spending that money here if this is where we are getting to. So with having those two proposals in

front of me, and I don't have all the particulars. I need staff to help here. I'm giving you some kind of -- you know, to me it says I'm not going to turn my cheek on the Legislature or the Governor, because they are both great plans. Now we put them together and figure out -- let's take direction from them on how we propose the rules after we have a few more specifics in there.

Thank you, Mr. Chairman.

CHAIRMAN CARTER: Thank you, Commissioner.

Commissioner Skop, you're recognized.

COMMISSIONER SKOP: Thank you, Mr. Chairman.

I think Commissioner Argenziano made some good points there. With respect to, I guess, Mr. Rudd's discussion of what we are mandated to do pursuant to the legislative mandate in terms of providing achievable megawatts or something like that, I think that part of the second page of my analysis attempted, again, a rough order to try and articulate if you had this much available for each of the caps as proposed by staff, how many megawatts that you could -- installed megawatts in the state of Florida would be achievable by renewable type through 2020.

So I think part of that, again, I'm trying to answer some unanswered questions, I think, as all of us have, and it is difficult because we don't have those answers. And I would hope that, you know, perhaps staff could share at least these preliminary results with the Navigant consultant or maybe at

some point I could talk to them during the process. Because, again, I would like to see what's achievable in terms of installed capacity by megawatt renewable type through 2020, or, you know, what have you. What target RPS date you can make; what percentage by year. And also, too, those levelized costs.

Again, I didn't try and project any of that. I made some just really gross first order of magnitude estimates on what would be doable as a basis for facilitating discussion.

And also, you know, whether we could achieve the goal. And, again, I think that that is doing that at least rough analysis has convinced me that we can move forward and do so aggressively, or we could do so more moderately. But, again, that's a policy decision. But, again, clearly, you know, those goals can be realized through a lot of combined effort and hard work on our part and getting something, the best possible product and best options to the Legislature for ratification.

COMMISSIONER ARGENZIANO: Mr. Chairman.

CHAIRMAN CARTER: Commissioner Argenziano.

COMMISSIONER ARGENZIANO: I'm sorry, I forgot I had some questions for staff. And I hope that they will lead to something else that we need maybe to ask the Legislature.

Number one, what have we come up with as far as the determination of need for 2020; what is the energy amount that we need to take us through those times?

MR. BALLINGER: Tom Ballinger with staff. Are you

talking the forecasted retail sales of the IOUs?

COMMISSIONER ARGENZIANO: To meet the needs of Floridians.

MR. BALLINGER: A ballpark figure would be about 255,000 gigawatt hours.

COMMISSIONER ARGENZIANO: And the second part of that question, with the proposals of the four new nuclear power plants, how much of that energy will we be achieving with the four new plants when they come on-line?

MR. BALLINGER: That I do not know. You want to know a percentage of what would be provided by nuclear?

figure out if we are trying to get to an energy level, making sure that we have energy, where are we with the four nuclear plants, and then how much do we need above that? And that is besides the other issue, because another issue that is probably going to come up in this session is going to be the new energy. I mean, clean energy, not just renewables. And that's going to be —— I think it's going to be a big factor, but I want to know —— I guess I'm trying to figure out how much demand do we have that we are looking for down in the future and how much are we going for so we know how much we should be including into this picture and letting the Legislature know at the same time. This is the demand we see for the future. We have four plants coming on. We want to open the door for renewables for

many different reasons, but let's figure out the remaining energy that we forecast.

MR. BALLINGER: Another part of that question would be the capacity needs. In our Ten-Year Site Plan there is a lot of capacity that has been proposed. About half of that capacity has already been committed to by utilities, either through need determinations from the Commission, certification through the Governor and Cabinet, or under construction. It didn't require certification, it's peaking capacity that's under construction.

There has been several more thousand megawatts that has happened over time that has been removed from utility plants for various reasons, primarily reduction in load growth. Bottom line, we're looking at maybe 1700 megawatts of capacity and energy that's available that can be avoided, if you will, by new renewable generation out through 2017. Then you have two more nuclear units that come on in 2018 and 2020 with FPL. So between that, we are pretty much covered as far as needed capacity needs through the 2017 to 2020 time frame.

COMMISSIONER ARGENZIANO: So you're saying -- I think what you just told me is that we are covering our need, our predicted need.

MR. BALLINGER: Our reliability capacity needs; yes, ma'am. That doesn't mean renewables can't avoid a fuel, an energy need, which they do today, they sell as-available energy

and can displace fuel.

