1	BEFORE THE		
2	FLORIDA PUBLIC SERVICE COMMISSION		
3	In the Matter of:		
4	PETITION FOR APPROVAL OF DOCKET NO. 090109-EI SOLAR ENERGY POWER PURCHASE AGREEMENT BETWEEN TAMPA ELECTRIC COMPANY AND ENERGY 5.0, LLC.		
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11	PROCEEDINGS:		
12		ITEM NO. 3	
13	COMMISSIONERS PARTICIPATING:	CHAIRMAN MATTHEW M. CARTER, II	
14		COMMISSIONER LISA POLAK EDGAR COMMISSIONER NANCY ARGENZIANO	
15		COMMISSIONER NATHAN A. SKOP COMMISSIONER DAVID E. KLEMENT	
16	DATE:	Tuesday, October 27, 2009	
17	PLACE:	Betty Easley Conference Center	
18		Room 148 4075 Esplanade Way	
19		Tallahassee, Florida	
20	REPORTED BY:	JANE FAUROT, RPR LINDA BOLES, RPR, CRR	
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PROCEEDINGS

CHAIRMAN CARTER: We are back on the record.

And when we last left we were getting ready for Item 3.

Staff, you're recognized.

MR. GRAVES: Good afternoon, Commissioners.
Robert Graves from Commission staff.

Item 3 is Tampa Electric Company's petition for approval of a negotiated renewable energy contract with Energy 5.0. The contract is based on TECO purchasing the entire net electrical output of Energy 5.0's Florida Solar I facility for a period of 25 years beginning on January 1, 2011.

Energy 5.0 will sell as-available energy produced by the facility to TECO at a price per megawatt hour that is fixed for the term of the contract. In addition to the purchase of energy, the contract specifies that TECO will receive all environmental attributes and renewable energy credits associated with the renewable energy that is sold to TECO.

Staff's recommendation is that TECO be authorized to recover from its ratepayers an amount equal to its avoided energy costs. Any costs in excess of this amount should be borne by TECO's stockholders. Staff's recommendation would have no impact on customers' bills. If TECO is granted full cost-recovery of the contract,

1 customers would see a monthly bill impact of roughly 50 2 cents in 2011, and that would be an increase. 3 Chairman, representatives of the party and a 4 member of the public are present to speak. 5 CHAIRMAN CARTER: Okay. Let's do this. Let's 6 do this. Let's start with the company first, and then we 7 will hear from the public, and then we will hear from intervenors. You're an intervenor, Mr. Wright, is that 8 9 right? 10 MR. WRIGHT: We are the co-party. I represent. Energy 5.0. We are the supplier to Tampa Electric. 11 12 CHAIRMAN CARTER: Let's do this. Mr. Klutho is 13 here. Let's hear from him first. 14 Mr. Klutho, good morning. MR. WRIGHT: Thank you, Chairman. 15 CHAIRMAN CARTER: Or good afternoon. 16 MR. KLUTHO: Shouldn't I be after? 17 CHAIRMAN CARTER: After what? Do you want to 18 be heard on the issue? 19 MR. KLUTHO: I would rather be heard last, if 20 21 that's okay. CHAIRMAN CARTER: Okay. Let's hear from the 22 company and then from the co-petitioner. 23 MR. BEASLEY: Thank you. 24 Mr. Chairman and Commissioners, I'm James D. 25

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Beasley appearing with Lee L. Willis of the law firm of Ausley and McMullen on behalf of Tampa Electric Company. With me today from Tampa Electric are Joann Wehle, who is the Director of Wholesale Marking and Fuels, and Mr. Carlos Aldazabal, who is the Director of Regulatory Affairs.

Commissioners, for many years we have all heard the call globally, nationally, state, and locally that developing and rigorously pursuing renewable energy resources is for the good of all of us, and to that end, Tampa Electric Company set about in 2007 to issue, publish, and widely disseminate a request for proposals seeking all of the renewable energy proposals that we could get from the marketplace.

We got responses to those and fully evaluated them, and in particular the solar proposals. And the company evaluated those proposals and determined that from the solar proposals, the Energy 5.0 proposal is the best proposal presented to us from a cost standpoint from the qualifications of the provider for our customers. So for approximately a year thereafter we negotiated with Energy 5.0 and came up with the contract that is before you for 25 megawatts of solar PV energy from this provider.

Now, we believe that this agreement represents

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the lowest cost alternative developed by Tampa Electric from a competitive market solicitation for solar PV in our service territory. Consequently, it's the best solar alternative that we can present to you on behalf of Tampa Electric Company having looked at the various alternatives that were presented.

While our petition acknowledges that the cost of this energy would be greater than that generated from conventional energy generation sources, it is solar power and we believe that everyone in government favors the development of solar power to the extent that we can do that. So consequently, we have this contract before you. We urge you to approve it for cost-recovery purposes for us so that we can implement it, and we have Mr. Wright on behalf of Energy 5.0 here with his representatives to answer questions you may have regarding the service that they will provide to our customers.

CHAIRMAN CARTER: Thank you.

Mr. Wright, you're recognized.

MR. WRIGHT: Thank you, Mr. Chairman, and good morning. As before, I'm Schef Wright, and on this matter I have the privilege of representing Energy 5.0, LLC, a Florida LLC who will be the supplier of solar power to Tampa Electric pursuant to the power purchase agreement that's before you today.

Also here with me today on behalf of the company are Mr. Bud Cherry, Mr. Vince Zodiaco, and Mr. Zach Cherry, who are respectively the Chairman and CEO, the Chief Operating Officer, and the Vice-President for Finance and Development of Energy 5.0.

In summary, we appreciate that part of the staff's recommendation that recommends approval of the power purchase agreement for partial cost-recovery. However, we disagree with the staff's attempt to parse the energy payments into two components, and a part for as-available energy and into a part for RECs, or the rest of the environmental attributes.

Approval of the power purchase agreement and the -- I do have a few minutes of comments. I will be as brief as I can. In summary, approval of the power purchase agreement and of the project itself are in the public interest and we would urge you to exercise your authority and your jurisdiction to approve the power purchase agreement and the petition as requested by Tampa Electric.

To be very clear, it is our unequivocal understanding that if you do not approve the petition and the power purchase agreement for full cost-recovery as prayed by Tampa Electric, this project will not go forward. The contract will not go forward.

Now, as Mr. Beasley said, Tampa Electric followed sound competitive procurement procedures to get us to where we are this morning. They conducted a competitive RFQ/RFP process and got a number of proposals. They selected Energy 5.0's proposal as the best solar proposal of the lot. We negotiated with them for well over a year and these actions have now yielded what I would call the proof in the pudding. Tampa Electric has negotiated very competitive pricing under this power purchase agreement versus the known pricing for other solar photovoltaic projects pricing and costs for other known solar photovoltaic projects and contracts in Florida and elsewhere throughout the United States.

Now, the staff referred to this as as-available energy. I would characterize it as Tampa Electric getting all of the energy and all of the output. It is on a nonfirm basis. We elected to have a single price, which is confidential, but it is a single price. But it includes all of the energy, it includes the capacity to the extent that exists, which is not trivial at the time of summer peak on a hot, sunny summer afternoon, and it includes all of the environmental attributes, whatever they are, carbon credits, carbon tax credits, carbon allowances, renewable energy credits, RPS or RES credits. Tampa Electric gets all the output and all the

environmental attributes.

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You have basically two key issues and one that I think is somewhat less important that I will touch on briefly. First, can the Commission approve the solar power purchase agreement between Tampa Electric and Energy 5.0 for full cost-recovery? We believe the answer to that question is unequivocally yes. The Commission has the authority and jurisdiction to approve this power purchase agreement just as it has for other cogeneration and renewable energy contracts. To really cut to it, you have the authority. You are, in fact, directed to regulate the public interest. You are directed by 366.91, 366.92, and 366.81 to promote the use of solar energy, to promote the use of renewable energy. Under your general authority in several sections, you are required to have rates that are fair, just, and reasonable, and in the public interest.

We would submit to you that to the extent that there is a small amount, you know, a few cents a month, anywhere from two to 40 cents a month over the life of the contract, to the extent that there is a small amount above the utility's conventionally calculated avoided cost, which by the way doesn't pay any attention to carbon costs or RPS mandate compliance costs, you have the authority to approve these in the public interest.

Additionally, two separate sections of your Statute 366.01 direct the Commission to regulate public utilities in the public interest and to broadly construe your statute in the public interest, and 366.81, which is the first real business part of the Florida Energy Efficiency and Conservation Act likewise states that it is to be liberally construed for the purposes of encouraging solar energy, renewable energy, solving the state's energy problems, and so on.

Next, should the Commission approve the solar power purchase agreement between Tampa Electric and Energy 5.0? Again, the answer is yes. Approving this solar PPA is in the public interest and will promote and serve the specific public interest goals and criteria set forth in Chapter Section 366.91 and 92. It will promote fuel diversity; it will reduce Florida's dependency on natural gas as a generating fuel; it will reduce Florida's exposure to fuel price volatility; it will improve environmental conditions by reducing emissions from conventional electric generation; and it will encourage investment in Florida.

There has been an issue discussed and it is being litigated in connection with other matters elsewhere in the United States, but the question is does the Public Utility Regulatory Policies Act of 1978, or

PURPA, or the PURPA rules in any way bar Tampa Electric Company from entering into a contract that has pricing greater than conventionally calculated avoided cost, and does it bar the Commission from approving it. The answer to that is also no. Section 292.301(b) of the Federal Energy Regulatory Commission's PURPA rules clearing states that nothing in the rules prohibits a utility and a supplier — even assuming that the supplier was a qualifying facility, and I will come back to that briefly in a moment — from negotiating payments pricing greater than the utility's conventionally calculated avoided cost.

The important distinction with respect to the PURPA rules, if you assume arguendo that this is a qualifying facility, is that this is a voluntary negotiated power purchase agreement and, therefore, it is completely okay under the PURPA rules. The distinction is that it is not a state-mandated standard offer type contract mandating payments above avoided cost. The first rulings on that are mixed, but they are really not relevant here.

Additionally, this power purchase agreement does not require Energy 5.0 to be a qualifying facility. So if there was any concern about that technicality, we could register as an exempt wholesale generator, in which

case the hypothetical PURPA bar would not apply in any event.

I have a few concluding comments. I think I have explained -- and I will answer all the questions you want to ask me -- I explained that you have the authority to approve this power purchase agreement, and that it's in the public interest, and that it specifically addresses and serves the public interest criteria articulated by the Legislature in its prorenewable statutes.

I want to say a few more things. Tampa

Electric Company deserves tremendous credit for its

vision in initiating the competitive procurement process

that led to their selection of this power purchase

agreement. We're fortunate. We made a really good

offer. This is the American economy, they chose our

project. Tampa Electric got out in front. They

recognized the public interest benefits of renewable

energy, of Florida-based solar power in particular, and

they anticipate what pretty much all of us anticipate,

and that is that we are looking at future carbon

regulation and future renewable energy mandates, probably

near term future in the opinion of most observers.

Tampa Electric also deserves tremendous credit for sticking with the negotiation process with us for

well over a year. I think it was over a year and a half. Sixteen months, I'm advised by Mr. Cherry.

I would submit to you, Commissioners, that your decision today on this solar power purchase agreement requires great vision, as well. The vision that the Florida Legislature has articulated for Florida's energy future is a future where Floridians obtain increasing amounts of our energy resources — of our energy needs from renewable Florida-based energy resources. This will provide the public interest benefits: Fuel diversity, reduced dependency on natural gas and other fossil fuels for generation, reduced exposure to fuel price volatility, and enhanced environmental quality.

The business as usual vision is not so bright. As we sit here today, we import 97 percent of all of our electric generating fuel that's used to make electricity in the state of Florida from outside of Florida. Some is from across the Atlantic, some is from across the Pacific, some is from across the Gulf, some is from other sources in the United States, but we import 97 percent, and solar represents only a tiny fraction of the pretty small 3 percent share that renewable energy enjoys today.

You have the opportunity this morning to adopt a new vision and chart a better course for Florida's energy future by approving this PPA, to recognize and

reward Tampa Electric's vision in pursuing solar today for the long-term benefits that it will provide to Tampa Electric, Tampa Electric's customers, and Florida as a whole.

Message supporting the Legislature's vision for reduced vulnerability to volatile energy prices, for enhanced Florida energy security and energy independence, and for increased investment in Florida renewable energy resources. Every investor-owned utility in Florida is watching this docket closely, and they have told me, straight up, because they, too, are interested in pursuing realistically priced workable renewable energy projects like the Energy 5.0 Florida Solar I Project, and bringing them to you as Tampa Electric has done here.

We urge you to grant Tampa Electric's petition and to approve the solar power purchase agreement for full cost-recovery.

I want to thank you very much for your attention. And, Mr. Cherry, would like to provide some additional detailed and some practical real world --

CHAIRMAN CARTER: Hang on a second, Mr. Cherry.

I will come back to you later.

Mr. Klutho, you're recognized.

MR. KLUTHO: Yeah. I have here from the New

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York Times, October 10th, this new book, Capturing a Nation's Thirst for Energy. And this author, who's a photographer, is putting out public service type messages around the country pairing some of the book's images with literary quotations, like the one from Mark Twain that hovers above a shot of a slab of new Nevada highway. This is from Mark Twain: "Civilization is a limitless multiplication of unnecessary necessities." And that's what we have here with this plan that TECO wants. And remember when I testified last time here I showed you the lighting fixture, the imaging specular reflector? You still haven't fixed the lighting system here in your building.

CHAIRMAN CARTER: We're here to talk about the issue, Mr. Klutho. Keep it, keep it, keep it focused.

Keep it focused.

MR. KLUTHO: This is the issue. This is the issue.

And the problem with this system, which is, in a word, asinine, remember what I said when I spoke before, what Amory Lovins says about getting your hot water from electricity, it's like cutting butter with a chainsaw? Well, these fools want people to pay for this solar generated electricity that will be wasted going into the grid that people will have to pay to get. And

it'll go into tanks so that they can heat their water, the worst way that you can use solar electricity.

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Now at our house we have solar thermal, flat plate collectors where the water trickles through these collectors and gets heated and goes into a tank. This is the most cost-effective type of solar that there is. And we made an investment. These collectors, we will pay for them and own them.

Now the big array like this one here that Florida Power & Light has that accompanied this column that was in the paper, Look to the Sun to Make the State Green, it says here that investing in solar, as this developer has done in Sarasota, can create jobs. Well, Florida Power & Light is not a developer. But, again, to emphasize how stupid it is, over on Sligh Avenue in Tampa there are Washingtonia Palms growing up next to the power lines, and the fronds of these palms have burned and turned brown because of the heat released by the power These are line losses. And the line losses that lines. you will have as a result of the PV generated electricity is an obscene waste of renewable energy that we cannot afford. When you do solar on the roof, it is being provided right where it is needed, not being sent through power lines. I mean it is dumb, dumb, dumb.

And here we have this big article that was in

the St. Pete Times recently, why the military is paying attention to energy efficiency and global warming. And when you talk about efficiency, making a big, giant array of solar PV is not being efficient. You are wasting PV. But, again, the thought of PV always comes after you do the thermal.

As I said before when I testified, in Israel and Spain it is a law, any new single family dwelling must come with solar thermal for hot water. And as of, as of the first of the year, it is a law in Hawaii that a new house must have solar thermal for hot water. They aren't requiring photovoltaics. Solar thermal for the hot water. The payback for the solar thermal is much, much quicker than PV, and you are an imbecile if you're going to do your hot water with PV.

And here in this National Geographic,
Repowering the Planet, Energy for Tomorrow, in an interview with Amory Lovins this woman says, "You popularized the term megawatt." Well, this is an idiot because he didn't popularize the term, he coined the term "megawatt." He says — she says, "What are megawatts and why should we care about them?" "Megawatts are watts saved by more efficient use. It's enormously cheaper, probably eight times cheaper on average to save electricity than to make it."

