BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

DOCKET NO. 20190061-EI

In re: Petition for approval of FPL SolarTogether program and tariff, by Florida Power & Light Company.
_____/

VOLUME 3
PAGES 396 through 696

PROCEEDINGS:	HEARING
COMMISSIONERS PARTICIPATING:	CHAIRMAN GARY F. CLARK COMMISSIONER ART GRAHAM COMMISSIONER JULIE I. BROWN COMMISSIONER DONALD J. POLMANN COMMISSIONER ANDREW GILES FAY
DATE:	Wednesday, January 15, 2020
TIME:	Commenced: 1:00 P.M. Concluded: 2:53 P.M.
PLACE:	Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida
REPORTED BY:	DANA W. REEVES Court Reporter
APPEARANCES:	(As heretofore noted.)

PREMIER REPORTING
114 W. 5TH AVENUE
TALLAHASSEE, FLORIDA

I N D E X

WITNESSES

I N D E X (CONTINUED)

WITNESSES

EXHIBITS

NUMBER:	ID	ADMITTED
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P R O C E E D I N G S

(Transcript follows in sequence from Volume 2.)

CHAIRMAN CLARK: All right. If everybody will find a seat, we're going to go ahead and get started.

We will call this hearing back to order. And I believe, if memory serves me correct, Mr. Moyle, it is your turn.

MR. MOYLE: Thank you, Mr. Chairman, and good afternoon, Mr. Bores.

THE WITNESS: Good afternoon Mr. Moyle.

EXAMINATION

BY MR. MOYLE:

Q I wanted to touch on a few points with you. And I don't want to be redundant about the questions that I asked Dr. Sim earlier, but you all do have some overlap in your testimony, correct?

A There is a little bit of overlap, yes, that's correct.

Q And just so the record's clear, at a high level, just tell us kind of what you did compared to what Dr. Sim did.

A Yes. I think as Dr. Sim talked about, he's more doing the resource planning aspect of this, right,

looking at what is the cost to our system of adding these 20 additional solar sites. From there, he gives me that output to kind of -- I'll say, I more took that output and the CPVRR value that he calculated to develop the pricing associated with the program.

Q Okay. You filed direct and rebuttal, correct?

A Yes, that's correct.

Q I want to ask you about -- and you were involved in the design features of the program, correct?

A I would say I had very limited involvement in that; that's more Mr. Valle. And I'm working with those parameters that are given to me.

Q Well, at least on page five of your rebuttal testimony there is a question on line three: What other changes to FPL SolarTogether result from the increase in projected CPVRR benefits? Do you see that?

A Yes.

Q And you go in there and you say, well, one of the changes we made was that we've reallocated how savings are going to be provided to the general body of ratepayers as compared to the participants, correct?

A Yes. This accounts for the updated 55/45 split if that's what you're --

Q What was it before the 55/45?

A It was 80/20.

Q Okay. Why did you make that change to make it more -- more for the general body of ratepayers?

A I think as a result of the changes that were made, our CPVRR increased 110 million. And, therefore, we were able to offer some of that incremental benefit that was derived to the general body of customers.

Q And maybe I'm not real clear about how the split works. You had some questions with Mr. Rehwinkel, but is that split that 40 -- 45/55 split, does it stay the same regardless of what happens with respect to the variable -- variable cost of natural gas and carbon?

A I think, as I discussed with Mr. Rehwinkel, right, based on the projections we put forward today in what I'll call our base case, our mid fuel/mid CO2, it's 249 based on what happens in the future. And then I think Witness Sim did a good job talking about this, that could change and ultimately that split could change as a result of the change in fuel or emissions prices.

Q All right. So let's go through that. And you would agree with Dr. Sim where he said, you know, that 249 savings, that's one possible scenario out of nine and there's no probability that that's going to occur, or more likely to occur, than any of the other eight, correct?

A Yeah. I think it's one possible scenario out

of infinite. Right. We could have something different than low fuel. Right. It could be a penny change. Yes, anything is possible.

Q Right. And I think Dr. Sim said it could go outside the nine boxes, as well. That's a possibility?

A Agree.

Q So, hypothetically, let's say -- let's say that you have huge gas run-up and you have huge carbon price. That gets the most savings to the participants, right?

A Correct, in our 9-box scenario, high fuel/high CO2 would generate the most significant overall savings by putting solar in the system.

Q Okay. And with respect to the split, the 45/55 split, would that hold in that scenario?

A In your hypothetical, for the participants, their 137-million-dollar benefit wouldn't change, but what happened is the 112 benefit being allocated to the general body of customers, that would be a much higher number than 112 because they would realize all that upside associated with the change in fuel and emissions prices.

Q Right, but I'm just trying to understand -- so there's a locked-in number that the participants get, the 137, right?

A Correct.

Q And then there's another number that can vary?

A That is correct.

Q Okay. And the number that can vary, on the upside, is it 55/45?

A It all depends on what that upside number means. Right. It's just going to a ratio of whatever that total benefit is, 137 of that, let's just call it 500 if it goes to a tremendous upside, would go to the general -- or to the participants, so 137 over 500, let's just roughly say 15 percent, 20 percent would go. The other 80 percent would go to the general body of customers.

Q So am I correct, so you take out the 137 and whatever is remaining you split 55/45?

A A hundred percent to the general body at that point in time. Right. The 137 is not going to change for the participants. The only thing that is going to change is the amount of benefit allocated to the general body of customers. And, as a result of that, that could change the 50/45 allocation that we have in our base case.

Q Okay. And so the 55/45, is there, just as a representative number, if you hit the middle of the nine box with the mid fuel and the mid carbon, correct?

A Correct. That represents what we think is the best outcome, or the most likely outcome today, based on our mid fuel/mid carbon case.

Q But then if you were to run it at a different level, you just take the 137 off and then the remaining goes to the general body of ratepayers?

A Yes, that's the way I would think about it.

Q Okay. And if the worst-case scenario happens from a standpoint of impact on general body of ratepayers, and probably maybe not so much for participants, as well, would be as Mr. Rehwinkel was suggesting, that if it's low fuel and low carbon, then the general body of ratepayers are not getting much, correct?

A Correct. It would cost them, I think as Dr. Sim said, 145 million dollars. But, again, there's a -- in his analogy, the 145 dollars to get a $9,000 benefit in the lower overall average system cost.

Q Right. And that benefit they talked about would just be, oh, you know, it's low fuel and you're not having to pay a carbon cost. That's --

A Correct. Lower overall system average fuel cost for everybody.

MR. MOYLE: Okay. That -- I just needed clarification on those points. Thank you.

CHAIRMAN CLARK: Thank you, Mr. Moyle.

All right. Let's move to staff.

MS. SIMMONS: Thank you, Mr. Chairman.

EXAMINATION

BY MS. SIMMONS:

Q Good afternoon, Mr. Bores.

A Good afternoon.

Q Kristen Simmons with Commission Staff. You should have a set of documents in front of you.

A I do.

Q Great. My first set of questions today relate to the solar generating facilities and projects. I know Mr. Rehwinkel touched on the Power Plant Siting Act briefly in his questions, but I do not believe he asked this specific question. So, since each of the 20 solar generating facilities is below 70 megawatts, they are each exempt from the requirements of the Power Plant Siting Act, correct?

A Yes, that is my understanding.

Q And would it also be your understanding that they would also be exempt from a need determination by the Commission?

A Yes, that is also my understanding.

Q In the packet I provided, I believe the first one is FPL's petition. If you would please turn to page

three of the petition.

A I'm there.

Q Okay. Looking at the table, would you please confirm that none of the SolarTogether projects are below 75 megawatts?

A Yes, I will confirm each project is greater than 75 megawatts.

Q So if viewed at the project level, the SolarTogether projects would be subject to the requirements of the Power Plant Siting Act, correct?

A Yes, but I think we're mixing kind of apples and oranges. I think we need to look at what's the intent of the Power Plant Siting Act versus what's the intent of our AFUDC policy and how we analyze these from an accounting perspective.

Q Okay, but just humor me. The projects would then also be subject to a need determination by the Commission, correct?

A To humor you in your hypothetical, yes.

Q Thank you. I appreciate that. So this next question is about AFUDC. If you would please confirm that the revenue requirement impact associated with the AFUDC accrual for projects one and two is approximately 2.35 million? And I can direct you to Staff Rog 243, which is Exhibit 48 on the comprehensive exhibit list.

A Let me just go in the book. Yes, that is correct.

Q Okay. Thank you. I am now going to ask you some questions that Mr. Valle indicated yesterday would be better directed towards you.

A Great.

Q Do you agree that the cost for electric generation facilities are approved by the Commission for IOU's pursuant to Chapter 366 of the Florida Statutes?

A Yes, I agree the Commission reviews our generating plans for prudence and ultimately approves recovery of those.

Q Okay. If the Commission did not approve the tariff, but classified the proposed solar facilities as a regulatory asset, would you agree that this would encourage the development of solar generation in the state?

A Yes, I agree. Right. It would give us approval to build 20 sites, but that is -- kind of goes against I think everything Mr. Valle talked about in the customer desires of this program and what we're hoping to be able to bring to them and to the customers of Florida.

Q Okay. And would classifying all or a portion of the proposed solar facilities as a regulatory asset

provide assurance that FPL could recover those costs in a future rate proceeding?

A Again, yes. Right. I think we cannot establish a regulatory asset without Commission approval. And normally when we're ordered to establish a regulatory asset, it's a prudence approval and I think we can go ahead and recover that investment.

Q Okay. Thank you. My next line of questions deal with participant charges and credits. Would you agree that the participant charges will be credited as revenue for surveillance reporting purposes?

A Yes, that is correct. They will offset the revenue requirement associated with these facilities in the surveillance report.

Q And at your next rate case, these revenues will offset the capital investment of the solar facilities, correct?

A Yes. Again, these revenues will be credited against the revenue requirement and help minimize any rate case impact associated with these.

Q Okay. So, in other words, the revenue collected from the participating customers, the charge, will offset the capital cost associated with solar facilities that will then be recovered from the general body of ratepayers?

A So I think we've got to -- we're talking semantics, so I just want to make sure we're all very clear here. Right. We are levelizing this revenue requirement. And if you think about a revenue requirement, it normally declines over time. Right. So we -- to minimize the day-one charge and make it, quote-unquote, "economical" and encourage and meet the needs of the customers here, we have levelized that charge. So, in the short term, there will by a difference between the levelized charge to the participants and the actual revenue requirement that will sit in rate base that will turn around over the life of the project, such that participants contribute 104.5 percent of this total base revenue requirement over the 30-year life.

Q Please confirm that the participant credits will be included in the fuel cost recovery factor?

A Yes, that's correct. Ultimately what's giving rise to the credit is fuel and emissions and those are things that are normally and have historically been collected through the fuel clause.

Q And both of the charging credits will show up as separate line items on a participating customer's bill?

A I'm going to punt that one back to Mr. Valle.

Q Okay. Would you agree that the tariff does not specify how the charges and credits will be recovered from the general body of ratepayers?

A I have not gone through the tariff in that level of detail. So, again, I think that's a better question for Mr. Valle.

Q Okay. If the Commission approved the facilities and the tariff, but included the recovery of the participant credits as a base rate expense, would you agree that participating customers of SolarTogether would still receive all of the benefits that FPL has proposed in this docket so that participants would not be affected?

A I think we need to understand that a little bit better. Right. You are taking what I would call as a volatile cost, or a cost that could potentially change, given that it's tied to fuel and emissions and there's uncertainty about what those may be in the future, how would we go about recovering those through base rates, especially given that we've entered into four-year settlement periods and we would be essentially locking in a rate based on a fuel curve at that point in time that may change, and I think that's why we've proposed to include these in a fuel clause such that we can reset and true those up annually with the movements

in fuel and emissions prices, like we normally do through the fuel clause.

Q Can you verify that the credit is not tied to a fuel or emissions, it's a fixed cost?

A It is tied to fuel emissions. For the participants, we have fixed that based on the fuel curve that we've proposed in our mid fuel/mid CO2. I think as we've talked about, based on the actual fuel and emissions prices that occur over the 30-year life of this project, there may be some movement of ultimately what gets allocated to the general body of customers, but they are going to be paying the credit to the participants based on the fuel curve we've proposed and the emission curve we've proposed in our base case in this case.

Q Okay. But for the question that I asked, would the participating customers be affected or would they be unaffected, if the Commission approved the facilities and the tariff, but included the recovery of the participant credits as a base rate expense; wouldn't you agree that the participating customers would be unaffected?

A Again, the participating customers are members of the general body. So how exactly we're going to move that, I'll say credit, into base rates, I think we need

to understand and think through that a little more to make sure we're all on the same page of how that will work. Right. Essentially I think if we're going to say we're going to lock that portion of it in base rates over the next 30 years, then I would tend to agree with that, but I think we need to understand then what does that do to the general body of customers and how will this work given that we could have future settlements or extended periods without a reset in base rates. It's just something we haven't done is to collect a fuel charge or an emission charge through base rates. Right. It's always been reset annually through the fuel clause.

Q Okay. Would you agree that in this example, FPL would bear the risk of the SolarTogether credit expense until its next rate case? I can repeat the example if you'd like.

A I'm just trying to think through. Yes. Right. There would be risk associated. Right. If we were to put a fuel item through base rates, I would say absolutely there's going to be risk given the movement in prices, or the potential for the movement in prices.

Q Let's move to the last document provided to you. It should be FPL's Response to Staff's Interrogatory No. 233H.

MS. SIMMONS: Mr. Chairman, this document is

listed as Exhibit 46 on the comprehensive exhibit list.

CHAIRMAN CLARK: Okay.

MS. MONCADA: Can you repeat the exhibit?

MS. SIMMONS: Yes.

MS. MONCADA: And the interrogatory number?

MS. SIMMONS: It's FPL's Response to Staff's Interrogatory No. 233H, specifically attachment one, tab one of two, and it's the last one in the packet.

MR. COX: Ms. Simmons, did you say it was 46?

MS. SIMMONS: It's -- yes, the Comprehensive Exhibit 46.

MR. COX: So were there multiple -- there are multiple parts of 46. Okay. Thank you.

MS. SIMMONS: Yeah.

BY MS. SIMMONS:

Q Are you there?

A I am.

Q Okay. Great. Mr. Bores, you sponsored this document, correct?

A I did.

Q This exhibit shows the annual bill impact to the general body of ratepayers and the participants. Looking at year 2021, please confirm that the highest

bill increase to the general body of customers would be $13.49.

A I'm going to say yes. This is what the document shows. However, I think it's important to note that this assumes perfect ratemaking. Right. This has both the base and clause piece. We are in a settlement agreement and we have said we plan to stay out through the end of 2021, such that base rates are not going to change for the general body of customers, such that the base rate portion that's included in this 13.49, they are not going to see that in 2021 as a result of us staying out to that settlement agreement. They are going to see a fuel portion of that, which I think -- give me one second here -- in 2021 which will roughly increase their bill 47 cents a month for the typical 1,000-kilowatt-hour customer.

Q Is that assumption the same for both participants and non-participants?

A I don't understand the question. Right. Participants are going to be contributing when the services go into service. Their portion of the -- I'll call it the 104.5 percent are the subscription credits we will be collecting revenues from the participants to offset some of the revenue requirement. If there's just no change for the general body of customers, given that

we are not asking to change base rates as part of this petition.

Q Okay. So let me see if I can clarify. So is there perfect ratemaking assumed for both participants in the general body of ratepayers?

A So I'm going to try and clarify your question just to make sure we're all clear here. Participants are going to start paying a subscription credit on day one. Right. As soon as these facilities go into service, they start paying a subscription credit. Right. We're going to have a revenue requirement associated with placing these solar facilities in service. Participants are going to pay their share of that through the subscription credit, which will help offset some of that revenue requirement.

We talked a little bit about the differential between the levelized price we're charging them and the declining revenue requirement. That's ultimately what's going to sit in rate base through our surveillance report, essentially is a shortfall, all else equal. We are not going to ask to charge the general body of customers that shortfall in '20 or '21 as a result of this program because base rates are not changing. We're under the settlement agreement.

Q Okay. So I'm going to stick with 2021,

though. For that same year if we can stick with the same exhibit, the highest participant cost would be $22.49, correct?

A That's correct.

Q And the largest bill savings for the general body of customers comes in year 2028 and is $16.47, correct?

A Yes.

Q Whereas in that same year, 2028, participants would see a bill decrease of $49.20, correct?

A That is correct.

Q Okay. Thank you for your time, Mr. Bores. I have no further questions.

A Thank you.

CHAIRMAN CLARK: All right. Thank you, staff. Commissioners, any questions for Mr. Bores? Commissioner Brown.

COMMISSIONER BROWN: Thank you. And thank you for your testimony, Mr. Bores. I appreciate it. You clarified a few areas that I was interested in. So I appreciate it.

This proposal of community solar is definitely unique from other community solar programs from around the country, right?

THE WITNESS: From what I've heard from what

Mr. Valle tells me, yes.

COMMISSIONER BROWN: It's a first of its kind.

THE WITNESS: That is what we say.

COMMISSIONER BROWN: Couched as community solar?

THE WITNESS: Yes.

COMMISSIONER BROWN: I'm trying to get an understanding. Your financial modeling is consistent with FPL's SoBRA filings, right?

THE WITNESS: Yes. The way we look at it from a resource planning perspective, assuming, you know, this is the last solar addition we make in the system. Yes, very consistent in that regard.

COMMISSIONER BROWN: Why did FPL -- I know that there -- Mr. Valle said that this is being driven by the need from customers. Why did FPL model this program in the unique fashion that it has, including non-participating customers?

THE WITNESS: I think -- and I know he's prepared to answer this a lot better than I --

COMMISSIONER BROWN: I'm ready for it.

THE WITNESS: I think it's -- we wanted a program that was going to share the benefits with both the participants and the general body. Right. If we created this program with, I'm going to use

the term, a ring-fence, right, of just participants, it would be very hard to do that. Right. You'd have to look at that day-one charge you are going to have to make to them. I couldn't levelize that that day-one charge. Right. Because otherwise I'd have to -- as we're doing today, I'm taking that differential and having the general body pay for it, knowing it's going to turn around over the life of the program. If I ring-fence it, I would have to put that full declining revenue requirement, that full amount, on the participating customers day-one, which just wouldn't make it economical for the amount of savings we're going to see.

I think a lot of this savings associated with these solar facilities are in the outer years of the project, right, based on where we think fuel prices and emissions are going to go. And so to kind of develop a program that is going to have a significant day-one charge, but with very little savings, I think is going to be a hard pill to swallow for these customers, but ultimately if they were committed for the 30 years, they would get that. So we've designed this program to share in the benefits without charging any of the base

revenue requirement to the general body of customers, but be able to share that benefit with them.

COMMISSIONER BROWN: Seeing that the commercial side is fully subscribed already, the 75 percent of the program, it would almost appear that participating customers could -- the interest that is expressed by FPL's, at least commercial customers, could fund the entire program.

THE WITNESS: Again, I think it goes to what would we have to charge them on year-one day-one to -- makes it uneconomical for some --

COMMISSIONER BROWN: You'd have to levelize it over 50 years or --

THE WITNESS: Or a longer period of time. It's currently longer than a book life, or what we think is an economical life for the solar facilities.

COMMISSIONER BROWN: What is an economical life of a solar facility?

THE WITNESS: Today it is 30 years.

COMMISSIONER BROWN: With approval of -- if the Commission approves the FPL SolarTogether program as presented and the additional revenue requirement associated therewith, would that

obviate the need for FPL to come in later for a rate case?

THE WITNESS: You're asking in kind of 2022 based on our current plan.

COMMISSIONER BROWN: 2022, '23?

THE WITNESS: No. Right. Obviously this is one investment of a portfolio of investments we're making for our customers and across our entire fleet. Right. I think we continually assess what is the right time to come in for a rate case based on the investments that we're making and our financial position, but I don't think approving this program one way or another is going to change the outcome of a potential 2021 rate case filing for new rates, 1/1/22. This is just one piece of a portfolio of investments we're making for the benefit of our customers.

COMMISSIONER BROWN: It's a significant revenue piece, though.

THE WITNESS: I would say yes, but, again we're are asking the participants to fund all of that base revenue requirement. Right. And they are going to pay 104.5 percent of it over the program's life.

COMMISSIONER BROWN: Okay. Thank you.

CHAIRMAN CLARK: Commissioner Polmann.

COMMISSIONER POLMANN: Thank you, Mr. Chairman. Afternoon, Mr. Bores.

THE WITNESS: Good afternoon, Commissioner Polmann.

COMMISSIONER POLMANN: Interesting set of questions that -- and answers that raised more questions for me, sorry to say. To Commissioner Brown's last series of questions, and to follow up Ms. Simmons' questions, on the matter of the rate base and the fact that you're operating under a settlement agreement for no change in the base rate and the stay-out provision and so forth, you have a commitment right now to stay out for a period of time. And recognizing that beyond that you can come in at any time, I'm concerned to a degree that we don't have an understanding of the impact to the base rate to the general body that could occur once the actual costs for this program are defined.

So what is your understanding of how this is all going to play out? I understand that there is some known credits. There is revenue that's going to be collected by the participants and so forth, but there remain a number of unknown costs and the actual impact on the rate base, how that transfers

over into all of the other calculations that need to then be trued up and cascade through an actual rate case. So how is that all going to play out and when in time in some number of years? A lot of projections go out decades, in fact, but what's going to happen two, three, four years from now that you can help me understand?

THE WITNESS: Let me talk about -- and I'm going to reference my exhibit, SRB2. I think as we talk through this, I think it's probably the easiest way to hopefully helpfully lay some of this out for you guys to understand. What I want to focus on first is about halfway through the page I have a line called net revenue requirements. It's kind of below the base in clause. And if you look at 2019, the first number there is 5.8 million, and then 2020 it goes 52.2 million. That's basically, hey, if we did this program as your typical put-it-in-rate-base type investment, what the annual revenue requirement would be, if you go to the last line on this page, this basically shows what that revenue requirement is as a result of us doing this program.

So, in 2019, given that none of these facilities are yet in service, we have the same

5.8. However, in 2020, we have a revenue requirement of 50.7 million dollars. That's less for the general body of customers than it would be had we done this as a rate base program because the credit being paid to the participants is lower this year. They're paying a higher revenue requirement, a base revenue requirement than they're getting a credit through the clause. So, all this equal, this tells me that it is cheaper for our general body of customers to do this as a SolarTogether program than it would be to do it as a rate base program. And that stays true through about 2024 and at that point the credit being paid to participants exceeds the revenue requirement that we're collecting from them, such that they start to get a benefit, or I think as Dr. Sim referred to it, that incentive payment starts to kick in and it's exceeding that.

However, I think the important thing to note is that by 2027, this program completely flips and from 2027 on, our general body of customers has a benefit going forward and that continues out through the end of this program and that's essentially what allows for the benefit, the 112 million dollars, to accrue to the general body. It

is actually cheaper for them in the short-term to use this SolarTogether program, then ultimately it flips and they continue to get a credit in 2027 and each year forward.

COMMISSIONER POLMANN: Thank you for that explanation. Let me shift over to an item or page that was discussed. It was brought up yesterday and it was introduced. I think Mr. Trierweiler was asking questions of Mr. Valle and it was -- discusses in terms of what was Exhibit No. 65 was not -- was not brought into the record, but I believe it may have been referenced in your rebuttal testimony. It shows here, it was Interrogatory No. 234A and the question here -- it's an amended Interrogatory No. 83. And so the question refers to your rebuttal testimony, page three. And I'm not sure how to get you to see it. You have all of the information on the computer there, so --

THE WITNESS: I do have Interrogatory No. 234A in front of me.

COMMISSIONER POLMANN: Okay. So there's a table there at the bottom. And we see here the 1.8 billion dollars in total program costs and then there's $9.23. Can you just give me a real quick

explanation of the $9.23? How is that calculated and the units or dollars per kilowatt month? What does that mean?

THE WITNESS: So that is essentially the levelize charge. Right. So it's taking the revenue requirement of the 1.803 that we're adding to rate base and saying, hey, instead of declining that revenue requirement over 30 years, let's levelize it based on the kilowatt hours of production we expect to come up with; what's the charge. I view it as the capacity payment. Right. We have X amount of capacity over 30 years that has X amount of revenue requirement; what's the levelize charge for that capacity.

COMMISSIONER POLMANN: So the kilowatt, that's your anticipated production?

THE WITNESS: No, it is actually the fixed firm capacity. So think of 74-and-a-half megawatts times 20 sites over 30 years, that's how much capacity we have in essentially kilowatt versus megawatt hours.

COMMISSIONER POLMANN: Okay. So then looking at the subscription revenue, rounding that off as 1.32 billon dollars, and that's to be collected by the program participants under the pending tariff?

THE WITNESS: Yes.

COMMISSIONER POLMANN: That first column, the bottom line. It's 1.315.5.

THE WITNESS: Correct. Right. I think it's important, and we've skipped over a lot today, this, I'll call it, credit of 544.6, right.

COMMISSIONER POLMANN: No. I'll come back to that in a second. So what I'm trying to establish is that 1.315.5, that's a fixed known value according to the subscription. Is it fair to call them contracts? Is that --

THE WITNESS: I'll defer to Mr. Valle on the perfect word, but, yes, assuming we have a hundred percent subscription for this program, we will collect the CPVRR equivalent of 1.315.5.

COMMISSIONER POLMANN: Just a moment, Mr. Chairman.

Now, coming back to the 544.6 million, that's labeled as avoided generation savings. And what's included in avoided generation savings? Because that number appears here. Is that your base case because you're using less fuel and also including -- explain to me why that's a negative. That's a lower cost because of what?

THE WITNESS: Because of us building this

solar. So basically by building these 20 solar sites today, we are not having to build something else in the future that was going to cost our customers the equivalent of 544.6 million of incremental base revenue costs. So we are saving them 544.6 million of costs that they were going to incur in the future and was going to otherwise hit base rates as a result of building this solar today.

COMMISSIONER POLMANN: So this is lower capital?

THE WITNESS: That's a great way to think about it. Capital, and I will say O&M, associated with fixing that capital or maintaining it.

COMMISSIONER POLMANN: But it's not related to fuel?

THE WITNESS: This has nothing to do with fuel. This all just pure base rate cost, what is the base rate cost.

COMMISSIONER POLMANN: Thank you for that clarification. So the net revenue requirement, picking up on the discussion I had with Dr. Sim, is what component of that, if you can touch on that, if it's within your expertise, what component of has uncertainty such that this subscription revenue

that you're going to collect would be insufficient or in -- either more or less than this table reflects.

THE WITNESS: So, as I sit here today, I would say there's really none. However, are there factors that could change? Yes. Could our future population or load growth change, could we have a recession at some point in the future where we lose customers or customers start significantly losing -- using less energy such that we don't need to build what we thought we were going to need to build in the future? Yes. However, that 1.315, we are going to collect, assuming this program is one hundred percent subscribed, is locked, loaded and not going to change.

COMMISSIONER POLMANN: Okay. So is it fair to say that within this table, the program costs are essentially best estimates on capital and that the savings are your best estimates on avoided capital?

THE WITNESS: Yes.

COMMISSIONER POLMANN: And that the subscription basis is presuming a hundred percent participation, and then as you indicated the kilowatt is in place capacity and that there's some uncertainty with regard to your ability to fully

know what the estimated cost, whether or not they're --

THE WITNESS: Correct.

COMMISSIONER POLMANN: Is that a fair --

THE WITNESS: Yes. We're taking our load and population forecast as of today, the best information we have consistent with what we do at the ten-year site plan to basically say what generation are we going to need in the future to meet that load and demand growth and that's what this represents.

COMMISSIONER POLMANN: Thank you, Mr. Bores. I appreciate your answers.

Thank you, Mr. Chairman. That's all I have.

CHAIRMAN CLARK: Thank you, Commissioner Polmann. Any other questions?

Okay. I believe that concludes this witness. Mr. Cox.

MR. COX: Redirect. Thank you.

CHAIRMAN CLARK: Yes, sir.

EXAMINATION

BY MR. COX:

Q Just a few clarification questions for you, Mr. Bores. You were discussing, I think, with Commissioners the revenue requirement impact as it's

portrayed in SRB2, your exhibit. Do you recall that discussion?

A Yes.

Q Could you describe, at least for the early years of the program, what that means in terms of our best projections on bill impacts?

A Yeah. I think I talked about that a little bit, but -- right -- essentially since we're not changing bills for the general body, or the base portion of the bill for the general body of customers through at least 2021, I show an increase of roughly 13 cents in 2020 on the fuel side of the bill and 47 cents in 2021 on the fuel side of the bill. But, again, that quickly changes to a credit by 2027 and stays a credit for the remainder of the program for the general body of customers.

Q Okay. My other questions I want to ask you related to clarifying -- actually, let me ask you one more question. So the exhibit you were discussing with the Commission staff also did look at total bill impacts. Did it -- I think it was Exhibit 46, is that right, as part of the composite exhibit?

A Yes.

Q And I think you said that those bill impacts reflected perfect rate-making. Is what you said?

A Yeah. So I think when I was talking about '20 and '21 in your prior question, right, we are not changing base rates. This bill impact here would assume perfect rate-making, or such that the general body portion of the base rates that we're allocating, or the difference between the levelize and declining would be allocated to them in '20 and '21, and that's not the case with what we're proposing or where we stand in the current settlement.

Q Thank you for that clarification. The other area I want to talk to you about was your discussion with Mr. Rehwinkel about the AFUDC application to the solar energy projects. And he had two exhibits, so I'm going to reference those as I ask you some questions. Exhibit 69 was one that he talked about the SolarTogether one and two projects and the analysis on those memos that analyze whether or not FPL would apply AFUDC to those projects. Do you recall that discussion?

A I do.

Q Did that packet of information, that exhibit, also include accounting memos that address the SolarTogether 3 project?

A Yes, it has -- or I think what is a draft memo of the SolarTogether 3 project.

Q And did it also have a second version, which I

assume is the final?

A Yes, it did.

Q What were the conclusions in those memos? I think both in the draft and final conclusion was similar if I recall, right?

A That SolarTogether Project 3 no longer qualifies for AFUDC as we -- we contracted each site separately to get the lowest construction cost for our customers.

Q And that's a different conclusion than you reached for SolarTogether 1 and 2 when you applied the policy, correct?

A That is correct.

Q Last question. On Exhibit 70, and that was another accounting memo, an example of an accounting home addresses AFUDC for the GE 7FACT project?

A Yes.

Q Just one question. The various sites that were part of that -- well, take a step back. What was the conclusion of that analysis?