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COMMISSIONER ARGENZIANO: Okay. That's great. And maybe you can get me those numbers, because I didn't jot them down quick enough.

and kind of ran through a laundry list of a few items, when I said additional information on our review of ten-year site plans and the interrelationship with energy efficiency programs, some of those points were what I was hoping to kind of bring in. So, I'm hoping that with the further discussion that they are sort of part of what we can discuss the next time we're together.

COMMISSIONER ARGENZIANO: It just makes sense to know those things, put them altogether when we are reporting back to the Legislature, and say here is what it looks like. Here is where we need to go. And then, of course, there are other reasons to look at renewables. But keeping in mind that that clean -- and I'm not predicting what the Legislature is going to do, but it sounds like the clean energy issue is going to be a major issue this session, too, and that is going to change, I think, some of the things that has already been sent to us.

CHAIRMAN CARTER: Commissioner, before you go to another issue, would you yield to Commissioner Skop?

COMMISSIONER ARGENZIANO: Sure.

CHAIRMAN CARTER: I think he wants to be heard on

this point.

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Commissioner Skop.

COMMISSIONER SKOP: Thank you, Mr. Chair.

Just two quick issues, I think, in response to Commissioner Argenziano's question. I want to take a rough stab at the new nuclear generation in terms of gigawatt hours per year with four reactor plants. I would guess that it would be about 36,000 gigawatt hours per year. That was some quick math, but subject to check.

And then secondly, too, in terms of the capacity, that avoided capacity that Mr. Ballinger mentioned, the 1700 megawatts. Again, when I ran my preliminary numbers, I just assumed that, you know, that there was wasn't a constraint on that, either. But, again, I just wanted to clarify those two points. But I think if we do the math we will come close to probably about 36,000 gigawatt hours for the new reactors.

COMMISSIONER ARGENZIANO: Okay. And my point -- and I'm sure my colleagues feel the same way, is to make sure that gets passed on to the Legislature so they have a good understanding.

One other thing I have been curious about for the longest time, and it's very hard to get the numbers on, and I know Steve and my staff has been trying to work hard to get this, and I think I would like to bring it up in the legislative capacity.

Because from time to time legislators do talk to our federal counterparts and talk to them about the needs of the states and the country as a whole. And I think that in, what was it, in 2003 the Federal Clean Air Act was changed. And I wonder when you think about going back and putting it back to where it was pre-2003, how much of emissions reductions are we getting in doing that?

And I would like to get some kind of an answer to that question. And maybe advice, or ask our Legislature if they can look into that, and if there is anything being done on that. Because if it is being done on a federal level and you can reduce emissions, then that has got to help the states in so many other areas. And I'm just curious that I can't come up with that kind of information. I think that's it, Mr. Chairman.

CHAIRMAN CARTER: Good. And be aware -- I know we have used the term aggressive, but we do have an aggressive schedule, and we are going to stay on our schedule, because we have got those dates locked in because of our time frame to report to the Legislature. So, staff, as we are asking this --

COMMISSIONER ARGENZIANO: Mr. Chair, you are talking about the aggressive schedule for rulemaking.

CHAIRMAN CARTER: Right. Yes

COMMISSIONER ARGENZIANO: When I say aggressive, I'm talking about aggressive rules to go along with the policy.

CHAIRMAN CARTER: Right, and I agree with you. I'm just saying to try to keep the train on course, so staff can kind of work their work plan to understand that we are going to keep those dates as we go through that. That will keep us kind of focused. Because whatever we send to the Legislature, it will be given to them at the date, because the statute is specific on that, I think it's February 2nd.

Yes, ma'am. Commissioner, you're recognized.

Legislature has asked us, what I read before in part of our rulemaking -- excuse me one second, let me find that spot again. "In developing the rule, the Commission shall evaluate the current and forecasted levelized cost in cents per kilowatt hour through 2020 and current and forecasted installed capacity in kilowatts for each renewable energy generation method through 2020. I think that we have to provide that to the Legislature. And I think that -- I'm hoping that we stay on point with what they are actually asking us to provide, also.

CHAIRMAN CARTER: At a minimum we should at least provide what they ask for.

COMMISSIONER ARGENZIANO: We can throw in some other stuff.

CHAIRMAN CARTER: Yes, throw in some other stuff.