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Now when you're talking about doing photovoltaics and then you're going to put it into the grid and waste this, that's an absurdity.

Here in the newsletter from the Rocky Mountain Institute, on the cover you can see "RMI Retrofits America's Favorite Skyscraper." That's the Empire State Building. If you remember, I told you about one of my favorite quips from Amory Lovins: "Efficiency measures are like -- are better than a free lunch. They're like getting paid to eat your lunch." Well, this, this idea here is, people, you need to just keep on squandering your money, burn your money. We'll make plenty of PV renewable electricity, and you burn the dollars, you be stupid. Like what's happening here, you talk about being fair. Wall Street is stupid. The money is going up in smoke. I mean, this is about being smart with the money, being prudent. A megawatt, on average eight times less than producing a watt. And they wouldn't have hired Amory Lovins and the Rocky Mountain Institute to retrofit the Empire State Building if this guy didn't know what he was talking about. He also helped lead the retrofit of the White House and the Pentagon to make them more energy efficient.

Now this is, this is sheer absurdity. When I spoke here before, I had that paper by Amory Lovins

putting central power plants out of business. Now you want to talk about fairness, you want to talk about creating jobs, you don't make a big central PV plant and say, you dupes, buy this PV electricity the sun is putting on those collectors, you have the sun that's shining on the roof, everybody's roofs, you have them enjoy that benefit.

CHAIRMAN CARTER: I'm going to give you another minute to wind it up, Mr. Klutho. Okay?

MR. KLUTHO: You know, from Solar Today, Better Buildings by Design. "We shape our buildings, thereafter they shape us," Winston Churchill, Time Magazine,
September 1960. And when you say better buildings by design, those are the buildings that are sustainable, that have those solar collectors on the roof.

And like I say, before you think about the PV, the solar thermal comes first. That is the one that has the fastest payback. I mean, this what's happening here, this is, this is a circus. There's no other way to describe it, you know. He, he's, he's talking just sheer nonsense. This is, this is a snake oil salesman. No, no other way to put it.

COMMISSIONER ARGENZIANO: May I ask a question?

CHAIRMAN CARTER: Commissioner Argenziano,

you're recognized, then Commissioner Skop.

COMMISSIONER ARGENZIANO: Thank you.

Mr. Klutho, are you -- I understand what you're saying about the solar thermal. Are you suggesting that TECO should be placing solar thermal panels on individual homeowner's homes to get the efficiency, the greater efficiency or -- I'm not sure which -- are you asking that TECO use solar thermal -- and, of course, they couldn't use it centrally. It would have to be on individual homes; right?

MR. KLUTHO: Absolutely.

commissioner argenziano: Okay. So instead of, instead of -- what you're -- I don't want to put words in your mouth. You have to tell me if this is what you're suggesting because I'm trying to extract that.

MR. KLUTHO: Yeah.

commissioner argenziano: Are you suggesting that instead of TECO going forward with this project, they take the money from this project and place solar thermal panels on their customers' homes for hot water production?

MR. KLUTHO: We have talked about this before, that there needs to be an arrangement made so that utilities can be allowed -- there needs to be a decoupling. That absolutely has to happen so that utilities can make money helping people save money on

1 their utilities. But to design solar so that it is 2 wasted -- this system is solar 101, how you waste it. And more than 90 percent of the renewable energy being 3 installed today is renewable energy being wasted. 4 5 COMMISSIONER ARGENZIANO: Well, then can I just 6 follow up? 7 CHAIRMAN CARTER: Commissioner. 8 COMMISSIONER ARGENZIANO: Basically I think 9 what I hear you saying is that there should be a 10 different approach and it probably should be by 11 government to allow incentives for individual homeowners 12 to use more efficient types of renewable energies. Excuse me. And I'm not sure that they're not headed in 13 that direction, but I understand they're not moving quick 14

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basically a different approach, a different way, but isn't that more geared towards the individual homeowner?

MR. KLUTHO: Like I said, in Israel and Spain

enough. But would that be what you're trying to say is

COMMISSIONER ARGENZIANO: A government decision is made.

MR. KLUTHO: In Hawaii the first of the year it is a law that any new single family dwelling must have solar thermal for their hot water, and they are working on expanding the law to do other things with multifamily

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and helping people and doing conversions with -- they
were initially with electrical hot water, and they're
working on helping people convert where they have gas hot
water. And it's true, Hawaii has the highest cost for
their energy, but still the costs are going to continue
to rise. And, you know, when this -- if you, if you read
this article by the, by the vice admiral, what he had to
say where we're headed, I mean it's going, we're going to
end up in wars because of, of energy, and it's not a
pretty picture.

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

COMMISSIONER SKOP: Thank you, Mr. Chairman.

Good afternoon, Mr. Klutho. Just a quick follow-up question, if I'm understanding your concerns correctly, that you are against the proposed project.

MR. KLUTHO: Absolutely.

COMMISSIONER SKOP: Okay. And you are in support of distributed generation over centralized projects; is that correct?

MR. KLUTHO: Because that way it is not wasted.

COMMISSIONER SKOP: Okay. And you prefer solar

thermal over solar PV; is that correct?

MR. KLUTHO: Well, no. No. We have installed solar thermal at the house. And when I finish the, do

the retrofit of the house, I will have PV installed also. But before the PV is installed, you have to do all your efficiency measures so you don't waste the PV.

commissioner skop: Okay. I understand. And just as a point of reference, the item was deferred from today's agenda on Item 5. But if you'd get with our staff, Item 5, Issue 11 may more appropriately address some of the concerns that you've brought forth today. So thank you for your comments.

CHAIRMAN CARTER: Thank you.

Commissioner Klement.

COMMISSIONER KLEMENT: Yes. Thank you, Mr. Chairman.

CHAIRMAN CARTER: You're recognized.

COMMISSIONER KLEMENT: I can agree with the witness on some of the things he said. I wish in the future he would refrain from the pejoratives that he's used in addressing issues and people whom he disagrees with. Words like stupid, idiot, dupes, absurd, nonsense and snake oil do not belong in a civil debate, and I would just ask if you would not use those again when disagreeing with any of the presenters here.

I realize what you're saying about rooftop solar hot water, and it would be wonderful if we had that,

but we are far -- I've done some studying of that. We're far from being ready or able to do that. I have no idea what the cost per homeowner of putting that in -- well, I guess I have. It's in the thousands of dollars. I don't know how long it takes to, to recoup that, but it takes some time.

MR. KLUTHO: Eight years.

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COMMISSIONER KLEMENT: If it were so financially advantageous, I believe many of our American entrepreneurs would be doing it. So at some point we need to be doing it, I hope we will be doing it, but that isn't what we're discussing here today.

MR. KLUTHO: Can I, can I respond? I did a landscape in Tampa in 1989 by Downtown Tampa, and there was an old German gentleman right near where I was doing the landscape. And he was in a house that had a solar hot water system that was still functioning in 1989 that was installed in the 1920s. Solar hot water is, has been and is functioning all over the world going back over a hundred years. I don't know where you've been.

COMMISSIONER KLEMENT: I'm not disagreeing with you.

MR. KLUTHO: And the payback is roughly seven or eight years. You don't get that kind of a payback with photovoltaics or any kind of a power plant, not even

close. Not even close.

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CHAIRMAN CARTER: Thank you.

Commissioner Argenziano.

COMMISSIONER ARGENZIANO: I think, I think, as Commissioner Klement had said, we, we agree that there are better efficiencies. I, if I were building a house today, the first thing I would do is make sure that my hot water heater did have solar thermal. That would be the first thing I would do and move in that direction. And I do believe that sometime the policymakers are going to have to move and move quicker than slower, because it's been a long time coming, to maybe mandate that new home construction and also to provide incentives. And there are incentives now, but better incentives for each homeowner to retrofit. Even if they're in -- I mean, if they're in an existing home, to retrofit to be able to at least get their hot water heaters off the grid. And as a matter of fact, I think if you took most homeowners in the State of Florida and just their, their water heaters, if you did a solar thermal or PV, you would remove so much from peak power, you know, off the current grid that I think it would save a lot of money and probably slow down the need for construction of new plants. We're trying to get there, and that's a political process that is a heck of a nightmare.

saying because you were saying there are losses in efficiencies with this type of system. But I still have to look, and I know what you're saying and hopefully it can get there, and if we each talk to our legislators, federal and state, maybe it'll, it'll move quicker, although very political, and I understand that. But today I'm also looking at a company that may be doing other things that may negate some of the losses that you see. And I know you're shaking your head. You're not --we can't take your approach today because it's not going to work here today because there's so many political ramifications to it that those guys in those hot seats, the policymakers, are going to have to make up their minds soon, and that's going to take people to make that happen.

But today -- and I understand what you're

But as of today what we're looking at is a system that probably is going to reduce CO2, is moving in the direction that the state says it needs to move in. And that's what we're doing here today is evaluating that company's process today, while understanding what you're saying. I think a lot of people may, may take what you say the wrong way and sometimes you can say it the wrong way. Believe me, I'm accused of that many times myself and I understand that. And I think you really have done

your homework, and I've been reading up a lot about this. You're way ahead of me on some of those issues, but I -- and I think you're right. It's just that today what this Commission is faced with is not going to change the political that is the most desperate -- and I believe that sometimes, Commissioner, that's frustration you hear when you hear the words come out of someone who's probably been trying to do this for a long, long time and sees things clearer than maybe we have or our political leaders have, and I understand that very well. I just, I just want Mr. Klutho to understand that his research and his understanding of this doesn't go unnoticed, it really doesn't, not to me anyway, and I don't think to my colleagues. It's just that where you are today, we can't solve the problem that you really see is out there.

And I think that TECO is trying very hard to follow what it's, the policy of the lawmakers in the State of Florida have given, and I've got to look at the positives of what they're trying to do too, although I understand what you're saying. And I know you're going to shake your head, but I think that's what's before this Commission today. And I hope -- I think you are, I think you are dealing with the legislators and I hope you are because they're the policymakers. And there's a lot of things that are tied up in politics that stay there

forever. And I think we're at the point that we need to move that forward, and maybe you're the right person to do that.

too.

And I would suggest, if you haven't, and I know you probably have, is really trying to get to the policymakers, state and federal. And I know it's a tough job for one man to do, but I think there's a lot of people who believe in what you say, and maybe help some of the companies and the individual homeowners to get to where we need to be.

So I don't take what you say for granted. I do appreciate the work that you put into it, and I don't think you're a stupid man by any means. And I do appreciate what you bring forward, and I can see the frustration

But I just want you to know where we're at here today.

CHAIRMAN CARTER: Thank you.

Commissioner Skop, you're recognized.

COMMISSIONER SKOP: Thank you, Mr. Chairman.

And just to Commissioner Argenziano's point as well as to the point made by Mr. Klutho, I couldn't agree more. I mean, trying to drive changes in policy within the political process is difficult at best. And, you know, I -- Commissioner Argenziano touched upon the point about

state building codes, as, as Mr. Klutho did. I'm of the firm belief that the state building code should be amended to provide for both solar thermal and solar PV 3 requirements on new construction in Florida exceeding a certain square footage or exceeding a certain threshold 5 value. If you have a million dollar house, I mean, 6 certainly you can afford to implement some of these 7 8 initiatives to do your part to support distributed generation and energy conservation. And I think that 9 that's something that should be taken a critical look at 10 11 to not only help promote energy conservation, but to 12 support the development of additional renewables within our state. So I just wanted to comment on the excellent 13 14 point that I thought Commissioner Argenziano brought up. CHAIRMAN CARTER: Thank you. Commissioners, I 15 kind of wanted -- Commissioner Klement, do you have --16 17 COMMISSIONER KLEMENT: No.

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CHAIRMAN CARTER: Commissioners, what I propose we do is we kind of get staff to kind of walk us through this perspective in case we have any questions or anything like that. And I do want us to get a chance to get into our debate and our discussion and our dialogue. Staff, would you kind of tee this up for us?

MR. WRIGHT: Mr. Chairman.

CHAIRMAN CARTER: Mr. Wright.

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MR. WRIGHT: I'm sorry. I thought you had said that you were going to come back to Mr. Cherry.

chairman carter: I did. Mr. Cherry, you've got two, two and a half minutes. Mr. Wright burned up all your time. Just kidding. Just kidding. (Laughter.)

I did. Thank you, Mr. Wright.

MR. CHERRY: Yes, sir. I am Bud Cherry. I'm the Chairman and CEO of Energy 5.0. I've been in the energy business for 40 years, and I've been involved in all of the policy arguments that, that were previously discussed.

Mr. Wright's laid out the legal basis for the Commission's authority and reasons for the Commission to approve the Florida Solar I contract. I'll touch on a couple of the public interest aspects that have not been discussed and then talk a little bit about where we are with, with the project, if, if you will bear with me on that. Because I think, I think that is important.

Having a solar electric generator as part of a portfolio of sources in Florida and in the TECO service area is very positive in terms of the environment and having a balanced generation mix. This is not to suggest that we are rejecting or in support of rejecting any other technologies including solar thermal, including rooftop thermal, including anything that adds to the

energy efficiency of the state, including conservation incentives and so on, and in my career in the business I've been involved in all of those kinds of programs. And some of them work and some of them don't work, and some of them are very expensive and some of them are very cost-effective.

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I've spent time talking with Amory Lovins. The exact quote was, "Cutting butter with a chainsaw." He was referring to nuclear power plants, not heating hot water. This project meets all the criteria that the state has set out for, for renewables. Most particularly there is no CO2 emissions. In fact, there are no emissions at all except electrons, and the losses, despite the earlier comments, are modest.

Over the 25-year proposed contract term the project is expected to avoid the emission of up to one and a half million tons of, of carbon dioxide as compared to a conventional gas-fired project.

I'll spare you the list of other advantages
because I think Mr., Mr. Wright has, has covered those.
I do want to say that within the contract the company and
its customers are protected from technical and
operational risks through the structure of the contract,
which is an energy only, pay for performance fixed price.
And that is if we don't deliver a kilowatt hour to Tampa

Electric, we don't get paid for it. Tampa Electric and its customers take no risk whatsoever under this contract. We take all the risks.

I will say finally that this project will be a showcase project for Central Florida, showcase solar project for Central Florida.

Mr. Beasley talked about the background of the contract and that TECO, as a thoughtful and creative company, believed it made good sense to get ahead of the curve and be responsible to the policy guidelines in the state.

Mr. Beasley also talked about how we were selected in the negotiations. At the, at the time of the contract signing, TECO president Chuck Black praised the project. The Governor praised the project. He said, "I applaud TECO and Energy 5.0 on this exciting partnership that moves Florida closer to its goal of increasing energy diversity and reducing greenhouse gas emissions."

We began to diligently and professionally progress this project as soon as the contract was signed in February of 2009. To date I have spent approximately \$2 million on this project, and what we have accomplished is we have acquired a site in central Polk County, a 352-acre site, reclaimed phosphate lands. There is an existing 69 kV TECO distribution line which runs along

the periphery of the, of the property so that the interconnection to TECO, the TECO system is going to be very straightforward and very simple.

We've done a great deal of engineering, preliminary engineering on both the plant and transmission. We've done environmental assessments. We've done a Phase 1 environmental assessment on the property. We've done geotechnical analyses. And there have been transmission studies done performed by TECO at our, at our cost. Virtually all of this work was done by Florida-based firms. Virtually all of this work was done by Florida-based firms.

This project is essentially shovel ready.

There are only two major permits that we need to get.

One is a conditional use permit issued by Polk County.

We think we'll get that because of the economic development and because of the strength of the project.

The other is an environmental permit which deals mostly with storm water runoff, which we believe we will also get. There have been no major issues raised by any of the agencies regarding those permits.

We could have treated this contract as kind of an option where we sat back and did the minimum amount possible and waited for this tribunal to make its ruling on the efficacy of the contract, but we believe that the right thing to do, the good corporate citizen approach to bringing this project forward was to bring forward the best, most real project that we could to this Commission so that you understood that we were committed to getting it done. And we have, and we have done all that.