A That this project, upgrading the 20 GE 7FA units qualify for AFUDC.

Q And the various sites that made up that project, the CT project, were they located in different parts of FPL's service territory?

A Yes. I think very similar to our solar sites, we are very geographically diverse across the entire State of Florida. So that is -- same holds true for our combined cycle units, as well.

Q Would it be fair to say that some are several hundred miles apart?

A I think that's a fair assumption, yes.

Q Thank you, Mr. Bores.

MR. COX: No further questions, Mr. Chairman.

CHAIRMAN CLARK: All right. Concludes this witness. Your documents -- exhibits. I'm sorry.

MR. COX: Yes. One moment. Chairman, FPL would move Mr. Bores' exhibits, which were Exhibit 11 and 36.

CHAIRMAN CLARK: Okay. So ordered.

(Whereupon, Exhibit Nos. 11 and 36 were entered into evidence.)

CHAIRMAN CLARK: Mr. Rehwinkel.

MR. REHWINKEL: Public Counsel would move Exhibit 69 and then 70.

CHAIRMAN CLARK: So ordered.

(Whereupon, Exhibit Nos. 69 and 70 were entered into evidence.)

CHAIRMAN CLARK: And, staff, you did not order any, did you?

MS. SIMMONS: That's correct.

CHAIRMAN CLARK: All right.

MR. COX: May the witness be excused, Chairman?

CHAIRMAN CLARK: Yes, sir. You're excused. Thank you.

All right. Our next two witnesses are stipulated to, Mr. Shannon and Mr. Deason. You want to go ahead and enter their testimony, Ms. Moncada?

MS. MONCADA: Thank you, Mr. Chairman. FPL requests that the testimony and the prefiled exhibits, if any, for Mr. Deason, as well as Mr. Shannon, will be entered into the record as though read.

CHAIRMAN CLARK: All right. Without objection, make it so.

(Whereupon, Witness Shannon's prefiled rebuttal testimony was inserted into the record as though read.)

ERRATA SHEET OF SAM SHANNON

September 23, 2019 – Rebuttal Testimony

PAGE #	LINE #	CHANGE
Page 1	3	Delete “LON M. HUBER” and insert “SAM SHANNON”
Page 4	3	Delete “John” and insert “James”

I. Introduction and Background

Q. Please state your name and business address.

A. My name is Sam Shannon. My business address is 517 Wingra Street, Madison, Wisconsin 53715.

Q. By whom are you employed and in what capacity?

A. I am employed by Navigant Consulting, Inc. as a Managing Consultant in the energy practice.

Q. Please describe your educational background and professional experience.

A. I graduated from Southwestern University in Georgetown, Texas in 2007 with a Bachelor's in Philosophy and Spanish Literature. I graduated from the University of Wisconsin-Madison in 2013 with a Master's in Public Affairs and a graduate certificate in Energy Analysis and Policy. I completed NARUC rate school in 2014. From 2013 to 2019 I worked at the Public Service Commission of Wisconsin as the Senior Energy Policy Analyst. While at the PSCW, I testified in rate cases for electric, natural gas, and water utilities in which I offered rate design and cost-of-service exhibits. I also worked on a variety of other utility issues including community solar, industrial pricing programs, dedicated renewable energy offerings, municipal annexation and incorporation, and pole attachment charges. I served on the NARUC Electricity and Rate Design staff subcommittees during that time as well.

Q. For whom are you appearing as a witness?

A. I am appearing as a witness for Florida Power & Light Company ("FPL").

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to the testimony of Office of Public Counsel ("OPC") witness James R. Dauphinais and Vote Solar witness Matt Cox. I will

address their contentions and discuss the reasonableness of FPL's proposed SolarTogether Program, highlight best practices of community solar programs, and discuss, generally, how community solar programs expand access to renewable energy.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

REBUTTAL TESTIMONY OF LON M. HUBER

DOCKET NO. 20190061-EI

SEPTEMBER 23, 2019

I. Introduction and Background

Q. Please state your name and business address.

A. My name is Lon M. Huber. My business address is 101 S Tryon St #2820, Charlotte, NC 28280.

Q. By whom are you employed and in what capacity?

A. I am employed by Navigant Consulting, Inc. as a Director in the energy practice.

Q. Please describe your educational background and professional experience.

A. My career in the energy industry began in 2007 when I started work at a solar energy research institute housed within the University of Arizona. From 2010 to 2013, I held positions in the solar industry working on matters both local to Arizona and across the U.S. Subsequently, I served as a consultant for Arizona's consumer advocate, the Residential Utility Consumer's Office (RUCO), on energy related issues. I then joined RUCO as a full-time employee. At RUCO, I was the staff lead on significant dockets involving net metering, resource procurement, and utility solar programs. I decided to rejoin the consulting space in 2015 where I have since worked for numerous consumer advocates, state utility commissions, and energy companies. A major topic of my work has been on pricing and community solar programs. For example, I developed Hawaii's Community Based Renewable Energy (CBRE) program on behalf of the Hawaii Public Utilities Commission; I

helped shape Maryland's community solar program on behalf of the Office of People's Counsel; and I represented the Coalition for Community Solar Access in New York on a few community solar matters. My work on community solar, through the above examples and more – including my efforts in Massachusetts, New Hampshire, Arizona, and Maine – helped me garner Utility Dive's 2018 Innovator of the Year award. My other professional focus revolves around pricing and rate design for customer facing programs across the U.S., with a particular specialty in time-varying rates and subscription-based pricing. I am a regular instructor at the Financial Research Institute (FRI) Transformational Pricing course held at the University of Washington, and I currently consult for entities such as the New York Public Service Commission and the Office of Consumer Counsel in Connecticut on pricing for renewable energy. Finally, I have extensive experience with resource planning, both past and present, particularly in regard to grid-scale renewable energy and energy storage.

In terms of educational background, I obtained a Bachelor of Science degree in Public Policy and Management from the University of Arizona in 2009. I also received a Master of Business Administration from the Eller College of Management at the same university. I completed NARUC rate school in 2014.

Q. For whom are you appearing as a witness?

A. I am appearing as a witness for Florida Power & Light Company ("FPL").

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to the testimony of Office of Public Counsel ("OPC") witness John R. Dauphinais and Vote Solar witness Matt Cox. I will address their contentions and discuss the reasonableness of FPL's proposed SolarTogether Program, highlight best practices of community solar programs, and discuss, generally, how community solar programs expand access to renewable energy.

II. Assessment of the proposed FPL SolarTogether Program

Q. Have you reviewed the direct testimony of those opposed to the FPL SolarTogether Program?

A. Yes. My general reaction is that opponents to the FPL SolarTogether Program have not adequately considered or valued the significance of this program to the needs of customers. I believe that customer needs and interest in this program should be at the forefront of the relevant considerations and discussion regarding whether FPL SolarTogether should be approved.

Q. In general, how do community solar programs address the needs of customers?

A. Community solar programs, like FPL SolarTogether, perform a dual function of giving customers who may not otherwise have access to or the ability to invest in solar the opportunity to do so, while allowing those customers to remain customers of the utility, which supports the grid and benefits the entire

customer base.

Q. For those customers that do not have access to solar power, what are the common barriers they face?

A. The most common barriers are siting and price. Solar requires adequate, unshaded roof space or clear land available to install the arrays. And while the price of solar continues to fall, some customers may not have the resources to lease or purchase solar PV or businesses may not see a fast enough payback to justify the investment. This is particularly acute on small PV installations that do not possess favorable economies of scale compared to larger installations.

Q. How do utility-led community solar programs address these two barriers?

A. In a utility-led community solar program, the utility takes over the siting and resource planning aspects of installing solar arrays. For example, this means that homeowners or businesses with a shaded roof can "buy" a solar array but not have to locate it on their own premises. Also, utilities are better able to site the community solar resources at the locations that are most likely to provide greater benefits to the electric grid and exercise buying power and utilize economies of scale to lower the price of hardware and installation.

Community solar programs offer residential customers access to solar energy regardless of where they live. This is important for renters and occupants of multi-unit buildings who may not have access to the roof to install solar or may be unwilling to make the investment because their occupancy may only

be for a few years at a time. Condominium owners, especially in high-rise buildings, have similar siting barriers to commercial customers due to the low ratio of rooftop to total square footage. Approximately 20-25% of the FPL customer base cannot install rooftop because they rent or live in a condo and would not have roof-right access. Community solar offers the only real chance for these customers to directly contribute to building more solar energy.

Businesses with renewable or sustainability goals may be especially receptive to community solar as a way for them to meet their goals due to the nature of the buildings they occupy. First, many businesses lease space with others in buildings with short-term leases. Second, even those that own their own buildings or are the sole occupant may not have the available roof space to build an array that makes a meaningful contribution to their energy needs. This problem grows for companies that occupy multi-story buildings where the ratio of rooftop square footage to total square footage may be low. According to one recent report, 48% of commercial buildings do not have enough available roof space to host a PV array that would provide more than 20% of the customer's energy need.[1]

Q. What about the price barrier?

A. Regarding cost, the utility can leverage its buying power and economies of scale to purchase large-scale universal solar instead of each customer buying multiple, smaller systems. In 2018, the national average price of large-scale

[1] Shared Solar: Current Landscape, Market Potential, and the Impact of Federal Securities Regulation; https://www.nrel.gov/docs/fy15osti/63892.pdf; April 2015.

PV systems was $1.48 per watt (AC) compared to $3.05 per watt (AC) for residential systems.[2]

Q. What is your general conclusion regarding the proposed FPL SolarTogether program?

A. In my opinion, FPL SolarTogether is a novel program and represents the next evolution in community solar programs, building upon existing successful community solar programs across the nation. The innovative program design demonstrates how community solar can play a major role in a utility's generation portfolio for jurisdictions where solar energy is a highly competitive form of new generation. Customer segments of the residential and commercial classes seek direct access to renewable energy products; yet meeting this need without undue cross subsidization and in a manner open to all customers has been a challenge for state commissions, utilities, and environmental and industry advocates.

The FPL SolarTogether Program offers a new pathway for all parties, while incorporating many best practices and lessons learned from other programs. Although the FPL SolarTogether offering is big and bold, it is actually a conservative resource selection for the general body of customers with high net benefits over the life of the solar asset. This is accomplished by allocating a significant amount of the forecasted benefits to the entire customer base, while diversifying FPL's energy mix and capacity mix.

[2] *Q4 2018/Q1 2019 Solar Industry Update*; National Renewable Energy Laboratory; May 2019.

III. Reasonableness of FPL SolarTogether

Q. Have you reviewed the testimony of OPC witness Dauphinais?

A. Yes.

Q. Witness Dauphinais contends that the general body of customers is subsidizing the participating customers. Is this correct?

A. As support for his contention, witness Dauphinais is focused only in those years in which the annual revenue requirement is greater than the subscription revenues received from participating customers. He is not correct with regard to the overall analysis. It is important to point out that for the remaining years, the subscription revenues are greater than the annual revenue requirement costs, resulting in lower rates to the general body of customers overall. The important thing to keep in mind when evaluating a program like FPL SolarTogether is the difference between traditional ratemaking and levelized pricing.

Q. Please explain the difference between traditional ratemaking and levelized pricing.

A. Under traditional ratemaking practice, the revenue requirement and associated costs that customers pay are based on a single test year. However, programs like FPL SolarTogether that use levelized pricing must have a value proposition that encompasses the entire life of the project. While the cost side of the base revenue requirement will start high and trail off as the asset is depreciated, the associated revenues will not change year-to-year. As a result,

a view that takes a single-year snapshot may show a revenue shortfall because the annual revenues are not tied to the annual costs. In this regard, levelized pricing programs should use a standard of review that is commonly used to evaluate construction projects. For this reason, focusing on short-term value and any associated claim of subsidization ignores the total value proposition of the program.

Q. What does a long-term analysis say about the customer benefits of the FPL SolarTogether program?

A. As with any forecast and resource decision, there is some uncertainty regarding the level of future benefits as this involves projecting fuel and CO_2 prices. Witness Dauphinais's scenarios represent a reasonable range of sensitivities. Using his own range shown in exhibit JRD-5, six of the nine scenarios show positive cumulative present value of revenue requirements (CPVRR) benefits, and the average benefit across all nine models of $47.6 million over the life of the program. When the sensitivity runs are revised with the updated forecast, as shown in exhibit JE-9, eight of the nine models show benefits to customers with an average value of $268 million.

Q. Witness Dauphinais offers his opinion that in a reasonable community solar program, subscribers pay a premium in both costs and risks over what the general body of customers would pay for solar energy. Do you agree?

A. I agree that community solar programs have come in many different versions. But as I indicated earlier, FPL's proposal represents an evolution in

community solar programs that will better meet customer needs while providing a cost-effective solar option for all customers. Under older community solar programs in various states, the subscribers often pay more for the solar power, but only because the cost of the solar power is traditionally more expensive than a utility's other generation options. Increasingly, however, with the cost of solar PV coming down, this is no longer the case. The price that a subscriber pays for community solar is solely derived from the cost of the solar generators constructed for the program and the kWh/kW produced by the system. As the cost of solar resources continues to fall, it is perfectly reasonable to expect that the premium paid will fall or result in cost savings in the future. For example, in Arizona, both Arizona Public Service and Tucson Electric Power offer community solar programs that provide savings to participants rather than premiums. A reasonable community solar program is one where the price paid by participating customers is set to recover the costs of the program.

Q. Provide an example of how such a pricing structure would work.

A. The most straight-forward pricing model of the kind referenced by witness Dauphinais is the upfront purchase model. In these programs, the subscribing customers pay the all-in cost to acquire or construct their share of the community solar array before they can receive any bill credits for the output of the array. This model involves large upfront payments to the utility in the order of thousands or tens of thousands of dollars to secure a share of the array. Community solar programs that use this pricing method appear to the

customer no different than if the customer were to cash finance their own personal solar system.

Q. Are there any downsides to such a pricing model?

A. Yes. First, the high cost of entry would exclude those residential or commercial customers who do not have the cash on hand to participate. Second, while allowing customers who plan to cash finance their own solar systems to take advantage of the utility's buying power, it does not provide a true alternative to how most private solar systems are financed because most customers looking to install solar systems will either lease the system or finance the cost over time.

Q. Is there another reasonable pricing model for community solar?

A. A levelized pricing structure, like the one used for FPL SolarTogether, provides a better alternative for customers interested in community solar compared to the upfront pricing model. Instead of requiring customers to pay the entire cost of their shares up front, the levelized pricing effectively finances the cost and allows customers to pay for their shares over time.

Q. Do you have any examples of other utilities using a levelized pricing structure for community solar?

A. Yes. Madison Gas & Electric serving south-central Wisconsin has a Shared Solar program, which uses a levelized cost pricing mechanism.[3] In this program, the cost of the utility-owned array is levelized on a per-kWh basis

[3] *See* Final Decision in *Re: Application of Madison Gas and Electric Company, as an Electric Public Utility, Dane County, Wisconsin, for Approval to Provide an Expansion and Modification of its Shared Solar Program*. Docket 3270-TE-104. Issued July 30, 2019.

over 25 years. For all energy produced by each customer's share of the array, customers pay the levelized price for each kilowatt-hour. Westar Energy in Kansas also has a community solar program that uses levelized pricing on either a per-kW or per-kWh basis.[4] The actual monthly charge is determined by the length of the contract, anywhere between five and 20 years.

Q. Do you agree with the risk assessment for FPL SolarTogether that witness Dauphinais discusses?

A. No. Witness Dauphinais states that FPL SolarTogether does not reduce the risks faced by the general body of customer compared to FPL constructing the solar facilities on its own. This is not an accurate depiction, and in design it is quite the opposite. Rather than having the entire customer base pay for the solar facilities through base rates, FPL is leveraging some of its customers' willingness to pay to provide clean, renewable energy for all of its customers. Naturally, many of the benefits will flow to the subscribing customers given that they are the ones paying over 100% of the base rate cost of the project. But under FPL's updated program design, 45% of the benefits go to the general body of customers. This does not happen with a traditional community solar program where risk and reward are entirely contained within the subscribing customer class.

[4] *See* Order Approving Stipulation and Agreement in *Re: Application of Westar Energy, Inc. and Kansas City Gas and Electric Company to Make Certain Changes in Their Charges for Electric Service*. Docket 15-WSEE-115-RTS. Issued September 24, 2015.

Q. What about the risk of undersubscription or customers leaving the program?

A. This is not a valid concern. The fact of the matter is that the general body of customers still benefit from this program even if it is undersubscribed or customers leave before the full term. Assuming full subscription for the entire program life, the subscribers will pay for over 100% of the cost of the systems. Even if there were undersubscription and attrition such that only 80% of the program was subscribed in the end, the subscribers would still pay over 80% of the cost of the facilities. Compare this to the alternative used by witness Dauphinais where FPL builds the systems on its own and the entire customer base pays for 100% of the cost. In that case, the entire customer base takes on 100% of the risk on the assets, like nearly all traditional generation projects. The breakthrough with the design of FPL SolarTogether is the fact that the capital projects are paid for by the customers who have the willingness to pay for the resource.

Q. Is there anything else that reduces the risks to the general body of customers?

A. Yes. First, a well-designed community solar program tries to minimize the risk of undersubscription and attrition. The best way to achieve this is by having anchor customers. An anchor customer is a stable customer, usually commercial, government, or industrial, that can buy a large share of the array on its own. These customers, like anchor tenants in a mall, provide large amounts of stable revenue and give other potential subscribers confidence that

the project will be viable and stable. This attracts more customers, reducing the risk of undersubscription. FPL's pre-registration resulted in several large customer subscriptions and FPL's yearly escalating credit mechanism encourages long-term commitment. The top four pre-registered customers subscribed to a combined 546 MW, or 36.6% of Phase 1, which represents a significant portion of the array that reduces risk to the general body of customers. Second, because of the ownership structure of the FPL SolarTogether assets, risk is further reduced. If in the years ahead, benefits are not being realized at the level forecasted, FPL could add battery storage to the projects to achieve additional value if it was deemed cost-effective. Additionally, at the end of the program the solar assets are essentially paid off and providing zero marginal cost energy, this affords FPL the opportunity to treat these assets as general plant thus benefiting all customers.

IV. Community Solar Pricing and Public Interest

Q. Have you reviewed the testimony of Vote Solar witness Cox?

A. Yes.

Q. Witness Cox notes that FPL SolarTogether differs from other community solar programs that completely separate participants from the other customers. Do you have a response to this?

A. Witness Cox is correct that many other community solar programs are designed to keep any risks and rewards self-contained within the program.

Q. That seems reasonable. Why were those programs designed that way?

A. In the early days of community solar, the price of solar energy, even for large-scale universal solar, was not competitive with other resources in a utility's fleet. However, utilities wanted to be responsive to growing customer demands for new renewable sources and customers' willingness to pay for those resources. Community solar programs provided a way for the utilities to meet the demands of their customers. Responsible design of those programs, given the cost of solar at the time, required the programs to include safeguards and backstops to ensure that only those customers who wanted to participate would pay for the additional solar energy. In so doing, other customers who were either unwilling or unable to participate would not see any of the extra costs appear on their bills.

Q. Are the same protections for the general body of customers required if the price of solar energy becomes competitive with other generating sources?

A. No. As the price of solar energy has come down over time, large-scale universal solar is a cost-effective source of energy for many utilities. As described in the rebuttal testimony of FPL witness Enjamio, the proposed cost of the solar energy in the FPL SolarTogether program shows it to be a cost-effective source of new generation.

Q. If solar is cost-competitive, how does community solar fit in the utility's portfolio?

A. Community solar programs effectively create a new subclass of customers,

whose participation in the program helps to increase the amount of renewable energy in the utility's portfolio in 2020 and 2021. As the cost of other generation sources increases over time, the fixed price of the community solar arrays serves to keep costs lower for all customers. The proposed sharing of costs and benefits between the participants and the general body of customers ensures that all customers can reap some of the long-term benefits of this program.

Q. Witness Cox notes that some utilities are required to submit to prudence reviews if the community solar program is undersubscribed. Is that necessary to protect the general body of customers in this case?

A. No. As shown in Exhibit SRB-2, the benefits of the solar generation exceed the costs over the projected life of the assets. In the event of undersubscription or customer attrition, it is true that the utility will not receive the forecasted revenue in a given year. However, the utility will not have to pay the credit for that portion as well. This will increase the clause portion of the revenue requirement benefits, which will accrue to all other customers. As discussed above, the general body of customers still benefit in a world where the program is undersubscribed by virtue of not having to pay for the entire cost of the system in base rates.

V. Expanding Access to Clean Energy

Q. How does the FPL SolarTogether Program design make community solar available to more customers?

A. As discussed above, the levelized pricing structure allows customers to finance their participation over time. Rather than having to come up with the cash to pay for the entire subscription at the time the contract is signed, this pricing structure makes the program available to more customers who may not have the resources to make large cash payments. As a result, more customers, both residential and commercial, are able to participate.

Q. Will FPL SolarTogether increase clean energy access to all customers?

A. Yes. By leveraging a certain customer class's willingness to pay for renewable energy, community solar programs increase the amount of renewable energy generated for customers. To date, community solar programs are responsible for over 1.3 GW of additional solar capacity.[5] For this particular program, FPL has consciously set aside 45% of the financial benefits for the general body of customers. This includes low-income customers or others who choose not to participate in the program. But more importantly, community solar programs such as FPL SolarTogether help to ensure the increase in the amount of renewable energy generated for customers.

[5] National Renewable Energy Laboratory (NREL), "Community Solar," Market Status, as of July 2019, *available at* https://www.nrel.gov/state-local-tribal/community-solar.html.

Q. What kinds of customers benefit the most from community solar programs?

A. As discussed in earlier testimony, community solar programs allow customers, who want to invest in solar energy but are otherwise unable, to contribute to more solar generation. These customers include the 49% of homeowners that do not have suitable roofs for installing their own solar systems, the 35% of households that rent, or the commercial entities that do not have sufficient onsite space to offset their energy load.[6] Community solar programs also make investing in solar more attractive to businesses that may not have the expertise or do not have the same purchasing power on their own as the utility does.

Q. Do you have any response to the discussion regarding the 25% allocation for residential and small business customers?

A. FPL witness Valle goes into the allocation in more detail in his testimony. I would like to note that a specified allocation dedicated to residential customers is used by some other community solar programs such as that offered by Alliant Energy.[7] For a program the size of FPL SolarTogether, the relative percentage is not as important as the absolute size of the allocation. For perspective, the residential and small business portion of FPL SolarTogether by itself would be the second largest community solar program in the country, and the total program size of 1.4 GW is greater than the total

[6] Shared Solar: Current Landscape, Market Potential, and the Impact of Federal Securities Regulation; https://www.nrel.gov/docs/fy15osti/63892.pdf; April 2015.

[7] *See* Final Decision in *Application of Wisconsin Power and Light Company, as an Electric Public Utility, to Update its Renewable Energy Tariff*. Docket 6680-TE-104. Issued July 19, 2019.

installed capacity from all other community solar programs combined. [8]

Q. Does this conclude your rebuttal testimony?

A. Yes.

[8] Xcel Energy has over 504 MW of community solar in its Minnesota program. *Sharing the Sun: Community Solar Project List*; updated June 2019.

(Whereupon, Witness Deason's prefiled rebuttal testimony was inserted into the record as though read.)

Q. Please state your name and business address.

A. My name is Terry Deason. My business address is 301 S. Bronough Street, Suite 200, Tallahassee, Florida 32301.

Q. By whom are you employed and in what capacity?

A. I am employed by Radey Law Firm as a Special Consultant specializing in the fields of energy, telecommunications, water and wastewater, and public utilities generally.

Q. Please describe your educational background and professional experience.

A. I have more than 40 years of experience in the field of public utility regulation spanning a wide range of responsibilities and roles. I served a total of seven years as a consumer advocate in the Florida Office of Public Counsel ("OPC") on two separate occasions. In that role, I testified as an expert witness in numerous rate proceedings before the Florida Public Service Commission ("Commission"). My tenure of service at OPC was interrupted by six years as Chief Advisor to Florida Public Service Commissioner Gerald L. Gunter. I left OPC as its Chief Regulatory Analyst when I was first appointed to the Commission in 1991. I served as Commissioner on the Commission for 16 years, serving as its chairman on two separate occasions. Since retiring from the Commission at the end of 2006, I have been providing consulting services and expert testimony on behalf of various clients, including public service commission advocacy staff, county and municipal

governments, and regulated utility companies. I have also testified before various legislative committees on regulatory policy matters. I hold a Bachelor of Science Degree in Accounting, summa cum laude, and a Master of Accounting, both from Florida State University.

Q. For whom are you appearing as a witness?

A. I am appearing as a witness for Florida Power & Light Company ("FPL" or the "Company").

Q. Have you previously submitted direct testimony in this proceeding?

A. No.

Q. Are you sponsoring any rebuttal exhibits?

A. Yes. I am sponsoring Exhibit JTD-1, which is my curriculum vitae.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to some of the positions and recommendations contained in the testimony of OPC witness James R. Dauphinais. I also respond to the policy issues raised by Commission Staff witness Cayce Hinton.

Q. How is your rebuttal testimony organized?

A. My rebuttal testimony is organized into three sections. Section I addresses the broad policy considerations of FPL's SolarTogether community solar program. Section II addresses some of the specific criticisms of FPL SolarTogether raised by witness Dauphinais. Section III is my conclusion.

I. POLICY CONSIDERATIONS

Q. Does Florida have a policy on the provisioning of renewable energy?

A. Yes, the Legislature has made a finding that it is in the public interest to promote the development of renewable energy and has recognized the potential for renewable energy to increase fuel diversity, lessen dependence on natural gas, minimize fuel cost volatility, improve environmental conditions, and encourage investment within Florida. This can be found in Section 366.92 (1), Florida Statutes.

Q. What is the Commission's policy?

A. The Commission has a policy to promote the development of renewable energy in Florida, consistent with Section 366.92 (1), Florida Statutes, and appropriately considers the benefits of renewable energy as well as potential impacts on the costs of power supply to electric utilities and their customers. The Commission's policy is also appropriately evolving as the relevant technologies, especially solar-based technologies, continue to develop along with customers' desires for solar generation to comprise a growing portion of electric power generation within Florida.

Q. How has the Commission's policy evolved thus far?

A. In the early years of implementing its policy, the Commission gave emphasis to customer-owned renewable generation and the adoption of

net-metering rules to facilitate customer-owned renewable generation. As the cost of solar generation continued to decline, especially for large-scale universal solar generation, the Commission recognized the importance and the inherent cost, environmental, and fuel diversity advantages of utilities making significant solar additions to their systems for the benefit of all of their customers. Thus, the Commission's implementation of legislative policy and the promotion of renewables has evolved to appropriately recognize the role of large-scale universal solar. This evolution has and continues to be driven by the strong desire of customers to see more solar generation generally and for some customers to gain the advantages of solar generation who cannot or choose not to invest in their own private solar facilities. As a corollary to this evolution, the Commission appropriately considers the overall cost-effectiveness of large-scale universal solar facilities and their potential impacts on the general body of customers.

Q. Do you believe that the cost-effectiveness of FPL's SolarTogether Program and its potential impact on the general body of customers to be relevant considerations?

A. Yes. The cost-effectiveness of the proposed solar facilities planned for the FPL SolarTogether Program is a first-step consideration to determine if the Program is in the public interest. If the planned facilities were not cost-effective to build, operate, and maintain, they would not be pursued.

Q. Does witness Hinton take issue with the cost-effectiveness of the facilities planned for the FPL SolarTogether Program?

A. No. My reading of his testimony is that he does not express an opinion one way or the other on the Program's cost-effectiveness. Rather, for his purposes, he assumes the cost-effectiveness to be a given in order to raise other policy issues that he identifies in his testimony.

Q. What is the essence of the issues raised by witness Hinton?

A. Witness Hinton acknowledges that the proposed FPL SolarTogether Program has elements that are different from other solar programs approved in the past. Given these differences, he outlines certain questions centered on protecting all customers and preventing any undue preference or harm.

Q. Do you agree with the policy issues identified by witness Hinton?

A. I agree that the issues raised are relevant. And because witness Hinton takes no stated positions on the issues he raises, I cannot say that I either agree or disagree. I do take some minor exceptions to some of his implications and suggest that his issues be considered within the context of other broad policy considerations beyond those he identifies.

Q. What are these broad policy considerations to which you refer?

A. There are four broad policy considerations that I believe need to be part of the discussion when considering the issues raised by witness Hinton and some of the intervenor witnesses as well. First, regulation needs to be open to new and innovative ways to capture benefits for customers.

This is particularly true when technologies, economics and customer expectations change. The FPL SolarTogether Program is indeed new and innovative and is designed to meet customer expectations that did not exist in the past to the extent they do today. Accordingly, there are elements designed to make the program successful that have not been previously implemented in a Florida PSC-approved program. However, this should not eliminate the proposal from due consideration and appropriate scrutiny. After all, the Commission is to regulate in the public interest and is to liberally construe its statutory jurisdiction to achieve that purpose. As such, the ultimate test is whether the FPL SolarTogether Program, taken in its entirety, is in the public interest. There are other broad policy considerations that can and should be used to assist the Commission to make a determination as to whether the FPL SolarTogether Program is in the public interest.

Second is the broad policy of protecting customers from cross subsidizations and undue preferences. This is achieved by designing rates to recover costs allocated to customers based on their cost responsibility. The standard is that no customer or group of customers be harmed by the rates charged to or offerings made to other customers, *i.e.*, a "do no harm" standard. In the case of the FPL SolarTogether Program, not only is there no harm, there are substantial benefits for all customers. Thus, the FPL SolarTogether Program exceeds this

standard and provides additional assurances to the general body of customers.

Third is the policy to promote renewable energy. While a strict cost-effectiveness test and a proper allocation of costs are essential, there are important considerations that go beyond those considerations. As I earlier identified, the Commission should weigh the benefits to customers of increased fuel diversity, a lessened dependence on natural gas, minimization of fuel cost volatility, improved environmental conditions, and increased investment in Florida. The FPL SolarTogether Program would be a means both to achieve these goals and help ensure a significant increase of solar generation in Florida.

And fourth is the need for regulation to be responsive to the needs of customers and to provide options where appropriate. This is particularly true and relevant for customers wanting to ensure additional solar generation. There was a time when customers looked at electricity as a commodity with little or no regard for where the electrons originated and by what technology they were generated. This has greatly changed, and many customers now desire, and perhaps expect, that their electrons should be from a renewable source. If regulation can enable this expectation to be met in a way that protects all customers, or even shares the benefits with them, it would be

incumbent on regulation to do so. The FPL SolarTogether Program is a means to achieve this result.