But, as a minimum, we have got to give them what they asked for as a foundation. And then I think that gives us an opportunity

to those areas that we may need some further direction on, looking at nuclear, or looking at it in how do you look at it if you do look at it. Looking at the fact that based upon the Ten-Year Site Plans, I think Mr. Ballinger said there is 1700 megawatts left out there. How do we look at that in the context of trying to create a marketplace for renewable energy in Florida.

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And, I think, Commissioner Skop, I like the schedule that you have developed here because it goes down to 2020, but also looking at it in the context of what's available in Florida, and what will come to Florida given the process. And looking at the cost, the RECs, the rate caps, and things of that nature, and then biomass. God love Commissioner Bronson, but when he starts talking about dry tons -- you know, I know about cotton, I know about peanuts, I know about corn, and I know a little bit about pigs and cows, but I don't know about dry tons.

COMMISSIONER ARGENZIANO: He does.

CHAIRMAN CARTER: He does. That's a good thing, he does. But in the context of putting it all in place, as I said, it's a very exciting time. And for us to be able to -- and I appreciate your perspective on that, Commissioners, is that how we look at first and fundamentally what the Legislature has told us to do that we know that's unequivocal. Then as we go through the process of coming to grips with

giving them the information they are requiring, there are some collateral issues that kind of spin-off from that.

And I think that as we identify -- because it is important that we identify those issues because, as I said, well, if you can't do that then why, why didn't you guys look at that. So we do need to look at that. I don't want to be -- I don't think any of the five of us want to be standing before a committee when they say why didn't you guys look at that. And we say, well, we didn't really think about it.

COMMISSIONER ARGENZIANO: Turn around and say, well, we sent you a message and said we needed to know how you wanted us to look at that. Then we can answer them and say, well, we did.

CHAIRMAN CARTER: That's where we are getting to, and that's why I'm so excited about the issues. But, fundamentally, I'm excited about the fact that the five of us are looking at this in the context of protecting Florida, protecting the ratepayers, following our legislative mandate, but also creating an exciting economic development opportunity for the state. And, as you said, Commissioner, coalescing the Governor's vision and the Legislature's policy for us. That's a great thing. That's a great thing.

Commissioners, I think I'm coming back to Commissioner Edgar.

COMMISSIONER EDGAR: Mr. Chairman, once again, it has

163 been long day, but a good day. And I guess if we are at that 1 place, I'd take a stab at a motion and see where it takes us. 2 CHAIRMAN CARTER: Commissioners, I'm going to ask 3 Commissioner Edgar to give her stab at it, if that's okay with 4 5 everyone. You're recognized. 6 COMMISSIONER EDGAR: Thank you, Mr. Chairman. 7 I would ask that we direct our staff to do some 8 further analysis and data gathering per the conversation that 9 we have had. There have been a number of items that have been 10 listed and others that have been discussed, and that we come 11 back on December 3rd for a further workshop on these issues. 12 And that we work towards then from that date a January 9th 13

And that we work towards then from that date a January 9th special agenda at which point in time we will work towards a vote on some items and additional information to send to the Legislature per the statute.

CHAIRMAN CARTER: Thank you, Commissioner, for the

motion. Let's discuss -- to make sure that we got everything there, Commissioners, before I ask for a second, let me call on Commissioner McMurrian first, and then we will come to --

Commissioner McMurrian.

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COMMISSIONER McMURRIAN: Yes, Chairman.

CHAIRMAN CARTER: Were you able to understand the motion that Commissioner Edgar had made, and just whatever feedback. Before we ask for a second, I wanted to kind of make

sure that we were all on board with understanding exactly where we are going from this point.

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motion. I agree with that way of looking at it. I think that we have some things that if we try to hash through them today, I just don't think we're going to have the information to answer some of those questions that Commissioner Edgar laid out, and there are some other more specific things, if we go down the road of trying to put forth a proposal today, I do think that, of course, staying on schedule is absolutely important. And I think with this kind of an approach, we can do that, and we can get to where we need to be.

And I think that we are -- I think that we are gaining a lot of consensus here. I think that we want to move forward and strike the right balance, and I think we can do that. But, again, I think there are a few things that Commissioner Edgar mentioned, the one I had mentioned, I've got a couple of others, you know, particularly a little bit -- a few more questions that I might ask if we are going to try to put pen to paper today and actually submit a proposal.

But I think we do have a really good work product to go from. I think we know where those spots of information -- we know where the places are where we need to gather some more information, and we have got something to work from. I do agree with Commissioner Edgar's approach, if that's what you

are asking of me, Chairman.