Staff has indicated that the cost of the electricity is, is incrementally higher than, than TECO's current avoided cost. It's 46 cents a month on an approximately \$138 a month bill. That declines to two cents by the end of the contract. And the average increase over the term of the contract based on TECO's analysis is 18 cents a kilowatt hour.

It is notable that as we speak the President is attending the dedication of another solar PV plant in Arcadia. That project is more expensive than the electricity that we're delivering by the public statements made by the owner of that, of that project. But what's important is the presidential focus and the policy focus on solar energy in Florida underscores the importance of moving ahead on a broader front and for the benefit of the state and of the United States. And I'm sorry, I misspoke. It's -- the 18 cents is not per kilowatt hour. It's per month, 18 cents per month average over the term of the contract is the incremental cost of the solar photovoltaic generation coming from

this, from this facility.

So I'm not, I'm not turning up my nose at 18 cents, 18 cents a month, but I think by, by any measure it's a modest price for the step that Tampa Electric wants to take to move ahead into the, into, into renewables. Let me close, and I know I've run over my --

CHAIRMAN CARTER: Are you close? I was about to say, are you close to winding it down?

MR. CHERRY: I know I've run over my two minutes. I just wanted to say that in my 40-year career -- I haven't played football for a very long time, I appreciate your comment earlier, Mr. Chairman -- I have appeared before regulatory commissions from Pennsylvania to the Philippines. And these regulatory tribunals have always done the right thing for their constituents, their customers, the companies, their developers and so on, and I'm pleased to have the confidence that this tribunal is going to do the same thing. So I appreciate your forbearance with my presentation.

And, finally, I want to thank the people at TECO who have worked so hard on this, on this contract over the time that we have been engaged in the negotiations and the follow-on activities. I think they deserve a great deal of credit.

CHAIRMAN CARTER: Thank you very kindly.

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Commissioner Argenziano, you're recognized.

COMMISSIONER ARGENZIANO: Just one question.

And I appreciate any, any movement in the direction of alternatives. I think it's a smart thing to do.

Just one question. As, as I've been trying to keep up with solar advancements, there seems to be a great deal of promise coming out, hopefully sooner than later, of more efficient solar technology. If that were to come about, is there any integration that's possible in a system that -- I mean, it's a contract for 25 years and I understand that. But is there any type of integration if it becomes a more efficient panel or a more efficient technology to integrate into the system?

MR. CHERRY: Yes. The answer is yes, because as, as the panels are developed now, you in fact can change out panels. It's one of the things that is potentially something you'd need to do to make sure that the system stays up at a 98, 99 percent availability. And so if the improvement is in photovoltaic, then we'll, we will be in fact able to roll those kinds of improvements into the project over its, over its lifetime.

COMMISSIONER ARGENZIANO: Okay. Great. Thank
you.

CHAIRMAN CARTER: Thank you. Let me just kind

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of ask this before, and then, Commissioner Skop, you'll be next. Is the project scalable? I know you say you've got like 300 plus acres there, and right now we're talking about 25 megawatts. Is it scalable to where if there are new technologies, as Commissioner Argenziano had asked, and new developments, there's a lot of whiz-bang stuff happening more now than ever before, is the project scalable in terms of increasing the capacities?

MR. CHERRY: Yes, sir. The project is scalable. And in fact in the contract with TECO there is a very soft option where the parties would sit down and negotiate the terms and conditions of a second 25 megawatts. And we specifically acquired the rights to this 352-acre parcel in Polk County so that if TECO desired to go forward with the second phase of the project, that we wouldn't have to go through the hassle of getting more real estate, worrying about interconnections and all of those kinds of things. So the answer is, yes, the project is scalable.

chairman carter: And in the context of the scalability of the project, I know -- well, I guess if you had another 25 megawatts and you scaled up to that, what's the impact of the overall rate on a monthly basis?

Do you know that? I know that may not be a fair

question.

MR. CHERRY: I, I don't know it offhand. I think the cost of the overall generation would, would go down somewhat because there are fixed costs that you incur whether it's 25, 50 or 100 megawatts.

CHAIRMAN CARTER: Okay. Commissioner Skop.

COMMISSIONER SKOP: Thank you, Mr. Chairman.

I guess it may be best to hear from staff to introduce the issues. Before they do so, I just wanted to touch upon a point raised by Commissioner Argenziano and chime in on that.

I also appreciate the positive aspects of what TECO and Energy 5.0 are trying to do to give effect to the legislative, to give effect to the intent of the Legislature with respect to the energy policy embodied within House Bill 7135 that was approved by the Legislature. I'm also a very strong advocate for renewable energy, but I also am required to balance that and be equally aware of the need to keep customer electric bills fair, just and reasonable.

I do have some significant reservations with respect to their proposal, and I'll just save those questions for staff after staff introduces the issue.

And, again, my concerns are more financially and technically related based on my renewable energy industry

experience. Thank you.

CHAIRMAN CARTER: Thank you. Commissioners, before I go to staff, any further general comments before we do that?

Staff, you're recognized to introduce the issues. In fact, just take us 1 and 2. We know that 3 is "Should the docket be closed?" But just kind of bring us, bring us in for, kind of tee it up for Issues 1 and 2, please.

MR. GRAVES: Yes, sir. Issue 1 addresses the recovery of costs up to the company's as-available energy rate. Issue 2 addresses the recovery of costs, of any costs that exceed that as-available energy rate.

And staff, staff agrees that there are a lot of benefits to solar energy. And I guess where we kind of depart from the company is with the economics. We feel like our recommendation of not allowing the recovery of costs above the as-available energy rate fits within the boundaries of the rules, of the PSC rules that we made our decision on.

CHAIRMAN CARTER: Now does that mean the, the, does that mean that in addition to what you said the current rate structure is and the RECs, that that should be a part of that, or are you just talking about one issue? Because I would like for you to kind of tee the

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whole thing up so we can have a free flowing discussion.

MR. GRAVES: I got you. Okay. Right. Issue 2, because the rule says that anything above avoided costs cannot be recovered, no, they can't pay for energy that's above the as-available energy rate, we decided to allocate those costs towards what they would pay for the RECs. I know Mr. Wright didn't agree with that, but anything above the company's as-available energy rate is not allowed by rule. So we considered those as what they would be paying for the RECs.

And in Issue 2 we're saying that the recovery of costs for RECs is not, it's not mandated right now, so we don't agree with the recovery of those costs.

CHAIRMAN CARTER: Commissioner Argenziano.

commissioner argenziano: To that point, you say the additional costs, meaning from the traditional costs that are available; right?

MR. GRAVES: Correct. If they, so basically if they produce their energy on their own, it would be less than what it would cost them to pay Energy 5.0 for that energy.

COMMISSIONER ARGENZIANO: So if they built the plant themselves, is that what you're saying?

MR. GRAVES: No, ma'am. What I'm saying is from their existing fleet, if they produced energy using,

say, a combustion turbine or combined cycle unit.

COMMISSIONER ARGENZIANO: But that would be, that would be exactly opposite of the policy of the state

and moving towards renewables and alternatives.

MS. BRUBAKER: Commissioners, with your indulgence perhaps I could make an attempt to kind of lay out the statutory framework under which staff was -- I'm sorry.

COMMISSIONER ARGENZIANO: Just one other question with that in mind.

MS. BRUBAKER: Certainly.

to, we're trying to give incentives for people to move in a different direction, we can't punish them at the same time. And if I'm looking at the cost to the consumer being miniscule at the end of the month, I have to take that into consideration of course, those costs. And you also mentioned what's allowed by rule. Doesn't the statute now kind of possibly change that rule to allow for encouragement, even the word solar in the statute, wouldn't that -- I don't know how the rule -- because these statutes supersede the rules. That's what you go by. And if the policy is shifting, maybe it's time to take a look at that rule.

CHAIRMAN CARTER: Ms. Brubaker.

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point out, the petitioner is absolutely right, the state
has a very clear mandate moving towards renewable energy.

It's in the first line of 366.91 that the Legislature
finds it is in the public interest to promote the
development of renewable energy resources in the state.

So that's, that is absolutely a primary concern.

But also of concern is we have other statutes. The rules that have been talked about do cite to 366.051 which talks about cogeneration. And in that statute it also says in fixing rates for power purchased by public utilities from cogenerators or small power producers, the Commission shall authorize a rate equal to the purchasing utility's full avoided cost. And let's go to the two rules that have been discussed in staff's recommendation and also by Mr. Wright on behalf of Energy 5.0 in a filing on October 22nd. Those are 25-17.0825, Florida Administrative Code, and 25-17.240, both of which also cite to 366.051, the statute I just mentioned.

They both discuss utility payments for as-available energy shall be recoverable if payments, and I'm paraphrasing a little, if the payments are not reasonably projected to result in higher cost electric service to the utility's general body of ratepayers. And then 25-17.240, negotiated contracts will be considered

prudent for cost recovery purposes, again paraphrasing, provided they're at a cost to the utility's ratepayers which does not exceed full avoided cost.

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So what we have are different statutes. One definitely wants to promote renewable energy, but they also, another one also requires the Commission to evaluate the avoided cost for that.

COMMISSIONER ARGENZIANO: And I understand that, and that's where, when the Legislature asks, asks for the Public Service, because I know they asked me when I was at the nominating commission and, and just my fellow colleagues in the senate said, you know, make sure you let us know what the needs are. And when we're looking at this, and this is just getting off the point here, but perhaps they need to know that while you're promoting moving towards renewables, you have to change things a little bit. You can't have it both ways. And I think that's a message that I'm gonna to take back and I hope that the Commission would agree, the Commissioners, that if the policy of the state is to move in one direction, then you have to, you have to start looking at the entire statute. You can't say it and then prohibit it in another part of the statute. You have to accommodate for that, especially if the costs are so minimal but getting you to that area where you really

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want to go as far as policy.

CHAIRMAN CARTER: Okay. Let me, let me do
this, Commissioners. I'm going to go to Commissioner
Klement, then Commissioner Edgar, then Commissioner Skop.
Commissioner Klement.

COMMISSIONER KLEMENT: Thank you, Mr. Chairman.

I wanted to focus on the Rule 25 a little closer to, to learn more about it. Is that -- what is the process for changing that? Is that a rule that we control or is that something that's imposed on us by the Legislature and we must abide by?

MS. BRUBAKER: Absolutely, Commissioner

Argenziano is absolutely right. The statute is always
our primary source of authorization. That's why I
directed you to 366.051. The rules are proposed by the
Commission. They have to be approved, of course, by the
state and be ratified. But the rules implement 366.051.
We also look to the statutes for our authority.

COMMISSIONER KLEMENT: So are our hands tied legally by statute?

MS. BRUBAKER: Well, again, I'm not focusing on the rules so much as the statutes. And when I'm reading 366.051 and, of course, the rules that implement it, I'm also looking at 366.91 and .92 as urged by the Petitioners. And I would point you to 366.92. There are

actually two potential exclusions from the avoided cost.

One is in (4) of 366.92 where the Legislature

specifically created full cost recovery for up to a total

of 110 megawatts of power. That was approved, I believe,

in '08 for Florida Power & Light Company.

There's also discussion in 366.92(3) that once the RPS rule has been ratified by the Legislature, avoided cost can essentially be trumped for, I believe it's Standard Offer Contract specifically. Of course what we're dealing with here was a negotiated contract.

So the statutes do, are looking forward to a time where renewables may take some precedence over the avoided cost mandate, but I don't think we're there at this time and I don't think we're there with this project. We're for the project, in fact we're recommending the project be approved, but not at a cost above the avoided cost, not to be ascribed to the ratepayers for that amount.

motives for this. I'll say more perhaps when more information comes out, Mr. Chairman.

CHAIRMAN CARTER: Okay. Commissioner Edgar, then Commissioner Skop.

Commissioner Edgar.

COMMISSIONER EDGAR: Okay. Thank you. And of

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course the Legislature has not approved an RPS.

MS. BRUBAKER: That's correct.

commissioner EDGAR: Am I correct that one basic difference between the staff recommendation and the request of the coparties is that minimal amount of an average of 18 cents a month would be paid by the shareholders under the staff recommendation and would be borne by the ratepayers under the request?

MR. GRAVES: That's correct.

COMMISSIONER EDGAR: And the statute -- and,

I'm sorry, Ms. Brubaker, I don't remember the cite, nor

do I have it in front of me, but the statute that put in

place that up to 110 megawatts of solar under a specific

cost recovery clause, specific, specific method of cost

recovery, which statute is that?

MS. BRUBAKER: That's 366.92(4).

commissioner edgar: That's .92. Okay. Would it be reasonable to put forth that if the Legislature wanted us to go beyond avoided cost to ratepayers for solar projects, that they would have not put on a 110-megawatt cap?

MS. BRUBAKER: That is certainly my interpretation. I would be uncomfortable recommending the Commission go forward without that clear intent by the Legislature.

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COMMISSIONER EDGAR: And so I guess,

Commissioners, once again we're in that conundrum of

competing priorities, which of course is not unusual for

this body, nor probably is it unusual for any other

subject area of public policy with complex statutes

created over time.

I am, as I know we all are, I am a huge believer and supporter of promoting and supporting renewables. In fact, a discussion that I think we may have at Internal Affairs here in a little while this afternoon with the Ten-Year Site Plan that will be before us then and looking at what our fuel portfolio is or, another way to put it, the lack, my words, lack of diversity in that fuel portfolio has been a concern of mine in the past and certainly going forward.

So with that, I'm strongly going to do what I can as one Commissioner, what we can as a body to promote renewables and to create jobs and to foster a regulatory environment that is, is, helps us as a state to promote renewables and bring those jobs into this state. But that piece of the statute that says up to 110 megawatts and then to go above and beyond that, once again, kind of like in our last issue when we've got some competing directives, so that gives me some concern.

CHAIRMAN CARTER: Commissioner Skop.

commissioner skop: Thank you, Mr. Chair. I just wanted to touch upon the discussion that was in some points that I had hoped to have made in terms of how I view the docketed matter before me.

I guess if we look back to House Bill 7135, which basically was responsible or provided for what is now enacted in *Florida Statute* 366.92(4), looking at that specific statutory provision the Legislature saw fit to expressly allow or provide for full cost recovery for a total of 110 megawatts statewide subject to certain prerequisite conditions being fulfilled. Again, that was an express mandate to incentivize solar. Unfortunately, and that may be part of why we have the issue before us, the 110 megawatts was quickly subscribed to, leaving none for our other Florida investor IOUs.

Secondly, avoided cost has always been a practice followed by the Commission to keep rates low for consumers and serve as a threshold measure. Specifically in other cases before the Commission, recent cases, I believe one was for Progress on a biomass project and one was for FPL, the Commission did not allow for the recovery of energy credits or environmental attributes because it was not expressly provided for by the Legislature and would be an additional cost borne by consumers.

To that point, I'd also note that the staff recommendation as to Issue 2 is consistent with the precedent previously established by this Commission.

As to the proposed project, I'm also in favor of the project, but I agree with the staff recommendation for issues that I will further articulate. However, with respect to the attributes and the other things that are necessary to make the project I guess cost-effective from the developer's standpoint, I would note that the Legislature, when considering the RPS recommendation in the last legislative session, they were looking at things that would, provided for avoided cost-plus type of pricing mechanisms to support renewables, but they did not ratify that RPS portfolio standard for the state.

So, again, I think that we're seeing, you know, express legislative intent vis-a-vis Florida Statute

366.92(4), which says you can go build this and get full cost recovery. Then we're struggling at the Commission in terms of the avoided cost threshold and the precedent, prior precedent of the Commission.

But I also would point out that in viewing this, this is a power, essentially a power purchased -- a purchased power agreement or -- I'm getting tongue -- a power purchase agreement, a long-term power purchase agreement for 25 years. And although it entails

renewable, it's not substantially different than the other biomass contracts or waste energy contracts the Commission has also been called upon to assess not only the value to consumers, but also to approve consistent with the energy policies of the state.