Q. What are the specific policy questions raised by witness Hinton?

A. There are three specific questions, and I will briefly address the first two together before I address the third. First, witness Hinton asks: "If generating facilities are being built to meet the desires of a certain portion of customers, should all the benefits and costs of the program be allocated to those customers as the cost causer?" He then follows with the second question: "In addition, if solar additions are now a cost-effective generation addition to all customers, is it appropriate to implement a voluntary program that allocates the majority of benefits to a small group of customers?" These two questions are closely related and appear to be contrasting the FPL SolarTogether Program with the traditional approach of assigning costs to cost causers when there are net incremental costs being imposed on the system. However, this is not the situation with FPL SolarTogether. There are not net incremental costs; rather, FPL SolarTogether would help ensure that net incremental benefits are being generated for all customers. In essence, the customers wishing to receive more solar generation by participating in the FPL SolarTogether Program are not "cost causers" as that term is traditionally used. Rather these customers are better described as "benefit facilitators."

So, while it may be theoretically possible to assign all benefits and costs to the FPL SolarTogether Program, it would not be wise to do so for at least two reasons. First, the FPL SolarTogether Program, achieves a reasonable balancing of benefit sharing and cost allocation. Witness Hinton's questions appear to imply a judgment that the sharing of benefits is skewed in favor of the FPL SolarTogether participants. This is an assertion that the ultimate facts in this case will address. So, I will temporarily place that assertion aside. Suffice it to say that if the balance of cost responsibility and benefit sharing is materially altered, it may place the entire proposal in jeopardy. And secondly, any attempt to place all benefits and costs on one subset of customers, while well intentioned, will most likely not achieve its intended purpose of completely shielding all customers from any potential cost impacts. It is very possible that any such attempt would have the unintended consequence of denying the general body of customers any opportunity to share in the benefits, while still exposing them to potential cost impacts. So, in a situation where there are no net new costs, but rather net new benefits, would it not be better to allow the general body of customers an opportunity to share in those benefits? I answer that question in the affirmative. This would actually provide a greater level of protection than an attempt to isolate them from all costs and all benefits.

Q. Can you provide an example of the Commission's traditional approach of assigning costs to cost causers when there are net incremental costs being imposed on the system?

A. Yes, and it is in sharp contrast to what is being proposed in the FPL SolarTogether Program. A good example is the Commission's decision to allow customers the choice of opting out of receiving advanced or smart meters. As utilities rolled out smart meter technology, the Commission recognized the strong desire of a segment of customers to retain their existing meters. The Commission decided to allow customers to choose to opt out of smart meters and approved a rate rider to recover the net incremental costs of providing this optional service. As there were no benefits and only net incremental costs of this optional service, the Commission simply estimated the net incremental costs and spread them over the customers choosing the optional service. While this was an appropriate outcome to protect the general body of customers, it does not fit the economics or the design of the FPL SolarTogether Program.

Q. Does the smart meter opt-out rate rider protect the general body of customers?

A. That is what it is designed to do, and I believe that it does so in great measure. However, it does not guarantee that there is no impact on the general body of customers. The general body of customers is the backstop and may be called upon to make up the difference, to the

extent the rate rider does not cover all of the net incremental costs. Likewise, to the extent that the rate rider provides revenues that exceed the net incremental costs, the general body of customers would benefit until the rate rider is reset, either as part of a rate case or a tariff-specific filing. The point is that there are no projected net benefits to the general body of customers of the option to not have a smart meter, and when customers choose this option, the general body of customers is placed at risk. This is not the case for the FPL SolarTogether Program, which does project net incremental benefits to the general body of customers.

Q. What is the third question posed by witness Hinton?

A. Witness Hinton's third question reads: "Finally, does this allocation of costs and benefits between participants and non-participants represent undue discrimination or preference?" I answer this question in the negative. Recall that the participants in the FPL SolarTogether Program are not cost causers. Rather they are better described as benefit facilitators. The benefits they facilitate are then shared with all customers. Thus, the general body of customers is not harmed, which is generally understood to be required before there is a finding of undue discrimination or preference. I do acknowledge that the Commission has the discretion to judge whether the sharing of costs and benefits are apportioned fairly. However, I do not agree that the FPL SolarTogether Program can be determined to be unduly discriminatory on its face.

Q. Before posing his three questions, witness Hinton states that the FPL SolarTogether Program seems to represent a departure from least-cost planning principles. Do you agree with this assertion?

A. No. I do acknowledge that the FPL SolarTogether Program contains elements that have never been implemented before. In large part, this is necessitated by the strong desire of some customers to be responsible for an increase solar generation and to eliminate or substantially reduce their reliance on fossil-fuel generation. Nevertheless, I believe that the FPL SolarTogether Program is consistent with least-cost planning principles as they are generally understood.

Q. How is the FPL SolarTogether Program consistent with least-cost planning principles?

A. To some extent, the term least-cost planning is a misnomer. It is possible that the best generation expansion plan is not the least-cost plan, as there are a number of other strategic considerations that could result in the best or preferred plan not being the least-cost plan. I like to look at it as "best cost" planning. Nevertheless, to the extent the term least cost implies that a generation expansion plan should be cost-effective, the FPL SolarTogether Program certainly meets this criterion and is based on achieving the lowest electric rates.

Q. What are some of the other strategic considerations in judging whether a generation expansion plan is appropriate?

A. Witness Hinton correctly notes that the traditional means of granting a

need determination for generating units of 75 megawatts or more is set forth in Florida's Power Plant Siting Act (PPSA). While the proposed solar facilities to be constructed as part of the FPL SolarTogether Program are less than 75 megawatts per site and are not required to come before the Commission in a need determination proceeding, the PPSA does provide some guidance to the Commission. In addition to cost-effectiveness, the PPSA also requires the Commission to consider fuel diversity and whether renewable generation is being utilized to the extent reasonably available. Given that the planned solar facilities will help to ensure the increase in fuel diversity and are indeed from a renewable energy source, the FPL SolarTogether facilities would meet these planning criteria. In addition to the PPSA, the Legislature has declared that it is in the public interest to promote renewable energy. In Sections 366.91 and 366.92, Florida Statutes, the Legislature identifies a number of benefits of Florida-based renewable energy. Among these benefits are measures to minimize fuel cost volatility, improve environmental conditions and increase investments within Florida. These would certainly be benefits derived from the solar facilities planned as part of the FPL SolarTogether Program.

II. DAUPHINAIS CRITICISMS

Q. What are the criticisms arising from OPC witness Dauphinais's testimony that you will address?

A. There are essentially four: the shape of the curves depicting the forecasted cumulative present value of revenue requirement (CPVRR) savings; his assertion that generational cross subsidies would result; his assertion that certain sensitivity assumptions are inapplicable; and his assertion that the costs, benefits, and risks of the FPL SolarTogether Program are not being fairly allocated.

Q. Please comment on the shape of the curves depicting the forecasted CPVRR savings.

A. The overall shape of the forecasted CPVRR savings, showing significant net costs in the early years followed by a gradual increase in savings until the curve turns positive in the later years, is not surprising and should be expected. This is a natural result of how revenue requirements are determined to set rates. The initial capital investment associated with new generation facilities is incurred on the front end and has an almost immediate and significant impact on revenue requirements. This is in contrast with the savings the new generation facilities produce over the useful life of the generating facilities. In the case of new solar facilities, these savings include both lower operating and maintenance costs and much lower fuel costs, as the fuel for solar is

free. Witness Dauphinais implies that this delay in the curve becoming positive is indicative of the risks of the proposed solar facilities on the general body of customers and on a subset of customers he labels non-participants. However, planning for cost-effective generation that has a life of 30 years or more inherently involves risk. It is a natural factor of planning for the longer term as opposed to skewing outcomes by placing too much emphasis on facilities that may turn positive sooner but that do not produce as much total savings. Witness Dauphinais's calculations show that the timeframe for the non-participants curve becoming positive is four years later than the curve for all customers. Assuming his calculations are correct, I do not find that the four-year extension is that significant enough to conclude that the general body of customers is placed in a scenario of too much risk. This is particularly true given the strategic advantages offered by solar generation. The important point is that the net savings are positive, which benefits all customers.

Q. Please comment on witness Dauphinais's assertion that there would be generational cross subsidies.

A. This is a classic example of a "red herring" argument that has no basis in determining the merits of the FPL SolarTogether Program or any other proposal that requires an economic analysis of long-lived assets to cost-effectively serve customers. It inappropriately attempts to pit the interests of one group (generation) of customers against another. It is

also inconsistent with the way that rates are set and cross subsidies avoided for the benefit of all customers. Policy should be driven by what benefits all customers over the long run and not by divisive approaches which focus on the short run.

Q. Please explain.

A. Regulation in Florida is focused on the general body of customers and goes to great lengths to set rates that are fair, just and reasonable and that do not foster cross-subsidies among customers. This is apparent in both the nature of and the extent to which costs are recognized in rates, as well as in the structure of the rates themselves. The Commission has rules dealing with cost-of-service studies and many years of precedent to ensure that rates are set equitably and on a non-discriminatory basis. This entire regulatory approach is based on the fact that benefits to all customers are maximized when decisions are made for the benefit of all customers over a continuum of time. This is simply axiomatic. Conversely, if decisions were made to protect only one generation of customers, as witness Dauphinais suggests, outcomes would be focused on the short term and the maximization of benefits for all customers over the long run could not be achieved.

Q. Witness Dauphinais asserts that today's customers would be subsidizing customers 20 years from now. Do you agree with this assertion?

A. No. Witness Dauphinais simply loses focus on how regulation works to

protect customers as a whole and to maximize benefits to them over the long term. Even if one were to attempt to stratify customers by age – a truly untenable and unworkable approach – it would not be possible to conclude that one generation of customers is being treated unfairly. For example, the existing customers, who witness Dauphinais asserts will be subsidizing a future generation of customers, are indeed the beneficiaries of previous investments made decades ago that continue to provide them with service. Under witness Dauphinais's logic, they would now be subsidized by a previous generation of customers. Such overly broad conclusions are not appropriate and, if attempted, could lead to inappropriate decision making that would jeopardize the maximum benefit for all customers over the long term.

Q. Please describe witness Dauphinais's assertions concerning certain sensitivity analyses' assumptions.

A. FPL performed eight sensitivity analyses in addition to its base case analysis of the CPVRR of net savings associated with the FPL SolarTogether Program. The eight sensitivity analyses used different combinations of assumptions for fuel costs (high, medium and low) and carbon dioxide compliance costs (high, medium and low). As would be expected, the scenarios with higher fuel costs and higher carbon dioxide compliance costs showed higher cost-effectiveness for the FPL SolarTogether Program.

Witness Dauphinais opined that the sensitivity analyses with combinations of medium and low fuel costs and medium and low carbon dioxide compliance costs (showing lower or no net savings) should receive greater weight. He states that there are now no carbon dioxide compliance requirements and that there is currently an abundance of natural gas. He opines that these are justifiable reasons to place greater emphasis on the scenarios tending to show lower or no net savings.

Q. Do you agree with witness Dauphinais's opinion?

A. No, for three reasons. First, it defeats the fundamental purpose of a sensitivity analysis to give greater weight to a select few scenarios. The fundamental purpose of a sensitivity analysis is to provide unbiased information to a decision maker on the effect on results from the full array of potential changes in the underlying assumptions. Cherry picking which scenarios to emphasize could lead to distorted conclusions. Second, the reasons given by witness Dauphinais are too narrowly focused on present conditions and do not recognize significant changes from present conditions which could happen over the 30-year time horizon of the CPVRR analyses.

Simply because there are not presently carbon dioxide compliance requirements does not mean that this situation will continue. Likewise, an abundance of natural gas, largely due to advanced extraction

technologies like fracking, does not mean that this will persist over 30 years. It should be noted that most, if not all, of the leading Democrats seeking their party's nomination to run for President, have stated firm support for initiatives to combat global warming and have come out in opposition to fracking. While I am not a political prognosticator, I do believe it is evident that concerns over carbon dioxide emissions and fracking are growing in the American consciousness. As a consequence, I believe it would be short-sighted and ill advised to emphasize those sensitivity analyses which tend to discount these changing dynamics. And third, the sensitivity analyses witness Dauphinais suggests be de-emphasized are the very ones that give useful information on the reasons that Florida has a policy of promoting renewable energy. As I previously stated, the foundation of this policy includes: the need for increased fuel diversity; a lessened dependence on natural gas; minimization of fuel cost volatility; and improvement of environmental conditions.

Q. What is witness Dauphinais's ultimate conclusion and recommendation concerning the FPL SolarTogether Program?

A. He concludes that the costs, benefits, and risks of the FPL SolarTogether Program are not being fairly allocated and recommends that the FPL SolarTogether Program not be approved by the Commission.

Q. Do you agree with his conclusion and recommendation?

A. No, for a number of reasons. First, planning for and deploying assets with lives of 30 or more years, like those envisioned as part of the FPL SolarTogether Program, is an inherently risky undertaking. However, if benefits are to be maximized and the interests of customers met over the long term, it is an undertaking that must take place. This is an undertaking that the Commission has successfully accomplished and effectively regulated over many decades. The tools utilized by the Commission to make these decisions are effective and can be applied to the FPL SolarTogether Program. When applied, they reveal that the FPL SolarTogether Program is cost-effective for all customers. The simple fact is that should witness Dauphinais's recommendation be accepted, all customers will miss out on this innovative and cost-effective program.

Second, Florida and the Commission have a policy of promoting renewable energy. The FPL SolarTogether Program is an innovative approach to furthering the development of renewable energy on a large scale and in a cost-effective manner. And by approving the FPL SolarTogether Program, Florida and its rate-paying citizens will have assurance to obtain the strategic benefits I previously identified, such as: increased fuel diversity; a lessened dependence on natural gas; minimization of fuel cost volatility; improvement of environmental

conditions; and an increased investment in Florida.

Third, the Commission has a policy of meeting the earnest desires of customers, as long as it can be done cost-effectively or in a manner that does not cause harm to the general body of customers. The FPL SolarTogether Program is designed to cost-effectively ensure additional renewable generation to customers who have this earnest desire, whether it be because of their inability to deploy customer-owned solar, or because of their social consciousness, or a combination of the two. The FPL SolarTogether Program not only meets the needs of these customers, it does so in a manner that creates and shares benefits with all customers. In essence, customer choice would be expanded while preserving the protections of Commission regulation. This approach actually provides more protection to the general body of customers than trying to isolate the program only to participants.

And fourth, witness Dauphinais has not considered a degree of risk that would likely result, should the FPL SolarTogether Program not be approved. It should be recognized that there is a large and growing number of customers who believe it is imperative that their energy needs be met largely, if not entirely, from renewable sources. Should the opportunities afforded them by the FPL SolarTogether Program be denied to them, they would likely seek other alternatives outside of the

advantages provided by large-scale universal solar. Among the many advantages of large-scale universal solar is the retention of the loads of these customers and their contributions toward the fixed costs of all customers. A significant loss of load would be harmful to the remaining general body of customers and would constitute a significant risk factor on a going forward basis.

Q. Witness Dauphinais's conclusion is driven largely by risk factors. Are there any other risk factors which should be part of the Commission's deliberations in this proceeding?

A. Yes, and I have identified it generally as part of my discussion on Florida's renewable energy policy. However, I believe it needs to be put in proper context based on personal experience.

Q. Please explain.

A. During my sixteen-year tenure on the Commission, I experienced first-hand the risk on customers from fuel price volatility. The large increases in natural gas prices and the associated extreme price volatilities caused great disruptions to customers. Whether it was impacts on large industrial customers and their abilities to successfully manage their operations and remain competitive or families struggling to budget their household expenses, the impacts were large. They caused great concern, anxiety, and angst for customers. And it needs to be stressed that natural gas generation now comprises a larger portion of generation than it did during those times. Fortunately, gas prices are

now stable and are relatively low compared to historical levels. This is a good thing. However, I fear that these good times may have resulted in a certain degree of complacency or even a false sense of security when it comes to risks associated with potential price spikes. It is for these reasons that I feel it is important to consider the risk of fuel price volatility and potential ways to mitigate that risk. Even as large as the FPL SolarTogether Program is, it will not eliminate this risk. However, it is a meaningful step in the right direction. It is a new and innovative tool being proposed to equip the Commission to better protect all customers. This fact should not be lost when the Commission considers the risks and benefits of the FPL SolarTogether Program and whether FPL SolarTogether, taken in its entirety, is in the public interest.

III. CONCLUSION

Q. What is your conclusion?

A. Regulation needs to be open to new and innovative ways to capture benefits for customers. This is particularly true when technologies, economics, and customer expectations change. The FPL SolarTogether Program is indeed new and innovative and is designed to capture these changes and meet customer expectations by establishing a balance of the costs and benefits provided to all customers. As such, there are elements designed to make the program successful which have not been

so structured in the past. Nevertheless, this structure is consistent with Commission policies on protecting all customers and preventing any undue preference or harm. And while not subject to the PPSA, the solar facilities envisioned are consistent with the planning criteria for new generating units of 75 megawatts or higher.

When the FPL SolarTogether Program is adequately scrutinized and evaluated, it is shown to be a cost-effective approach which benefits all customers and enables large deployments of solar generation which is consistent with Florida's policy of promoting renewable energy, including efforts to minimize fuel price volatility. In addition, the FPL SolarTogether Program meets the needs of customers desiring greater generation from renewable sources and does so in a manner that creates and shares benefits with all customers. This approach actually provides more protection to the general body of customers than trying to isolate the program only to participants.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

CHAIRMAN CLARK: All right. FPL, does that conclude your witnesses?

MS. MONCADA: For this portion of the case, yes.

CHAIRMAN CLARK: All right. Okay. Let's go to OPC. Mr. Rehwinkel --

MR. TRIERWEILER: Mr. Chairman, if we could, staff doesn't care when we take this up, but there were two questions that were punted by the last witness, Mr. Bores, back to Mr. Valle. They're two quick questions. We certainly don't mind taking them up when Mr. Valle retakes the stand in his supplemental rebuttal, but I don't know if --

MS. MONCADA: No objection.

MR. TRIERWEILER: Then that's what we'll do. We'll just take up those two at the very end. Thank you.

CHAIRMAN CLARK: Perfect. Thank you.

All right, Mr. Rehwinkel. Your witness.

MR. REHWINKEL: The citizens call James R. Dauphinais to the stand.

CHAIRMAN CLARK: Mr. Dauphinais, you were sworn in yesterday, is that correct?

THE WITNESS: Yes, I was.

EXAMINATION

BY MR. REHWINKEL:

Q Thank you. Mr. Dauphinais, would you state your name for the record, please?

A James R. Dauphinais, D-A-U-P-H-I-N-A-I-S.

Q Are you -- can you tell me on whose behalf you're testifying today?

A The Florida Office of Public Counsel.

Q And are they here representing all the customers of Florida Power & Light?

A Yes.

Q Mr. Dauphinais, did you cause to be prepared testimony, direct testimony, on September 12th, 2019, consisting of some 41 pages?

A Yes.

Q Do you have any changes or corrections to make to that testimony?

A No.

Q Okay. Mr. Dauphinais, if I asked you the same questions that are in your prefiled direct testimony, would your answers be the same today as they were in that prefiled testimony?

A Yes.

Q Did you also cause to be prepared exhibits JRD1 through JRD7?

A Yes.

Q Okay. Do you have any changes or corrections to make to those exhibits?

A No.

Q Okay.

MR. REHWINKEL: Mr. Chairman, exhibits JRD1 through JRD7 are identified in the CEL as Exhibits 12 through 18.

CHAIRMAN CLARK: Thank you.

BY MR. REHWINKEL:

Q Mr. Dauphinais, did you also cause to be prepared 33 pages of testimony, supplemental direct testimony, that was filed on November 15th 2019?

A Yes.

Q Do you have any changes -- did you have any changes or corrections to that testimony?

A Two pages to that testimony were corrected and, I believe, filed.

Q Okay. Is that the January 9th errata, two pages of errata that were filed and are included in the comprehensive exhibit list?

A Yes.

Q With those changes and corrections to your testimony, if I asked you the same questions today that were contained in your prefiled testimony, would your answers be the same?

A Yes.

Q Okay. Did you also cause to be prepared Exhibits JRD8 through JRD12?

A Yes.

Q And do you have any changes or corrections to make to those exhibits?

A No.

MR. REHWINKEL: Mr. Chairman, those exhibits are Exhibits 19 through 23 in the CEL.

CHAIRMAN CLARK: Thank you.

BY MR. REHWINKEL:

Q Mr. Dauphinais, did you prepare a summary of your prefiled testimonies?

A Yes.

Q Would you give that summary to the Commission at this time?

A Sure. Good afternoon, Commissioners. My testimony in this proceeding addresses FPL's proposed SolarTogether program as FPL has modified its proposal in its rebuttal testimony in its October 9th, 2019 non-unanimous stipulation. My testimony also addresses the lack of need and poor economics of FPL's proposed generation facilities for the program.

As I discussed in my testimony, the SolarTogether program is only a voluntary program for

those FPL customers that are both eligible to participate and able to participate. This group of customers amounts to only approximately three percent of FPL's total retail sales. For FPL's remaining customers, or approximately 97 percent of FPL's total retail sales, the SolarTogether program would not be voluntary, as these customers would not have the ability to participate in the SolarTogether program and would be required to bear the cost and risk of the program that FPL is assigning to its customer as a whole.

Under the SolarTogether program, FPL is proposing to treat the 490 megawatts alternating current of SolarTogether generation facilities exactly the same as it would typically treat other generation additions, except in two respects. Just like it typically does with other generation resources, FPL proposes to place its investment in the SolarTogether generation facilities into its rate base. This holds FPL customers as a whole rather than customers participating in the program ultimately responsible for the capital cost of these generation facilities.

Similarly, just like it typically does with other generation resources, FPL proposes to pass through the actual impact of the SolarTogether generation facilities on its fuel and emission cost through the

fuel clause. This holds FPL's customer as a whole rather than participating customers responsible for the commodity cost risk associated with the SolarTogether generation facilities. Where FPL's SolarTogether program differs from typical rate-making is its net payment of 137 million dollars to customers that are participating in the program. This payment is funded by FPL's customers as a whole and will be paid regardless of the actual construction cost of the SolarTogether generation facilities and regardless of whether the generation facilities provide a net benefit or net cost to FPL's customers as a whole.

Given that approximately 97 percent of FPL's sales to customers as a whole would be customers not participating in the SolarTogether program, the 137 million dollar payment amounts to non-participating customers paying a 133 million dollar subsidy to those that are participating in the program. A reasonable voluntary community solar program would have its participants pay extra in order for the utility to pursue additional solar generation facilities that it would not otherwise pursue. That is not what would happen under FPL's proposal. Instead, non-participating customers would be required to pay a nearly guaranteed subsidy of 133 million dollars to participating

customers. For this reason, FPL's proposed SolarTogether program should be found unreasonable and reject it.

In addition, FPL's proposed SolarTogether generation facilities should be rejected. As I discussed in my testimony, while these facilities might eventually be useful for addressing FPL's future capacity needs for reliability, FPL does not need this capacity for reliability at this time. Furthermore, FPL has indicated that it would not have been pursuing all of this generation but for its proposed SolarTogether program.

Finally, the SolarTogether program presents a significant risk of net cost to FPL's customers now participating in a program, which is the vast majority of FPL's customers. For all of these reasons, I also recommend the Commission reject FPL's proposal to place the SolarTogether generation facilities into its rate base. Thank you.

MR. REHWINKEL: Mr. Chairman, I need to move Mr. Dauphinais' September 12th and November 15th as-corrected testimony into the record.

CHAIRMAN CLARK: So ordered.

(Whereupon, Witness Dauphinais' prefiled direct and supplemental testimony was inserted

into the record as though read.)

DIRECT TESTIMONY

OF

JAMES R. DAUPHINAIS

On Behalf of the Office of Public Counsel

Before the

Florida Public Service Commission

Docket No. 20190061-EI

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. James R. Dauphinais. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q. WHAT IS YOUR OCCUPATION?

A. I am a consultant in the field of public utility regulation and a Managing Principal of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

Q. ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A. I am appearing on behalf of the Florida Office of Public Counsel ("OPC").

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. In 1983, I graduated from Hartford State Technical College with an Associate's Degree in Electrical Engineering Technology. Subsequently, I completed undergraduate studies at the University of Hartford and was awarded a Bachelor's Degree in Electrical Engineering. I have also completed graduate level courses in the study of power system analysis, power system transients and power system protection through the Engineering Outreach Program of the University of Idaho.

Q. PLEASE DESCRIBE YOUR EXPERIENCE.

A. I have over 34 years of experience in the electric utility industry, which began with the start of my employment as an Engineering Technician in the Transmission Planning Department of the Northeast Utilities Service Company ("NU," now "Eversource Energy") in 1984. In 1990, upon the completion of my undergraduate studies in electrical engineering, I was promoted to the position of Associate Engineer within the Transmission Planning Department. By 1996, I had been promoted to the position of Senior Engineer within the Transmission Planning Department.

In the employment of NU, I was responsible for conducting thermal, voltage and stability analyses of the NU's electric transmission system to support planning and operating decisions. This involved the use of load flow, power system stability and production cost computer simulations. It also involved examination of potential solutions to operational and planning problems including, but not limited to, transmission line solutions and the routes that might be utilized by such transmission line solutions.

In 1997, I joined the firm of BAI. The firm includes consultants with backgrounds in accounting, engineering, economics, mathematics, computer science and business. Since my employment with the firm, I have been involved with a wide variety of electric power and electric utility issues including, but not limited to ancillary service rates, avoided cost calculations, certification of public convenience and necessity, class cost of service, cost allocation, fuel adjustment clauses, fuel costs, generation interconnection, interruptible rates, market power, market structure, off system sales, prudency, purchased power costs, resource planning, rate design, retail open access, standby rates, transmission losses, transmission planning, transmission rates and transmission line routing. I have provided expert testimony on all of the foregoing. This expert testimony has been provided to the Federal Energy Regulatory Commission ("FERC") and the utility regulatory bodies of 18 states or provinces, including the Florida Public Service Commission ("Commission" or "FPSC"). I provide further information on my education and background in Appendix A to my testimony.

Q. PLEASE ELABORATE ON YOUR EXPERIENCE WITH RESPECT TO RESOURCE PLANNING ISSUES.

A. During my employment with NU, prior to the implementation of FERC Order Nos. 888 and 889, the transmission planning organization within whom I was employed was integrated with, and part of, the same functional organization as Northeast Utilities' generation planning organization. This integration led to significant involvement by transmission planning, including myself, in resource

planning analyses (e.g., the analysis of the potential net benefit of retirement of existing generation resources) and resource planning in transmission planning analyses (e.g., whether to proceed with economic transmission upgrades). In addition, while employed at NU, I made significant usage of the General Electric Company Multi-Area Production Simulator ("MAPS") to analyze the generation production costs associated with various transmission operating and planning alternatives on the NU system.

Subsequently, during my employment with BAI since 1997, I have become further involved with resource planning issues, initially in support of my colleagues at BAI and later in a lead position. This work has included the review of electric utility resource plans, the review of proposed certificates of public convenience and necessity for new electric utility generation resources, the forecasting of future market prices, the forecasting of future utility rates and the evaluation of long-term power supply options. I have conducted this work both for intervenors in regulatory proceedings and specific retail end-use customer clients of BAI who were evaluating their future power supply options. I have also been extensively involved in the development of Independent System Operator ("ISO") and Regional Transmission Organization ("RTO") - administered power markets including, but not limited to, issues related to markets for energy, operating reserves and capacity.

Q. PLEASE IDENTIFY SOME OF THE CASES IN WHICH YOU PROVIDED TESTIMONY WITH RESPECT TO RESOURCE PLANNING ISSUES.

A. In the past 14 years, I have provided testimony on resource planning and/or the prudency issues related to resource planning in Indiana Utility Regulatory Commission

("IURC") Cause No. 42643, Louisiana Public Service Commission ("LPSC") Docket No. U-30192, IURC Cause No. 43393, IURC Cause No. 43396, Colorado Public Utilities Commission ("CPUC") Docket Nos. 09A-324E and 09A-325E, IURC Cause No. 43956, IURC Cause No. 44012, New Mexico Public Regulatory Commission ("NMPRC") Case No. 13-00390-UT, NMPRC Case No. 15-00261-UT, NMPRC Case No. 17-00174-UT and FPSC Docket Nos. 160186-EI and 160170-EI (with respect to Scherer Unit 3 in the 2016 Gulf Power Company base rate case).

In a number of these proceedings, I had either extensive involvement in the review of the utility's Strategist® analysis or had a Strategist® analysis performed under my direction and supervision, based upon data provided by subject utility.[1]

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS DOCKET?

A. I present testimony with respect to Florida Power & Light Company's ("FPL's") proposed SolarTogether community solar program ("SolarTogether Program"), which FPL's Petition categorizes as a voluntary program. My evaluation, analysis and recommendation includes whether pursuit of the 1,490 MW of alternating current ("MW_{AC}") of new solar photovoltaic generation facilities FPL proposes to construct at 20 different sites under Phase 1 of the SolarTogether Program is reasonable

[1]Strategist®, which includes a module called Proview®, is a computer software tool produced by Ventyx that allows resource planners to examine a very large number of alternative resource portfolios with the goal of identifying through an optimization algorithm the most cost effective resource portfolio for an electric utility. It can also be used in a probabilistic mode to test the robustness (i.e., risk) of specific resource portfolios over a wide range of assumption variations. Strategist® is currently utilized, and has been utilized, by many electric utilities to conduct their resource planning. Other commercial software tools that have some or all of the functionality of Strategist® include software tools such as System Optimizer®, PLEXOS®, Aurora XMP® and EnCompass®.

for FPL's customers as a whole, absent support from a reasonable voluntary solar program (which I will describe later below). Assuming it is even prudent to add this amount of generation in the first place, my testimony also examines whether FPL has adequately considered all the options available to add the 1,490 MW_{AC} of new solar generation such that it ensures FPL's proposed construction of the facilities is the most cost efficient manner for reliably adding this new solar generation (e.g., versus providing for all or some of the solar generation through Purchased Power Agreements ("PPAs") or other third-party arrangements such as build and acquisition arrangements). Finally, I explore whether FPL's proposed split of benefits and costs between itself, its customers who can and do opt to participate in the SolarTogether Program ("Participating Customers"), and its customers who do not or cannot participate in the SolarTogether Program ("Non-Participating Customers") is reasonable.