CHAIRMAN CARTER: Yes, ma'am, I was. And thank you so kindly.

Commissioner Argenziano.

COMMISSIONER ARGENZIANO: If I could ask Commissioner Edgar one more time, repeat it to me. We are talking about getting additional information but staying on course as far as the deadlines that we have that the Legislature gave us.

COMMISSIONER EDGAR: Yes, ma'am.

COMMISSIONER ARGENZIANO: And what would be the next workshop or date that we would have this come before us? I want to make sure that there is enough time in between for public as well as the Commissioners to keep working on it.

COMMISSIONER EDGAR: Sure.

My understanding, and this is what I'm working from, and I certainly would ask staff if I have a date wrong or if anything needs to be added, but my understanding is that we are currently scheduled on the Commission calendar on December 3rd, and that we would use that pre-scheduled date as a workshop looking at the information that staff would be following up on in the meantime, and with their, of course, direction and ability to work with all stakeholders and interested parties. And then we have, it's my understanding, January 9th, a date already scheduled on the Commission calendar, and that that would be a date then for a further more refined work product to

come before us potentially, and hopefully then to be able to come to consensus on a product to send to the Legislature.

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And my thinking, as I said earlier, is that I don't know yet what that will look like, but there is the ability to still look at options, to look at ranges, to look at some different approaches with language, and that gives us two more times that we will be gathered together in open forum for discussion.

COMMISSIONER ARGENZIANO: And that will include open to public, also.

CHAIRMAN CARTER: Absolutely.

COMMISSIONER ARGENZIANO: Okay, great. And that January 9th date would be -- we'll have that date set as the date we will actually vote. That is our tentative plan on that, and that way we can maintain our February 2nd. So staff can go through and do all the scriveners and putting all the things together and get it to the Legislature in a timely manner.

Commissioner Skop.

COMMISSIONER SKOP: And I guess based on the discussion, I would second Commissioner Edgar's motion. Again, I think with respect to the time remaining until December 3rd, it's a significant amount of time, but I also think that we have quite a bit of analysis that we need to get done between now and then. And basically we need a comprehensive analysis

so we can provide the Legislature with the appropriate options.

CHAIRMAN CARTER: Let me just -- Commissioner Argenziano.

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mean, I try to go to different places to get some information and resources available. Are some of our universities or universities around the country providing some research on some of the renewables that we can tap into?

MR. FUTRELL: Commissioner, Lawrence Berkeley
National Laboratory for one, and there are several other major
research centers that provide information, particularly on
updates on what is going on in RPS in other states where we can
get a lot of these in-depth questions, particularly about
things like alternative compliance payments and understanding
the issues more in-depth, as well as how states are progressing
with their renewable standards, the cost implications, barriers
they are finding to success. How they are trying to overcome
those barriers, as well. There is a lot of research out there
that we are tapped into.

COMMISSIONER ARGENZIANO: And that's great, and I think that's great. I think what I'm trying to say, and I'm going to try and say it in the best way I can. You have so many competing interests that I would hate to just rely solely on their own data as far as cost and efficiency. I would like to see if there is some other research in other places that

could give us, you know, an unbiased maybe -- and not to say that they are not giving us straightforward information, but so I feel comfortable that we are getting the best information as we can from several sources.

CHAIRMAN CARTER: Staff, what Commissioner Argenziano is saying is pretty much what we're all thinking, is that to ensure as comprehensively as possible that you seek out that information and get it to us so that we can make the best possible decision. Because, as a said, we are not seeking to be number two, we are seeking to be the leader in the country as Florida is now and will continue to be. And in that process as you go there, I mean, even -- I mean, there may be some information we may be able to get from some industry institutes. Wherever, no stone unturned. Let's look under every rock, behind every tree and get that information.

And that way I think that particularly in light of what we have been discussing here from the bench saying that we want to make sure that we give the Legislature those collateral issues that are relevant to the decisions that we are making. And I think that if we can do that, the more information that we can give based upon the decision that we make, I think the better off we are going to be. Because in the final analysis is that the Legislature will be the final sign-off on the rule.

Yes, ma'am.

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COMMISSIONER ARGENZIANO: May I say something, Mr.

FLORIDA PUBLIC SERVICE COMMISSION

Chairman? The statute does say that we will make Florida a leader in new and innovative technologies.

CHAIRMAN CARTER: There you go.

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COMMISSIONER ARGENZIANO: We are mandated.

CHAIRMAN CARTER: We are mandated to do it.