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But to me I see a fundamental difference between a power purchase agreement and the self-build option or the allowance of full cost recovery for a project under 366.92(4). I think it's a subtle but distinct difference, and I'll get more into that when staff finishes its discussion. Again from the -- just a fundamental review of the project itself, I think that it's a great project. I'd like to see more of them in Florida. But making the economics work are also a critically important aspect to the extent that consumers' rates are impacted sometimes substantially by these projects. And, you know, we need to make sure that consumers frankly are not overpaying for renewable resources, and that'll lend itself into my other comments. But I am generally in favor of the project but also in favor of the staff recommendation which limits the costs that could be recovered to the as-available energy rate.

CHAIRMAN CARTER: Okay. Thank you.

Commissioner Argenziano.

COMMISSIONER ARGENZIANO: I, I just find it kind of absurd coming from the Legislature that we would have a policy in the state -- and of course this is going out to the Legislature, it's my prerogative I guess to do so -- to say that we're going to have a policy of getting off traditional or moving towards alternative sources and renewables and yet limiting to 110 megawatts. That's the most hypocritical thing I think we've done, the Legislature has done -- well, one of the most. I won't get into that. I'll get myself in trouble again.

But, and it may be a stretch, and I guess it is. Looking at the 110 megawatts as a sole provider, could, could that be looking at it as a sole provider even though the word "statewide" is in there? Meaning per, per --

MR. GRAVES: I don't think the 110 was intended for a sole provider. I think it ended up that way that FPL got the full 110 megawatts.

commissioner argenziano: I know. What I'm trying to say is can -- I understand that. I guess it's too much of a stretch to look at it the other way. What I was trying to say is could it have been written in the statute and looking at that as per provider?

MS. BRUBAKER: I certainly think it could have been written so. I do not believe it was written so in

this instance. I understand from Mr. Trapp it was argued that way at the time that the statute, the amended statutory language was being considered.

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CHAIRMAN CARTER: Commissioner Skop.

COMMISSIONER SKOP: Thank you. And I think to Commissioner Argenziano's point, I wholeheartedly agree. You know, obviously our other respective investor-owned utilities were disadvantaged by the fact that there's none of the 110-megawatt statewide capacity left for them to avail themselves of. You know, in viewing the project, I think it's a good one. I'm just torn by how you approve something where it doesn't comport with Commission precedent in the absence of a ratified RPS and in the absence of a statutory provision that's been fully subscribed to by one investor-owned utility. It seems to me that part of the logical approach and, you know, advice I would give would be the legislative session is, you know, quickly approaching, and it would seem to me that if there are additional shovel-ready projects, then certainly the Legislature could see fit to expressly provide for cost recovery of those projects should it deem appropriate and in the interest of state policy to do so.

I would also, you know, when we get into further discussion, I have some concerns as to the

company in lieu of entering into a power purchase agreement, why they did not maybe look at a self-build option that could have provided some additional cost benefit to its ratepayers. But I'll save my questions to that.

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CHAIRMAN CARTER: Commissioner Argenziano.

COMMISSIONER ARGENZIANO: Mr. Chair, and I'm just I quess at a loss because I understand where we are. But when you look at a company who's trying to promote something, that policy, really we're saying that's where we need to move and as an individual I believe we need to be moving in that direction, at such a low cost, because whatever you've heard for the past three decades, oh, it'll cost thousands and thousands, people wouldn't be able to afford their bills. You know, you're talking about a minimal amount per month to move towards something that many believe is essential. And, and it just boggles my mind I think that here we are looking at this and having to look at, you know, what the Legislature has said. And basically we'd be telling this company, sorry, we can't, you know, you can't pass this on, this small amount to move in the direction that we all need, most of us know we need to be moving in.

And I still when I read the statute I just see conflicting, that you could almost make the argument to

say, well, you can go ahead with it until you get to that one point. And I'm not sure whether it takes better lobbying on TECO's part. Maybe Mr. Wright can, can add on to that.

CHAIRMAN CARTER: Mr. Wright, ever so briefly.

MR. WRIGHT: Thank you, Mr. Chair, and I'll be as brief as I can. I really did try to keep my earlier remarks fairly short because we laid it out in our memo of law. But I really need to address the issues related to the statutory construction and the rule issues.

CHAIRMAN CARTER: Okay.

MR. WRIGHT: I will be as brief as I can.

I believe that to hit the concluding point first and I'll come back to it, I believe that the correct interpretation is that you can indeed do what Tampa Electric asks you to do under the statutes as they are written today, and I'll go through why that is.

Neither the statutes nor the rules prohibit you from paying more than avoided cost. 366.051's statement to the effect that the Commission shall authorize full payment equal to full avoided cost is really in the context of Standard Offer Contracts.

The --

CHAIRMAN CARTER: And this is not -- this is a negotiated agreement.

MR. WRIGHT: This is a negotiated contract. 1 2 Yes, sir.

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CHAIRMAN CARTER:

MR. WRIGHT: 366.92(4) provided for really essentially a separate pilot project to allow for the development of certain renewable energy projects and for their recovery through the Environmental Cost Recovery That's exactly what that did. It was not exclusive as to what we're asking for. We're not asking to be rolled under that statute. We're asking you to approve this through your general authority to approve power purchase agreements and through your general both authority and mandates to regulate in the public interest.

Okav.

The rules do not prohibit. The rules say will be considered prudent for cost recovery purposes if less than avoided cost. They do not say if and only if, they do not say will be considered imprudent for cost recovery purposes if they're above avoided cost. Your statutes very clearly, and I think y'all agree with this, even those who have reservations about, about the pricing under this contract, y'all agree that this contract, that it's the Legislature's intent to promote renewable energy for the achievement of the specific public policy goals and purposes articulated in 366.91 and 366.92. And from

the sound of the discussion, I think you all agree that this project will in fact promote those public interest purposes as we suggest.

I come back to Chapter 366.01, which states that Chapter 366 shall be broadly construed to serve the public interest. Chapter 366.81, which is part of, a more specific part of the Florida Energy Efficiency and Conservation Act, I'm leaving out a lot of words because there's a lot here, but it very clearly says the Legislature intends that the use of solar energy, renewable energy sources, et cetera, shall be encouraged. And it says that FEECA at any rate shall be liberally construed in order to meet Florida's energy problems.

I don't, I honestly don't believe that it's a reach at all for you to rely on your public, public interest mandates under FEECA and under 366.01 and the specific — and the fact that this project will serve the specific purposes identified as the public interest under 366.91 and 366.92: Fuel diversity, reduced dependence on natural gas, reduced exposure to fuel price volatility and investment in the state, improved environmental conditions as articulated by the Legislature.

Regarding the rules, if there, if there even were -- and I don't think it's a valid argument that the rules prohibit paying more than cost recovery, than full

avoided costs conventionally calculated, a rule cannot trump a statute. Your statutes clearly direct you to encourage solar energy, to encourage renewable energy, and that your statutes also clearly, clearly direct you to construe your statutes liberally for the accomplishments of these, these purposes. Thank you.

CHAIRMAN CARTER: Commissioner Edgar, then
Commissioner Argenziano.

MR. WRIGHT: And briefly, I believe that -- let
me throw in one more personal note.

CHAIRMAN CARTER: Okay.

MR. WRIGHT: I've been doing this a long time. I had the privilege of working on the staff for seven years and working with a whole lot of folks, technical and legal staff. When I first left the Commission and went to law school, I actually had the opportunity as a Class B practitioner back then to serve alongside Harold McLean, who was working for the Public Counsel at the time, formerly of the staff, later your General Counsel.

And Harold said to me, "Schef, you're going to find that there's about 90 percent of all lawyers when you ask them if you want to do something will tell you why you can't do it, and there's another 10 percent that will tell you you can find a way to do it." And I believe that your statutes clearly afford you the way to

get to where you want to get. You want to send a message that this is a good project. You want to credit Tampa Electric's vision. You want to tell the other utilities that they're open for business, that they can bring you solar projects like this one where they determine that they're in the best interest of those utilities and their customers. Thank you.

CHAIRMAN CARTER: For the record, Mr. Wright is a 10 percenter. So we'll go to --

MR. WRIGHT: Thank you, Mr. Chairman.

CHAIRMAN CARTER: Yeah. We'll go to

Commissioner Edgar, Commissioner Argenziano, then

Commissioner Klement and then Commissioner Skop.

Commissioner Edgar, you're recognized.

struggle. I think we've all pointed out that there are some potentially inherent conflicts in the statutes. And it certainly would make this job much easier if there were a statutory provision that said promote renewables no matter what the cost as long as you try to minimize them or something like that. I don't see that.

So here's my first question to you. What is the position of consumer groups regarding whether shareholders or ratepayers should pay the difference above avoided cost for renewables?

MR. WRIGHT: Commissioner Edgar, first I would like to say it would make my job a lot easier too.

COMMISSIONER EDGAR: I understand.

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MR. WRIGHT: I can only speak -- I don't know if my brethren from the Office of Public Counsel are still here. I can only speak generally on behalf of --

COMMISSIONER EDGAR: I note that they are not.

MR. WRIGHT: They were either wise or hungry or both.

So as I sit here before you, here's what I can tell you from, from everything I know. AARP has opposed things like this. They have not offered an opinion to me, no representative of the AARP has offered an opinion to me one way or the other on this. But we know they did oppose a 2 percent cap versus a 1 percent cap. That's what we know about AARP. I don't know that the industrial power users have taken a position on this. Public Counsel rarely takes positions on things like this. And I can tell you on behalf of my other client, the Florida Retail Federation, they're strongly supportive of renewable energy. We haven't, I don't think we've discussed this specific project, but I believe -- I know that they support renewable energy generally speaking and they very actively support solar power, including projects like this. They want to see

the last or next to the last of the legislative
Band-Aids. Well, actually they want to see several of
them.

COMMISSIONER EDGAR: But there again, Mr. Wright --

MR. WRIGHT: They want to see, they want to see energy independence and they want to see encouraged investment.

all -- your organizations or the ones you've cited that support renewables, we have all I think individually if not today otherwise have said, I think each of us, certainly I have, that we support renewables. It, as always in life, comes down to who's going to pay. And we've had comments here that this, this, the difference for this particular project appears to be, and I've heard the word used and I will use it, minimal.

With all of the advantages to renewable projects that we hear about, promoting fuel diversity, hoping to attract new industry into this state, hoping to create jobs and on and on and on, why should that minimal cost not be borne by the shareholders for the hopefully goodwill and other benefits that would accrue from, for instance, what we've been reading about with the project in Arcadia today?

MR. WRIGHT: Well, I would point out that with regard to the project in Arcadia, the shareholders are not bearing the cost at all. The price -- the cost of that contract is substantially higher than this.

COMMISSIONER EDGAR: And I did not say that they were. And if I did, that's -- exactly. We've been making the distinction between the cost recovery that is provided for under statute for that project and others, I guess.

My -- the point I was trying to make is that there does seem to be goodwill and other things that come along to a company that is promoting a renewable project, certainly a solar project in this state, not without criticism from some, but that why should that minimal cost be borne by the ratepayers and not by the shareholders?

MR. WRIGHT: My answer to that question, you know, as one who does represent consumers before you --

COMMISSIONER EDGAR: That's why I thought you'd be the perfect person to answer the question.

MR. WRIGHT: -- very, very often, my answer to that is because it is minimal and it is in the public interest here. I think with regard to why it should be borne by the shareholders, I answered the question why should it be borne by customers?

COMMISSIONER EDGAR: Because it's minimal.

MR. WRIGHT: Because it's minimal and because it's in the public interest and because it's going to get you where, a lot closer to where you want to be.

COMMISSIONER EDGAR: Could you not argue it the other way? If it's minimal and it's in the public interest, that the shareholders, in light of unclear statutory direction?

MR. WRIGHT: I think that Mr. Beasley might be better positioned to answer that than I, but I would offer you this. It's minimal, it's cents on a typical customer's monthly bill. It's a substantial amount of money to Tampa Electric Company, to Tampa Electric Company's shareholders. That I think is the real difference there. But that's, that's my former economist answer to you. I think Mr. Beasley might be in a better position to answer.

COMMISSIONER EDGAR: Thank you. Thank you.

CHAIRMAN CARTER: Commissioner Argenziano and then Commissioner Klement and then Commissioner Skop.

COMMISSIONER ARGENZIANO: Well, under, under the Environmental Cost Recovery Clause, can staff maybe tell me how it wouldn't fit in there or, and -- excuse me. I lost where I was now. Hang on one second.

I guess can you tell me also your reading of

366.051 under cogeneration and how that could be 1 interpreted in that statute? 2 MS. BRUBAKER: Certainly. If I could, I'll 3 start with the statute. I have actually conferred with 4 our General Counsel, and I don't see where 366.051 is 5 limited to Standard Offer Contracts. Certainly that is a 6 component of the types of contracts that might come 7 before this Commission. But the other component is 8 negotiated contracts, which we have. And in both 9 instances we look at avoided cost. It wouldn't make 10 sense to use a test for one but not the other in staff's 11 12 opinion. 13 And I'm sorry. Could you restate your question about recovering through the clause? I'm --1.4 **COMMISSIONER ARGENZIANO:** The environmental 15 16 recovery, recovery. MR. BALLINGER: Commissioner Argenziano, I 1.7 18 think that was specific in the statute for the 110 megawatts, to flow it through the Environmental Cost 19 20 Recovery Clause. COMMISSIONER ARGENZIANO: Just for the --21 MR. BALLINGER: Yes. Normally purchased power 22 23 agreements go through the fuel and purchased power 24 clause. COMMISSIONER ARGENZIANO: Right. Right. Ιt 25

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was the 110. Okay. Thank you.

CHAIRMAN CARTER: Commissioner Klement. Oh, wait. Hang on a second.

Commissioner.

COMMISSIONER ARGENZIANO: Well, when the Commissioner is done maybe Mr. Wright can, can tell me how he sees it fitting into 366.051.

CHAIRMAN CARTER: Why don't we do that now, and then we can go to Commissioner Klement. He can get a full perspective on his questions. Commissioner -- Mr. Wright, would you respond to Commissioner Argenziano's question, please, sir?

MR. WRIGHT: Well, again, I think I essentially answered that. I think it's not preclusive. I said shall authorize a rate equal to the utility's full avoided cost.

You know, as Commissioner Edgar correctly pointed out, it would be a lot easier if the Commission, if the Legislature just said do this. Our -- and just to touch on the Environmental Cost Recovery Clause question raised by Commissioner Argenziano, we're not asking for that. We're just asking for conventional recovery through the fuel cost recovery clause.

But the, again, there is tension in the statute. You know, you've got this one reference here

and then you've got in 366.92 this very nebulous phraseology, while at the same time minimizing cost to customers. A very simple explanation of that is that they meant promote renewable energy at the lowest reasonable cost for required renewable energy. That's exactly what Tampa Electric Company has done in this case through its competitive procurement process and through, as I put it, the proof in the pudding, bringing you a solar power purchase agreement with pricing that's lower than virtually every other data point we know of. It's less than the Arcadia and related projects. It's less than GRU's feed-in tariff. It's less than the Cal Energy Commission as reported as the cost for comparable generation in California which has a better solar resource than we have.

I would say that we have that good old statutory construction principle of in pari materia. If you read all this in pari materia, you're required to promote the public interest, construe your statutes in the public interest, promote, promote renewable energy and develop fair, just and reasonable rates. Our position is, with which Tampa Electric agrees, that the rates resulting from approving this petition as prayed will be fair, just and reasonable rates. There will be a small impact on customers' bills. Whatever benefits

1 there are over the long-term will flow through to customers. And additionally customers not only of Tampa 2 3 Electric but of the other utilities in the state will see the benefits of encouragement as other vendors, as we 4 along with, Energy 5.0 along with other vendors of 5 renewable energy come knocking on their door next month, 6 7 next year after hopefully you approve this power purchase 8 agreement and say, look, now we know what we're working 9 with. Let's sit down and see if we can't cut you a 10 better deal. But, you know, every journey begins with 11 the first step, and this really is one of those first 12 steps, you know. The pricing under the other project 13 we've discussed is, as I've put it, substantially higher 14 than ours. Here we are beating the price down. We think 15 you ought to approve the contract. Thank you. 16 CHAIRMAN CARTER: Okay. Commissioner Klement 17 and then Commissioner Skop.