The fact that I do not address any other particular issues in my testimony or am silent with respect to any portion of FPL's Petition or direct testimony in this proceeding should not be interpreted as an approval of any position taken by FPL.

Q. YOU INDICATE THAT FPL'S PETITION CATEGORIZES THE SOLARTOGETHER PROGRAM AS A VOLUNTARY PROGRAM. WOULD YOU CONSIDER IT BE A VOLUNTARY PROGRAM?

A. Not entirely. It would be voluntary from the perspective of a FPL customer who could and did choose to subscribe to the program to become a Participating Customer pursuant to the terms and conditions of the program. However, the costs and

risks that would be imposed on Non-Participating Customers by the SolarTogether Program would be involuntary for Non-Participating Customers. Non-Participating Customers would have no choice but to take on those costs and risks.

Q. CAN YOU PLEASE EXPLAIN WHAT YOU MEAN BY A REASONABLE VOLUNTARY SOLAR PROGRAM?

A A reasonable voluntary solar program is one in which Participating Customers take on sufficient cost and risk for a solar project such that it substantially reduces the cost and risk faced by the utility's Non-Participating Customers versus what the latter customers would be exposed to for the solar project absent the voluntary solar program. Ideally, under such a reasonable voluntary solar program, the Participating Customers and/or the utility voluntarily choose to subsidize additional solar power development in such a manner that Non-Participating Customers are not economically harmed by the pursuit of the additional solar power development. Later in this testimony, I address whether FPL's proposed SolarTogether program is a reasonable voluntary solar program.

Q. YOU HAVE USED THE TERMS "PARTICIPATING CUSTOMERS," "NON-PARTICIPATING CUSTOMERS," AND "FPL'S CUSTOMERS AS A WHOLE." PLEASE EXPLAIN THESE TERMS AND WHETHER FPL USED THESE TERMS IN ITS PETITION AND DIRECT TESTIMONY.

A. I use the term Participating Customers to refer to those FPL customers who can and do voluntarily choose to subscribe to FPL's proposed SolarTogether Program. FPL used this same term in its Petition and direct testimony (e.g., Valle Direct at 3).

I use the term Non-Participating Customers to refer to those FPL customers who either have not chosen to subscribe to the SolarTogether Program or are unable to subscribe to the SolarTogether Program. In its petition and direct testimony, FPL used the confusing term "FPL's general body of customers" for these customers instead of "Non-Participating Customers" (e.g., see Valle Direct at 4). The term "general body of customers" is confusing because it could be easily mistaken to mean all of FPL's customers, in other words, Participating Customers and Non-Participating Customers combined. Thus, for clarity in my testimony, in place of FPL's term "general body of customers," I have chosen to instead use the more accurate term "Non-Participating Customers" to mean those FPL customers who either have not chosen to subscribe to the SolarTogether Program or are unable to subscribe to the SolarTogether Program.

I use the term "FPL's customers as a whole" to refer to Participating Customers and Non-Participating Customers combined. FPL does not use this term or any other term for Participating and Non-Participating Customers combined. Instead, when speaking of an impact to FPL's customers as a whole, FPL typically speaks in terms of

the total impact on customers (e.g., Petition at paragraph 20, FPL response to Citizens' Interrogatory No. 5, Valle Direct at 4 and Enjamio Direct at 10).

Q. PLEASE DESCRIBE WHAT YOU REVIEWED AND ANALYZED IN PREPARING YOUR DIRECT TESTIMONY.

A. I reviewed and analyzed: (i) FPL's Petition; (ii) the Direct Testimony and Exhibits of its witnesses Matthew Valle, William F. Brannen, Juan E. Enjamio and Scott R. Bores; (iii) the October 6, 2016 Stipulation and Settlement in FPL's last base rate case proceeding (Docket Nos. 160021-EI, 160061-EI, 160062-EI and 160088-EI); (iv) FPL's March 1, 2019 solar base rate adjustment ("SoBRA") filing in Docket No. 20190001-EI; (v) FPL's Ten-Year Power Plant Site Plan for 2019-2028 that was submitted to the Commission in April 2019; and (vi) FPL's responses to Interrogatories and Requests for Production of Documents as of the date this testimony was filed with the Commission. I applied my knowledge and experience in conducting my review and analyses of the foregoing.

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.

A. I conclude the following:

- FPL has not shown it needs additional resources in 2020 and 2021 and that its 1,490 MW_{AC} of proposed solar generation facilities under Phase 1 of its SolarTogether Program would be the most cost effective solution to reliably meet such an additional resource need for FPL's customers as a whole, absent the implementation of a reasonable voluntary solar program to support the facilities;

- FPL has not shown its proposed construction of all of the Phase 1 SolarTogether projects is the most cost effective option to reliably add 1,490 MW_{AC} of new solar generation for either FPL's Participating Customers or its Non-Participating Customers, assuming this solar generation was needed; and

- FPL's proposed SolarTogether Program does not provide a reasonable allocation of the benefits, costs and risks of the proposed SolarTogether Phase 1 projects between FPL, Participating Customers, and Non-Participating Customers.

For the above reasons, I recommend that the Commission deny FPL's petition for its proposed SolarTogether Program, including any approval related to increasing rate base sought by FPL for its proposed Phase 1 SolarTogether solar generation projects.

II. FPL'S PHASE 1 SOLARTOGETHER PROPOSAL TO ADD 1,490 MW_{AC} OF SOLAR GENERATION

Q. YOU HAVE INDICATED THAT, UNDER PHASE 1 OF FPL'S SOLARTOGETHER PROGRAM, 1,490 MW_{AC} OF NEW SOLAR GENERATION WOULD BE ADDED ACROSS 20 SITES OF 74.5 MW_{AC} EACH. HAS FPL IDENTIFIED WHETHER IT WOULD BE PURSUING THIS NEW SOLAR GENERATION WITH OR WITHOUT ITS PROPOSED SOLARTOGETHER PROGRAM?

A. In discovery, FPL indicated the 1,490 MW_{AC} of solar generation proposed under Phase 1 of its proposed SolarTogether Program includes: (i) 900 MW_{AC} of nameplate non-solar base rate adjustment ("Non-SoBRA") solar capacity that is shown in its 2019 Ten-Year Site Plan ("TYSP") resource plan for 2020 and 2021 and (ii) an acceleration of part of the solar capacity FPL identified in its 2019 TYSP resource plan for years 2022 – 2024 (FPL's response to Citizens' Interrogatory No. 8).[2] FPL also indicated that it intends to proceed with construction of the 900 MW_{AC} of nameplate

[2]In Exhibit JRD-6, I have provided a copy of all of FPL's public responses to interrogatories and requests for production of documents that I cite to in my direct testimony.

solar capacity even if its proposed SolarTogether Program is not approved by the Commission (*Id.*). Additionally, in its direct testimony, FPL indicated that Projects 1 and 2 of Phase 1 of the proposed SolarTogether Program, totaling 447 MW_{AC}, are already under construction (Brannen Direct at 5). Furthermore, FPL has indicated that it intends to complete Projects 1 and 2 and to seek to place them into its rate base in its next base rate proceeding, regardless of whether the Commission approves its proposed SolarTogether Program (FPL's response to Citizens' Interrogatory No. 26). Given this, it is important to examine whether the Phase 1 SolarTogether projects are the most cost effective option to reliably meet FPL's resource needs for FPL's customers as a whole.

Q. HAS FPL IN ITS PETITION, DIRECT TESTIMONY, OR RESPONSES TO DISCOVERY AS OF THE DATE OF THIS TESTIMONY DEMONSTRATED THAT THE 1,490 MW_{AC} OF PHASE 1 SOLARTOGETHER PROJECTS ARE THE MOST COST EFFECTIVE MANNER TO RELIABLY MEET FPL'S RESOURCE NEEDS?

A. No, it has failed to make this demonstration. FPL has only provided an analysis that it claims shows the Phase 1 SolarTogether projects are cost effective under an assumed set of postulated conditions. In that analysis, under FPL's base case assumptions, the Phase 1 SolarTogether projects are forecasted to provide a Cumulative Present Value Revenue Requirement ("CPVRR") net savings of $139 million to FPL's customers as a whole over the 30-year book life of the projects under the cost effectiveness test that FPL is authorized to use only for its SoBRA projects. (Petition at paragraphs 7 and 19-22; Enjamio Direct at 3-4, 6 and 10; and FPL's response to

Staff's Interrogatory No. 39). In discovery, FPL further indicated it defines a project or resource cost effective when it results in a lower CPVRR than the alternative. (FPL's response to Staff's Interrogatory No. 24).

Q. PLEASE EXPLAIN WHY FPL'S COST EFFECTIVENESS TEST FAILS TO DEMONSTRATE THAT THE PHASE 1 SOLARTOGETHER PROJECTS ARE THE MOST COST EFFECTIVE MANNER FOR FPL TO RELIABLY MEET ITS RESOURCE NEEDS.

A. The test does not consider the cost risk of one alternative versus another, especially with respect to the length of time that needs to pass before FPL's customers as a whole would receive a payback from the Phase 1 SolarTogether projects. As I discuss later in my testimony, FPL put a heavy emphasis on providing a payback to the Participating Customers from the SolarTogether Program within seven years in order to meet the desires of those customers interested in the program. (Valle Direct at 12). Yet, in applying the SoBRA cost effectiveness test to evaluate the Phase 1 SolarTogether projects for FPL's customers as a whole, FPL does not take payback time into consideration at all.

Q. PLEASE EXPLAIN THE TERM "PAYBACK."

A. Payback occurs when the cumulative revenue requirement net benefit of an investment becomes positive. It can be expressed in terms of either: (i) nominal dollars, which FPL refers to as "simple payback" (Valle Direct at 11-12), or (ii) present value dollars. The latter approach, which I will refer to as the "cumulative present value payback," is the more appropriate approach as it properly takes into consideration the

time value of money in terms of utility cost of capital. A cumulative present value payback occurs when the CPVRR net benefit of an investment becomes positive.

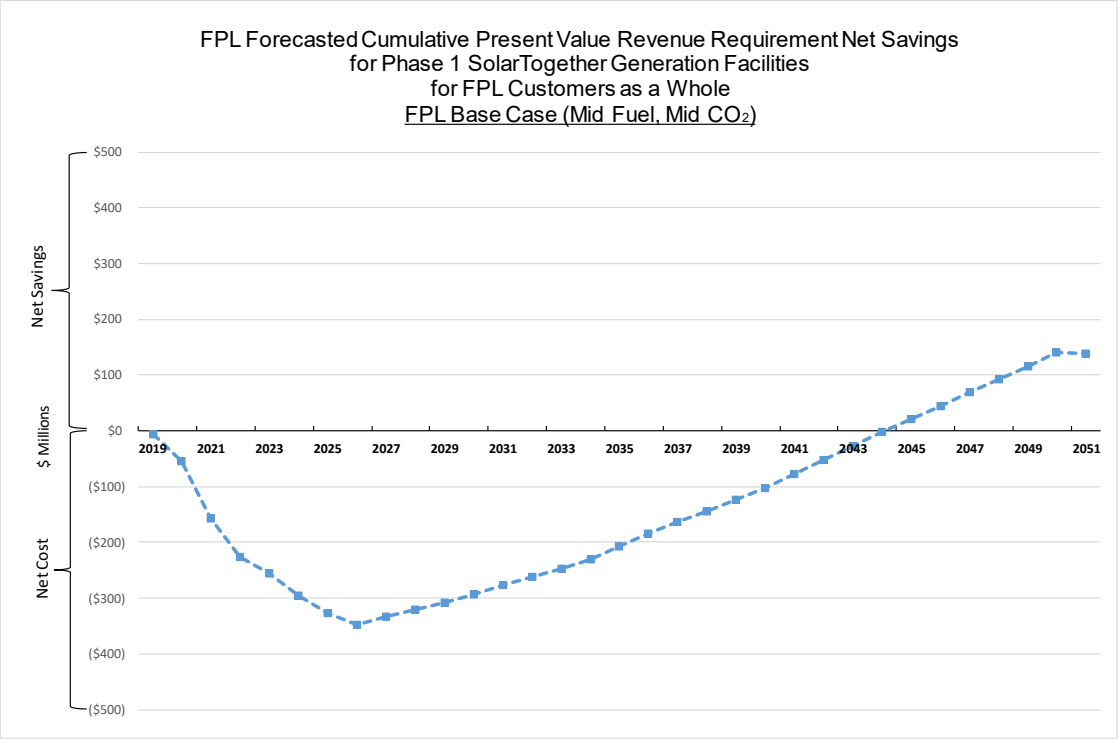
Q. PLEASE EXPLAIN WHY THE TIME IT TAKES TO ACHIEVE A PAYBACK MATTERS.

A. The forecasted benefits from an investment do not always necessarily flow evenly over the life of an investment, if at all. The forecasted benefits from a particular investment can fall predominately in the earlier years of the book life of the investment, in the later years of the book life of the investment, or be spread fairly evenly over the book life of the investment. While discounting later year costs and benefits through the net present value calculation accounts for the lower level of lost investment opportunity associated with later year costs and benefits, it does not account for the fact that there is generally greater uncertainty as you go out in time. This is to say we can better predict most benefits and costs two to three years from now than we can predict those benefits and costs 22 to 23 years into the future.

Q. DOES FPL'S ANALYSIS CONTAIN SUFFICIENT INFORMATION TO KNOW THE FORECASTED CUMULATIVE PRESENT VALUE PAYBACK YEAR FOR FPL'S CUSTOMERS AS A WHOLE FOR THE PHASE 1 SOLARTOGETHER PROJECTS?

A. Yes. While FPL does not present the number in its petition or direct testimony, it can be calculated from FPL's workpapers that were provided by FPL in response to Staff's Interrogatory No. 78. In Figure JRD-1 below, I have plotted the forecasted CPVRR net savings of the Phase 1 Solar Together projects for FPL's customers as a whole year-by-year from 2019-2051 under FPL's base case fuel and emission price assumptions. I also present this information in tabular form in Exhibit JRD-1.

Figure JRD-1



Source: FPL Response to Staff Interrogatory No. 78.

As can be seen from Figure JRD-1, at the end of the book life of the last of the installed Phase 1 SolarTogether projects in 2051, FPL is forecasting a CPVRR net savings of $139 million for the Phase 1 SolarTogether projects for FPL's customers as a whole. However, the cumulative present value payback year for FPL's customers as a whole is not forecasted to materialize, under FPL's base case assumptions, until 2045 – some 24 years after the last of the Phase 1 SolarTogether projects would enter service in 2021. This makes the actual realization of a cumulative present value payback for FPL's customers as a whole much riskier than, for example, if the forecasted cumulative present value payback year was only 10 years into the future and net savings were forecasted to consistently grow after those 10 years.

Q. DOES THE TIME TO ACHIEVE A CUMULATIVE PRESENT VALUE PAYBACK MATTER FOR OTHER REASONS BESIDES THE GREATER RISK ASSOCIATED WITH ACTUALLY REALIZING THAT PAYBACK?

A. Yes. Utility investments with a long cumulative present value payback period create generational cross-subsidies between ratepayers. For example, many of the customers who pay electric rates today will not be the same customers who pay electric rates 20 years from now or may have very different demand and consumption levels than they do today. As a result, a utility investment made today that does not have a forecasted cumulative present value payback until 20 years from now will likely result in today's electric customers of FPL subsidizing its electric customers of 20 years from now, since today's customers would likely pay a lion's share of the costs of the

investment while FPL's customers 20 years from now would likely receive the lion's share of the benefits from that investment.

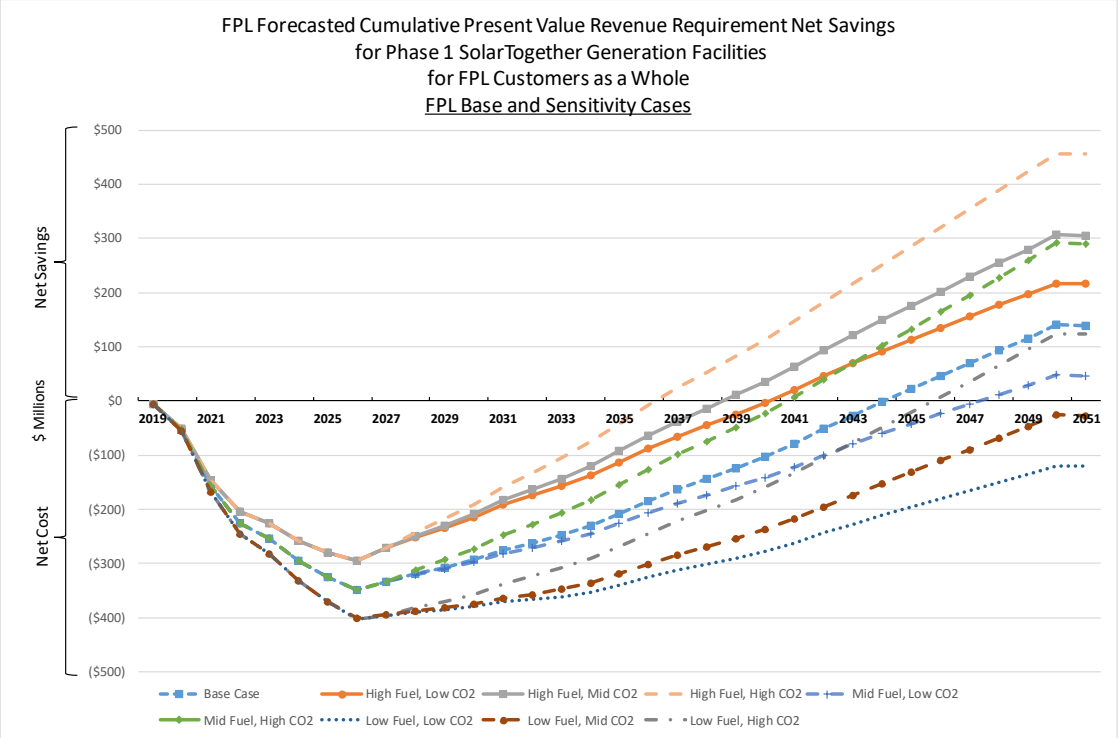
Q. ARE THERE ADDITIONAL FACTORS THAT SHOULD BE CONSIDERED WHEN EVALUATING WHETHER A PROPOSED PROJECT IS THE MOST COST EFFECTIVE CHOICE TO RELIABLY MEET THE RESOURCE NEED OF A UTILITY?

A. Yes. Specifically, reviewers should consider the sensitivity of the forecasted results to the underlying assumptions when making an analysis. In particular, it is prudent to consider the sensitivity of the results to assumed natural gas prices and CO_2 emission prices, as they can have a major impact on forecasted values when evaluating different resource options.

Q. DID FPL UNDERTAKE SUCH A SENSITIVITY ANALYSIS?

A. While FPL makes no mention of any sensitivity analysis in its Petition or direct testimony, FPL did in fact run eight sensitivity cases in addition to its base case that used FPL's midlevel fuel and CO_2 emission price assumptions. The results of these sensitivity cases were provided as part of FPL's response to Staff's Interrogatory No. 78. In Figure JRD-2, I plot the year-by-year CPVRR net savings for FPL's customers as a whole for each of FPL's eight sensitivity cases and FPL's base case. I also present this information in tabular form in Exhibit JRD-2.

Figure JRD-2



Source: FPL Response to Staff Interrogatory No. 78.

As can been seen from Figure JRD-2, a very wide range of outcomes can result by 2051 under FPL's sensitivity cases. The results from these sensitivity cases range from a $121 million CPVRR net loss for the Phase 1 SolarTogether projects under FPL's low fuel and low CO_2 price case, to a $456 million CPVRR net savings under FPL's high fuel cost and high CO_2 cost case. However, I would caution that, given there is no CO_2 emission regulation in place today and predictions indicate the current great abundance of natural gas in the United States will continue in the foreseeable future, it is my opinion greater weight should be placed on (1) FPL's base case, (2) FPL's mid fuel and low CO_2 price case, (3) FPL's low fuel and mid CO_2 price case, and (4) FPL's low fuel and low CO_2 price case, than on any of FPL's other sensitivity cases involving high fuel prices and/or high CO_2 emission prices. The four FPL cases

with only medium and/or low price assumptions yield results for FPL's customers as a whole that range from no cumulative present value payback (with a forecasted end-state CPVRR net loss of $121 million) to a cumulative present value payback for the SolarTogether projects at 24 years after the last of the Phase 1 projects would enter service (with a forecasted end-state CPVRR net savings of $139 million for the projects).

Q. IN YOUR OPINION, DO THE RESULTS OF FPL'S ANALYSES SUPPORT THE ADDITION OF THE PHASE 1 SOLARTOGETHER PROJECTS BEING THE MOST COST EFFECTIVE SOLUTION FOR FPL'S CUSTOMERS AS A WHOLE TO RELIABLY MEET FPL'S CURRENT RESOURCE NEEDS?

A. No, they do not. Given that the indicators point to abundant natural gas for the foreseeable future and that no CO_2 emission regulation is in place today (or approved or expected to go into effect in the near future), the focus should be on FPL's results under its four cases involving only low and medium price assumptions for natural gas and CO_2 emissions. Results for these four cases show an end-state where there is nearly an equal likelihood of a CPVRR net loss or a CPVRR net benefit for FPL's customers as a whole. Taking this into consideration and combined with the generational cross-subsidies and greater risk with respect to actually realizing a cumulative present value payback associated with the lengthy 24-year cumulative present value payback period forecasted under even the most optimistic of these four cases (FPL's base case with mid-level fuel and mid-level CO_2 emission prices), I conclude that FPL's proposed Phase 1 SolarTogether projects are not FPL's most cost effective reliable resource

option at this time for FPL's customers as a whole without support from a reasonable voluntary solar program. Moreover, it is important to note that FPL has already made, and is in the process of making, other 74.5 MW_{AC} solar generation investments with very similar economics through the SoBRA provisions of the 2016 Stipulation and Settlement ("2016 Settlement") in FPL's last base rate proceeding. It is my understanding that those provisions are highly specific to the unique circumstances of the 2016 Settlement. Specifically, between its 2017, 2018 and 2019 SoBRA projects, FPL has added a total of 894 MW_{AC} of solar generation (through sites of 74.5 MW_{AC} each) and has proposed an additional 298 MW_{AC} of solar generation (through more sites of 74.5 MW_{AC} each) for its 2020 SoBRA project. Given the current borderline of economics discussed above for new utility-scale solar generation, it does not make sense to "double down" on FPL's 1,192 MW_{AC} of SoBRA solar generation additions by pursuing the Phase 1 SolarTogether projects without support for those projects from a reasonable voluntary solar program.

Q. DOES THE SOBRA APPROVAL STANDARD OUTLINED IN THE 2016 SETTLEMENT HAVE PRECEDENTIAL EFFECT IN THIS CASE?

A. No, it does not. When I inquired about the SoBRA approval standard, counsel for OPC showed me Paragraph 24 of the 2016 Settlement, which reads as follows:

> No party will assert in any proceeding before the Commission or any court that this Agreement or any of the terms in the Agreement shall have any precedential value, except to enforce the provisions of this Agreement.

Based on this reading, as a witness and expert in electric utility regulation (in addition to resource planning), I would not expect that the 2016 Settlement provides a

precedential basis for evaluating the cost-effectiveness of the SolarTogether projects. I would certainly not recommend it to this Commission as a reasonable or even meaningful standard to approve over $1.7 billion in new generation assets of any type.[3]

Q. IT WAS SUFFICIENT FOR FPL'S SOBRA PROJECTS TO GAIN COMMISSION APPROVAL BY FPL SIMPLY SHOWING THOSE PROJECTS WERE COST EFFECTIVE FOR FPL'S CUSTOMERS AS A WHOLE UNDER FPL'S BASE CASE ASSUMPTIONS. PLEASE EXPLAIN WHY SUCH A DEMONSTRATION IS NOT APPROPRIATE FOR FPL'S PHASE 1 SOLARTOGETHER PROJECTS?

A. Section 10 of the 2016 Settlement in FPL's last base rate proceeding specifically provided for approximately 300 MW_{AC} of solar projects for each calendar year within a defined term. It also limited the evaluation of the cost effectiveness of these projects to testing whether they lower FPL's projected CPVRR as compared to FPL's CPVRR without the project. Under the specifically negotiated terms of that 2016 Settlement, demonstration of "most cost effectiveness" is not required and there is no consideration of payback and price risks. However, the terms of the 2016 Settlement are limited to the SoBRA projects provided for in the Stipulation and Settlement. They do not apply to any other resource proposals of FPL. Thus, passing the SoBRA cost effectiveness test has no bearing upon, and is not sufficient for, the proposed Phase 1 SolarTogether projects.

[3]FPL is estimating the total cost of the Phase 1 SolarTogether projects to be $1.79 million (Brannen Direct at 10).

Q. PUTTING ASIDE THE FACT THAT FPL HAS FAILED TO DEMONSTRATE THAT PURSUIT OF ITS PROPOSED PHASE 1 SOLARTOGETHER PROJECTS IS THE MOST COST EFFECTIVE ALTERNATIVE FOR RELIABLY MEETING ITS RESOURCE NEEDS, HAS FPL MADE ANY DEMONSTRATION IN ITS PETITION AND DIRECT TESTIMONY THAT IT NEEDS TO MAKE ANY RESOURCE ADDITIONS TO ITS SYSTEM IN 2020 AND 2021 BEYOND ITS 2020 SOBRA PROJECTS AND PROJECTS ALREADY APPROVED BY THE COMMISSION?

A. No, it has not. FPL has failed to present evidence in its Petition or direct testimony that demonstrates it has a need for additional generation capacity in 2020 and 2021 beyond its 2020 SoBRA projects and its resource projects that have already been approved by the Commission. Therefore, FPL has failed to demonstrate it has an additional capacity need of any sort for 2020 and 2021, in addition to failing to demonstrate that the most cost effective way to reliably meet such a need would be through pursuit of the Phase 1 SolarTogether projects.

III. FPL'S CHOICE TO CONSTRUCT ALL OF THE PHASE 1 SOLARTOGETHER PROJECTS

Q. HOW IS FPL PROPOSING TO PROVIDE FOR THE ADDITION OF 1,490 MW_{AC} OF NEW SOLAR GENERATION FOR ITS PROPOSED PHASE 1 SOLARTOGETHER PROJECT?

A. FPL is proposing to construct all 20 of the 74.5 MW_{AC} sites itself[4] through the use of contractors.

Q. DID FPL CONDUCT A REQUEST FOR PROPOSALS ("RFP") PROCESS FOR SOLAR PURCHASED POWER AGREEMENTS ("PPAs") OR OTHER THIRD-PARTY ARRANGEMENTS BEFORE DECIDING ON CONSTRUCTING ALL OF THE PHASE 1 SOLARTOGETHER PROJECTS ITSELF?

A. No, it did not. In response to Citizens' Interrogatory No. 10, FPL indicated it did not solicit proposals from third-parties. The Company provided the following two purported reasons for not evaluating third-party PPA options:

- Such options would not align with the program design for the SolarTogether Program, including the structure of recovery of cost for the program (i.e., fixed payment stream to a third-party PPA seller vs. FPL's collection of revenues through charges and credits to subscribed customers);

[4] I say that FPL will construct all 20 sites "itself;" however, it should be noted FPL witness Brannen is an employee of NextEra Energy Resources, LLC and manages the development and implementation of engineering technology selection and execution strategies for universal solar and distributed generation projects for NextEra Energy, Inc., the parent of FPL (Brannen Direct at 1). Given Mr. Brannen's status as a NextEra Energy Resources, LLC employee, it is possible that the development and construction of the SolarTogether sites is actually being performed by an affiliate or affiliates of FPL rather than FPL itself. I have not made any assumptions about whether any possible affiliated asset transfers appropriately affect the costs and other assumptions related to the payback and cost-effectiveness issues that I address in my testimony.

- SolarTogether represents a significant commitment to FPL's customers, and reliance on a third-party with no track record in Florida would represent an unreasonable level of risk, particularly as it relates to scale, cost, timing and performance.

(FPL's response to Citizens' Interrogatory No. 10)

Q. DO YOU AGREE WITH FPL'S REASONING?

A. No, I do not. With respect to the first point, were FPL to have an actual need for the solar generation resources, a fixed payment stream to a third-party PPA seller could be coupled with FPL's collections of revenues through charges and credits to subscribed customers. It would simply require that either FPL, the Non-Participating Customers, or some combination of the two, pay or collect the difference between the revenue stream paid to the PPA seller and the collection of revenues through charges and credits to Participating Customers. Therefore, FPL's first point is not valid especially considering FPL's own proposal for its proposed SolarTogether Program involves FPL's Non-Participating Customers taking on the risk to pick up the slack between FPL and the Participating Customers.