And I did want to say that, because I think that as we go forward we want to ensure that we have that, and I just wanted to kind of keep us on track from our time perspective and all.

But, again, let me just say, Commissioners, before we vote on the motion, to not only to our staff, who has done a yeoman's job in terms of putting together this process, and also holding the workshops for the stakeholders, let me just say to the stakeholders, those of you that have been with us from day one, as well as those that are here with us today, please continue to work with our staff. Please continue to submit information. Is has been my opinion, although I have not lived as long as -- as some of the kids in Sunday school said, I was around when Moses came. I don't have all of the great ideas, but I do think that if we work cooperatively and collaboratively we can have -- as the Legislature says, make Florida a leader in this area.

And with that, Commissioners, anything further? Any debate? Hearing none, we have a motion and a second on the floor. All in favor of the motion let it be known by the sign

1	of aye.
2	(Simultaneous affirmative aye.)
3	CHAIRMAN CARTER: All those opposed, like sign.
4	Shown it done. Thank you so much for your time
5	Thank you, Commissioner McMurrian.
6	COMMISSIONER McMURRIAN: Thank you.
7	CHAIRMAN CARTER: We are adjourned.
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1	STATE OF FLORIDA) : CERTIFICATE OF REPORTERS
2	COUNTY OF LEON)
3	WE, LINDA BOLES, RPR, CRR, and JANE FAUROT, RPR, Official Commission Reporters, do hereby certify that the
4	foregoing proceeding was heard at the time and place herein stated.
5	IT IS FURTHER CERTIFIED that we stenographically
6	reported the said proceedings; that the same has been transcribed under our direct supervision; and that this
7	transcript constitutes a true transcription of our notes of said proceedings.
8	WE FURTHER CERTIFY that we are not a relative,
9	employee, attorney or counsel of any of the parties, nor are we a relative or employee of any of the parties' attorneys or
10	counsel connected with the action, nor are we financially interested in the action.
11	interested in the decisi.
12	DATED THIS 20th DAY OF OCTOBER, 2008.
13	
14	LINDA BOLES, RPR, CRR JANE FAUROT, RPR
15	FPSC Official Commission FPSC Official Commission Reporter
16	(850) 413-6734 (850) 413-6732
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18 THE RESERVE OF THE	RPS Summary for FPL (Renewable Percentage Achievable with 1% Cap)				
Year	Biomass	Wind	Solar (Thermal)	Solar (PV)	
2007	0.74%	0.08%	0.03%	0.03%	
2008	1.51%	0.17%	0.06%	0.05%	
2009	2.25%	0.26%	0.09%	0.08%	
2010	2.98%	0.34%	0.11%	0.11%	
2011	3.70%	0.42%	0.14%	0.13%	
2012	4.39%	0.50%	0.17%	0.16%	
2013	5.09%	0.58%	0.19%	0.18%	
2014	5.76%	0.65%	0.22%	0.21%	
2015	6.48%	0.74%	0.25%	0.23%	
2016	7.22%	0.82%	0.28%	0.26%	
2017	7.94%	0.90%	0.30%	0.28%	
2018	8.66%	0.98%	0.33%	0.31%	
2019	9.42%	1.07%	0.36%	0.34%	
2020	10.18%	1.16%	0.39%	0.36%	

2010	0.0070	0.0070	0.0070	0.017
2019	9.42%	1.07%	0.36%	0.34%
2020	10.18%	1.16%	0.39%	0.36%
	PPS	Summary for FI	2	
	(Renewable Perce			
Year	Biomass	Wind	Solar (Thermal)	Solar (PV)
2007	2.21%	0.25%	0.08%	0.089
2008	4.54%	0.52%	0.17%	0.169
2009	6.74%	0.77%	0.26%	0.249
2010	8.93%	1.01%	0.34%	0.329
2011	11.09%	1.26%	0.42%	0.40
2012	13.18%	1.50%	0.50%	0.479
2013	15.26%	1.73%	0.58%	0.54
2014	17.29%	1.96%	0.66%	0.629
2015	19.43%	2.21%	0.74%	0.699
2016	21.65%	2.46%	0.83%	0.77
2017	23.81%	2.70%	0.91%	0.859