COMMISSIONER KLEMENT: Thank you, Mr. Chairman.

Actually Commissioner Edgar's question to Mr. Wright was the question I had most wanted to ask was about why, why not ask the shareholders to pay instead of the rateholders since it is a small amount, but you've answered that.

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So I'll instead use this opportunity to ask staff counsel if it's true what Mr. Wright said

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that a rule cannot trump a statute, if that is an accurate interpretation of the legalities.

MS. BRUBAKER: That's correct. You always —
the primary authorization for any agency to act is its
authorizing statutes. The rules are created to help
implement the statutes. Rules are always subservient to
the statutes that authorize them.

However, I don't see that the rules are necessarily in conflict here. What we have is a statutory framework that is moving towards promoting renewable energies. We, we have seen great progress in that direction. They specifically reference and hopefully we will soon have an RPS. The fact of the matter is we're not there yet. And what we have currently before us is a framework that is what it is. You know, what staff looks at, I'll cite you to Page 4 of staff's recommendation that says TECO's evaluation of the contract without revenues from the sale of RECs indicates that purchased power pursuant to the contract would have a net cost above TECO's as-available energy cost of approximately \$44 million to \$65 million over the life of the contract.

Maybe that's minimal when you look at a month-to-month bill, maybe it's not. But what staff is saying, promote the contract, but do it so that costs

above the avoided costs are, are imposed to the shareholders. And let them -- to the extent there are rewards, more power to them and may they come. But to the extent there are risks, we would ask that those not be imposed on the customers.

COMMISSIONER KLEMENT: If I may follow up. You said we do not have an RPS. Do you mean Florida or do you mean the PSC?

MS. BRUBAKER: Actually I think it's both at this time. We are, we are -- I don't know exactly where we are in the process of that. Perhaps Mr. Trapp can --

COMMISSIONER EDGAR: We do not have one.

MR. TRAPP: I can address that for you.

MS. BRUBAKER: At this time one has not been approved by the Legislature.

MR. TRAPP: We during the last session were required to give a draft RPS rule to the Legislature for their ratification, and the Commission did that. As a matter of fact, the Commission gave the Legislature a range of options to look at with respect to the adoption of an RPS, and the Legislature during the last session did not act on ratifying that. So we are in this state of limbo with respect to what the legislative total intent is with respect to payment above avoided cost.

I wish at some point in this discussion that

you would look at some of the real numbers. We've heard a lot of rhetoric, if you would, with respect to the minimal impacts of this project. But this is a 25-megawatt project that's going to have a 40- or 50-cent first year impact on monthly rates, and that to me is significant. And I think staff has got an exhibit from TECO that shows you those impacts that you probably ought to look at.

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COMMISSIONER KLEMENT: What percentage was that?

MR. TRAPP: Tom, do you have those numbers?

MR. BALLINGER: No. It was the -- I handed it to all your offices this morning. It was the interrogatory response from Tampa Electric that showed the rate impact. It's a one-page exhibit. It's response to Interrogatory Number 66. And it shows that the first year rate impact is about 48 cents on a typical residential bill. It escalates the next year, but then it starts to decline as customer growth goes on. But keep in mind, this is an increase above and beyond what the bill normally would be, and that is significant. 50 cents a month is a significant increase on a customer bill. I would also --

COMMISSIONER ARGENZIANO: Chairman.

CHAIRMAN CARTER: Commissioner.

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1	COMMISSIONER ARGENZIANO: He's not done. He's
2	not done. I'm sorry.
3	MR. BALLINGER: That's okay. Go ahead.
4 .	COMMISSIONER ARGENZIANO: No. The Commissioner
5	is not done yet.
6	COMMISSIONER KLEMENT: I wanted to ask, that
7	RPS that we recommended to the Legislature, is that 7
8	percent by 2013?
9	CHAIRMAN CARTER: It was 20 by 20.
10	MR. BALLINGER: It was 20 by 20, I remember
11	that, and I think it was basically a linear progression
12	up to that.
13	COMMISSIONER KLEMENT: Okay. Perhaps it went
14	up to 20 by 20.
15	I don't know. I'm still, I'm thinking out loud
16	here, but perhaps the Commission needs to send a message
17	to the Legislature in some more vocal form than
18	COMMISSIONER ARGENZIANO: Send me. Send me.
19	(Laughter.)
20	COMMISSIONER KLEMENT: They don't appear to
21	have heard us up to now. I know. I know. I heard that
22	at the Nominating Council interviews, as Mr. Carter did;
23	right?
24	CHAIRMAN CARTER: Yep.
25	COMMISSIONER KLEMENT: And you answered them

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pretty emphatically, "You didn't pass what we recommended."

I yield the floor.

COMMISSIONER ARGENZIANO: Mr. Chair.

CHAIRMAN CARTER: Commissioner, let meet do this. Let me go to Commissioner Skop. He's been, believe it or not, he's been patient. Then I'll come back to you.

Commissioner Skop.

COMMISSIONER SKOP: Okay. And I'll make my one point, then yield to Commissioner Argenziano.

CHAIRMAN CARTER: And I do want, before you go,
Commissioner, I do want, Commissioners, for us to kind of
start getting our minds around this thing to kind of
bring it in. It's, it's really unfortunate because we've
talked about how much we support creating an environment
for renewable energy in Florida, but, and then the
Legislature has for whatever reason chosen not to give us
the appropriate tools to get there. But anyway let's
kind of -- I want you to be thinking about that after we
finish our discussion.

Commissioner Skop.

COMMISSIONER SKOP: Actually let me, it will probably be best because I have a few points I want to cover in sequence. So let me yield at this point to

Commissioner Argenziano. And then if you could come back to me, I'd appreciate it.

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CHAIRMAN CARTER: Commissioner Argenziano.

COMMISSIONER ARGENZIANO: Sure. And I quess what I'm looking at is the way the policy direction has been moving. And I think Mr. Wright is correct when you talk about what's in the public interest. I mean, we hear the Legislature and we hear, you know, we see the statutes, read the statutes. I think when you look at what the policy has done in other areas, I mean there are recoveries that are totally given for other energy sources that are not placed upon the shareholders. And I think when you look at it in the whole context -- and I think what Mr. Schef (sic.) said, I've been scrambling through the -- Mr. Wright, Mr. Schef, I just renamed you -- Mr. Wright had indicated strikes me that I don't see a prohibition and that makes a big difference. there's no prohibition in the statute specifically and yet you look at the direction of the statute and you add into that what's in the public interest, then perhaps it is in the public interest. So unless you direct me to the prohibition in the statutes, well, then I don't have a prohibition.

MR. TRAPP: I would like to address it from a policy standpoint, and I think maybe the legal standpoint

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are two different things.

COMMISSIONER ARGENZIANO: Well, now you're talking legislative, legislative policy or your policy? And I don't mean that with disrespect.

MR. TRAPP: Well, I'm an employee of the Public Service Commission, so what I hope to offer you is proposed Public Service Commission policy. Actually it's steeped upon rulemaking and legislative intent and all of that.

commissioner argenziano: Right. And the
reason --

MR. TRAPP: So it's PSC policy.

commissioner argenziano: Okay. So then the reason I said that is because there's quite a difference between legislative policy, they are the true policymakers. And no matter what we do here, unless they give us the authority to do that, and we don't, we can't do it unless we have legislative authority to do. So I was asking for a differentiation for that purpose.

MR. TRAPP: Let me simply pose a practical question to you.

COMMISSIONER ARGENZIANO: Sure.

MR. TRAPP: If you believe this project is in the public interest and you want to approve it and you want to pay more than avoided cost, my question is very

simple, what does staff do to evaluate the next project that comes in? And where, without specific guidance from the Legislature on how much more than the standard avoided cost you can pay, without that guidance, how am I to evaluate any project that comes in here?

The Legislature has very clearly in my mind and in the adopted rules of this Commission said avoided cost is the standard. They have not varied from that standard yet. There's been a lot of talk about it, there's been a proposed rule, subject to ratification that would allow us to go past avoided cost. But the rule has not been ratified, so the question has not been answered. And without standards, I don't see how this Commission can make decisions in the future. That's, that's my conundrum.

MR. BALLINGER: Commissioner, if I could add a little to that. Just as Commissioner Skop pointed out earlier, that staff's recommendation is consistent with Commission policy of looking at renewables, of using avoided cost as kind of our benchmark and all that. And I'd just like to remind you consistent a few weeks ago you had before you an issue with the City of Tampa and Tampa Electric, it was a solid waste facility, which is another renewable facility under 366.92. That contract showed savings over the term of the contract below

avoided cost, yet the Commission decided to send the parties back to try to get some more savings. So staff is trying to gauge, like Mr. Trapp said, how do we evaluate these things.

COMMISSIONER ARGENZIANO: Yeah. I understand that. And there were different circumstances in that because there was a belief that there could be more savings.

And what I'm trying to get at, and I understand the dilemma we're in quite, I mean clearly except — well, and I guess if the Legislature — I guess what it looks like when it comes down to it, if there's no prohibition, strict prohibition against it, then it can be done. It's just then how do you know, like Mr. Trapp has indicated, what do you do the next time and what numbers do you use? And I'm not sure.

All I know is that when you look at it in total, that the policy has been to move forward to renewables, actually then my statement today to the Legislature would be you're speaking out of both sides of your mouth because you cannot say that we need to move towards renewables and not put it in the statutes.

Now if they turn around and say, well, you're not prohibited from doing that, well, then I'd feel like an idiot too. So that's what I'm trying to get down to,

I guess, is looking, if there's no prohibition, as Mr. Wright says, and yet everything else leans towards — it even specifically talks about solar, giving added weight to solar, then maybe we're not doing what's in the best interest, understanding the problems that arise the very next time that something comes into play.

MS. BRUBAKER: Mr. Chairman, if I may.

CHAIRMAN CARTER: Ms. Brubaker.

MS. BRUBAKER: I have the great pleasure of actually disagreeing with something Mr. Trapp says. He says that the Legislature has never given us guidance about going above avoided cost, and actually they have and he even talked about it. It's at 366.92(4). And they created there a very specific carve-out to allow up to 110 megawatts of -- I think it actually says renewables. I don't think it really specifies -- or is it solar?

CHAIRMAN CARTER: That's already been, the 110, that's already been --

MS. BRUBAKER: Anyway, 110 megawatts at, at full cost recovery, full cost recovery, and that's, that's very different. There's a, there's a principle of statutory interpretation that says statutes should be read together to the extent they can. And to the extent there's conflict, there are different ways to assess how

to interpret it. I don't think we have a conflict here. I think we have some tension, and I would love to see the Legislature give us a better sense of where we can go in the future. But we have statutes that talk about projects at avoided cost and that's our, our hallmark, our standard, and we also have the promoting renewable energy. And I would like to think that's what we're doing here, we just don't want to do it where the risk is assessed to the customers.

And one thing that Commissioner Skop actually mentioned is some prior cases recently where we have actually addressed this very issue, and I'd like to cite you to Order PSC-08-0116-PAA-EQ, and that had to do with a petition for approval of negotiated renewable energy contract with Manatee Green Power LLC with Florida Power & Light Company. And the order actually discusses some of the things we've heard today, PURPA and 366.051.

And in that order on Page 7 I would just point out the Commission, which actually is four-fifths of today's sitting Commission, "It would not be appropriate for the general body of ratepayers to be obligated at this time to pay the cost to purchase speculative green attributes that may be associated with the Manatee project." And with all due respect and reverence for what has been said up to this point, I really think

that's where we are today, where we are here today.

We're in the same position. We have a, a policy of promoting renewables, but we also have a policy of setting fair, just and reasonable rates. And as staff recommends, we think that would be up to, cost recovery up to the point of avoided cost.

COMMISSIONER ARGENZIANO: Well, then one, one other comment, Mr. Chair.

CHAIRMAN CARTER: Commissioner Argenziano.

COMMISSIONER ARGENZIANO: And I'd be happy to, to tell it to the Legislature personally.

CHAIRMAN CARTER: Then Commissioner Skop.

joke to, for the Legislature or the policymakers of this state to give us these statutes and I guess indicate to the people of the State of Florida that we are moving in a direction towards renewables and yet only selectively allow cost recoveries in certain areas where they may be justifiably right, but it's a joke then. Because sitting here trying to do a job and trying to look at what's in the best public interest, my hands are tied then. And it looks like that's what -- but I have to make the comment that I think it is a joke. You cannot tell the people of the State of Florida that this is your policy. I mean, it has to be done within reason, of course, and costs

have to be very much a consideration, as we all know.

But when you have something before you -- and it's just because maybe the Legislature didn't look -- I guess they're selectively picking where they want that incentives to go, and it obviously isn't in the solar industry's interest at this point.

Where I hear from the people of the State of Florida, many people are interested in moving towards solar. We are the Sunshine State. That doesn't diminish nuclear or anything else. It just says that in my opinion the Legislature is speaking out of both sides of its mouth. You can't take away the incentives of one industry when you're talking about renewables. You have to give that incentive also.

And I guess what I'm getting from today, and
I'm trying very hard to find it in the statutes, but that
they have not given us that incentive for solar. So when
the people call us and complain that we're not moving
toward solar or pushing or helping companies to get
there, they need to call their state representatives and
their senators because we don't have the incentive to
give TECO to do this at this point.

You may, may be able to stretch it that way. But really when you look at it, it looks like they've decided not to give the incentive to that industry at

this time.

CHAIRMAN CARTER: Thank you.

Commissioner Skop.

COMMISSIONER SKOP: Thank you, Mr. Chairman.

And I just wanted to follow up and hopefully we can bring this into landing after we've had substantial discussion on the issue.

But I just want to be clear. I generally am in support, full support of the proposed project, but I equally agree with the staff recommendation at the present time and I'll articulate some rationale why.

I guess staff has alluded to, and I had my aid pass out two pages for all the Commissioners, but the first page I'd like the Commission to look at is the one with Page 54 at the bottom that has the differential pricing or the rate impact on customer bills. And if we look at the far right column, which is the differential in 1,200 kilowatt hours for a customer bill, it shows, as staff has articulated, the monthly impact is, starts out in 2011 of 48 cents and then rises to 52 cents and then goes up and down and then ultimately down towards the end of the term of the project.

My concern stated concisely is that I believe that the rate impact shown on this page may be higher than they need to be, and that's just based upon my

review of the underlying documents of the project and some of the things I'll get into. But the central point is I have no doubt that this project is consistent with the public interest and consistent with the legislative policy of the state. But that being said, we as a Commission cannot be agnostic to procuring renewable resources at the lowest cost possible for ratepayers.

And Mr. Trapp, we often disagree, but he said something that resonated the point I was trying to make during our RPS discussions. When the state moves forward with encouraging renewables, we as a Commission that are called upon to evaluate each specific project have to have a benchmark to evaluate the project such that it is -- you know, I've harped upon this, it's very important to establish a levelized cost by renewable type to ensure that consumers are not overpaying on any given project.

And the reason for this is that the company can come before the Commission today with a solar PV contract for a 15-year term. Solar projects typically have a useful life anywhere from 25 to 30 years. So if they come with a 15-year term contract, how are we as a Commission to evaluate that contract versus another contract based on solar PV that may be for a 25- or 30-year term? You need to look at the levelized cost by

renewable type over the life cycle cost of the project in order to have a benchmark to properly evaluate whether the cost being requested to be recovered from consumers is fair, just and reasonable. In this case we don't have that levelized cost data.