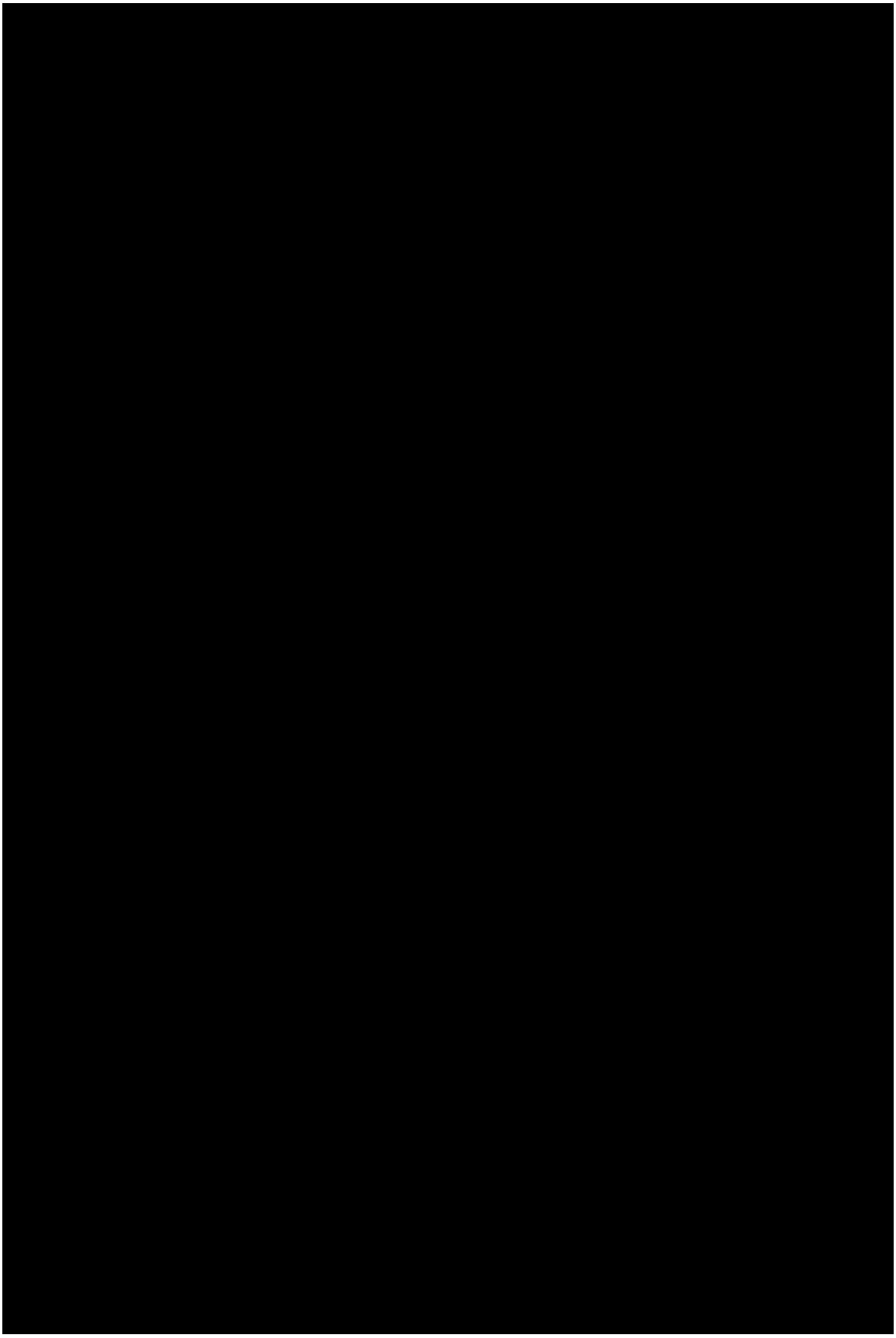
FPL's second point is also invalid. Essentially, FPL presents an all or nothing proposition for the use of PPAs or other third-party arrangements such as build and acquisition arrangements. Were FPL to have an actual need for the solar generation resources, it would not be unduly risky for it to pursue at least some of the Phase 1 SolarTogether projects through PPAs or other third-party arrangements, such as build and acquisition arrangements, if, after performing a reasonable RFP, it was determined that the most cost effective way to provide for the Phase 1 SolarTogether projects would be through the use of some level of third-party arrangements. In addition, FPL's

opposition to relying in any way on a third-party under the argument that the third-parties lack a track record in Florida is highly problematic. There are likely many third-party solar developers with good reputations inside and outside of Florida, and it is unreasonable to expect any of them to have a track record in Florida if no utility in Florida is willing to give them a chance to establish such a track record.

Simply put, FPL's reasons for not conducting an RFP for PPAs and other third-party arrangements for at least a portion of the Phase 1 SolarTogether projects are not prudent or reasonable. Such an RFP might have revealed that there were opportunities with third-parties to provide for at least a portion of the proposed Phase 1 SolarTogether generation facilities on a more cost effective basis than having FPL construct all of the projects itself. As a result, an important check on the cost of the Phase 1 SolarTogether projects for both Participating Customers and Non-Participating customers was lost. Therefore, we do not know whether FPL (or a non-regulated affiliate of FPL) constructing all of the Phase 1 SolarTogether projects is the most cost effective approach for reliably pursuing the Phase 1 SolarTogether solar generation facilities, and this is assuming that FPL even needs additional resources such that pursuit of the Phase 1 SolarTogether solar generation facilities is the most effective way to meet that resource need.

Q. IS THERE ANY EVIDENCE OF A THIRD-PARTY SOLAR DEVELOPER WITH A GOOD TRACK RECORD OUTSIDE OF FLORIDA BEING INTERESTED IN DEVELOPING UTILITY-SCALE SOLAR GENERATION PROJECTS WITHIN THE FPL SERVICE TERRITORY?

A. Yes. [redacted]



[redacted]

Q. [redacted]

A. [redacted]

IV. REASONABLENESS OF FPL'S SOLARTOGETHER PROGRAM

Q. PLEASE BRIEFLY SUMMARIZE FPL'S PROPOSED SOLARTOGETHER PROGRAM.

A Under FPL's SolarTogether Program, customers who volunteer to participate would be permitted to subscribe to a portion of FPL's proposed utility-scale SolarTogether solar photovoltaic generation projects for up to 100% of each customer's annual energy usage, pursuant to the terms and conditions of the program and contingent upon the solar capacity being available to the customer. As I have discussed, for Phase 1 of its SolarTogether Program, FPL proposes to construct 1,490 MW_{AC} of new solar generation facilities split between 20 sites of 74.5 MW_{AC} each that would enter service between February 2020 and April 2021 (Valle Direct at 9 and 19). FPL proposes to initially offer 25% of the Phase 1 capacity (372.5 MW_{AC}) to its residential and small business customers and the remaining 75% of this capacity (1,117.5 MW_{AC}) to its Commercial, Industrial and Governmental ("C&I-G") customers (Valle Direct at 16). FPL proposes to periodically reevaluate demand for the SolarTogether Program and, if warranted, reassign the allocation of capacity as appropriate (*Id.*). As I have also noted earlier in my testimony, the impact of FPL's proposed SolarTogether Program on FPL's Non-Participating Customers is not voluntary for those Non-Participating Customers.

FPL has already offered pre-registration for the SolarTogether Program to its C&I-G customers and purportedly received reservations from 200 such customers for a total capacity amount of approximately 1,100 MW_{AC} – nearly the entire initial 1,117.5 MW_{AC} allocation of Phase 1 capacity to C&I-G customers (Valle Direct at 23). FPL

reports that many of these C&I-G customers have reserved a subscription that will cover 75% to 100% of their annual energy usage (*Id.*). Under FPL's SolarTogether Pre-Registration Agreement, these pre-registration reservations are essentially binding unless the SolarTogether Program is either not approved or the Commission makes material modifications to the program. (FPL's response to Staff's Interrogatory No. 55).

Q. PLEASE HIGHLIGHT SOME OF THE KEY TERMS AND CONDITIONS TO WHICH PARTICIPATING CUSTOMERS WOULD BE SUBJECT UNDER FPL'S SOLARTOGETHER PROGRAM.

A. Participating Customers may participate in the program for up to 30 years and can terminate their participation at any point past their initial month of participation. Participating Customers pay a fixed, flat monthly subscription rate of $6.76 per kW-month applied to their kW of subscribed SolarTogether capacity (FPL Exhibit MV-1). In exchange, they receive a stated subscription credit for the actual energy produced by their subscribed SolarTogether capacity that starts at 3.42881¢ per kWh in year 1 and escalates annually to reach 5.20540¢ per kWh in year 30 (*Id.*).

Q. PLEASE EXPLAIN HOW FPL DEVELOPED THE RESERVATION CHARGE AND SUBSCRIPTION CREDIT FOR PARTICIPATING CUSTOMERS UNDER ITS PROPOSED SOLARTOGETHER PROGRAM.

A. The subscription charge was developed by FPL by first allocating 96.4% of the forecasted $1.370 billion CPVRR net base rate revenue requirement for Phase 1 of the

SolarTogether Program to Participating Customers and then developing a levelized monthly subscription rate intended to recover that amount ($1.321 billion) from Participating Customers over 30 years. The subscription charge for each customer was then calculated as the monthly subscription rate ($6.76 per kW-month) multiplied by the subscribed kW of capacity of the participating customer (Bores Direct at 6).

The subscription credit was developed by assigning 80% ($111 million) of the forecasted base case $139 million CPVRR net savings for Phase 1 of the SolarTogether projects to Participating Customers and targeting a seven-year simple payback to those Participating Customers based on the estimated output of the Phase 1 solar generation facilities, assuming typical Florida weather. FPL reports this allocates 95% or $1.432 billion of the $1.509 billion total fuel and emission fuel clause savings that FPL is forecasting to receive from the Phase 1 SolarTogether projects over their 30-year book life under its base case assumptions (Bores Direct at 8 and Valle Direct at 11).

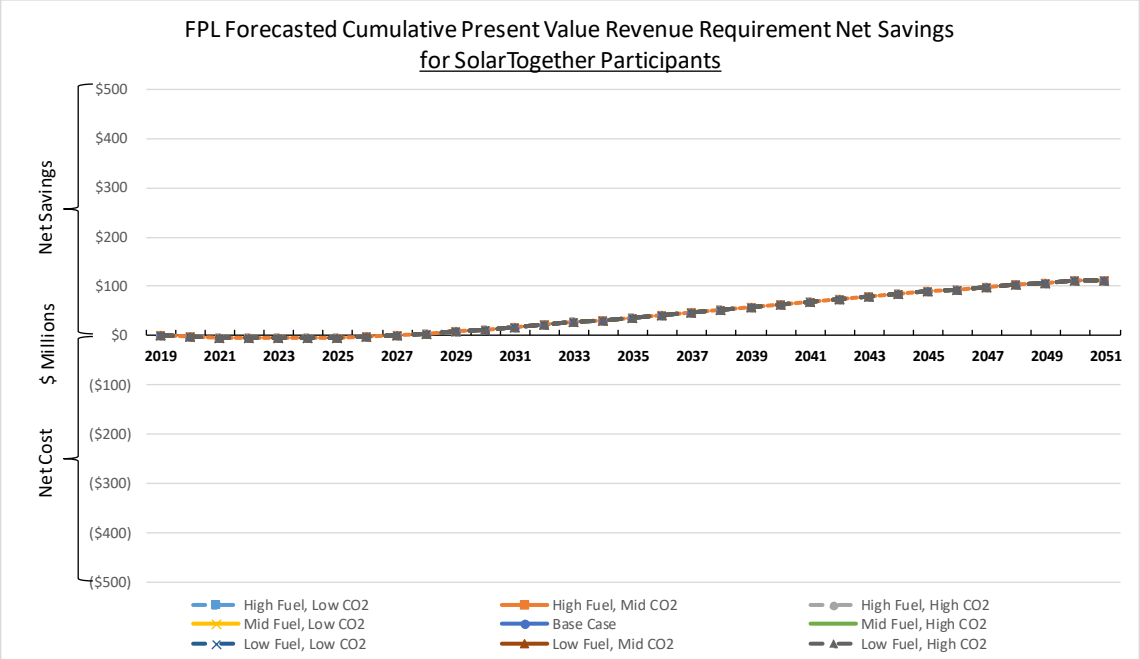
Q. ARE PARTICIPATING CUSTOMERS STILL SUBJECT TO NORMAL TARIFF RATES FOR THE DEMAND AND ENERGY CONSUMPTION OF THEIR LOAD?

A Yes, they are. Participating Customers continue to be subject to normal tariff rates for their load. The customers' normal tariff rates include any applicable tariff riders, which also include FPL's fuel clause.

Q. EARLIER IN YOUR TESTIMONY, YOU PLOTTED FPL'S FORECASTED YEAR-BY-YEAR CPVRR NET SAVINGS FROM THE PROPOSED PHASE 1 SOLARTOGETHER PROJECTS FOR FPL'S CUSTOMERS AS A WHOLE (I.E., FPL'S PARTICIPATING CUSTOMERS AND NON-PARTICIPATING CUSTOMERS COMBINED). ARE YOU ABLE TO DO THE SAME FOR PARTICIPATING CUSTOMERS BY THEMSELVES?

A. Yes. In response to Staff's Interrogatory No. 79, FPL provided sufficient information to perform the necessary calculations. I have performed the necessary calculations and have plotted FPL's forecasted year-by-year CPVRR net savings from the Phase 1 SolarTogether projects for just the Participating Customers for FPL's base case and eight sensitivity cases in Figure JRD-3 below. I also present this information in tabular form in Exhibit JRD-3.

Figure JRD-3



Source: FPL Response to Staff Interrogatory No. 79.

As can be seen from Figure JRD-3, the Participating Customers as a group receive a cumulative present value payback by 2027, six years after the last of the Phase 1 SolarTogether projects enter service, and then these customers see a consistently increasing CPVRR net savings that ultimately reaches $111 million at the 2051 end-state. In addition, since FPL has designed its stated subscription credit for the SolarTogether Program based on its forecasted base case fuel clause savings and not on the actual fuel clause savings to be realized, as shown in Figure JRD-3, the time to a cumulative present value payback and the CPVRR net savings for Participating Customers is completely immune to variations in natural gas prices and CO_2 emission prices. Furthermore, while it is not considered in FPL's sensitivity cases, it is also important to note that the time to recognize a cumulative present value payback and the end state CPVRR net savings for Participating Customers is also immune to FPL's actual costs for the Phase 1 SolarTogether projects because FPL has designed the SolarTogether monthly subscription rate for Participating Customers based on its forecasted cost for those projects and there is no true-up to actual costs for Participating Customers in FPL's SolarTogether proposal.

Q. DO PARTICIPATING CUSTOMERS FACE ANY RISKS UNDER FPL'S PROPOSED SOLARTOGETHER PROGRAM?

A. There are two, but both are minor. The first is if actual weather conditions over time produce much less solar energy production than the historic period that FPL used to develop its forecast of solar energy production from the Phase 1 SolarTogether

projects. However, there is no evidence that over an extended period of time that this will be a risk of any significance.

The second risk is that several years into the SolarTogether Program the Commission could potentially make material changes to the monthly subscription rate and/or subscription credit that ruins the economics of the SolarTogether Program for Participating Customers. However, this is a risk of no significance given that (i) FPL designed the SolarTogether Program to provide a payback to Participating Customers within seven years regardless of the actual cost of the Phase 1 SolarTogether projects and the actual fuel clause savings provided by the Phase 1 SolarTogether projects, and (ii) Participating Customers can terminate participation at any time after their initial month of participation. The bottom line is that, given the seven-year or less payback and the nearly complete lack of risk, participation in FPL's proposed SolarTogether Program is a good way for Participating Customers to lower their electric bills regardless of any interest those customers may have in receiving solar power. Based on this lack of risk and seven-year or less payback, it is not surprising FPL was able to secure reservations for approximately 1,100 MW of the Phase 1 SolarTogether projects from C&I-G customers during its pre-registration process.

Q. YOU HAVE ILLUSTRATED HOW ATTRACTIVE PARTICIPATION IN FPL'S PROPOSED SOLARTOGETHER PROGRAM IS TO FPL'S CUSTOMERS REGARDLESS OF THEIR INTEREST IN RECEIVING SOLAR POWER. HOW DOES FPL'S PROPOSED SOLARTOGETHER PROGRAM AFFECT FPL'S NON-PARTICIPATING CUSTOMERS?

A. In stark contrast to the Participating Customers, FPL's Non-Participating Customers are worse off under FPL's proposed SolarTogether proposal than FPL's customers as a whole (i.e., Participating Customers and Non-Participating Customers combined). In addition, Non-Participating Customers continue to bear all of the risks associated with costs and benefits related to FPL's Phase 1 SolarTogether projects except for the level of solar energy production by the facilities.

Q. PLEASE EXPLAIN.

A. Under FPL's proposed SolarTogether Program, FPL proposes the following rate treatment for Non-Participating Customers:

- The actual costs of the Phase 1 SolarTogether projects be included in FPL's rate base in FPL's next base rate proceeding;
- The actual reservation charges collected by FPL from Participating Customers be applied as a revenue credit against FPL's base rate revenue requirement in its next base rate proceeding; and
- The actual subscription credits paid out to Participating Customers be recovered by FPL from its Non-Participating Customers through FPL's fuel clause.

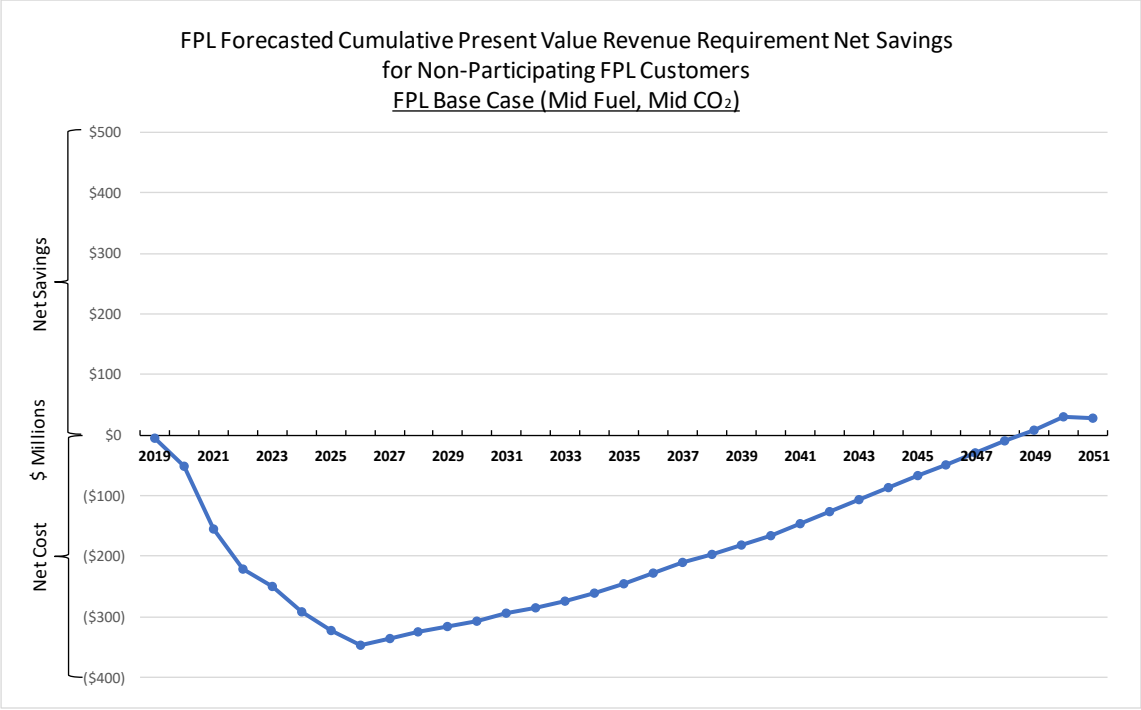
It should be noted that FPL's actual fuel and emission cost savings from the Phase 1 SolarTogether projects would flow back to FPL's Non-Participating Customers

through FPL's fuel clause; however, it would of course be offset by the subscription credits paid to Participating Customers under FPL's proposal.

Q. CAN YOU PLOT FPL'S FORECASTED YEAR-BY-YEAR CPVRR NET SAVINGS FROM ITS PHASE 1 SOLARTOGETHER PROJECTS FOR FPL'S NON-PARTICIPATING CUSTOMERS UNDER ITS PROPOSAL?

A. Yes. The information for the necessary calculations was provided in FPL's response to Staff's Interrogatory No. 79. I have performed the necessary calculations and have plotted FPL's year-by-year forecasted CPVRR net savings for Non-Participating Customers under FPL's base case assumptions in Figure JRD-4. I also present this information in tabular form in Exhibit JRD-4.

Figure JRD-4



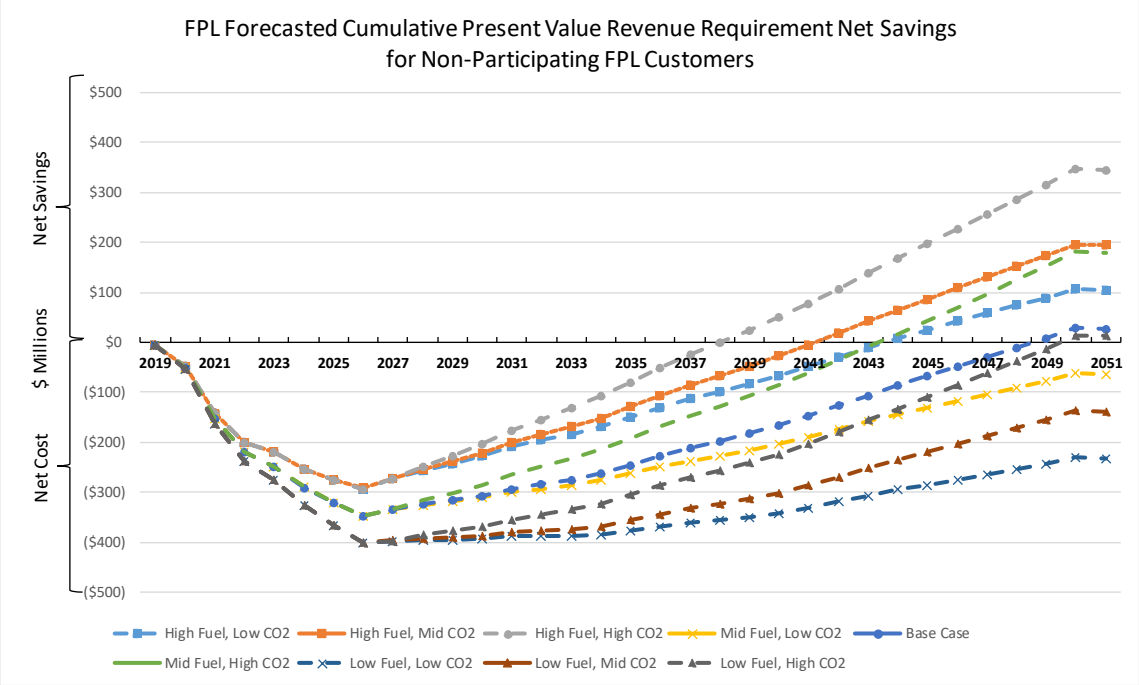
Source: FPL Response to Staff Interrogatory No. 79.

As can be seen from comparing Figure JRD-4 to my earlier Figure JRD-1, FPL's Non-Participating Customers are worse off under FPL's proposal than FPL's customers as a whole. Specifically, FPL's Non-Participating Customers – those customers who either do not have the opportunity to participate or choose not to participate – do not see a cumulative present value payback under FPL's base case assumptions until 2049 – 4 years later than FPL's customers as a whole and 22 years later than the Participating Customers. The situation becomes even more problematic when FPL's sensitivity cases are examined.

Q. CAN YOU PLOT FPL'S FORECASTED YEAR-BY-YEAR CPVRR NET SAVINGS FOR FPL'S NON-PARTICIPATING CUSTOMERS FOR FPL'S EIGHT SENSITIVITY CASES IN ADDITION TO FPL'S BASE CASE?

A. Yes. I have done so in figure JRD-5 below using the information provided in FPL's response to Staff's Interrogatory No. 79. I also present this information in tabular form in Exhibit JRD-5.

Figure JRD-5



Source: FPL Response to Staff Interrogatory No. 79.

Focusing on FPL's base case and its three sensitivity cases that do not utilize either its high natural gas or high CO_2 emission price assumptions for the reasons I discussed earlier in my testimony, the end-state CPVRR net savings for Non-Participating Customers range from a CPVRR net loss of $232 million under FPL's low fuel and low CO2 emission cost case to a CPVRR net savings of $28 million under FPL's base case. This is dramatically worse than the situation for Participating Customers, whose CPVRR net savings are immune to natural gas and CO2 emission price swings (see Figure JRD-3). It is also significantly worse than for FPL's customers as a whole, whose CPVRR net savings range from a CPVRR net loss of $121 million to a CPVRR net savings of $139 million for the four FPL cases I have focused upon (see Figure JRD-2). It must be emphasized again that the cost-effectiveness test

proposed by FPL is not appropriate for use in approving the SolarTogether Program or the addition of the associated generation assets.

Q. WHAT DO YOU CONCLUDE FROM YOUR ANALYSIS ABOVE OF FPL'S PROPOSED SOLARTOGETHER PROGRAM?

A. As noted earlier in my testimony, a reasonable voluntary solar program is one in which Participating Customers take on sufficient cost and risk for a solar project, such that it substantially reduces the cost and risk faced by the Non-Participating Customers versus what those Non-Participating Customers would be exposed to absent the voluntary solar program. This is the complete opposite of what will occur under FPL's proposed SolarTogether Program if it is subsequently approved. Instead of the SolarTogether Program lowering the net cost and risk associated with pursuing the Phase 1 SolarTogether Projects for Non-Participating Customers, the SolarTogether program would instead increase those net costs and risks, as is evidenced by comparing year-by-year CPVRR net savings in Figure JRD-5 for the Non-Participating customers to year-by-year CPVRR net savings in Figure JRD-2 for the FPL's customers as a whole (i.e., the Participating Customers and the Non-Participating Customers combined).

In addition, Participating Customers under FPL's Solar Together Program are not paying a premium in order to access solar power. Instead, they are receiving a nearly guaranteed CPVRR rate reduction within seven years of beginning participation and a nearly guaranteed amount of additional CPVRR rate savings for the remaining 23 years of the participation thereafter. As such, participation in the program is highly

attractive as a way to lower a customer's electric bill regardless of the customer's interest in fostering solar power development. However, this comes at the expense of FPL's Non-Participating Customers, as noted above. This is completely counter to a reasonable voluntary solar program where Participating Customers would pay a premium (in terms of the costs and risks assigned to them) over what the Non-Participating Customers would pay in order to help foster the development of solar power. Instead, under FPL's proposal, the Non-Participating Customers would subsidize Participating Customers by continuing to be saddled with nearly all of the risks associated with the Phase 1 SolarTogether projects and having a lower likelihood of realizing a cumulative present value payback from the projects than if the projects were simply pursued on behalf of FPL's customers as a whole.

Finally, FPL's side of the equation under its proposal also needs to be considered. Under the proposal, FPL will accelerate its construction of solar generation facilities in 2020 and 2021 by at least 590 MW_{AC}[6], which will allow it to accelerate the growth of its rate base, and, in turn, accelerate the growth in the total return earned by its shareholders. Furthermore, it is important to remember that, similar to the subscription credits paid to Participating Customers under the SolarTogether Program, the return earned by FPL's shareholders is essentially immune to fuel and CO_2 emission price swings given that FPL's fuel clause protects FPL, but not its customers, from such price swings.

In summary, for the reasons I have discussed, FPL's proposed SolarTogether Program does not provide a reasonable allocation of benefits, costs and risks between

[6] 590 MW_{AC} = 1,490 MW_{AC} (Phase 1 SolarTogether projects) – 900 MW_{AC} (FPL 2019 Ten-Year Site Plan projects with no SolarTogether Program).

FPL, the Participating Customers and the Non-Participating Customers. As such, the program is unreasonable and should not be approved by the Commission.

V. CONCLUSIONS AND RECOMMENDATIONS

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.

A. I conclude the following:

- FPL has not shown it needs additional resources in 2020 and 2021 and that its 1,490 MW_{AC} of proposed solar generation facilities under Phase 1 of its SolarTogether Program would be the most cost effective solution to reliably meet such an additional resource need for FPL's customers as a whole absent the implementation of a reasonable voluntary solar program to support the facilities;

- FPL has not shown its proposed construction of all of the Phase 1 SolarTogether projects is the most cost effective manner to reliably add 1,490 MW_{AC} of new solar generation for either FPL's Participating Customers or the Non-Participating Customers, assuming this solar generation was needed; and

- FPL's proposed SolarTogether Program does not provide a reasonable allocation of the benefits, costs and risks of the proposed SolarTogether Phase 1 projects between FPL, the Participating Customers and the Non-Participating customers.

For the above reasons, I recommend that the Commission deny FPL's petition for its proposed SolarTogether Program at this time including any approval related to increasing rate base sought by FPL for the proposed Phase 1 SolarTogether solar generation projects.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

Qualifications of James R. Dauphinais

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A James R. Dauphinais. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017, USA.

Q PLEASE STATE YOUR OCCUPATION.

A I am a consultant in the field of public utility regulation and a Managing Principal with the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A I graduated from Hartford State Technical College in 1983 with an Associate's Degree in Electrical Engineering Technology. Subsequent to graduation, I was employed by the Transmission Planning Department of the Northeast Utilities Service Company[1] as an Engineering Technician.

While employed as an Engineering Technician, I completed undergraduate studies at the University of Hartford. I graduated in 1990 with a Bachelor's Degree in Electrical Engineering. Subsequent to graduation, I was promoted to the position of Associate Engineer. Between 1993 and 1994, I completed graduate level courses in the study of power system analysis, power system transients and power system protection

[1]In 2015, Northeast Utilities changed its name to Eversource Energy.

through the Engineering Outreach Program of the University of Idaho. By 1996 I had been promoted to the position of Senior Engineer.

In the employment of the Northeast Utilities Service Company, I was responsible for conducting thermal, voltage and stability analyses of the Northeast Utilities' transmission system to support planning and operating decisions. This involved the use of load flow, power system stability and production cost computer simulations. It also involved examination of potential solutions to operational and planning problems including, but not limited to, transmission line solutions and the routes that might be utilized by such transmission line solutions. Among the most notable achievements I had in this area include the solution of a transient stability problem near Millstone Nuclear Power Station, and the solution of a small signal (or dynamic) stability problem near Seabrook Nuclear Power Station. In 1993 I was awarded the Chairman's Award, Northeast Utilities' highest employee award, for my work involving stability analysis in the vicinity of Millstone Nuclear Power Station.

From 1990 to 1996, I represented Northeast Utilities on the New England Power Pool Stability Task Force. I also represented Northeast Utilities on several other technical working groups within the New England Power Pool ("NEPOOL") and the Northeast Power Coordinating Council ("NPCC"), including the 1992-1996 New York-New England Transmission Working Group, the Southeastern Massachusetts/Rhode Island Transmission Working Group, the NPCC CPSS-2 Working Group on Extreme Disturbances and the NPCC SS-38 Working Group on Interarea Dynamic Analysis.

This latter working group also included participation from a number of ECAR, PJM and VACAR utilities.

From 1990 to 1995, I also acted as an internal consultant to the Nuclear Electrical Engineering Department of Northeast Utilities. This included interactions with the electrical engineering personnel of the Connecticut Yankee, Millstone and Seabrook nuclear generation stations and inspectors from the Nuclear Regulatory Commission ("NRC").

In addition to my technical responsibilities, from 1995 to 1997, I was also responsible for oversight of the day-to-day administration of Northeast Utilities' Open Access Transmission Tariff. This included the creation of Northeast Utilities' pre-FERC Order No. 889 transmission electronic bulletin board and the coordination of Northeast Utilities' transmission tariff filings prior to and after the issuance of Federal Energy Regulatory Commission ("FERC" or "Commission") FERC Order No. 888. I was also responsible for spearheading the implementation of Northeast Utilities' Open Access Same-Time Information System and Northeast Utilities' Standard of Conduct under FERC Order No. 889. During this time, I represented Northeast Utilities on the Federal Energy Regulatory Commission's "What" Working Group on Real-Time Information Networks. Later I served as Vice Chairman of the NEPOOL OASIS Working Group and Co-Chair of the Joint Transmission Services Information Network Functional Process Committee. I also served for a brief time on the Electric Power Research Institute facilitated "How" Working Group on OASIS and the North American Electric Reliability Council facilitated Commercial Practices Working Group.