2.95%

3.21%

3.47%

25.98%

28.26% 30.55%

2018 2019

2020

0.99%

1.08%

1.17%

0.93%

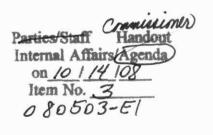
1.01%

1.09%

	RPS Summary for FPL (Renewable Percentage Achievable with 2% Cap)				
Year	Biomass	Wind	Solar (Thermal)	Solar (PV)	
2007	1.47%	0.17%	0.12%	0.05%	
2008	3.03%	0.34%	0.18%	0.11%	
2009	4.50%	0.51%	0.17%	0.16%	
2010	5.95%	0.68%	0.23%	0.21%	
2011	7.39%	0.84%	0.28%	0.26%	
2012	8.78%	1.00%	0.34%	0.31%	
2013	10.17%	1.16%	0.39%	0.36%	
2014	11.53%	1.31%	0.44%	0.41%	
2015	12.95%	1.47%	0.49%	0.46%	
2016	14.43%	1.64%	0.55%	0.51%	
2017	15.87%	1.80%	0.61%	0.57%	
2018	17.32%	1.97%	0.66%	0.62%	
2019	18.84%	2.14%	0.72%	0.67%	
2020	20.37%	2.31%	0.78%	0.73%	

	RPS Summary for FPL (Renewable Percentage Achievable with 4% Cap)				
Year	Biomass	Wind	Solar (Thermal)	Solar (PV)	
2007	2.95%	0.33%	0.11%	0.11%	
2008	6.05%	0.69%	0.23%	0.22%	
2009	8.99%	1.02%	0.34%	0.32%	
2010	11.91%	1.35%	0.45%	0.42%	
2011	14.79%	1.68%	0.56%	0.53%	
2012	17.57%	2.00%	0.67%	0.63%	
2013	20.35%	2.31%	0.78%	0.72%	
2014	23.06%	2.62%	0.88%	0.82%	
2015	25.91%	2.94%	0.99%	0.92%	
2016	28.86%	3.28%	1.10%	1.03%	
2017	31.75%	3.61%	1.21%	1.13%	
2018	34.63%	3.93%	1.32%	1.23%	
2019	37.68%	4.28%	1.44%	1.34%	
2020	40.74%	4.63%	1.55%	1.45%	

	RPS Summary for FPL (Renewable Percentage Achievable with 5% Cap)				
Year	Biomass	Wind	Solar (Thermal)	Solar (PV)	
2007	3.69%	0.42%	0.14%	0.13%	
2008	7.56%	0.86%	0.29%	0.27%	
2009	11.24%	1.28%	0.43%	0.40%	
2010	14.89%	1.69%	0.57%	0.53%	
2011	18.49%	2.10%	0.71%	0.66%	
2012	21.96%	2.49%	0.84%	0.78%	
2013	25.43%	2.89%	0.97%	0.91%	
2014	28.82%	3.27%	1.10%	1.03%	
2015	32.38%	3.68%	1.24%	1.15%	
2016	36.08%	4.10%	1.38%	1.29%	
2017	39.69%	4.51%	1.51%	1.41%	
2018	43.29%	4.92%	1.65%	1.54%	
2019	47.10%	5.35%	1.80%	1.68%	
2020	50.92%	5.78%	1.94%	1.81%	



RPS Summary (FPL Analysis Only) Nathan A. Skop 10/14/2008

FPL Summary Economic Investment and Achievable Capacity (Through 2020)

Fotal Economic Investment (1% Cap): \$ 4,113,549,188			4,113,549,188
Installed Capacity (A	chievable MW by Rene	ewable 1	ype):
Biomass	2,165		
Wind	1,788		
	367		
Solar (Thermal) Solar (PV)	343		支持的关键 [10]

Total Economic Inve	\$ 12,340,647,563	
Installed Capacity (A	chievable MW by Rene	ewable Type):
Biomass	6,495	
Wind	5,365	
Solar (Thermal)	1,102	
Solar (PV)	1,028	

Total Economic Inve	stment (2% Cap):	\$ 8,227,098,375	
Installed Capacity (A	chievable MW by Rend	ewable Type):	
Biomass	4,330		
Wind	Vind 3,577		
Solar (Thermal)	735		
Solar (Thermal) Solar (PV)	686		

Total Economic Inve	\$ 16,454,196,751	
Installed Capacity (A	chievable MW by Rene	ewable Type):
Biomass	8,660	
Wind	7,154	
Solar (Thermal)	1,469	
Solar (PV)	1,371	

Total Economic Inve	\$20,567,745,939	
Installed Capacity (A	chievable MW by Renev	vable Type):
Biomass	10,825	
Wind	8,942	
Solar (Thermal)	1,836	
Solar (PV)	1,714	