And I'll ask the Commission to turn to the next handout, which is, it's got a big one at the bottom of it, and it's staff's first data request, request number one, Page 1 of 2. And if we look at the response to 1A, and I'll just quote excerpts, "Fixed price is just that, a fixed price. Tampa Electric has no knowledge of Energy 5.0 internal financing analysis that may support the confidential price of the subject power purchase agreement."

So I want to loosely translate this using my own renewable experience. I take this as TECO has no knowledge of a levelized cost by renewable type to ensure that TECO customers are not overpaying for this renewable resource. I have no benchmarking data at all to substantiate this. That's why I have a big question mark.

Again, even, Mr. Wright, even if I adopted your position that the Commission had the discretion to approve the proposed project, I would not do so at the present time because of the many unanswered questions

that I have regarding the proposed project.

As further stated on Page 1, Tampa Electric had to go benchmark off the CEC, which is the California Energy Commission, to try and rationalize the proposed confidential price.

Well, I've worked in California on renewable projects. I've -- I may have even appeared before the California Energy Commission. I can't remember. But I'm certainly familiar with working with them. Again, what's good for California is not good for Florida. We need to establish our own levelized cost structure so that we can evaluate these projects as they come before the Commission. To do otherwise is complete randomness because we have no benchmark and we're just merely guessing, and that's the concern that I have here.

Another point with this document is that they have established a fixed price. And I have a question for staff. What is the current as-available energy rate for TECO in dollars per megawatt hour or dollars or cents per kilowatt hour?

MR. BALLINGER: We get monthly reports and I'm trying to recall the last one I saw. I want to say it's anywhere between four and five cents a kilowatt hour, but Mr. Beasley might be able to --

CHAIRMAN CARTER: Mr. Beasley.

MR. BEASLEY: I understand that's about approximately correct.

MR. BALLINGER: Okay.

COMMISSIONER SKOP: Okay. All right. So without getting confidential data, the fixed rate versus the as-available energy price, they're on different spectrums of the universe; is that correct?

MR. BALLINGER: Yes.

commissioner skop: Okay. All right. The other concerns that I have here, most importantly is that if you were to look at, and everyone may not have this and I don't want to bore everyone, but on Page 27 of the agreement between the parties, Page 6, Paragraph 6 talks about the rights to environmental attributes and renewable energy credits.

As staff has properly stated and as presented by the parties, certainly under the proposed agreement TECO would own the environmental attributes and renewable energy credits. If you read the last sentence of that, however, and you have to read closely because this is very important, "The seller shall retain," the seller being Energy 5.0, "The seller shall retain all tax credits arising out of generation of renewable energy, renewable energy tax credits."

Under the current Investment and Recovery Act

policy there's something known as invest, convertible 1 investment tax credit which provides for a cash payment 2 of 30 percent of the qualified project costs directly 3 from the Treasury. I'm not certain as to whether that 4 30 percent rebate, for lack of a better word, has been 5 properly priced into the fixed energy costs within the 6 agreement, which again means that TECO customers might be 7 overpaying for the renewable resource. Again, you have 8 to read this closely to, and I don't have the -- part of 9 the problem here is I don't have Energy 5.0's project pro 10 forma. I can't evaluate what their revenue stream would 11 12 be, I can't evaluate what their expenses would be, whether it be project O&M, debt service for the capital 13 cost of the project, and I certainly can't evaluate what 14 their profit margin would be or their return on equity. 15 But with that lack of transparency and not knowing 16 17 whether the convertible investment tax credit which this project, given the in-service date, certainly should 18 qualify for, it could be a tremendous windfall to the 19 20 developer. I mean, I know how these things work. it. I got paid well to manage type of projects like 21 this. So, again, these are, these are relevant comments. 22 Other points I would mention is that the 23

Other points I would mention is that the capacity factor assumed for the project is, is, and this is in a public record, it's, I believe, 22 percent, which

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is much higher than what was projected by FPL for its three solar projects that were built under 366.92(4). I believe it is.

MR. BALLINGER: They're comparable. I think the FPL is 20 to 21. This is pretty comparable.

COMMISSIONER SKOP: Okay. Well, I thought I saw 18 percent for one of the FPL projects, which was land-based solar PV not the, not the --

MR. BALLINGER: It's in the range. Yes.

COMMISSIONER SKOP: Okay. All right. Anyway, that, that had a concern to me. I mean, it's a concern in passing. It affects revenue for the project.

But looking at the, how the project was presented, the base case again was developed in September 15th, 2008, based upon 2009 fuel cost recovery prices. Natural gas has gone down substantially since that time. Again, the economic analysis would have to be rerun at best.

But some other closing points that I just wanted to mention. You know, these illustrate in my mind -- again, I'm fully in support of the project, but, again, there's a right way to go about it and a wrong way. And in order to evaluate the cost-effectiveness of any given project of a given type as it comes before the Commission, we need to establish levelized costs. I know

in that data request they refer to what California did. Well, you know, that's a good benchmark, but it may not be applicable to Florida. There's different capacity factors certainly for a project given the solar resource of California, its geographic differences, a whole host of things that factor into that.

So, again, what would be interesting to me would be to see the project pro forma to see and evaluate how it compares to what would be established by the Commission as levelized cost.

But just to Mr. Wright briefly, and Mr. Beasley also mentioned this in terms of the developer's experience, but can you identify a solar PV project that Energy 5.0 has developed and is currently in operation in Florida?

MR. CHERRY: The answer is no, we have not developed a solar PV project in Florida. However, we have developed as individuals projects far more complicated, far more expensive in far more difficult circumstances than in Florida.

And, for example, I was responsible for the repowering of the JEA Northside Plant, and we view solar, and we've spent a lot of time looking at it over the last two years, we view the execution of a solar project not as something that's a slam dunk, easy to do, but it is

much less complicated than building and developing the kind of power projects that we have had lots of experience in doing.

commissioner skop: I understand. And I do respect that. And also the liquidated damages provision within the agreement somewhat protects the ratepayer in the event that there's -- but I have no doubt that, you know, it's possible. It's just not been done yet.

To Mr. Beasley, with respect to the proposed project, and I know that they did a solicitation, but part of the project relies upon using land that is going to be a reclaimed phosphate mine, I guess as articulated in the background information. But typically when you're developing a project, obviously you have to acquire the land and that's a cost of doing business, which, you know, is an expense to be incurred.

I guess the question I had, and similar to what, you know, one investor-owned utility did that took advantage of the statutory provision for 110 megawatts of solar, has TECO given any thought to self-building a comparable array or could it show that it would be more cost-effective than their proposal before us to the extent that, you know, out at least at the Polk facility, you know, it seems to have suitable land or maybe some other facilities it had which would avoid the need to

procure land or make the project more cost-effective for ratepayers because ratepayers have already paid for the land and just basically self-build using an EPC or engineering procurement construction contract for a, what is pretty much a snap together, 25kW, I mean 25-megawatt array? It's not real rocket science. There's some, you know, development issues that have to go in that, some permitting approvals. But, you know, certainly it's, you know, feasible on something like that to, to self-build. And I was interested as to whether TECO considered that and why maybe it did not pursue that option if it would have been in fact a more cost-effective option for the ratepayers?

MR. BEASLEY: I asked that question myself,
Commissioner Skop, and it's my understanding that the
company does not have the internal expertise to do that
and would have to retain someone, much the same as we
have through the competitive bidding process, to perform
that work for us.

COMMISSIONER SKOP: Okay. But there's a fundamental difference between a long-term power purchase agreement, a PPA, and a turnkey EPC contract to just have a vendor, I'm going to use FPL's vendor for a second, SunPower or Sharp or some other qualified vendor come in and to build and construct the array on your own site if

you have suitable land where you already have existing transmission facilities. You know, there might be some cost benefit there that would make the, the numbers on this page be less than what they are with the proposal. And also it would allow the company to avail itself perhaps of an investment tax credit that I don't know the disposition of as it pertains to the proposed rates here.

MR. BEASLEY: Mr. Aldazabal will address that.

I wish I were competent to answer that, but I'm not.

MR. ALDAZABAL: Commissioner, that's a good question. I think our resource planning group did work with, did work with Black & Veatch and they did a study on that and, on the preliminary analysis, and it didn't turn out to be cost-effective for us.

don't know why, you know, you'd have to get somebody as high-end as Black & Veatch to do that. I mean, you know, certainly you could have contacted a, you know, a large solar manufacturer or vendor, SunPower or equivalent, to take a look at that. But, you know, it's a question that came to mind in terms of the project-specific backgrounds. Because certainly if they're acquiring land to site the project, then what happens to the land at the end of the, you know, 25-year project? Is the life of the solar panels -- I don't know anything about the solar

panels. Do they have a 30-year life versus a 25-year and what's the remaining life? A lot of questions here that are unanswered.

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So, again, it boils down to I'm in support of renewable projects. I'm probably the biggest advocate you'll find. But I'm not going to do so in a manner that causes ratepayers to bear higher costs than otherwise they should absent somebody with my technical expertise digging in the details and making sure there's value there. Because if there's no value and the consumers are being taken advantage of, I'm not approving it. that's, that's my concern. And that may not be the case. But I don't have transparency -- even TECO by its own admission doesn't have the underlying confidential pro formas. It's just we picked a price, we looked around, it seemed to be a reasonable price, and we're going to go To me -- that answer doesn't work well for me. with it. I'm not going to do that. It's not going to garner my support. I need more information.

And from staff's perspective, I would expect as we evaluate projects of different terms and different types, we need to establish, it's critically important to establish a levelized cost over the life cycle, I mean, the life cycle, projected life of the project so that we know on a cents-per-kilowatt-hour basis how much

CHAIRMAN CARTER: Okay.

MR. BALLINGER: I think there's a couple of

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consumers should be paying given a reasonable rate of return on the project and all the expenses and such that go into that.

But if we just pick a number out of thin air and say we're going to pay, I don't know, 50 cents a kilowatt hour for electricity just because it sounds good, that doesn't imply inherent value if the levelized cost of the project is determined to be approximately, you know, 16 cents or 20 cents per kilowatt hour.

We had the same problem in Sunshine Energy where the payback on that Rothenbach array was, you know, the contract was about eight years and the useful life of the array was 25 years. So after year eight anything they made from that is pretty much gravy, and that's not protecting the ratepayers well in a case where we're asked to enter into a long-term power purchase agreement. We need to make sure that the costs are fair, just and reasonable. And the only way you can do that in my eyes is to conclusively establish what is your best estimate of levelized cost for a particular renewable project type over the life of the project. And I'd be happy to hear from staff. But those are the comments I wanted to make. Okay. Yes.

ways to look at that. One is you can establish a market rate for a particular thing. And I think in this instance TECO attempted to do that through an RFP and, according to the people here, took the cheapest solar alternative and that's what ended up in the contract. So from a, from a market basis where you have the same technologies competing, if you will, you get your lowest price. That's one method of going at it.

Your method also has merit of looking at the levelized cost of a, of a unit. That takes a bit more

Your method also has merit of looking at the levelized cost of a, of a unit. That takes a bit more expertise on the staff side and assumptions of financing and internal rates of return, things of that nature. So there's, there's a couple of ways to slice that apple.

The other way we look at it is once you have that price in the contract, staff looks at the avoided cost as our benchmark for determining that and that's what we're talking about. We need some level to measure these things against. And I think when we look at the utility's avoided cost, we have a good handle on that.

CHAIRMAN CARTER: Mr. Wright.

MR. WRIGHT: I think Mr. Cherry would like to say something.

CHAIRMAN CARTER: Okay. And then, Mr. Beasley,
I'll come back to you.

MR. CHERRY: Okay. I wanted to make a comment

relative to the discussion of a self-build program by TECO versus this power purchase agreement. In a, in a self-build program the, the owning entity takes all the risks of delivering that project.

In the PPA that we have structured with TECO they take no risk. We take all the risk. Because if we don't get -- if we don't deliver, we don't get paid. And I think that's, that's an important point.

And the second point is relative to how does the staff do its job? I'm not a lawyer, but it seems to me that the point of how does the staff do its job should not be a factor in considering what is a \$130 million project and a \$2 million investment on, on my part. I think the staff needs to figure out how to do its job and they need to figure out how to do it properly.

What happened on this project was the assurance to the staff and to the Commission that this project was professionally and thoughtfully and carefully evaluated by Tampa Electric was the process that Tampa Electric went through and described in detail to the staff in terms of how they went through their procurement activities. And I note in the, in the staff's recommendation they don't have any negative comments on the TECO procurement activity, and I would therefore conclude that they found that acceptable.

CHAIRMAN CARTER: Okay. Mr. Beasley.

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MR. BEASLEY: Yes, Mr. Chairman. I just wanted to say that Mr. Ballinger appropriately assessed the alternative that we chose two and a half years ago when we took the bull by the horns and decided we've heard the challenges from the Governor, from the Legislature, from this Commission to go out and develop renewable energy resources and particularly solar. So we used the RFP process, and we scoured the market, we got bids from a number of potential suppliers. This bid was the, the low bid from the standpoint of our ratepayers. I mean, this was by far and away better than the other bids that we received for comparable solar projects. We relied on the market, and we think that that's an appropriate means for ensuring that your ratepayers are not paying more than they need to for this resource. So that, that, that is one alternative, and that's the alternative that we selected and that led us to where we are.

CHAIRMAN CARTER: Commissioners, I'm going to go to Commissioner Klement and then I'm going to --

> MR. WRIGHT: 30 seconds.

CHAIRMAN CARTER: I thought you passed it off to your client. Mr. Wright.

MR. WRIGHT: I did. Thank you. Just to continue part of the dialogue and colloquy involving

Mr. Beasley, Mr. Cherry, Commissioner Skop and Mr. Trapp, what the staff do have and what the Commission does have is knowledge that Tampa Electric conducted a competitive process, at least reasonable knowledge, if not better than that, that that process was completely sound. We assert that it was.

In terms of, in terms of standards that the staff might apply, you could apply standards as follow. Was it procured through a competitive process, was it a sound process, did it do the job right, and what were the results? In this case there's no quibble, there's no argument that Tampa Electric's process was flawed in any way. And, again, the proof is in the pudding. There, there are few, if any, data points out there in Florida or anywhere else that the pricing arrived at pursuant to Tampa Electric's competitive process is not highly competitive versus all other known data points. Thank you.

COMMISSIONER SKOP: Mr. Chair.

CHAIRMAN CARTER: Commissioner Skop.

COMMISSIONER SKOP: I'll just briefly respond to that in terms of my expectation of staff in terms of evaluating renewable projects. Again, when you have a solar PV project that has a term of eight years, a term of 16 years, a term of 20 years, a term of 25, 30 years,

how do you evaluate what's good value? The only way you can do that is what is the, at the end of the day the levelized cost in cents-per-kilowatt-hour or dollars-per-megawatt-hour of the renewable resource such that for contracts that are of different terms you're not

overpaying for the same renewable resource?

On solar PV it's very simple. There's software out there that allows one to develop the levelized cost for a solar project that even analysts use. You know, certainly the way I used to do such things would be you create a pro forma spreadsheet with your revenues and your expenses and your debt service payments, and you look at your net operating income and your profit, reasonable profit, and you figure out what it's going to take, what the, what the array can produce over its life in terms of, you know, megawatt hours or kilowatt hours. You know what the cost is that generates a revenue and they you look at your expenses. It's a simple pro forma analysis.

But absent doing that, we're just guessing.

We're guessing on the market. And that does, to me does not imply strict scrutiny of ensuring the best value for the ratepayers. It's complacency. And a market analysis benchmarking off California costs in a market that has a whole host of, of differences from Florida, has a

completely different regulatory scheme, has mandates by the state completely different from this state is not an appropriate benchmark. It's one benchmark that can be looked at. But, again, at the end of day what I want to see when I'm evaluating a project is levelized cost versus the cost of the project. And if it's at, near the levelized cost, it's going to get my approval subject to the terms and conditions being acceptable. If it's way above the levelized cost value, there's a problem there. It's probably not as cost-effective as another alternative. It's very simple, it's a very straightforward analysis. It's just it seems that we don't want to do the homework. We just want to allow and buy off on any different variation of different projects. And it's important to have consistency so that we know we're doing the right thing on a consistent basis.