In 1997, I joined the firm of Brubaker & Associates, Inc. The firm includes consultants with backgrounds in accounting, engineering, economics, mathematics, computer science and business. Since my employment with the firm, I have filed or presented testimony before the Federal Energy Regulatory Commission in Consumers Energy Company, Docket No. OA96-77-000; Midwest Independent Transmission System Operator, Inc., Docket No. ER98-1438-000; Montana Power Company, Docket No. ER98-2382-000; Inquiry Concerning the Commission's Policy on Independent System Operators, Docket No. PL98-5-003; SkyGen Energy LLC v. Southern Company Services, Inc., Docket No. EL00-77-000; Alliance Companies, et al., Docket No. EL02-65-000, et al.; Entergy Services, Inc., Docket No. ER01-2201-000; Remedying Undue Discrimination through Open Access Transmission Service, Standard Electricity Market Design, Docket No. RM01-12-000; Midwest Independent Transmission System Operator, Inc., Docket No. ER10-1791-000; NorthWestern Corporation, Docket No. ER10-1138-001, et al.; Illinois Industrial Energy Consumers v. Midcontinent Independent System Operator, Inc., Docket No. EL15-82-000; Midcontinent Independent System Operator, Inc., Docket No. ER16-833-000; Midcontinent Independent System Operator, Inc., Docket No. ER17-284-000; and Midcontinent Independent System Operator, Inc. and Ameren Services Company Docket No. ER18-463-000. I have also filed or presented testimony before the Alberta Utilities Commission, Colorado Public Utilities Commission, Connecticut Department of Public Utility Control, the Florida Public Service Commission, the Idaho Public Service Commission; Illinois Commerce Commission, the Indiana Utility Regulatory

Commission, the Iowa Utilities Board, the Kentucky Public Service Commission, the Louisiana Public Service Commission, the Michigan Public Service Commission, the Missouri Public Service Commission, the Montana Public Service Commission, the New Mexico Public Regulation Commission, the Council of the City of New Orleans, the Oklahoma Corporation Commission, the Public Utility Commission of Texas, the Wisconsin Public Service Commission, the Wyoming Public Service Commission and various committees of the Illinois, Missouri and South Carolina State Legislatures. This testimony has been given regarding a wide variety of issues including, but not limited to, ancillary service rates, avoided cost calculations, certification of public convenience and necessity, class cost of service, cost allocation, fuel adjustment clauses, fuel costs, generation interconnection, interruptible rates, market power, market structure, off-system sales, prudency, purchased power costs, resource planning, rate design, retail open access, standby rates, transmission losses, transmission planning, transmission rates and transmission line routing.

I have also participated on behalf of clients in the Southwest Power Pool Congestion Management System Working Group, the Alliance Market Development Advisory Group and several committees and working groups of the Midcontinent Independent System Operator, Inc. ("MISO"), including the Congestion Management Working Group; Economic Planning Users Group; Loss of Load Expectation Working Group; Planning Subcommittee; Regional Expansion, Criteria and Benefits Working Group and Resource Adequacy Subcommittee (formerly the Supply Adequacy Working Group). I am currently a member of the MISO Advisory Committee in the end-use

customer sector on behalf of industrial customer groups in Illinois, Louisiana and Texas. I am also the past Chairman of the Issues/Solutions Subgroup of the MISO Revenue Sufficiency Guarantee ("RSG") Task Force.

In 2009, I completed the University of Wisconsin-Madison High Voltage Direct Current ("HVDC") Transmission course for Planners that was sponsored by MISO. I am a member of the Power and Energy Society ("PES") of the Institute of Electrical and Electronics Engineers ("IEEE").

In addition to our main office in St. Louis, the firm also has branch offices in Phoenix, Arizona and Corpus Christi, Texas.

SUPPLEMENTAL TESTIMONY

OF

JAMES R. DAUPHINAIS

On Behalf of the Office of Public Counsel

Before the

Florida Public Service Commission

Docket No. 20190061-EI

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. James R. Dauphinais. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q. ARE YOU THE SAME JAMES R. DAUPHINAIS WHO FILED DIRECT TESTIMONY ON BEHALF OF FLORIDA OFFICE OF PUBLIC COUNSEL ("OPC") REGARDING THE ORIGINAL CASE THAT FPL FILED?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY IN THIS DOCKET?

A. On September 23, 2019, Florida Power & Light Company ("FPL" or "Company") filed what it called rebuttal testimony in this proceeding that: (i) made new claims regarding its proposed SolarTogether Program that were not made in either its March 13, 2019 petition ("Petition") or its July 29, 2019 direct testimony; (ii)

substantially changed the economic analysis FPL previously used in its attempt to justify its proposed SolarTogether Program; and (iii) substantially changed the terms and conditions of its proposed SolarTogether Program. This is essentially a new case. My supplemental testimony herein addresses FPL's new claims made in this new case, as well as its changes to its economic analysis and the proposed terms and conditions of the SolarTogether Program.

In addition, on October 9, 2019, FPL, Southern Alliance for Clean Energy, Walmart, Inc., and Vote Solar ("Joint Movants") filed a Joint Motion to Approve Settlement ("Joint Motion"), with the Joint Movants' non-unanimous Stipulation and Settlement Agreement attached as Exhibit A. My supplemental testimony also responds to the Joint Movants' Exhibit A.

The fact that I do not address any other particular issues in my testimony or am silent with respect to any portion of FPL's rebuttal testimony or the Joint Motion should not be interpreted as an approval of any position taken by FPL or any of the other Joint Movants.

Q. IN GENERAL, DO YOU OPPOSE THE ADDITION OF SOLAR GENERATION FACILITIES?

A. No, I do not oppose the addition of solar generation facilities, so long as the additional solar generation facilities in question are either:

- Needed to provide reliable electric service at the lowest reasonable cost; or

- Supported by subsidies from the utility, the customers in a voluntary solar program or both, such that the customers <u>not</u> participating in the voluntary solar program are not economically harmed by the pursuit of the additional solar generation facilities on behalf of the customers who are allowed to voluntarily participate in the program.

Later in this testimony, I will explain why FPL's proposed solar generation facilities for its SolarTogether Program, with the modifications presented in FPL's rebuttal testimony and Joint Movants' Exhibit A, fail to meet either of these two criterion.

Q. IN GENERAL, DO YOU OPPOSE VOLUNTARY COMMUNITY SOLAR PROGRAMS?

A. No, I do not, provided the voluntary community solar program in question reduces the costs and risks faced by customers not participating in the program versus what they would be exposed to absent the program. This means that customers not participating in the program should not be any worse off economically under the program than they would be if the program did not exist. This is critical because, if this criterion is not met, the customers not participating in program will be forced to involuntarily subsidize the customers who are participating in the program and/or pay the utility for facilities that are uneconomic.

Later in my testimony, I will address why it is my opinion that FPL's proposed SolarTogether Program, with the modifications presented in FPL's rebuttal testimony and Joint Movants' Exhibit A, fails to meet this criterion.

Q. PLEASE DESCRIBE WHAT YOU REVIEWED AND ANALYZED IN PREPARING YOUR SUPPLEMENTAL TESTIMONY.

A. In addition to the materials I reviewed and analyzed for my direct testimony, I also reviewed and analyzed: (i) FPL's rebuttal testimony and exhibits; (ii) the Joint Motion; and (iii) FPL's responses to Interrogatories and Requests for Production of

Documents since the date my direct testimony was filed in this proceeding. I applied my knowledge and experience in conducting my review and analyses of the foregoing.

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.

A. I conclude the following:

- Despite the claims in FPL's rebuttal testimony, FPL has failed to reasonably demonstrate that the solar generation facilities for its proposed SolarTogether Program, even with the modifications presented in the new case in FPL's rebuttal testimony and Joint Movants' Exhibit A, are needed to provide reliable electric service at the lowest reasonable cost; and

- Despite the claims in FPL's rebuttal testimony, FPL has failed to reasonably demonstrate that, even with the modifications presented in the new case contained in FPL's rebuttal testimony and Joint Movants' Exhibit A, Non-Participating Customers[1] are not any worse off economically under the proposed SolarTogether Program than they would be if the proposed SolarTogether Program was not pursued. Under the SolarTogether Program, I estimate Non-Participating Customers would, through the money they are required to pay FPL, pay a subsidy of approximately $133 million on a Cumulative Present Value Revenue Requirement ("CPVRR") basis to support the Participating Customers' use of the SolarTogether Program. As a result, Non-Participating Customers would be substantially worse off under the SolarTogether Program than they would be if the SolarTogether Program was not in place.

For the above reasons, I recommend that the Commission deny FPL's Petition for its SolarTogether Program under either the original case or the new case filings, including any approval related to the increased rate base sought by FPL in this proceeding for its proposed Phase 1 SolarTogether solar generation facilities.

[1] In my supplemental testimony, I am using the same definitions for Participating Customers and Non-Participating Customers as I did in my direct testimony on FPL's original case. Specifically, Participating Customers are those FPL customers who can and do voluntarily choose to subscribe to FPL's proposed SolarTogether Program. This term is also used by FPL. Non-Participating Customers are those FPL customers who have either chosen not to subscribe to the SolarTogether Program or are unable to subscribe to the SolarTogether Program. As I explained in my direct testimony, FPL uses the confusing term "general body of customers" when referring to Non-Participating Customers. Also consistent with my direct testimony, I use the term "FPL's customers as a whole" when referring to Participating and Non-Participating Customers combined. (Dauphinais Direct at 8-9).

II. THE QUESTION OF NEED

Q. DID FPL IN ITS PETITION AND DIRECT TESTIMONY IN ITS ORIGINAL CASE EVER CLAIM THE PROPOSED SOLARTOGETHER GENERATION FACILITIES ARE NEEDED TO PROVIDE RELIABLE ELECTRIC SERVICE TO ITS CUSTOMERS AT THE LOWEST REASONABLE COST?

A. No, it did not. Nowhere in FPL's Petition or direct testimony in its original case did FPL claim it needs to pursue the SolarTogether generation facilities to provide reliable electric service at the lowest reasonable cost to FPL's customers as a whole. What FPL did claim is that: (i) it is proposing the SolarTogether Program "to meet the substantial demand from customers who are seeking expanded access to solar energy, including those who do not wish to or cannot install their own solar system through net metering" and (ii) the SolarTogether generation facilities would eliminate the need for certain future generation projects (Valle Direct at 6 and Enjamio Direct at 6). In addition, in response to discovery, FPL indicated that it would re-evaluate its pursuit of SolarTogether Projects 4 and 5 if its proposed SolarTogether Program is not approved (FPL's response to Staff's Interrogatory No. 100).[2] Furthermore, FPL indicated in discovery that the proposed SolarTogether generation facilities accelerate part of the projected solar generation capacity additions shown in its 2019 Ten-Year Site Plan ("TYSP") for the years 2022 to 2024 (FPL's response to Citizens' Interrogatory No. 8).

[2] In Exhibit JRD-12, I have provided a copy of all of FPL's public responses to interrogatories and requests for production of documents to which I cite in my supplemental testimony.

Q. WHAT DOES FPL CLAIM IN ITS REBUTTAL TESTIMONY IN ITS NEW CASE WITH RESPECT TO WHETHER THE SOLARTOGETHER GENERATION FACILITIES ARE NEEDED?

A. FPL now claims it has demonstrated a need for the solar generation facilities associated with FPL's proposed SolarTogether Program through its responses to Staff's interrogatories. It also provided its Exhibit JE-5 in an effort to substantiate its new claim that the SolarTogether generation facilities are needed (Enjamio Rebuttal at 3).

Q. HOW DO YOU RESPOND TO FPL'S CLAIM?

A. First, it is important to note that FPL is the party that has the burden to demonstrate in its direct testimony whether its proposed solar generation facilities are needed to provide reliable electric service at the lowest reasonable cost. As such, if FPL wanted to make such a claim, it had the responsibility to make and support such a claim in its direct testimony. It did not do so, and instead, indicated in response to discovery to its Petition and direct testimony that: (i) FPL may not necessarily pursue all of its proposed SolarTogether generation facility projects if the SolarTogether Program is not approved by the Commission and (ii) the SolarTogether generation facilities represent an acceleration of projected FPL solar generation additions that are in its TYSP. This posture undermines any claim that need is the motivation for the projects.

Furthermore, FPL's Exhibit JE-5 does not actually support FPL's need claim. In Table JRD-1 below, I compare the capacity that FPL in Exhibit JE-5 forecasts it needs to maintain what it describes as a minimum planning reserve margin of 20%, versus capacity provided by the proposed SolarTogether generation facilities.

TABLE JRD-1

SolarTogether Phase 1 Capacity in Excess of FPL's Forecasted Need

Year	FPL's Forecasted Summer MW Needed to Meet 20% Reserve Margin	Summer MW that would be Provided by SolarTogether	SolarTogether Summer MW in Excess of FPL Forecasted Need	SolarTogether Nameplate MW_{AC} in Excess of FPL Forecasted Need
2020	19	220	201	408
2021	252	735	483	979
2022	400	735	335	679
2023	764	735	0	0
2024	1,216	735	0	0

As can be seen from Table JRD-1, even under FPL's own forecast, 408 MW_{AC} of the 447 MW_{AC} of SolarTogether generation projects that would enter service in 2020 would not be needed to meet what FPL suggests is the minimum planning reserve margin requirement of 20% that FPL is currently using.[3] Furthermore, only 64 MW_{AC} of the 1,043 MW_{AC} of SolarTogether generation projects that would enter service in 2021 would be needed to meet the 20% planning reserve margin requirement in 2021.

[3] The OPC takes the position that Order No. PSC-1999-2507-S-EU and its attached stipulation at paragraph 6 make it clear that the 20% minimum reserve margin planning criterion was not an unbounded minimum, but instead was essentially a target that would be maintained "for the indefinite future." While deviations could occur to "adapt to relevant circumstances," the Commission reserved the right to take action in response to any changes in the planning criteria. (*Id.* at 9.) In other words, there is a presumption that the 20% is a target reserve margin planning criterion, and neither FPL nor any other utility has unbridled discretion to make the reserve margin planning criterion any number above 20%. My reading of the stipulation attached to Order No. PSC-1999-2507-S-EU, combined with my planning experience, leads me to believe that this is the correct view of how the reserve margin should operate.

In addition, in 2022, FPL is forecasting that only 364 MW_{AC} of that 1,043 MW_{AC} of SolarTogether generation would be needed to meet the 20% planning reserve margin requirement.

Given all of the foregoing, the Phase 1 SolarTogether generation facilities should only be considered eligible for approval by the Commission if FPL can reasonably demonstrate that Non-Participating Customers will not be economically harmed by this accelerated deployment of projected solar generation additions by FPL. Otherwise, as I noted earlier, Non-Participating Customers will end up subsidizing Participating Customers or, worse yet, subsidizing FPL's shareholders, by paying for investment that is both uneconomic and not needed to provide reliable electric service at the lowest reasonable cost to FPL's customers.

III. FPL's REVISED ECONOMIC ANALYSIS

Q. PLEASE BRIEFLY REVIEW THE ECONOMIC ANALYSIS CONTAINED IN FPL'S DIRECT TESTIMONY FOR THE SOLARTOGETHER GENERATION FACILITIES FOR FPL'S CUSTOMERS AS A WHOLE.

A. Under its mid-level fuel / mid-level CO_2 emission price assumptions, FPL in the economic analysis contained in its direct testimony for its original case forecasted the Phase 1 SolarTogether generation projects would provide a net CPVRR savings for FPL's customers as a whole of $139 million at the end of the 30-year book life of the projects in 2051, with a forecasted CPVRR payback for FPL's customers as a whole occurring in 2045 – approximately 24 years after the last of the Phase 1 SolarTogether

generation projects would enter service (Dauphinais Direct at 14-15). Additionally, in discovery, FPL provided the results of a sensitivity analysis it performed with respect to its fuel and CO_2 emission price assumptions. That sensitivity analysis showed that, for the range of assumption variations examined by FPL, the forecasted net CPVRR in 2051 for FPL's customers as a whole ranged from a net cost of $121 million for FPL's low fuel / low CO_2 emission price case to a net savings of $456 million for FPL's high fuel / high CO_2 emission price case (Dauphinais Direct 16-18).

Given these results, and the fact that FPL's extensive recent investments in its SoBRA solar projects likely have similar borderline economics, I concluded that the Phase 1 SolarTogether generation projects are not FPL's most cost effective solution for FPL's customers as a whole to meet FPL's current reliability needs, assuming the Phase 1 SolarTogether Projects are needed for reliability (Dauphinais Direct 18-21). I also noted that FPL failed to demonstrate in its Petition and direct testimony that the Phase 1 SolarTogether generation projects are needed for reliability (Dauphinais Direct at 21).

Q. PLEASE DESCRIBE FPL'S REVISED ECONOMIC ANALYSIS PRESENTED IN ITS NEW CASE IN ITS REBUTTAL TESTIMONY.

A. In its revised economic analysis that it presented in its new case in its rebuttal testimony, FPL made two changes. First, it decided not to seek an Allowance for Funds Used During Construction ("AFUDC") amount for SolarTogether Projects 3, 4 and 5 (Valle Rebuttal at 10, Brannen Rebuttal at 4-5, Enjamio Rebuttal at 4, and Bores Rebuttal at 3). This decreased the 30-year book life CPVRR of the Phase 1

SolarTogether projects for FPL's customers as a whole by approximately $45 million (Bores Rebuttal at 3).

Second, FPL decided to change its baseline resource addition assumptions in both its SolarTogether case and its reference No SolarTogether case to reflect a sensitivity analysis that the Commission Staff requested in Staff Interrogatory No. 190 (Enjamio Rebuttal at 4). Staff's sensitivity analysis request asked FPL to examine inclusion of the 2020 SoBRA projects and FPL's proposed Demand Side Management ("DSM") goals in both FPL's SolarTogether case and FPL's No SolarTogether reference case (Staff Interrogatory No. 190). Even though this change was made both in the SolarTogether case and the No SolarTogether reference case, it nevertheless resulted in a further $65 million decrease in the forecasted 30-year book life CPVRR of the Phase 1 SolarTogether projects for FPL's customers as a whole.

Q. HAS FPL PROVIDED ANY EXPLANATION WITH RESPECT TO WHY ADDING THE 2020 SOBRA PROJECTS AND ITS PROPOSED DSM GOALS TO BOTH THE SOLARTOGETHER CASE AND THE NO SOLARTOGETHER REFERENCE CASE WOULD CAUSE THE 30-YEAR BOOK LIFE CPVRR OF THE PHASE 1 SOLARTOGETHER PROJECTS TO FALL BY $65 MILLION FOR FPL'S CUSTOMERS AS A WHOLE?

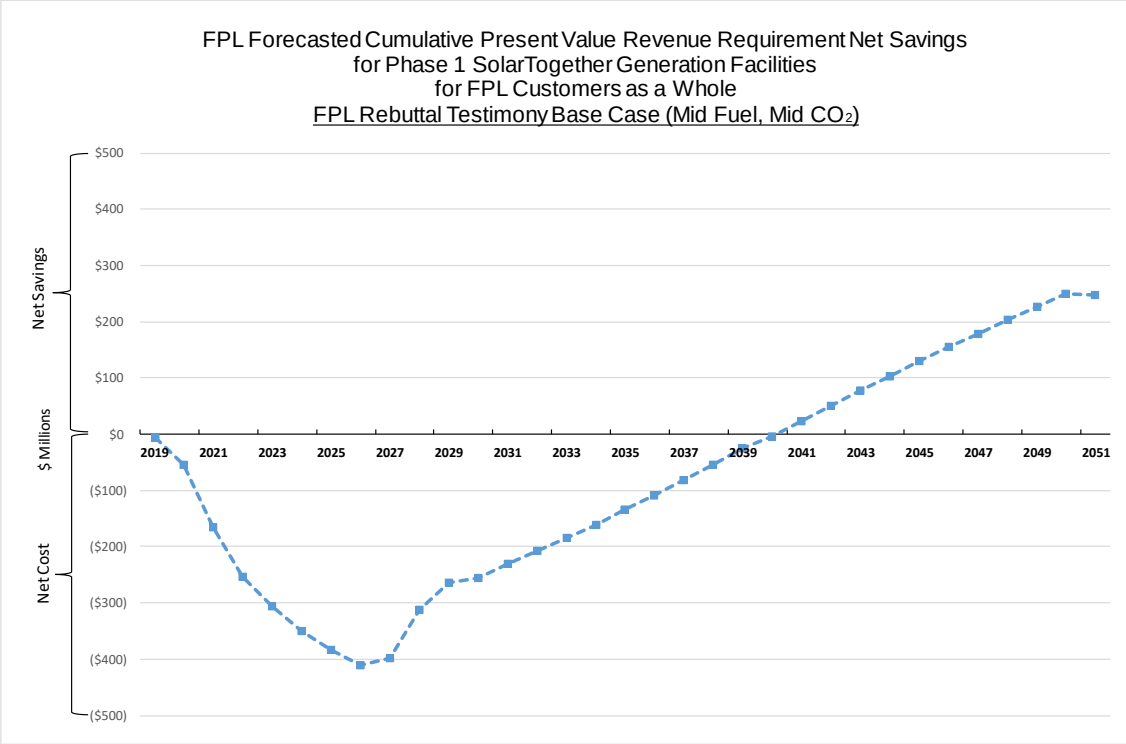
A. No, it has not. However, FPL indicated in rebuttal testimony that it used its EGEAS resource optimization model to select new future resource portfolios with the 2020 SoBRA projects and DSM goals forced in (Enjamio Rebuttal at 4). This apparently caused changes to the assumed future resource portfolios for the two cases, such that it improved the 30-year book life CPVRR economics of the SolarTogether

case by approximately $65 million versus the No SolarTogether reference case (Enjamio Rebuttal at 7 and Bores Rebuttal at 3). However, FPL has failed to explain whether this is in fact what happened, and, if so why it happened.

Q. WHEN THESE CHANGES WERE CONSIDERED TOGETHER, HOW DID IT CHANGE FPL'S FORECASTED ECONOMICS FOR THE PHASE 1 SOLARTOGETHER GENERATION PROJECTS FOR FPL'S CUSTOMERS AS A WHOLE?

A. Under its mid-level fuel / mid-level CO_2 emission price assumptions, FPL in its rebuttal testimony economic analysis forecasted that the Phase 1 SolarTogether generation projects would provide a net CPVRR savings for FPL's customers as a whole of $249 million at the end of the 30-year book life of the projects in 2051 with a forecasted CPVRR payback for FPL's customers as a whole occurring in 2041 – approximately 20 years after the last of the Phase 1 SolarTogether generation projects would enter service, as shown below in Figure JRD-6. I also present this information in tabular form in Exhibit JRD-8.

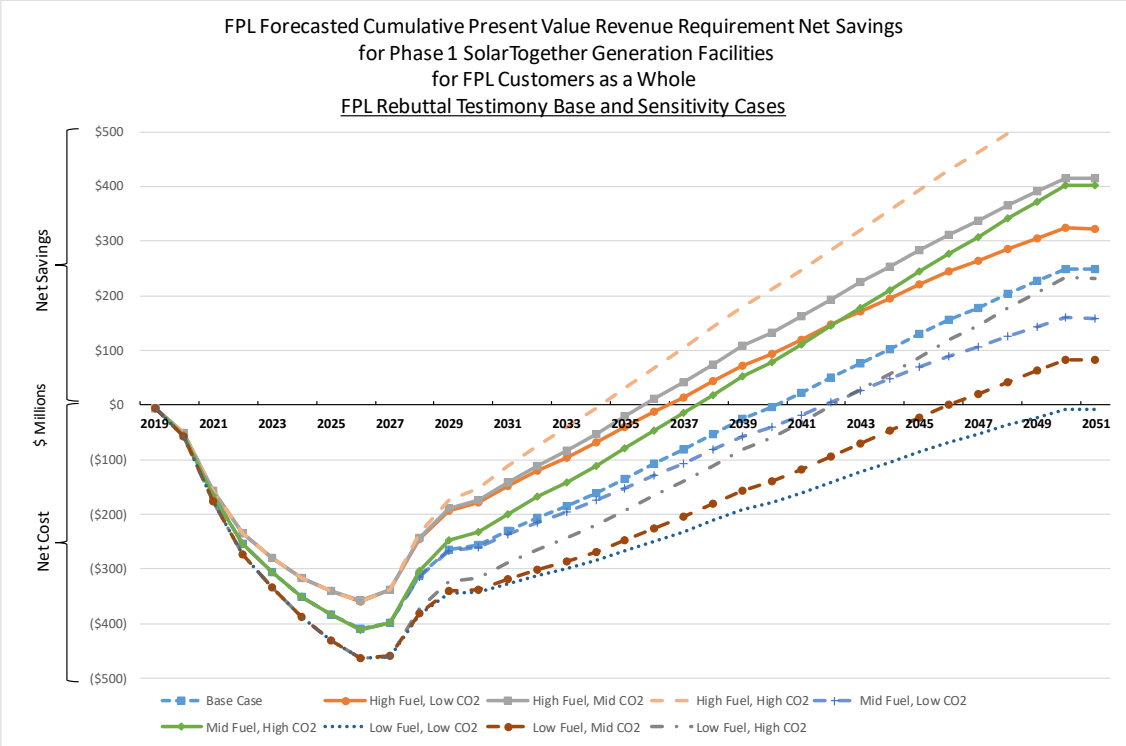
Figure JRD-6



Source: FPL Response to Staff Interrogatory No. 78 Amended.

Under its rebuttal testimony sensitivity analysis, for the range of assumption variations applied by FPL, the forecasted net CPVRR in 2051 for FPL's customers as a whole ranged from a net cost of 8 million for FPL's low fuel / low CO_2 emission price case to a net savings of $563 million for FPL's high fuel / high CO_2 emission price case, as shown below in Figure JRD-7. I also present this information in tabular form in Exhibit JRD-9.

Figure JRD-7



Source: FPL Response to Staff Interrogatory No. 78 Amended.

While FPL's revised economic analysis is improved with respect to moving the CPVRR payback year for customers as a whole forward four years and reducing the forecasted risk for customers as a whole, there is still nevertheless a risk that the Phase 1 SolarTogether generation projects, which are not needed to provide reliable electric service at the lowest reasonable cost, would cause FPL's customers as a whole to experience a net CPVRR cost over the 30-year book life of the projects. More importantly, even if the Commission were to find the above economics reasonable, the above economics are not the economics being offered to Non-Participating Customers because FPL is not proposing these projects for its customers as a whole, such that their costs and benefits of the projects would be rolled into rates and the Fuel Clause like any other FPL generation project. Instead, as I discuss further below, FPL through its proposed SolarTogether Program, is proposing to impose significantly worse economics

on Non-Participating Customers by requiring them to fund, through rates and the Fuel Clause, a net $137 million 30-year book life CPVRR payment to Participating Customers that the latter will receive through FPL's proposed SolarTogether Rider.

IV. FPL's SOLARTOGETHER PROGRAM IN REBUTTAL TESTIMONY

Q. PLEASE BRIEFLY DESCRIBE HOW FPL MODIFIED ITS PROPOSED SOLARTOGETHER PROGRAM IN ITS REBUTTAL TESTIMONY.

A. In its rebuttal testimony, FPL changed the allocation of the cost and benefits between Participating and Non-Participating Customers of its proposed Phase 1 SolarTogether generation projects. Specifically, under FPL's rebuttal testimony, Participating Customers are paid 55% of the net mid-level fuel / mid-level CO_2 price forecasted benefit of the Phase 1 SolarTogether generation projects (Bores Rebuttal at 5). This amount is only subject to adjustment for differences between actual and forecasted energy production by the SolarTogether generation projects and the level of total customer subscription to the SolarTogether Program.

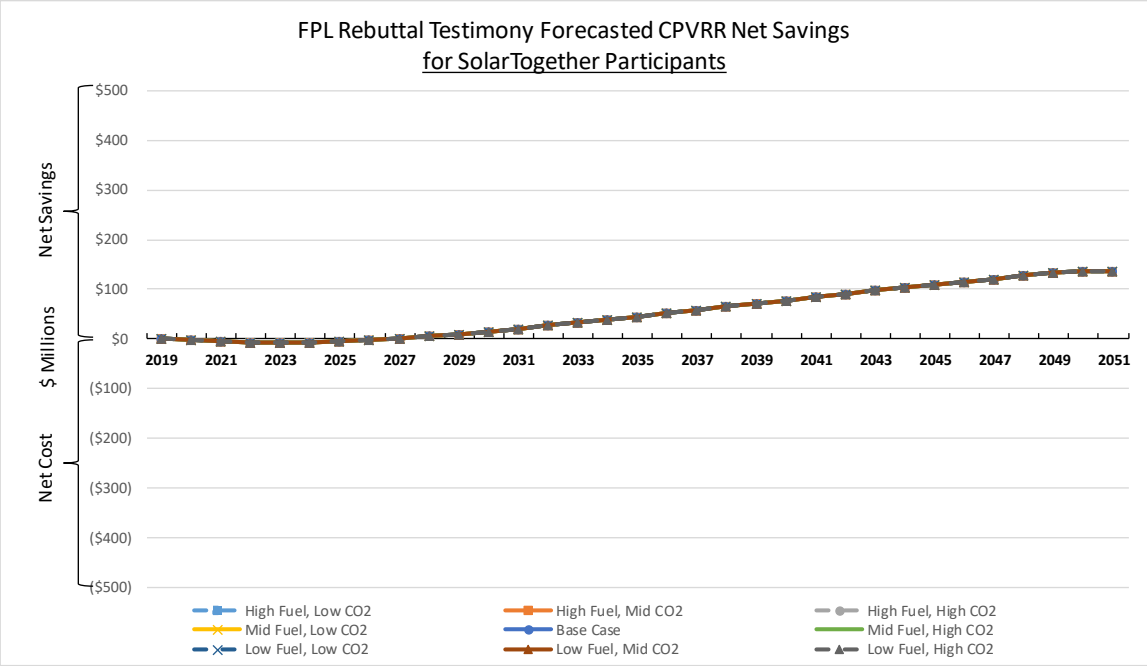
Non-Participating Customers are assigned the actual costs and benefits of the Phase 1 SolarTogether generation projects, less what is paid out on a net basis to Participating Customers. If the actual costs and benefits of the Phase 1 SolarTogether generation projects turned out to be exactly equal to FPL's mid-level fuel / mid-level CO_2 price forecasted costs and benefits for the generation projects, Non-Participating Customers would receive 45% of the forecasted net benefit of the Phase 1 SolarTogether generation projects. However, the actual costs and benefits for the projects can greatly deviate from FPL's mid-level fuel / mid-level CO_2 price forecasted costs and benefits for the projects because the actual results are very sensitive to fuel and emission prices

and also affected by actual construction costs, actual O&M costs, actual energy production and actual program subscription levels.

Q. WHAT ARE THE ECONOMICS FOR THE REBUTTAL TESTIMONY VERSION OF FPL'S PROPOSED SOLARTOGETHER PROGRAM UNDER FPL'S REVISED ECONOMIC ANALYSIS?

A. From FPL's amended response to Staff Interrogatory No. 79, I have performed the necessary calculations and have plotted FPL's rebuttal testimony forecasted year-by-year CPVRR net savings for the Phase 1 SolarTogether generation projects for Participating Customers for FPL's mid-level fuel / mid-level CO_2 price base case and FPL's eight sensitivity cases in Figure JRD-8 below. I also present this information in tabular form in Exhibit JRD-10.

Figure JRD-8

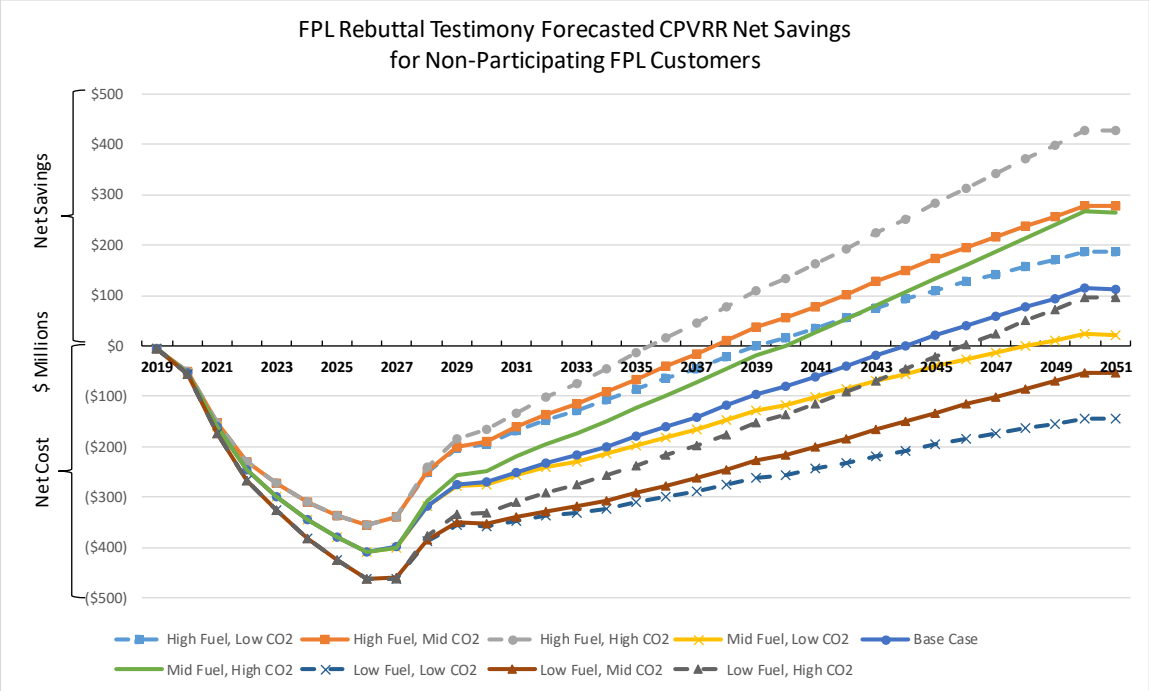


Source: FPL Response to Staff Interrogatory No. 79 Amended.

As can be seen from Figure JRD-8 above, subject only to variation in actual solar energy production from forecast and the actual level of customer subscription, Participating Customers will receive a net $137 million benefit on a 30-year book life CPVRR basis and will receive a CPVRR payback in 2027 – less than 6 years after the last of the Phase 1 SolarTogether generation projects would enter service. As can be clearly seen, neither the net amount received by the Participating Customers nor the CPVRR payback year for Participating Customers is sensitive in any way to fuel and emission prices. Nor are they sensitive to the actual construction costs and actual O&M costs for the Phase 1 SolarTogether generation projects. **As a result, Participating Customers are not exposed to any risk from fluctuating fuel and emission prices or cost overruns associated with the SolarTogether generation projects.**

The economics for Non-Participating Customers for FPL's mid-level fuel / mid-level CO_2 price base case and FPL's eight other sensitivity cases are presented below in Figure JRD-9. I also present this information in tabular form in Exhibit JRD-11.

Figure JRD-9



Source: FPL Response to Staff Interrogatory No. 79 Amended.

There are several striking things about these forecasted values for Non-Participating Customers. Specifically:

- **<u>Disparate Treatment for Non-Participants</u>:**
  Unlike for Participating Customers, the forecasted net CPVRR benefit for Non-Participating Customers is highly sensitive to variations in fuel and emission prices.

- **<u>Significantly Delayed Payback for Non-Participants</u>:**
  The forecasted CPVRR payback year for Non-Participating Customers is significantly later than for Participating Customers, ranging from 2036 (15 years) for FPL's high-fuel / high-CO_2 price case to <u>never</u> in FPL's Low-Fuel / Mid-CO_2 price and Low-Fuel / Low-CO_2 price cases. **Under the latter two sensitivity cases, Non-Participating Customers would be facing a 30-year book life net CPVRR <u>cost</u> of between $54 million and $145 million rather than a net CPVRR benefit.**

- **<u>Significantly Worse Economics for Non-Participants</u>:**
  As can be seen by a comparison of my Figure JRD-9 to my Figure JRD-7, the economics are significantly worse for Non-Participating Customers under FPL's rebuttal testimony SolarTogether Program than they would be for those

customers if FPL instead pursued the SolarTogether generation projects as a normal generation addition for its customers as a whole.

With respect to the last point, if the SolarTogether generation projects were pursued as normal FPL generation projects, Non-Participating Customers would have a forecasted CPVRR payback within 20 years (in 2041) under FPL's mid-level fuel / mid-level CO_2 price assumptions. With the projects pursued through the SolarTogether Program, the CPVRR payback for Non-Participating Customers is not until 24 years (in 2045). Furthermore, under the most adverse FPL fuel and emission price assumptions (low-fuel / low-CO_2 prices), if the SolarTogether generation projects were pursued as normal FPL generation projects, Non-Participating Customers have a forecasted 30-year book life net CPVRR cost of only $8 million for the projects. With the projects pursued through the SolarTogether Program, Non-Participating Customers have a forecasted 30-year book life net CPVRR cost of $145 million for the projects. Table JRD-2 below provides a more complete comparison of the adverse impact on Non-Participating Customers of FPL pursuing the SolarTogether projects through its proposed SolarTogether Program rather than as normal FPL generation projects.

TABLE JRD-2

	Normal Generation Project		SolarTogether Program Project		Adverse Impact to Non-Participating Customers Due to SolarTogether Program	
Scenario	**CPVRR Net Savings (millions)**	**CPVRR Payback Time (years)**	**CPVRR Net Savings (millions)**	**CPVRR Payback Time (years)**	**CPVRR Net Savings Decrease (millions)**	**Increase in Time to CPVRR Payback (years)**
Low Fuel Low CO_2	($8)	No Payback	($145)	No Payback	$137	No Payback
Low Fuel Mid CO_2	$82	26	($54)	No Payback	$137	No Payback
Low Fuel High CO_2	$232	22	$96	25	$137	3
Mid Fuel Low CO_2	$159	21	$22	28	$137	7
Mid Fuel Mid CO_2	$249	20	$112	24	$137	4
Mid Fuel High CO_2	$401	17	$265	19	$137	2
High Fuel Low CO_2	$323	16	$186	18	$137	2
High Fuel Mid CO_2	$414	15	$277	17	$137	2
High Fuel High CO_2	$563	14	$427	15	$137	1

Q. WHAT DO YOU CONCLUDE FROM THE ABOVE?

A. FPL's pursuit of the SolarTogether generation projects through its proposed SolarTogether Program rather than as normal FPL generation projects has a large adverse impact on Non-Participating Customers – customers who have either chosen not to subscribe to the SolarTogether Program or who are unable to subscribe to the SolarTogether Program. As a result, even as modified in FPL's rebuttal testimony, customers not participating in the program would be worse off economically under the SolarTogether Program than they would be if the SolarTogether Program did not exist. Therefore, the SolarTogether Program requires that Non-Participating Customers pay a subsidy to support Participating Customers. Thus, even if the Commission were to find the SolarTogether generation projects were needed to provide reliable electric service at the lowest reasonable cost or were to find the economics for the SolarTogether generation projects for FPL's customers as a whole were reasonable, it should still reject the SolarTogether Program itself because the program would require Non-Participating Customers to involuntarily subsidize Participating Customers.

Q. HAVE YOU ESTIMATED THE AMOUNT OF THE SUBSIDY THAT NON-PARTICIPATING CUSTOMERS, THROUGH THE MONEY THEY ARE REQUIRED TO PAY FPL, WOULD HAVE TO PAY PARTICIPATING CUSTOMERS UNDER THE SOLARTOGETHER PROGRAM AS MODIFIED IN FPL'S REBUTTAL TESTIMONY?

A. Yes, I have done so. In Exhibit C of FPL's Petition, FPL provided its annual forecast of MWh of SolarTogether generation. This is typically most years approximately 3,300,000 MWh per year for the period of 2020 through 2051. Page

401a of FPL's April 18, 2019 FERC Form 1 filing for calendar year 2018 reported annual retail sales of 110,072,760 MWh for FPL. As a result, only approximately 3% of FPL's total retail sales would be participating in Phase 1 of FPL's SolarTogether Program. 3% of the 30-year $249 million CPVRR net savings for FPL customers as a whole that FPL is forecasting under its mid-level fuel / mid-level CO_2 price assumptions is only $7.5 million. This is roughly the portion of the net savings that Participating Customers would have been entitled to if FPL was pursuing the SolarTogether generation facilities as a normal generation project. Under the SolarTogether Program, Participating Customers would instead receive a $137 million CPVRR payment through subscription credits less subscription charges. In addition, Participating Customers under the SolarTogether Program would also receive, through normal retail rates and the Fuel Clause, approximately 3% of the $112 million in CPVRR net savings forecasted for Non-Participating Customers under the SolarTogether Program under FPL's mid-level fuel / mid-level CO_2 price assumptions, or $3.4 million. Given this, I estimate that under FPL's SolarTogether Program, as modified by its rebuttal testimony, Non-Participating Customers would, through the money they are required to pay FPL, pay Participating Customers a 30-year book life CPVRR subsidy of approximately $133 million[4] under FPL's mid-level fuel / mid-level CO_2 price assumptions.[5] That $133 million subsidy the Non-Participating Customers are required to pay accounts for nearly all of the $137 million that Participating Customers would be paid through subscription

[4] $133 million ≈ $132.9 million = $137 million - $7.5 million + $3.4 million

[5] The subsidy is approximately $133 million under all nine of FPL's sensitivity scenarios. For example, under FPL's high-fuel / high-CO_2 price scenario, 3% of the $563 million in forecasted net CPVRR savings for FPL customers as a whole is $16.9 million and 3% of the $427 million in forecasted net CPVRR savings for Non-Participating Customers is $12.8 million. $137 million less $16.9 million plus $12.8 million is $132.9 million or approximately $133 million.

credits less subscription charges under the SolarTogether Program. **Simply put, Non-Participating Customers – who are already on the hook for all the fuel and emission price risk – would also be required to pay for the benefits that FPL is assigning to Participating Customers.**

V. JOINT MOVANTS' EXHIBIT A

Q. PLEASE BRIEFLY DESCRIBE JOINT MOVANTS' EXHIBIT A.

A. Joint Movants' Exhibit A is a non-unanimous Stipulation and Settlement Agreement between the Joint Movants. The Joint Movants filed a motion on October 9, 2019, requesting that the Commission approve Exhibit A. OPC is not a party to Exhibit A and filed a response in opposition to Exhibit A on October 16, 2019.

Q. HOW DO THE JOINT MOVANTS PROPOSE TO RESOLVE THIS CURRENT PROCEEDING?

A. In Exhibit A, the Joint Movants propose to essentially adopt FPL's rebuttal testimony version of the SolarTogether Program with only minor modifications to accommodate low income customers as Participating Customers (Joint Movants' Exhibit A at paragraphs 4 and 5 and FPL's response to Citizens' Interrogatory No. 57). These special provisions for low income Participating Customers would be solely funded by non-low income Participating Customers (*Id.*). Nothing in Exhibit A would change the costs and benefits allocated to Non-Participating Customers under the FPL rebuttal testimony version of the SolarTogether Program.

Q. HOW DO YOU RESPOND TO EXHIBIT A?

A. I recommend that the Commission reject Exhibit A. The Joint Movants consist of FPL, advocates for solar generation expansion, and customers that plan on becoming Participating Customers. As a result, Exhibit A not surprisingly does nothing to resolve the concerns I have raised in my supplemental testimony herein, including the $133 million subsidy that would be paid by Non-Participating Customers to Participating Customers under FPL's proposed SolarTogether Program.

VI. RESPONSE TO OTHER FPL REBUTTAL TESTIMONY CLAIMS

Q. FPL WITNESS VALLE SUGGESTS THE COMMISSION SHOULD NOT BE CONCERNED THAT THE FPL SOLARTOGETHER PROGRAM IS INVOLUNTARY FOR NON-PARTICIPATING CUSTOMERS, SINCE BOTH PARTICIPATING CUSTOMERS AND NON-PARTICIPATING CUSTOMERS ARE PROJECTED TO RECEIVE BENEFITS AND THE NON-PARTICIPATING CUSTOMERS ARE SUBJECT TO FLUCTUATIONS IN FUEL AND EMISSION COSTS UNDER THE SOLARTOGETHER PROGRAM JUST LIKE THEY ARE FOR FPL'S GENERATION IN GENERAL (VALLE REBUTTAL AT 8-9). HOW DO YOU RESPOND?

A. Mr. Valle's reasoning ignores two important facts. First, the net benefit assigned to Participating Customers, unlike the net benefit assigned to Non-Participating Customers, is protected under the SolarTogether Program from being subject to fluctuations in fuel and emission costs. In addition, as I discussed earlier in this testimony, under the SolarTogether Program, Non-Participating Customers are involuntarily required, through FPL's rates and fuel charges, to surrender to

Participating Customers $133 million of the CPVRR net benefit they would have otherwise been entitled to receive if the SolarTogether generation projects were pursued as normal FPL generation projects rather than through the SolarTogether Program.

Q. MR. VALLE CLAIMS THAT PRIVATE CUSTOMER-OWNED SOLAR GENERATION UNDER THE STATE'S NET METERING RULE IS CAUSING FPL'S CUSTOMERS NOT OWNING SUCH GENERATION TO PAY THOSE THAT DO OWN SUCH GENERATION SUBSIDIES OF $13 MILLION PER YEAR THAT FPL ESTIMATES WILL GROW TO $121 MILLION PER YEAR BY 2022 (VALLE REBUTTAL AT 9). HE ALSO CLAIMS THE PROPOSED SOLARTOGETHER PROGRAM COMPARES VERY FAVORABLY TO THIS (*ID.*). SIMILARLY, FPL WITNESS DEASON ARGUES ONE OF THE ADVANTAGES OF THE SOLARTOGETHER PROGRAM IS RETENTION OF THE LOAD OF CUSTOMERS THAT WOULD OTHERWISE SEEK OTHER RENEWABLE GENERATION ALTERNATIVES (DEASON REBUTTAL AT 22-23). HOW DO YOU RESPOND?

A. First, even if Mr. Valle is correct with respect to the subsidies that FPL is claiming flow from its customers that do not own solar generation to those that do own solar generation, it does not justify requiring Non-Participating Customers to be required to pay a 30-year book life $133 million CPVRR subsidy to benefit Non-Participating Customers under FPL's proposed SolarTogether Program. Furthermore, Mr. Valle implies and Mr. Deason essentially suggests that the SolarTogether Program would reduce the customer investment in their own solar generation facilities and as a result reduce the subsidies that FPL claims such customers receive from those without

such generation of their own under the state's net metering rule. However, when FPL was asked in Citizens' Interrogatory No. 37 and Citizens' Request for Production of Documents No. 43 to provide any studies it may have with respect to how the SolarTogether Program might affect the growth of customer-owned solar generation on its system or retain customer load, it indicated that the forecasts of customer-owned solar generation it has developed do not contemplate the SolarTogether Program and that it has not performed any studies with respect to the SolarTogether Program retaining customer load. Thus, there is no evidence to support the allegation by Mr. Deason or FPL that FPL's SolarTogether Program would reduce the cross-subsidies that FPL claims exist under the state net metering rule between those customers that own solar generation and those that do not. Nor is there any evidence that the SolarTogether Program would retain customer load.

Q. MR. VALLE CLAIMS THAT IN FPL's NEW CASE THE SOLARTOGETHER PROGRAM REASONABLY ALLOCATES BENEFITS AND COSTS OF THE SOLARTOGETHER GENERATION FACILITIES TO PARTICIPATING AND NON-PARTICIPATING CUSTOMERS BY ALLOCATING 104.5% OF THE NET BASE REVENUE REQUIREMENT TO PARTICIPATING CUSTOMERS WHILE ALLOCATING 45% OF NET BENEFITS TO NON-PARTICIPATING CUSTOMERS (VALLE REBUTTAL AT 10-12). HOW DO YOU RESPOND?

A. Mr. Valle is mischaracterizing the situation. The benefits and costs of the SolarTogether generation facilities are not reasonably allocated between Participating and Non-Participating Customers under FPL's proposed SolarTogether Program.

Assuming full subscription, which is very likely, Participating Customers under the SolarTogether Program are essentially nearly guaranteed to receive the 55% of total *forecasted* net benefits that are allocated to them. This is because, short of subsequent changes by the Commission, over the life of the SolarTogether Program, the Participating Customer subscription charges are fixed and the Participating Customer subscription credits that are paid out are only subject to adjustment to the extent actual solar energy production deviates from the forecasted level. As a result, as I discussed at length in my direct testimony, Participating Customers are not taking on **any** risks of consequence (Dauphinais Direct at 33-34). Therefore, Participating Customers under the SolarTogether Program are at no significant risk of not recovering the $1.315 billion net base revenue requirement allocated to them, or not being paid the $1.452 billion in gross benefits allocated to them (*Id.* and Valle Rebuttal at 13). Participating Customers are nearly guaranteed to actually receive the $137 million in forecasted net benefits that are allocated to them.

Non-Participating Customers, on the other hand, are in a different situation and it is one that is being involuntarily imposed upon them under the proposed SolarTogether Program. First, and foremost, under the SolarTogether Program, Non-Participating Customers are essentially guarantors of both the payment of the net benefits assigned to Participating Customers and FPL's recovery of, and return on, the investment in the SolarTogether generation facilities. This is because, unlike Participating Customers who are nearly guaranteed to receive their assigned net benefit, and FPL, who is basically guaranteed to recover and earn a return on its investment in the SolarTogether generation facilities, Non-Participating Customers are ultimately assigned *all* of the actual risks, costs and benefits of SolarTogether generation projects,

along with the obligation to fund the *forecasted* net benefit being provided to Non-Participating Customers. This is because FPL is proposing to place the entire investment in the SolarTogether generation projects into rate base and flow the entire actual impact of the SolarTogether generation facilities on its fuel and emission costs through the Fuel Clause.

Assuming full subscription of the SolarTogether Program, Non-Participating Customers will receive via FPL $1.315 billion in revenue credits on a 30-year book life CPVRR basis from the subscription charges assessed to Participating Customers; however, Non-Participants will also be required to pay, via the Fuel Clause, $1.452 billion in subscription credits on a 30-year book life CPVRR basis to those same Participating Customers. Over the life of the SolarTogether Program, this results in Non-Participants paying $137 million *more* through the Fuel Clause on a CPVRR basis than they stand to receive back in revenue credits. Furthermore, the collection of subscription charges and the payment of subscription charges is inseparable. This is to say that a Participating Customer cannot receive a subscription credit unless it also pays a subscription charge. As a result, what is really happening under the SolarTogether Program is that Non-Participating Customers, through the money they are required to pay to FPL, are essentially paying Participating Customers $137 million on a 30-year book life CPVRR basis, while still taking on all of the costs and risks they would have if FPL instead pursued the SolarTogether generation facilities as a normal generation project. As I detailed earlier in this testimony, this results in Participating Customers, at the expense of Non-Participating Customers, receiving approximately $133 million more on a 30-year CPVRR basis than they would have received without the SolarTogether Program, despite the fact that Non-Participating Customers are

ultimately taking on the same costs and risks as they would if the SolarTogether generation facilities were instead pursued as a normal FPL generation project. As a result, Non-Participating Customers are basically being required to pay a $133 million subsidy to Participating Customers on a 30-year book life CPVRR basis.

Q. MR. VALLE CLAIMS THE USE OF PPAS WAS NOT SUITABLE FOR THE SOLAR GENERATION FACILITIES FOR THE SOLARTOGETHER PROGRAM (VALLE REBUTTAL AT 17-18). HOW DO YOU RESPOND?

A. Mr. Valle has not introduced any valid new reasons for not conducting a Request for Proposals ("RFP") for PPAs or other third-party arrangements for at least a portion of the Phase 1 SolarTogether generation facilities. As I addressed at length in my direct testimony, FPL should have performed such an RFP to provide for, at a minimum, a portion of the SolarTogether generation facilities; therefore, an important check on the costs of the Phase 1 SolarTogether projects was lost as a result of an RFP not being performed (Dauphinais Direct at 22-28).

Q. FPL WITNESS ENJAMIO CLAIMS THE GREATER WEIGHTING YOU PLACE ON LOW AND MEDIUM PRICING ASSUMPTIONS FOR NATURAL GAS AND CO2 EMISSIONS AND YOUR CONSIDERATION OF THE CPVRR PAYBACK TIME ARE IMPROPER AND SHORTSIGHTED (ENJAMIO REBUTTAL AT 9-10). MR. DEASON ALSO RAISES CONCERNS WITH YOUR GREATER WEIGHTING ON LOW AND MEDIUM PRICING ASSUMPTIONS FOR NATURAL GAS AND CO2 EMISSIONS (DEASON REBUTTAL AT 18-20). HOW DO YOU RESPOND?

A. Mr. Enjamio is essentially claiming that I gave no consideration to the high pricing assumptions for natural gas and CO_2 emissions (Enjamio Rebuttal at 9-10.) He also suggests the need to take all nine sensitivity cases into consideration (*Id.*) Mr. Deason also suggests I am cherry picking and should give equal weighting to all scenarios (Deason Rebuttal at 18-20).

As is clear in my direct testimony, I did consider all nine sensitivity scenarios; and I plainly presented all nine scenarios in my direct testimony. (Dauphinais Direct at 16-19.) What I said in my direct testimony is that greater weight should be placed on the low and medium price assumption cases (given the projected abundance of natural gas and the current lack of carbon emission regulation), not that no weight should be placed on FPL's high price assumption cases (Dauphinais Direct at 17-18.) Also, it is important to note that FPL defined each of the nine scenarios. As a result, the nine scenarios are not necessarily unbiased such that they should all be given identical weighting. Furthermore, I find it highly ironic for FPL to emphasize the need to consider all nine sensitivity cases given that FPL only presented a single sensitivity case, its mid-level fuel and mid-level emission price case, in its Petition and direct testimony.

With respect to my consideration of CPVRR payback time, it was not without giving proper consideration to the 30-year book life net CPVRR results as well, because both are important. With that said, CPVRR payback is still an important consideration with respect to the degree of risk associated with a proposed utility investment, especially for proposed generation facility additions that are not needed to provide reliable electric service at the lowest reasonable cost.

Q. MR. ENJAMIO ALSO CLAIMS THAT INTRODUCING CONSIDERATION OF CPVRR PAYBACK TIME INTO THE RESOURCE PLANNING PROCESS WOULD UPEND THE WAY IN WHICH UTILITIES PLAN FOR THE LONG-TERM RELIABILITY OF THEIR SYSTEMS AND WOULD POTENTIALLY RESULT IN CUSTOMERS FORFEITING MILLIONS, OR EVEN BILLIONS, OF DOLLARS IN SYSTEM SAVINGS. (ENJAMIO REBUTTAL AT 14-15.) HOW DO YOU RESPOND?

A. Consideration of CPVRR payback time will not upend the resource planning process or cause customers to forfeit millions or billions in system savings. First, as I have detailed earlier in this testimony, FPL has not shown the proposed SolarTogether generation facilities are needed to provide reliable electric service at the lowest reasonable cost. Instead, the subject facilities are an acceleration of the deployment of the solar generation facilities FPL is projecting it will pursue in the future. As such, the time to CPVRR payback is of great importance, as the question of whether to pursue these projects is purely an economic matter. Furthermore, it is important to remember that it is customers who will be taking on the economic risk associated with the projects -- not FPL. FPL will receive its recovery of, *and return on*, this generation investment regardless of whether the economics for the proposed facilities "pans out" for customers.

In addition, even if the SolarTogether generation projects were needed to provide reliable electric service at the lowest reasonable cost, CPVRR payback is still relevant to consider in order to examine the degree to which a resource alternative is a "Hail Mary Play." By a "Hail Mary Play" alternative, I mean an alternative that requires a very large capital investment, that does not provide a CPVRR payback for customers

until the last few years of its book life, and that depends on certain assumptions lining up nearly perfectly in order to provide that payback prior to the end of the alternative's book life. Given that uncertainty increases as a forecast horizon is extended, "Hail May Play" alternatives, and those alternatives that approach being "Hail Mary Play" alternatives, have a high risk of not ultimately providing a net CPVRR benefit to customers over their book life. As a result, customers are not forfeiting millions or billions of dollars of system savings by their utility not pursuing such alternatives, because there is a high risk that the forecasted net CPVRR savings from those alternatives *will not actually materialize* over their book life, and those alternatives will instead leave customers with a net CPVRR cost.

Q. MR. DEASON INDICATES IT IS IMPORTANT TO CONSIDER THE RISK OF FUEL PRICE VOLATILITY AND POTENTIAL WAYS TO MITIGATE THAT RISK. (DEASON REBUTTAL AT 23-24.) HOW DO YOU RESPOND?

A. I agree those are important considerations; however, it is important to note that FPL made no effort in either its original case or its new case to: (i) reasonably quantify the risk exposure that currently exists, (ii) reasonably quantify the degree to which the SolarTogether generation facilities would reduce that risk exposure, or (iii) reasonably quantify whether pursuing the SolarTogether generation projects would be the lowest reasonable cost alternative to address that exposure. Furthermore, as with any generation project proposed by a utility that is not necessary to provide reliable electric service at the lowest reasonable cost, great scrutiny should be given to proposals to reduce the exposure to fuel volatility through generation resource additions. This is because utilities are inherently biased toward such proposals since such generation

additions allow utilities to convert customer fuel expense exposure into additional return on investment for the utility's shareholders.

Q. FPL WITNESS HUBER CLAIMS YOUR ANALYSIS OF THE SOLARTOGETHER PROGRAM AND YOUR CONCLUSIONS REGARDING SUBSIDIES FOCUSED ONLY ON THOSE YEARS IN WHICH THE ANNUAL REVENUE REQUIREMENT IS GREATER THAN SUBSCRIPTION REVENUES RECEIVED FROM PARTICIPATING CUSTOMERS. (HUBER REBUTTAL AT 8.) HOW DO YOU RESPOND?

A. First, let me note in general that Mr. Huber, when citing my direct testimony in his rebuttal testimony, in no case referenced any specific page in my direct testimony. As a result, it is unclear in a number of cases exactly what he is referring to in my direct testimony.

With specific respect to his claim, as can be plainly seen from pages 36 through 40 of my direct testimony, I considered the SolarTogether Program over its entire life when considering whether Non-Participating Customers are subsidizing Participating Customers, not just the period prior to the forecasted CPVRR payback for Participating and Non-Participating Customers. Thus, Mr. Huber's claim is groundless.

VII. CONCLUSIONS AND RECOMMENDATIONS

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.

A. I conclude the following:

- Despite the claims in FPL's rebuttal testimony, FPL has failed to reasonably demonstrate that the solar generation facilities for its proposed SolarTogether Program, even with the modifications presented in the new case presented in

FPL's rebuttal testimony and in Joint Movants' Exhibit A, are needed to provide reliable electric service at the lowest reasonable cost; and

- Despite the claims in FPL's rebuttal testimony, FPL has failed to reasonably demonstrate that, even with the modifications presented in the new case contained in FPL's rebuttal testimony and in Joint Movants' Exhibit A, Non-Participating Customers are not any worse off economically under the proposed SolarTogether Program than they would be if the proposed SolarTogether Program was not pursued. Under the SolarTogether Program, I estimate Non-Participating Customers would, through the money they are required to pay FPL, be required to pay a subsidy of approximately $133 million on a CPVRR basis to support Participating Customers' use of the SolarTogether Program. As a result, Non-Participating Customers would be substantially worse off under the SolarTogether Program than they would be if the SolarTogether Program was not in place.

For the above reasons, I recommend that the Commission deny FPL's Petition for its SolarTogether Program under either the original case or the new case filings, including any approval related to the increased rate base sought by FPL in this proceeding for its proposed Phase 1 SolarTogether solar generation facilities.

Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL TESTIMONY?

A. Yes, it does.

MR. REHWINKEL: With that, Mr. Chairman, Mr. Dauphinais is available for cross-examination.

CHAIRMAN CLARK: Thank you very much. All right. We'll start with FPL.

MS. MONCADA: No questions for Mr. Dauphinais.

CHAIRMAN CLARK: Okay. Just take them in order here. SACE.

MR. CAVROS: We have no questions.

CHAIRMAN CLARK: Vote Solar.

MS. OTTENWELLER: No questions, Mr. Chairman.

CHAIRMAN CLARK: Walmart.

MS. EATON: No questions.

CHAIRMAN CLARK: Staff.

MR. TRIERWEILER: No questions.

CHAIRMAN CLARK: Commissioners. Commission Fay.

COMMISSIONER FAY: I didn't want you to get off that easy, Mr. Dauphinais. I think I was the last one there. If you could do me a favor, I think it's in your supplemental direct, let's turn to that page real quick -- page 31 is what I'm looking at. So it starts on line 20. I think it goes all the way over to the next page. Could you read that for me?