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Solar PV, it's very simplistic to do something like this. Wind, it would be very simplistic to do something like this. Other technologies may be a little bit more difficult. But solar PV costs are well-documented. You know what your solar PV costs are for the, for the, for the modules. You know what your fixed O&M and variable O&M costs are going to be. They're basically maintenance free. Maybe you have to do some mowing, some cleaning every once in a while. But

you sit the thing there, you fence it, you got an inverter, and you keep it clean and the sun does its job and you produce power. So it's not rocket science.

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But, you know, when we're looking at just the market value or a competitive bid, you know, I have no ability other than to accept the bids as a competitive bid. I don't know whether those bids are overstated in, in virtue of reality or even what the underlying return on equity for such projects would be.

I know that, you know, when I managed wind turbines, we had easement payments we had to make for the use of the land. That's an expense of doing business. Similarly, if you, if you procure a parcel of land to use for a solar PV array, there's probably easement costs unless you're purchasing the land directly. But the costs are finite and distinct on a solar PV project. It's not rocket science. And we ought to take a critical look such that when we have a contract of different terms, which I think we've seen a couple of them so far, that we can make a balanced choice based on looking at the evaluated cost of the project versus the proposed project costs and draw some logical evaluation as to whether consumers are truly getting good value for the We want to encourage renewables. I want to encourage renewables. I support the project. But I only support the project at a cost that is appropriate, and I don't believe we've done that analysis.

MR. BALLINGER: Okay. I -- we've had these discussions before about levelized costs. I'm not going to get into it much. But I think from our perspective we're looking at it from the ratepayers' perspective, and I think that's why we look at avoided cost as our benchmark.

Quite frankly, I don't care how they negotiate a contract, what the price is. I look at that price compared to the utility's avoided cost. That's the entities that we, or the Commission regulates that sets a rate of return. We don't have the authority to set the rate of return for a private entity.

So I look at it from an avoided cost standpoint from the ratepayers, what they are being asked to pay, and it's a little different philosophy.

COMMISSIONER SKOP: But by nature renewables, with the exception of waste energy and biomass, are inherently above avoided cost. So that's why that becomes important. It's not just can you do it cheaper? If you're, if you're approving a solar PV project, obviously it's going to be above avoided cost unless there's some quantum leap in technology that is going to come from the planet of Krypton and I'm not aware of.

1 It's going to happen.

MR. BALLINGER: Correct.

commissioner skop: The same thing for wind, it's above avoided cost. The only two I know of are biomass and waste energy that are even remotely cost-competitive on a standalone basis without additional incentives to a generator or IOU's avoided cost as it exists today. Is that correct?

MR. BALLINGER: Correct. And that's why we got into the RPS discussion and the rules that we sent to the Legislature.

I'd like -- you made a good point. There are some renewables that are below avoided cost. You've seen some of them before you in contracts: The waste energy facility a few weeks ago, some biomass plants. In fact, I think in TECO's RFP that went out, they went out for all renewables, they found some biomass projects that were cheaper on a total levelized cost basis than the solar project, yet they chose to pursue solar. And Energy 5.0 was the cheapest of the solar proposals, not the cheapest overall of all the renewables.

commissioner skop: And just briefly because, you know, we've had a lengthy discussion. I think also if I remember from the RPS discussion, you know, it goes to Mr. Twomey's argument about, you know, you want to

look at what you can procure.

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And, again, I don't, I don't want to -- I want to acknowledge and commend both TECO and 5.0's efforts towards, you know, trying to give effect to the legislative intent and policy of our, you know, energy policy of this state. To me, you know, I feel somewhat constrained by the statute where I've expressed provision for 110 megawatts statewide, not utility, per utility, it's statewide that has already been subscribed. RPS for avoided cost plus was not ratified.

But, again, even assuming Mr. Wright's argument is valid, and I accept it on face, that we do have the discretion of the Commission to depart from that and approve something in the public interest, I still have substantial questions when you're dealing with such great unknowns that what we're approving isn't just a shot in the dark, that it is based on well understood, easily, readily quantified numbers that we currently don't have transparency to, particularly in light of the 30 percent convertible investment tax credit. That's a big deal. I don't even know if it's embodied in the analysis. I don't even want to venture to guess. Even if it was included in the pricing, I would still have a host of questions that I've previously articulated in lengthy discussion. Thank you, Mr. Chair.

CHAIRMAN CARTER: Thank you.

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Commissioners, my plans are to go to Commissioner Klement, then Commissioner Argenziano, but I recognize that blood sugar has dropped tremendously and we've had staff here for the whole time, and we do have a couple of staff members that do need some nutrition for, for health reasons and all like that. So, and of course I wouldn't mind having a bite to eat myself.

Commissioner Klement, then Commissioner Argenziano. You're recognized.

COMMISSIONER KLEMENT: Well, I don't know if this is -- I want to wait with the comments I have until there's more of a motion or something closer to that.

CHAIRMAN CARTER: Okay. Until we bring it in for a landing. Okay. That'll be fine.

COMMISSIONER KLEMENT: Thank you, Mr. Chairman.

CHAIRMAN CARTER: I hope we're closer to -- I really sincerely appreciate -- I hope that we're close to bringing it in for a landing.

Commissioner Argenziano, you're recognized.

COMMISSIONER ARGENZIANO: Just comments.

CHAIRMAN CARTER: Just comments.

COMMISSIONER ARGENZIANO: You know, while I don't think any one of us would want to willy-nilly give out anything without, you know, any, any kind of rates

that impact the ratepayer without an understanding of how they're derived and what are the best efficiencies, but you also have to be looking at the fact that in the regulated realm of things solar is not something that's been, has a large history. And there aren't many projects out there other than maybe nonregulated projects out there, and it's on the cusp of trying to get its foot in the door.

And if I were in the solar industry, what I would be saying is that everybody is talking a great deal about renewables but we're never going to get there. And if you don't let them in the door, you're not going to have any comparisons or, or you're never going to get to the point where you talk about consistency and confidence. If I were an industry in the solar industry, I hear this but I don't see it. And maybe in certain areas I see it happening. And I would not want to, want to commit dollars into research to, to go forward.

And if you don't let them get in the door somehow and you have politics, and don't even get me started with politics, that has virtually kept alternatives out of the picture. And it's starting to, the people are starting to speak louder on that. And while I'm saying you need to, you need to, of course, check into things, but there isn't that slate of

paperwork that you can pull out regarding the regulated, regulation of the solar industry and say, well, okay, these prices have been. If you have an RFP, I think that's pretty good until it gets more established and you understand what solar really can do and the advances that are coming or may be coming.

But as far as -- and even when we talk about biomass and waste, those are great because we talk about having alternatives to the traditional and they're important. But they still do not take care of the CO2 issue, which is a very big issue in today's world. When I talk to people out there, there are people who are against solar, there are people for solar, and I hear from a lot of people who would say to me that, look, I'd pay two, three bucks a month if you could switch to an alternative because that's what they want to see.

So, and understanding Commissioner Skop's concerns about, you know, levelized, trying to fix in on what are the appropriate costs, I understand that. But with somewhat of not having a very long history of being regulated, of where we are today, we're sitting here as Commissioners really on the, on a major change that I think is coming to, to this country, and it's going to have to, I guess. And the same reasons why we talk about nuclear; we need to be able to get to where we want to go

with clean energy and hopefully more efficient energy.

But, but I have a hard time understanding, I guess, where, what schedule I would look at to see what, what rates are good when it comes to solar. I have a, somewhat of an understanding in looking about the countries, all the different countries that have implemented solar and where it should be. So, but if —— I guess what I'm saying is if you don't let them in the door, if you can't get solar practicing, if you can't get those companies feeling good about somebody is finally going to let them get motivated into spending more dollars to, to increase the research, to feel that there is a potential for solar to be used more where it can be used more, then it ain't never going to happen.

And if, if the question comes down to me as a Commissioner or if, as a past legislator, if the question came to me that said that, that if all the Public Service Commission can do is look at what's the cheaper, can you do it cheaper than the traditional way? Well, heck, that ain't going to happen right now because they're such new industries. I think we know that. And if you wait for it to be cheaper, it's never going to happen if they don't have incentives to move forward.

So while I understand Commissioner Skop saying that he'd like to see more of a, I guess a history of

where we should be with, with those rates, understanding, to me understanding that it's such a new, a new venture I guess and I don't think that history is there, although I do feel comfortable with what I know what's being produced around the country and other countries and with the RFP process. So, you know, I guess I don't know if you, if you -- I don't know. I guess a lot of it is legislative. But in speaking here today as the Public Service Commission, if we were just to say, well, you know, we don't have enough information, well, how do you ever get there unless you start letting them in the door?

And I can't, I can't tell you how many times I have heard from people out there who are for alternatives, not just solar, for alternatives, who are saying, you know, when is this ever going to happen? And I'm not sure -- I know that a lot of it has to do with our policymakers. As we said, we have put forward an RPS. And if you remember, we did a solar carve-out on that, on that RPS.

CHAIRMAN CARTER: We did a carve-out.

commissioner argenziano: And I think everything that we hear coming from the Legislature says renewable. You look in, you look in the, in the statute and, and I mean there are things of course going towards nuclear, let's get moving because we need to provide

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energy, but also that say pay particular attention to solar.

And while I agree and have said before that the Legislature needs to sharpen up things and figure out really which way they want to go, I guess I just wanted to make my comments that, you know, I think that new technology, the people are speaking loud and clear. They want to see renewables, they want to give new technology a chance. And the new technology that's coming with solar is something that I think in the years to come -- I don't know how much better it will get, but from what I understand it's getting better and better. But I'm just worried that if we're looking for a history -- and I think I got what you said, Commissioner Skop, is that you really need to feel more comfortable with whether it's the right cost. And I, and I understand that, I really do.

But we sit here and we, we kind of give costs — there's a lot more impact of costs, and of course there's a greater energy that we get in, in return. But I'm just not so sure that the history is there. And if it doesn't, if we don't start it somewhere, we don't develop that history. I don't know if that make sense or not.

COMMISSIONER SKOP: Mr. Chair.

CHAIRMAN CARTER: Commissioner Skop.

COMMISSIONER SKOP: Thank you, Mr. Chair. And I'll briefly respond.

At least with solar PV and wind there's firm, there should be at the state of where we're at today very firm, definitive costs on, on what a solar PV module would cost. Those costs are coming down. But, you know, it's not a very variable cost. It should be easy to discern what that cost of the modules would be and you just multiply to get the capacity of the array and that's, that's your capital cost for the most part of what comprises the solar PV array. So, so to me the costs are easily able to be quantified.

I guess the point I'm trying to discern briefly is that the costs in the far right column of Page 54, I'm just merely questioning whether those costs are higher than they need to be without further transparency into, you know, how much is this going to cost and such like that.

It's analogous very simply to if I was going to buy a new car today, just going and paying sticker price versus consulting CARFAX or my credit union to look up the dealer invoice price and try and negotiate to get the best price. I'm not, I'm not saying that these numbers are wrong. I'm just merely saying I don't have

confidence in the numbers based on the uncertainty in the tax credit situation and some of the underlying assumptions to articulate that I'm just not signing off on something that is a windfall over and above something that would be taking a more critical approach.

But to one other point and then I'm going to just turn it off and not say a lot. You know, I support the project. I think the staff recommendation provides opportunity for the company to the extent that in the near-term it allows for the sale of energy should the project be developed at the as-available energy rate. Also providing opportunity for the petitioners to go to the Legislature during the upcoming legislative session to try and, you know, affect legislative change that would support the project on other terms that staff has not chosen to adopt in terms of the renewable energy credits and such. So I think there's, there's opportunity there and I support the project.

And I'd also point out that, although it was deferred today and I don't want to get into it but I'll mention it in passing, under Item 5 of today's agenda, Issue 11, there's a staff recommendation that actually provides for solar in a manner that was very analogous to the solar rebates in the alternate RPS proposal that was sent over that would facilitate the development of up to

3 megawatts annually of distributed solar PV generation through the energy conservation and cost recovery clause. So I do think that staff is, is trying to affect the intent of the Legislature in the ways that it has available to do so in the conservation goal setting. In this instance I do agree with the staff recommendation, but I am open to approving the project. But, again, my concern is I'm happy to approve, but I want to make sure that I'm not giving away the farm at the same time, so. CHAIRMAN CARTER: Thank you. Commissioner Edgar, then Commissioner Klement. COMMISSIONER EDGAR: Thank you. Mr. Chairman, you have referred sometimes when the necessary room.

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we've all been gathered together to the use and timing of

CHAIRMAN CARTER: Yes, ma'am.

COMMISSIONER EDGAR: So I'm hoping that that use and timing is coming soon.

And with that in mind, I guess I'd like to, if I may, kind of bring our attention back to the issues that are before us.

We've had a number of statements, I have made some and I think I've heard some from each side of me here along the bench today in support of many of the aspects of this project that is before us today and of

similar projects and other types of renewable projects. But yet when I come back to the item before us, with that in mind, that, those voices of support that I think I've heard for the project, it does seem to really then kind of come down to where we think individually the statutes guide us or take us for Issue 2. And so with that in mind, I'm just wondering if maybe we can look a little more specifically at Issue 2, and let me pose it this way to our staff.

Am I correct in my reading of these two issues and Issue 2 primarily and the analysis and recommendation before us that the primary difference between what the coparties are requesting and what is being recommended to us by our staff is where the risk for the RECs reside?

MR. GRAVES: Yes, ma'am. And it's actually just the risks of any costs that are above the as-available energy rate from the company.

commissioner edgar: Okay. And with that in mind, would it be a correct statement that if at some point in the future RECs that could be, as a result of this project could be profit making, but that is unknown at this time?

MR. GRAVES: That's correct.

COMMISSIONER EDGAR: Thank you, Mr. Chairman.

CHAIRMAN CARTER: Commissioner Klement.

COMMISSIONER KLEMENT: Thank you, Mr. Chairman.

I appreciate the staff's dilemma on this issue, which rule to follow, what standard to follow if we approve this proposal. I would like to suggest a threshold to start with, the price of a soft drink. Not to be flippant about it or sarcastic, but we're talking about, according to the figures provided, 48 cents a month for the average rate holder. I can't go to a machine and get a soft drink for that.

I want to ask this question in regard to renewables for, for the Commissioners to consider. It's one of my favorite expressions. If not now, when? If not us, whom? I don't like to blithely approve higher rates of any size for rate holders, I mean, sorry, for ratepayers, but I believe we must start somewhere if we're going to do anything about renewables. If we ever hope to achieve energy independence, if we're ever going to make some, make some real progress in converting from fossil fuels, it seems like we're going to have to make some sacrifices.

And one of the problems that our economy, the reason it's in this state and our federal government is in this state, because we've been unwilling to pay the price now for the things we want and the things we need and our leaders have not asked us to.

Our culture is enjoy now, let the kids pay later. And at some point I think we have to face up to the real costs if we want to achieve goals, including the renewables that we all say we want.

I appreciate what staff has said and all the points that Commissioner, Commissioner Skop has made as well. He has gone far more into depth than I am capable of doing. So I'm relying upon the efforts put in by staff on, on the overall proposal and regarding the statutory and rule issues. We have heard that it is statutorily allowed even if it is in conflict with a rule. So hopefully -- I mean, this may be not borne out, but our approval, if our approval of this project is made, that it would provide some political cover for legislators to come around in 2010 and really pass some, some standards.

I agree with Commissioner Argenziano and the point she just made about the attitude of consumers toward paying for clean energy. Maybe not all, maybe not even a majority, but I think many people are now willing to pay something to begin the move to renewable, for clean energy. They see, many of them, and we're increasingly so, see the handwriting on the wall regarding the limits of fossil fuel and the hostility of the countries who provide it to us. And that is becoming

clearer every day. Look at the headlines. And I think that's some, these are some of the things that should weigh on our decision today.

CHAIRMAN CARTER: Thank you.

Commissioners, just before I ask to bring it in for a landing is that when we sent the RPS rule to the Legislature -- you were there when I talked to them at the Nominating Council. When we sent the rule over there, we had testimony and evidence from people here during the workshop saying, look, if you're going to do solar, one, you're going to need to have a carve-out. It's too expensive, so you're going to have to do something to kind of bridge the gap. And that's why in our RPS rule we put a specific carve-out in there for solar. We didn't need it for biomass. It's a fairly established process there.

But the other thing too is that in order to bring about technological advances there has to be some modicum of investment, and that level of investment has to be to, to a standpoint to where I don't think

25 megawatts is going to break us or anything like that, but I do think that that's one of the reasons I asked the questions about is it scalable. Is that as prices come down, technologies become available, we can probably scale it up and then the costs will go down. As we were

going through those, those hearings, remember, people were saying, look, you guys -- we had people from the Solar Institute, we had people from all over the country, in fact, and some that had international -- one person there was telling us about what they're doing in Europe and things of that nature.

But I do think that we started out, I believe it was two years ago, Commissioners, when we talked about the fact that we wanted to make sure that Florida was open for business for renewable energy. I think that was one of the things that I said, and that's what we said too. I think that where we are now, we may very well be on the margins.

But we sent a -- one of the things that I'm real proud of when we did that is, I think you all got a copy of a letter that was signed by 1,400 people saying we did the right thing for solar in Florida. Commissioners, you remember that? 1,400 people that took the time to read all of that boring stuff, to follow our deliberations, and then to go through the process and say the RPS rule that you sent to the Legislature is world-class. We think you did the right thing, particularly the way that you did with the solar carve-out. And I'm saying, I mean 18 cents may or may not be significant, but I do think that Commissioner Klement is right, is that if not now,

when? If not us, who? That's where we are now. 1 Commissioner Skop, and then I'm going to ask 2 him for a motion. Commissioner Skop. 3 COMMISSIONER SKOP: Thank you, Mr. Chair. 4 I'm still not clear on this, this 18 cents. 5 Can somebody explain that to me? Because I'm seeing a 6 rate impact of 48 cents per month in 2011 for the average 7 8 consumer. Mr. Wright. 9 CHAIRMAN CARTER: Mr. Wright. 10 MR. WRIGHT: Mr. Chairman, Commissioner Skop, I 11 believe that 18 cents is the approximate median over the 12 life of the contract. 13 COMMISSIONER SKOP: Okay. But sooner rather 14 than later there's going to be --15 MR. WRIGHT: It's front-loaded. It's, it's 16 higher than avoided cost today. That shrinks over time. 17 And, again, these values don't include anything for 18 carbon or RPS mandates. 19 COMMISSIONER SKOP: Do you know, do you know if 20 the investment tax credit were included in the negotiated 21 rate? 22 MR. WRIGHT: I don't know the answer to that, 23 Commissioner. 24 COMMISSIONER SKOP: Because no one has 25 commented on my assertion so far.

MR. CHERRY: The ITC is included in our, in our economics. And whether you get it as a grant in lieu of tax credit or you get it as a tax credit is irrelevant to the overall economics of the project.

commissioner skop: Okay. I would respectfully disagree on the time value of money issue because the project finance would be substantially lower based on the, the debt that would have to be incurred for the project if you got 30 percent of the qualified project costs back from the Treasury in 60 days.

MR. CHERRY: Well, we've had, we've had a lot of conversations with providers of capital for this project, and I'd respectfully disagree with you.

COMMISSIONER SKOP: Okay. Well, it's good to respectfully disagree.

Question to staff, I don't want to mix issues, but a very I guess logical analogy in terms of rate impact would be to look at, as staff did, in Item 5 today that was deferred generally on Page 73. But looking at the five-year average cost of the cost recovery clause and then trying to look at a percentage basis of what the proposed near-term rates would be expressed as in a percentage, would it be logical to say that that's basically about a 50 percent increase in the capacity clause recovery?

1	MR. BALLINGER: You threw a lot of numbers at
2	me there.
3	COMMISSIONER SKOP: Okay. Just, just, just for
4	the purposes of discussion, again, I don't want to get
5	into this in depth, but I'm trying to rationalize what
6	I'm being asked to approve here.
7	On Page 73 of Item 5, and this is just for
8	staff's purposes
9	MR. BALLINGER: Right. We're looking at the
10	five-year average I guess for TECO, the ECCR?
11	COMMISSIONER SKOP: Yes.
12	MR. BALLINGER: It was \$765,000.
13	COMMISSIONER SKOP: Okay. But, but on Page 73
14	in the table, Table 1 of 1, the, for Witness, not the
15	staff recommendation but for Witness
16	MR. BALLINGER: Spellman?
17	COMMISSIONER SKOP: Spellman who adopted a
18	10 percent methodology and then look what that translates
19	to into impact in terms of cents per month.
20	MR. BALLINGER: Yes.
21	COMMISSIONER SKOP: Okay. So that's for
22	10 percent of the four-year average of the clause
23	recovery; right?
24	MR. BALLINGER: Correct.
25	COMMISSIONER SKOP: So to take that, if that
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represents 10 percent for 10 cents, then certainly 50 cents would be a 50 percent increase in that clause.

MR. BALLINGER: Correct.

COMMISSIONER SKOP: Okay. I agree. I think that we need to start somewhere. Again, I'm in favor of the project. I have some grave reservations. And, I mean, part of me recognizes the need to move forward with this. Part of me would want to defer it to get some better transparency as to the underlying economics. I mean, I feel like I'm just throwing a dart at a dart board and it's a best guess.

So I guess from a policy decision, if this is a one-time deal and the Commission wants to approve it, I may follow the majority against my better judgment. But that's not the way ~- I'm a very analytical person. I'm a very financially savvy person. I've run spreadsheets, I'm familiar with project economics, I'm familiar with some of the things that I've discussed. But it's not the way I like to do it. I like to see apples to apples comparison to make a sound judgment as to whether consumers are being asked to overpay for a renewable resource. And this isn't it, but I'll respect the underlying Commission's decision.

CHAIRMAN CARTER: Thank you.

MR. WRIGHT: Mr. Chairman, just one quick fact.

CHAIRMAN CARTER: Ever so briefly, Mr. Wright, 1 because I really had no intentions of coming back on this 2 side of the bench. But ever so briefly. 3 MR. WRIGHT: Thank you for your indulgence, 4 Mr. Chairman. 5 I just conferred with Mr. Aldazabal. 6 company, as I represented earlier, intends to recover the 7 cost of this through the fuel clause. 48 cents would be 8 somewhat under, just a shade under 1 percent on the 9 fuel bill, which is a shade north of \$50 a month on 1,000 10 kWh. On -- actually the 48 cents is on 1,200, so it's 11 12 probably closer to eight-tenths of a percent on the fuel 1.3 charge. 14 CHAIRMAN CARTER: Commissioner Skop. 1.5 COMMISSIONER SKOP: Thank you. And thank you, 16 Mr. Wright, for that clarification. I was going back and 17 forth between pages and thought I was talking about the 18 same clause. 19 CHAIRMAN CARTER: Thank you. 20 Commissioner Edgar. 21 COMMISSIONER EDGAR: I'm back to getting that, 22 wanting that necessary room real soon, Mr. Chairman, but 23 24 CHAIRMAN CARTER: Please tell me that you're 25 going to give a stab at making a motion.

commissioner EDGAR: Well, actually not, not
quite yet. Sorry.

CHAIRMAN CARTER: Okay. All right.

commissioner edgar: But what I did want to say is I made some comments earlier on the previous item about -- and, please, nobody throw a shoe at me or anything, but about --

CHAIRMAN CARTER: That it would be in Baghdad where they do the shoes.

commissioner EDGAR: Sometimes it feels like it, Mr. Chairman. About if a Commissioner or a party requests additional time, that we almost always try to accommodate that.

And, Commissioner Skop, I think I heard you say you wanted more time. And even though we have had, you know, significant discussion this afternoon, I do note that at the front of the item it does say no, no critical dates.

I am, you know, I, I am comfortable with the project. I am less comfortable with the issues that are embodied in Issue 2. And I guess to our newest colleague, I would kind of turn some of those comments on the other side. Again just for discussion purposes, the price of a soft drink once again, it seems like perhaps the shareholders in the interest of pushing forward

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renewables could, could find some way to work with that as well is just, you know, to look at it from the other perspective.

If indeed this project is approved rejecting the staff's recommendation on Issue 2, I think it's important to point out that that is a significant change in policy. I also think it's important, stating the obvious, that issues that come before us are case by case and almost every one has some unique features to it. But I do think that it's important to not gloss over that in addition to whether you think the amount should be by the ratepayers, an amount of the project should be borne by the ratepayers or by the shareholders or split some way or some other mechanism for finding those funds, that to do it different from what the staff recommends separate from the amount is a change in policy and I think it's important to make sure that we all realize. And, again, Commissioner, it's more time to you and that is a possibility --

CHAIRMAN CARTER: Commissioner, if you need a deferral, Commissioner, we'll grant it.

CHAIRMAN CARTER: We'll do it. If you need a deferral, we'll grant it. I mean, any Commissioner, as Commissioner Edgar has said, that any time any

Commissioner needs additional information, particularly when there's not prohibition by statute or rule or anything like that, we'll do that.

Let me go to Commissioner Argenziano while you're thinking. I'll come back to you.

Commissioner Argenziano.

COMMISSIONER ARGENZIANO: And just I think if a Commissioner needs more time, that's just the thing to do, unless there was something that was just so critical that it couldn't be done. But, and I mean this with all due respect to Commissioner Edgar's comment that sometimes policy does change with new, you know, new directions from the policymakers especially sometimes our policy may change. And I don't know where that is as of right now. But when we're looking at something new, it may require a policy change and it may have to be ultimately from the, from the Legislature. But sometimes it does change. But I understand the concern of, you know, uncertainty.

CHAIRMAN CARTER: Staff, excuse me.

commissioner EDGAR: And, Commissioner, I appreciate those comments. And I, I just didn't want to, again, not state the obvious, that it would be, would be a change. Whether that may be a great thing, it may be the time, but I think it's an important thing to just

kind of shine that light on.

CHAIRMAN CARTER: Staff's, there's no -- it doesn't say here. There's no statutory prohibition or rule prohibition that would preclude us from, or prohibit us from deferring this, is there?

MS. BRUBAKER: None that I'm aware of.

CHAIRMAN CARTER: Commissioners, let's just do this. We don't -- let's don't vote. Let's just -- by, by a motion, by a movement of the Chair we'll just defer this to allow for more, more time for more discussion, more information. We'll do that. So let's just consider this docket, this item deferred. And staff can get with each one of our respective offices and provide additional information and we'll go from there, Commissioners. So we'll just do it like that. Okay? So Item 3 is deferred. A robust debate nevertheless.

MR. WRIGHT: Thank you, Commissioners, Mr. Chairman.

CHAIRMAN CARTER: Okay.

MR. CHERRY: Thank you very much.

CHAIRMAN CARTER: Commissioners, I know that I said that people need nutrition, but I really do want us, I want to finish, I really do want to finish. So, staff, come on and let's kind of shake a leg and get on Item 6.

And I've talked to Chris, What we'll probably

do once we finish -- I know I normally give you 20 minutes, but I'm going to give you, give you five minutes for, five minutes for Internal Affairs. Okay? (Agenda item deferred.)

1	STATE OF FLORIDA)
2	: CERTIFICATE OF REPORTERS
3	COUNTY OF LEON)
4	WE, JANE FAUROT, RPR, and LINDA BOLES, RPR, CRR, Official Commission Reporters, do hereby certify
5	that the foregoing proceeding was heard at the time and place herein stated.
6	IT IS FURTHER CERTIFIED that we
7	stenographically reported the said proceedings; that the same has been
8	transcribed under our direct supervision; and that this transcript constitutes a true transcription of our notes
9	of said proceedings.
10	WE FURTHER CERTIFY that we are not a relative, employee, attorney or counsel of any of the parties, nor
11	are we a relative or employee of any of the parties' attorneys or counsel connected with the action, nor are
12	we financially interested in the action.
13	1646
14	DATED THIS 100 day of 1000mber
15	2009.
16	1 1 de de la bace
17	JANE FAUROT, RPR LINDA BOLES, CRR, RPR
18	PSC Official Commission FPSC Official Commission Reporter
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Parties Staff Handout Internal Affairs Agenda on 10127109
Item No. 3

TAMPA ELECTRIC COMPANY DOCKET NO. 090109-EI STAFF'S FIRST DATA REQUEST REQUEST NO. 1 PAGE 1 OF 2

FILED: SEPTEMBER 28, 2009

- 1. How was the fixed energy cost by Energy 5.0 developed? (Capital, O&M, Green Attributes, IRR, etc) Please provide any and all work papers/spreadsheets associated with the development of this cost. (Direct to Energy 5.0).
 - A. The fixed energy cost, the fixed price to be paid by Tampa Electric under the Solar PPA, is a negotiated value. While Energy 5.0 made certain assumptions in preparing its initial 2007 response to Tampa Electric's renewable energy solicitation, and throughout the negotiation process, the fixed price is just that, a fixed price. It is not a "built up" value in the conventional utility accounting sense. Tampa Electric has no knowledge of Energy 5.0's internal financial analysis that may support the confidential price of the subject power purchase agreement. Energy 5.0 responded to Tampa Electric's 2007 Renewable Generation Request for Proposals with a proposal to build, own and operate a 75 MW PV facility and deliver all of the energy and environmental attributes of the energy to Tampa Electric for a period of 30 years for a set base price with a yearly escalation rate. The initial proposals were provided to the Commission on a confidential basis. During the course of that negotiation the size of the project was reduced from 75 MW to 25 MW, the price was adjusted slightly to reflect the impact of the decreased economies of scale and the escalated price was levelized to the confidential value previously provided to the Commission.

As stated in Tampa Electric's petition, filed March 9, 2009, the Energy 5.0 response to the company's request for proposals was the most competitive non-firm solar proposal. Also, Tampa Electric's response to Staff's Second Set of Interrogatories No. 51 provided comparative pricing information for utility scale PV solar projects. The most recently available information relevant to Staff's request can be found in the California Energy Commission report entitled "Comparative Costs Of California Central Station Electricity Generation "which provides a methodology and levelized price for a variety of energy generation technologies for facilities built, owned, and operated by merchant, investor and publicly owned utilities. The executive summary of that report is attached to this response; the full report is available at the http://www.energy.ca.gov/2009publications/CEC-200-2009-017/CEC-200-2009-017-SD.PDF. The study considers all capital, operating and maintenance cost components, an assumed capital structure, taxes. insurance, available incentives and as appropriate fuel and waste disposal costs to establish a consistent set of levelized costs per kWh for utility scale facilities employing several energy generation technologies assumed

TAMPA ELECTRIC COMPANY DOCKET NO. 090109-EI STAFF'S FIRST DATA REQUEST REQUEST NO. 1 PAGE 2 OF 2

FILED: SEPTEMBER 28, 2009

commencing operation in California in 2009. Table B-1 of that report lists the average levelized costs for a merchant 25 MW PV solar facility as 26.22 cents per kWh. Despite the presence of better solar resource in most areas of California than any in Florida, the levelized price from the CEC report is greater than the confidential price in the Tarnpa Electric Energy 5.0 power purchase and sale agreement. The list of data points, while by no means exhaustive, is representative of utility scale PV projects. The conclusion, for the Commission's inquiry into the reasonableness of the pricing under the Tampa Electric-Energy 5.0 Solar PPA, is that by whatever means Energy 5.0 and Tampa Electric arrived at the contract price, the results are more favorable to Tampa Electric's customers than any of the comparably sized facilities listed in the table.