THE WITNESS: So I just want to make sure I'm

in the same place, Commissioner Fay. So we're on page 31 and you want me to start reading from line 20 and you want me to finish that through the conclusion of that paragraph at the top of the next page?

COMMISSIONER FAY: Correct.

THE WITNESS: Great. I'll be glad to do so.

Furthermore, as with any generation project proposed by utility that is not necessary to provide reliable electric service at the lowest reasonable cost, great scrutiny should be given to proposals to reduce the exposure to fuel volatility to generation resource additions. This is because utilities are inherently biased towards such proposals since such generation additions allow utilities to convert customer fuel expense exposure into additional return on investment for utility's shareholders.

COMMISSIONER FAY: So my question on this whole provision is, it sounds -- I'm trying to distinguish if you're saying that the need issue is something that creates the higher scrutiny or if it's the fact that it's solar generation. So, in other words, you have two components of that answer and I'm not sure which one -- I think you're

speaking to the need, but I'm just making sure you're not saying the Commission should apply a higher level of scrutiny for a solar project over a fuel-driven project. Does that make sense?

THE WITNESS: I think I understand and if I don't correctly -- don't really satisfy what you're trying to get at, I'd ask you to ask me a follow-up question. So I'm going to try my best with this.

COMMISSIONER FAY: Sure. I'm the only one asking questions, so I'll consider it. Thank you.

THE WITNESS: All right. So one of the characteristics of the solar projects is that they can help to reduce the risk of a fuel volatility and that's because they don't have any fuel cost. They're not -- the actual solar facilities, their cost to produce energy is essentially almost zero. There's some real very small variable operation maintenance costs that are a function of energy production, but they're miniscule for solar generation facilities. So versus something that is burning fuel, you don't have, you know, you don't have the risk of fuel risk there.

Now, the issue with investing in any resource, whether it be solar or some other resource, that reduces exposure to fuel volatility, are the risk

of fuel volatility costs in the fuel clause, is that what we do is we are looking at competing alternatives. One of those alternatives is to pay higher fuel costs and one of those alternatives is to make an investment into a generation resource. On the fuel cost side, the company just gets to recover its cost. It doesn't get to earn a return on that because it didn't make an investment to incur, you know, that cost it just simply incurred and they get to recover that cost.

On the investment side, utility not only gets to recover the capital cost, but they also get to recover and also earn a return on that investment, the return on equity. And so the challenge is when we're looking at investments to reduce fuel volatility is that utilities are going to be naturally inclined to pursue investments to reduce fuel volatility because they'll basically take a cost stream right now where they don't earn a return on investment and convert it into a cost stream where they will earn a return on investment, which is obviously helpful for their shareholders.

COMMISSIONER FAY: So I think what you're saying is you take it into consideration, but it doesn't necessarily trigger a higher level of

scrutiny. Because, for example, we have solar here, but it could be anything that would reduce the volatility of the fuel cost and potentially be cleaner energy. That in itself isn't a reason to apply higher scrutiny.

THE WITNESS: It is one of the things -- if fuel volatility is one of the reasons being cited, it's a reason to apply greater scrutiny. And it could be a solar project; but the same issue would exist, for example, if coal fire generation was still really on the table, which, of course, it's not, or nuclear generation. It would be the same issue is that there -- it addresses fuel volatility, but involves substantial capital investment. So whenever there's significant capital investment to produce fuel volatility, extra scrutiny is called for because of the utility's natural inclination to favor alternatives that would have them make larger capital investments, which would allow them to get a larger return on investment for their -- for their shareholders.

COMMISSIONER FAY: Okay. Thank you. Mr. Chairman, one more.

CHAIRMAN CLARK: Sure.

COMMISSIONER FAY: Thank you. We talked a little bit about the nine different scenarios and in your testimony there's a little bit of discussion about the weight of those scenarios and which would apply more or less. You do address in your testimony that you give consideration to all nine scenarios, but I'm just trying to figure out based on that testimony what sort of weight -- I can't quite figure out when you look at the other scenarios what consideration has been given to them.

THE WITNESS: I would say I gave them limited weight. There are certainly possible outcomes. However, based on the current situation where we don't currently have federal regulation of carbon emissions, and we may in the future at some point at some level, we don't know what that is right now, but right now we do not have any, and that natural gas prices have been at a sustained low level for some time, and as this proceeding has evolved since March have continued to fall in the market, the forward prices for natural gas, there's no indication that we're really more likely to see higher prices in natural gas or carbon emission cost on the high end in the assumptions that FPL

used. That doesn't appear as likely as essentially a scenario where we have either the mid/mid scenario, mid fuel and mid carbon emission cost, or we have anywhere from there down to the low carbon emission and low fuel cost. In my opinion, those deserve much more weight than any of the cases that use high natural gas prices or high carbon emission cost. Again, based on what we know right now today. It doesn't mean the other outcomes are not possible, but they don't deserve the same weight, in my opinion.

COMMISSIONER FAY: And if all those calculations created a savings, like if all nine scenarios created numbers that were a savings, could -- would that be deemed cost-effective?

THE WITNESS: It's a little bit more -- I think we have to be a little bit more careful with that. So cost-effective just means when I'm looking at two alternatives, one is, you know, when we consider all the costs -- all the costs and benefits together, we look at the net cost situation, the more cost-effective solution, or cost-effective solution is one that's lower cost than the alternative you're looking at. That doesn't mean it's the most cost-effective solution.

You would need really a more complete set.

So when we look at a scenario where all nine of scenarios, let's say, were showing a net benefit, then I would say yes. Of the two alternatives you compare, two alternative portfolios of resource issue compared, one is more cost-effective than the other and it is under all of the scenarios looked at. That doesn't mean there's some -- there is some extreme cases beyond the box-of-nine scenarios -- well, that's not true, but I would say that for the nine scenarios that, in fact, you know, that one alternative is more cost-effective than the one it was compared to, but it doesn't mean that the scenario that's cost-effective versus the other alternative is the most-cost effective solution for ratepayers, and it's important that the Commission look at the most cost-effective solution for ratepayers because that is critical towards providing reliable electric service at lowest reasonable cost.

COMMISSIONER FAY: I appreciate that yes. And I'm not sure if you're a lawyer or not, that was a very long answer to get there, but I do appreciate the input. Thank you. Mr. Chairman, that's all I have.

CHAIRMAN CLARK: Thank you, Mr. Fay.

Mr. Rehwinkel.

MR. REHWINKEL: Of course --

CHAIRMAN CLARK: I'm sorry. I'm sorry. Mr. Polmann.

COMMISSIONER POLMANN: I had no questions until Commissioner Fay had a question. I can't let you be the only.

Mr. Dauphinais -- sorry. Commissioner Fay raised the point. In your answer it brought to mind something I wanted to follow up on. So in looking at the various scenarios in the context of what's become referred to, thank you Mr. Moyle, as the nine-box concept in the base case, which was the mid fuel/mid environmental cost, I think what was just discussed was a concept of giving more or less weight to some of those scenarios. Would you perhaps consider the notion of weighting or giving more or less weight -- is that analogous to a likelihood concept that one is more likely than another? Would that be another way of saying -- giving weight?

THE WITNESS: Giving more weight is saying that the party that's giving the weight means they believe that the scenarios they're giving more

weight to are more likely scenarios.

COMMISSIONER POLMANN: So following beyond the likelihood, is it fair to think of that in terms of a probability recognizing that probability then becomes more of a numeric type thing?

THE WITNESS: Likelihood can become probability. Probability is more precise, I guess I would say. It tends -- it becomes probability when we think we can precisely quantify it and there's a way to quantify it.

COMMISSIONER POLMANN: I believe you were here earlier and heard one of the FPL witnesses explain that they don't apply any probabilities to those boxes. So do you feel that giving weight or likelihood or the probability should necessarily be part of that analysis? Is that a deficiency that you feel strongly about?

THE WITNESS: I do feel that judgment has to be used at looking at the collection of scenarios by taking a look at the current situation. You know, ICF essentially did that the way they developed their carbon forecast, for example, they're making judgment calls. Might not necessarily agree with their judgment calls, but they're making judgment calls. I'm making a

judgment call on the box of nine, as well, as basically saying that four of those scenarios I think are more likely than the other scenarios, significantly more likely based on, you know, what I see in the industry with regard to carbon emission regulation right now and natural gas prices. Dr. Sim is choosing -- he feels that one cannot be made and he's choosing not to give -- put any more weight on one scenario than another.

COMMISSIONER POLMANN: Would one way of looking at that be perhaps a professional analysis and a professional judgment, and then another way perhaps being a policy, more of a, you know, just a global public interest policy or programmatic planning, recognizing that you can't really assign probability, you don't have the data. You can't -- you know, there's a lot of uncertainty that you just can't quantify. So is there a judgment versus a sort of a planning and policy perspective? Is really my --

THE WITNESS: I think -- I think I understand what you're trying to ask, and if I don't, you know, feel free to follow up, of course. Somebody like ICF or myself or even Dr. Sim, you know, we might be making -- I'm making a professional

judgment call, what I think is more likely and should therefore get more weight. I think ICF is sort of doing that, their own analysis on carbon emissions, the way they develop their carbon emission forecast. That's one role. Then there's another role as might be to the Commission or anybody that might have some authority to set policy. Then they have to consider what they, you know, within their jurisdiction what they can and cannot do and how they should take all the facts that have been presented to them and the expert opinions that are provided to them and make a decision on that. I don't know if that's an answer to your question or not, though.

COMMISSIONER POLMANN: Well, I think that -- you shed some light and helped the discussion. So thank you, sir. I appreciate your answers.

THE WITNESS: You're very welcome.

COMMISSIONER POLMANN: Thank you, Mr. Chairman. That's all I have.

CHAIRMAN CLARK: All right. Mr. Rehwinkel, redirect.

MR. REHWINKEL: Just one question, Mr. Chairman.

EXAMINATION

BY MR. REHWINKEL:

Q Mr. Dauphinais, with respect to the last question that Commissioner Polmann asked you, is it the Commission's ultimate responsibility to make regulatory judgments about the likelihood of outcomes in the nine box or is it FPL's call? Who's, in your experience testifying around the country, who has that ultimate responsibility?

A That judgment call goes to the Commission.

MR. REHWINKEL: Thank you. No further questions. And I would move Mr. Dauphinais' exhibits identified as 12 through 23 into the record.

CHAIRMAN CLARK: Okay. So ordered.

(Whereupon, Exhibit Nos. 12 through 23 were entered into evidence.)

MR. REHWINKEL: Thank you. May Mr. Dauphinais be excused?

CHAIRMAN CLARK: He may. Thank you.

All right. Next witness up, stipulated to, Mr. Matt Cox, Vote Solar witness. Ms. Ottenweller.

MS. OTTENWELLER: Thank you, Mr. Chairman. At this time I would ask that Vote Solar witness Dr. Cox's prefiled direct testimony and his two exhibits be entered into the record as though read.

CHAIRMAN CLARK: So ordered.

(Whereupon, Witness Cox's prefiled direct testimony was inserted into the record as though read.)

DIRECT TESTIMONY

OF

MATT COX, PhD

ON BEHALF OF VOTE SOLAR

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

20190061-EI

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.

A. My name is Matt Cox. I am the Chief Executive Officer at the Greenlink Group Inc., located at 695 Pylant Street NE, Suite 110, Atlanta, GA 30306.

Q. PLEASE DESCRIBE THE GREENLINK GROUP.

A. The Greenlink Group (Greenlink) is an energy technology, research and consulting firm that specializes in energy policy analysis. Greenlink provides evidence and expert analysis needed to evaluate pressing issues in energy markets, especially those concerning the evolution of the electric grid. We focus on the integration and alignment of centralized and distributed energy resources, energy efficiency in buildings and manufacturing, demand side management (DSM), and modernizing these approaches for future applications. Greenlink has engaged in energy policy arenas from the local to the international scale, working

with public and private sector clients to design smarter data-driven policies and strategies.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL AND EDUCATIONAL EXPERIENCE.

A. I am the co-founder and current Chief Executive Officer for Greenlink, where I have led our team's research work for the past five years. A comprehensive review of my experience and qualifications is described in my *curriculum vitae* attached as Exhibit MC-1. Generally, we focus on energy issues at the city and state level, advising clients on policies and programs to maximize energy savings and economic efficiency. Frequently, this involves the utilization of Greenlink's machine learning modeling tools and our application of other advanced technology to the energy policy landscape.

I hold a PhD in Energy Policy from the Georgia Institute of Technology, with a minor in sustainable development. I was a National Science Foundation Fellow in Nanostructured Energy Storage and Conversion, as well as a founding member of the Climate and Energy Policy Laboratory at Georgia Tech. I also hold a Master's of Science degree in Public Policy in Energy and Environmental Policy, with a focus on economic development from Georgia Tech. My Bachelor of Science is from the University of Dayton. I have published over 60 research studies, primarily on energy efficiency and renewable energy policy.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE AS IT RELATES TO CLEAN ENERGY POLICIES AND PROGRAMS.

A. I have researched, designed, drafted, implemented, and evaluated renewable energy and energy efficiency policies across the United States. I have assisted cities, states, public service commissions, U.S. Department of Energy and its National Laboratories, the Energy Information Administration, as well as nonprofits and NGOs, in crafting more effective energy policy proposals and best-in-class program designs. Additionally, I have testified before state legislatures, public service commissions, and city councils on these topics.

Q. ON WHOSE BEHALF ARE YOU APPEARING?

A. I am appearing on behalf of Vote Solar.

Q. ARE YOU SPONSORING ANY EXHIBITS?

A. Yes. I am sponsoring the following exhibits:

- Exhibit MC-1, which is a summary of my experience and qualifications.
- Exhibit MC-2, which is a map of customer electricity burdens in FPL's service territory.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to assess the strengths and shortcomings of the SolarTogether program as proposed and to suggest improvements to the design of the program for all customers.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. SolarTogether is a promising program that, if approved, will likely be the largest utility-sponsored solar subscription offering in the nation.[1] The benefits from expanded solar generation for the State of Florida are many; more solar power can reduce the cost of electricity while improving public health and the economy. In fact, solar is now the cheapest generating source available to FPL.[2] The SolarTogether program is also in a position to set the standard for voluntary clean energy offerings by Florida electric utilities for the next decade or longer. As such, it raises significant public policy questions that bear careful consideration, especially regarding access and affordability for those customers who currently lack clean energy options.

It is clear that the addition of these solar resources comes with real and quantifiable benefits – in the form of cleaner energy, cleaner air, reduced greenhouse gas emissions, and financial savings. The question at issue is how those benefits should be apportioned between FPL, its shareholders, subscribing customers, and customers as a whole; and fundamentally, whether the program is essentially designed to benefit FPL first – and then to unduly favor certain customers over others – with the result of shutting out those customers who are most in need of bill relief from solar savings. The current design would primarily benefit FPL shareholders and those customers who can wait for benefits to

[1] Valle, Matthew. *Florida Power and Light Company, Direct Testimony of Matthew Valle, Docket No. 20190061-El.* July 29, 2019. *Before the Florida Public Service Commission*. At 5.

[2] Determined by using the NREL ATB levelized cost of energy with reported FPL fuel prices as applicable. NREL (National Renewable Energy Laboratory). 2019. *2019 Annual Technology Baseline*. Golden, CO: National Renewable Energy Laboratory. https://atb.nrel.gov/electricity/2019.

materialize over the course of years while excluding most other customers from accessing the financial benefits of increased solar deployment in the state.

I recommend that FPL take advantage of the savings opportunity that solar presents to its shareholders and all of its customers to deliver a fairer division of the benefits than is accomplished by the current program design. As it stands, a disproportionate share of the benefits are reserved for the shareholders, large commercial customers, and wealthier residential customers while leaving out the over 2 million FPL residential customers who suffer with higher-than-average energy burdens and the 1.4 million customers who live in energy poverty.[3] This unfair result, which would only serve to further exacerbate the significant disparities in energy burdens in Florida, is not in the public interest and unwisely squanders the opportunity that low-cost solar provides. With some relatively minor adjustments, the program can be a winning proposition for all stakeholders, demonstrate serious leadership and distinguish the program for more than just its sheer size.

To realize this potential, the Commission should require FPL to either set aside or expand its program by 100 MW of SolarTogether capacity to provide an opportunity for at least 20,000 of FPL's low-income customers to participate and

[3] Energy burden is the percent of household income dedicated to paying energy bills. As used in this testimony, the term is referring to electricity burdens specifically. Household energy bills are "unaffordable" or a household is in "energy poverty" when electricity bills exceed 6% or total energy bills exceed 10% of household income. *See* Fisher Sheehan & Colton. 2013. "Home Energy Affordability Gap." Available at www. homeenergyaffordabilitygap.com/. Heindl, P. 2015. "Dynamic Properties of Energy Affordability Measures." Energy Policy 86: 123–32.; Hernández, D., and S. Bird. 2010. "Energy Burden and the Need for Integrated Low-Income Housing and Energy Policy." Poverty and Public Policy 2 (4): 5–25.

reduce their annual electric bills by 10% or more. There are a number of options to achieve this level of savings, including providing the subscription benefit as a direct kWh offset, and by pairing the subscription with energy efficiency improvements. In all circumstances, the program should at a minimum incorporate a hold-harmless provision to empower low-income customers to participate in solar and produce a better future for their communities without fear that they may further stress their finances.

Finally, the Commission should require more thorough analysis from FPL for any unconstructed capacity within Phase 1 as well as any future phases of the SolarTogether program, including vetting power purchase agreements as a means of adding utility-scale solar capacity at a lower cost to ratepayers, consideration of a performance-based incentive to drive low-income participation, and requiring FPL to determine the optimal amount of utility-scale solar to add in order to maximize the benefit to ratepayers.

III. <u>WHETHER THE ADDITION OF 1,490 MW OF SOLAR IS IN THE PUBLIC INTEREST.</u>

Q. WHAT SHOULD THE COMMISSION CONSIDER IN DETERMINING WHETHER TO APPROVE, MODIFY OR REJECT THE SOLARTOGETHER PROGRAM?

A. There are two important questions for the Commission to weigh with respect to this program. First, is the addition of 1,490 megawatts of incremental solar resources to the rate base in the public interest? And second, are the rates offered under this program designed in a way that is fair and reasonable, without giving

any undue or unreasonable preference or disadvantage to any person?[4] I will address these questions in turn.

Q. IS ADDING MORE SOLAR TO THE GRID, AS THIS PROGRAM WOULD DO, IN THE PUBLIC INTEREST?

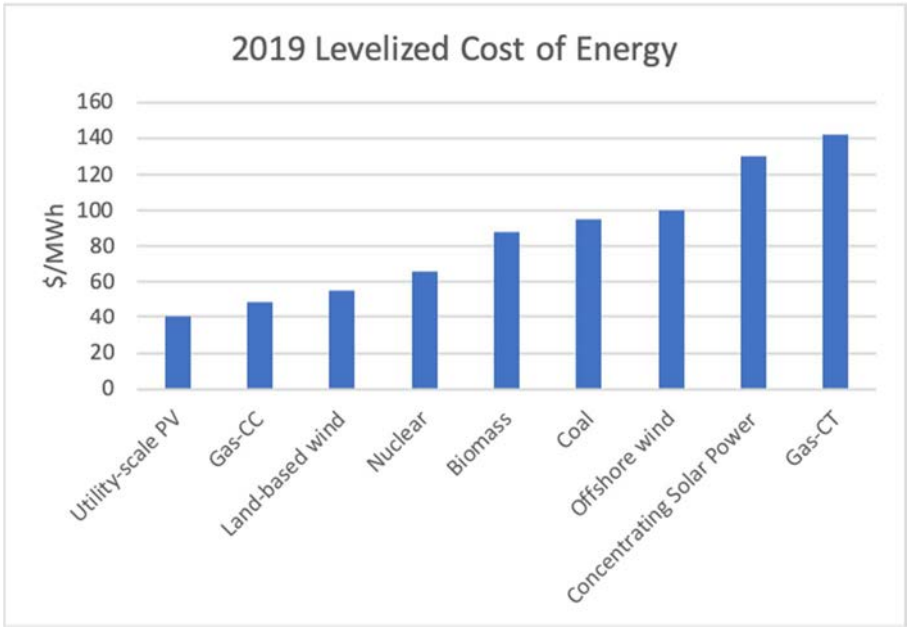
A. Yes. A number of analyses show that solar is the least-cost source of new generation in Florida. For example, two recent data products from the Department of Energy National Laboratories show that utility-scale solar is the least-cost resource on a levelized basis for the state (beating out natural gas) and that under optimized planning, 10 gigawatts of utility-scale and distributed solar would be added to Florida's grid for the next decade (notably, these would be the *only* capacity additions over the next decade as well) (See Figure 1, below).[5, 6] FPL's modeling in this filing demonstrating net benefits of $139 million over the life of these solar additions, the most current Ten Year Site Plan and FPL's recently announced 30-by-30 proposal[7] all suggest that FPL also sees additional solar as a highly cost-effective option to meeting the future energy needs of its customers.

[4] *See* Section 366.03, F.S.

[5] NREL (National Renewable Energy Laboratory). 2019. *2019 Annual Technology Baseline*. Golden, CO: National Renewable Energy Laboratory. Available at https://atb.nrel.gov/electricity/2019.

[6] Cole, Wesley, Will Frazier, Paul Donohoo-Vallett, Trieu Mai, and Paritosh Das. 2018. *2018 Standard Scenarios Report: A U.S. Electricity Sector Outlook*, Golden, CO: National Renewable Energy Laboratory. NREL/TP-6A20-71913. Available at https://www.nrel.gov/docs/fy19osti/71913.pdf.

[7] http://newsroom.fpl.com/2019-01-16-FPL-announces-groundbreaking-30-by-30-plan-to-install-more-than-30-million-solar-panels-by-2030-make-Florida-a-world-leader-in-solar-energy.



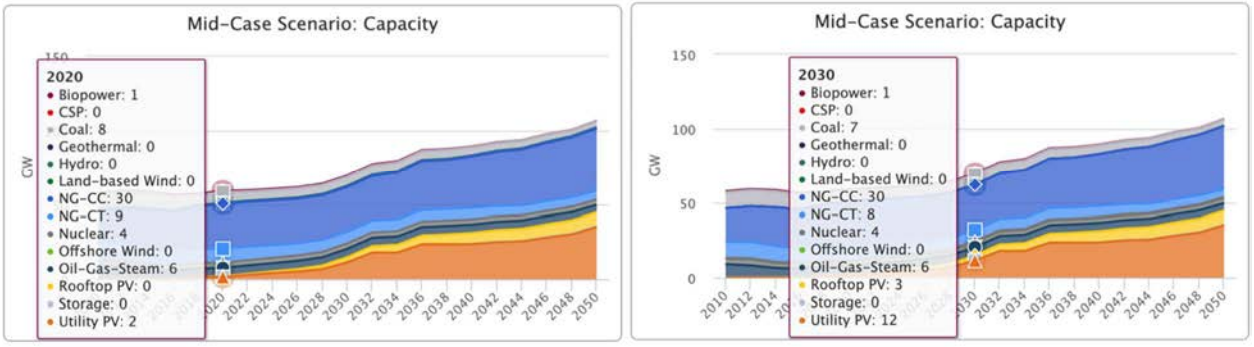


Figure 1: Utility-scale PV as least-cost resource today and through the coming decade[8]

Q. DOES FPL'S SOLARTOGETHER PROGRAM REFLECT THE MOST COST-EFFECTIVE METHOD OF ADDING SOLAR RESOURCES?

A. It's unclear. The way utility-scale solar projects are added in this proposal could benefit from a more transparent and competitive bid process. All stakeholders have an interest in ensuring that the *most* cost-effective solar resources are being procured for the benefit of customers. It is surprising that FPL didn't consider

[8] *Ibid.*

PPAs as part of this program because those are frequently the cheapest alternative in nearby jurisdictions.[9] It is also confusing that FPL doesn't appear to deem PPAs reliable enough for the purpose of this program,[10] given that its parent company NextEra competes for and develops solar through PPAs in many jurisdictions, including Florida.[11, 12]

Solar PPAs are sophisticated, long term contracts that include significant penalties for under-performance. In fact, PPAs often provide more safeguards for a utility's customers because PPAs insulate them from the risk of cost overruns and the cost of the utility's return on equity. Utilities across the nation make regular use of power purchase agreements to procure solar for their customers, which provide protections to the customers regarding cost overruns and underperformance. In short, there is no reason why a solar PPA couldn't be appropriate for a community solar program. Additionally, it's an open and important question whether other project ownership models like power purchase agreements would have provided an even greater benefit for FPL customers. Given this possibility, the Commission should require FPL to consider these market options now for any uncontracted

[9] FERC Form 1 shows PPA prices from solar installations in other major southeastern utilities currently compensated at less than $35/MWh.

[10] *See* FPL Response to OPC 3rd Int. #10, 11; FPL Response to OPC 6th Int. #29(c); FPL Response to Staff 2nd Int. #173.

[11] NextEra Energy. 2019. February 2019 Investor Presentation. Slide 34. http://www.investor.nexteraenergy.com/~/media/Files/N/NEE-IR/news-and-events/events-and-presentations/2019/02012019/February%202019%20Investor%20Presentation%20_VFinal2.pdf.

[12] NextEra Energy. 2019. Earnings Conference Call Second Quarter 2019. Slide 25. http://www.investor.nexteraenergy.com/~/media/Files/N/NEE-IR/reports-and-fillings/quarterly-earnings/2019/q2/2Q%202019%20Slides%20vF.pdf.

capacity in the current phase as well as in any future phases of SolarTogether that the Company may propose.

Q. SHOULD THE SOLARTOGETHER PROGRAM BE LARGER?

A. Yes. Given the modeling performed by both the national labs and FPL, in order to capture all of the cost-effective incremental solar available, it appears that FPL's total installed capacity of utility-scale solar projects should grow by at least a factor of five through 2030. FPL's current proposal suggests that this program is not being sized in order to achieve the goal of capturing all of the available solar savings, but rather to service the needs of a particular subset of its largest customers. Notably, the current size of the SolarTogether offering appears unlikely to meet even the narrow goal of meeting anticipated customer demand; the current allocation of capacity for large commercial and industrial customers will be entirely full when the tariff becomes available based on pre-registrations alone.

Further, the FPL filings in this proceeding project savings to the participants with spillover benefits reserved for the general customer base and a healthy return for shareholders, so it stands to reason that more solar would provide greater benefits to all customers and should be investigated. Fundamentally, FPL's analysis fails to answer the question of *how much more* solar could be brought onto to its system and result in net benefits. It is likely that expanding the capacity in this offering would provide larger benefits for all customers; the Commission should require FPL to evaluate the optimal quantity of solar capacity additions either as part of the SolarTogether docket or independently to determine what would be

best for its customers. FPL does not appear to have done so to date. It is clear that Florida has a largely uncaptured cost-effective solar resource that will be available throughout the next decade, some of which should be set aside to benefit all ratepayers and some of which should be set aside to meet the demands of specific customers through subscription programs as detailed in the remainder of my testimony.

IV. WHETHER THE SOLARTOGETHER RATES ARE JUST AND REASONABLE.

Q. DOES THIS PROGRAM REPRESENT A CHANGE IN POLICY FROM FPL'S PRIOR SOLAR PROGRAMS?

A. Yes. Although FPL states that this program does not represent a policy shift for the Company,[13] in fact these proposed solar additions are responding to a set of values expressed by its largest customers, who have clearly stated their preference to be served by 100% clean energy. This proposal allows a certain subset of FPL customers to choose their energy supply for the next several decades and to use the utility's rate-basing authority to achieve those ends.[14] Because of these distinctions, the Commission should conduct a thorough review of how the risks and benefits are allocated, including any barriers to participation that leave some customers without the same choices, freedoms, and opportunities available to others.

[13] FPL Response to Staff 1st Int. #101.

[14] FPL Response to Staff 1st Int. #85 ("FPL is seeking inclusion of all FPL SolarTogether centers in rate base as they benefit all FPL customers…"); *see also* FPL Response to Staff 1st Int. #86.

Q. ARE THE PROPOSED BENEFITS AND RISKS EVENLY SHARED BY THE STAKEHOLDERS?

A. No. If FPL finances the SolarTogether capacity additions in the same proportion of debt-to-equity as recorded in their FERC Form 1 filings, shareholders could expect a $245 million return on this investment over the lifetime of the project, which exceeds the total benefits to all participants AND non-participants in the program. Additionally, by using its rate-basing authority, FPL insulates itself and minimizes or eliminates financial risk to itself and its shareholders. This is a departure from some other utilities' approach to community solar, which typically is to ring-fence the program to ensure that all costs are borne by participants and require the utility to return to the Commission in the event of under-subscription for an additional prudency review prior to rate-basing.[15]

In contrast, FPL's program requires ratepayers to bear the program costs and risks, which they may recover from participants over time. All other stakeholders' benefits will only materialize if a series of FPL's assumptions and forecasts turn out to be correct, including fuel prices, generation and demand forecasts, carbon regulations, and any deviations from the "No SolarTogether" modeling pathway that FPL may make in the next several decades.[16]

[15] *See, e.g., In Re: Petition for Approval of Cmty. Solar Pilot Program, by Gulf Power Co.*., 328 P.U.R.4th 108 (Mar. 21, 2016) (noting that subscription fees are designed to cover the full revenue requirements of the community solar facilities, and that Gulf Power's shareholders, rather than non-participating customers, are assuming the risk that costs will not be fully supported by the program structure).

[16] *See* FPL Response to OPC 5th Int. #25 (FPL noting the risks to the general body of customers due to the "uncertainty in the underlying Program assumptions").

Q. DOES FPL'S CURRENT PROGRAM DESIGN STRIKE THE RIGHT BALANCE BETWEEN SHAREHOLDERS, SUBSCRIBERS AND NON-PARTICIPATING CUSTOMERS?

A. No. The highest benefit for all ratepayers based on this research and analysis would be to rate-base the entire solar allocation - which FPL states that it will do for much of the program absent program approval - ensuring that all of the benefits are equally shared by all.[17] That being said, it appears quite likely that subscribers in the SolarTogether program will see bill relief over the long run based on current program design (while absorbing the majority of the performance risk), while the non-participant savings are shown by FPL to be sensitive to assumptions regarding both fuel prices and carbon regulation and do not materialize in some of the scenarios evaluated.[18] One thing is certain: in any long-term energy analysis, the model projections will not come to pass exactly as projected. The benefits of these solar additions to non-participants appear likely to be higher than projected by FPL due to conservative assumptions about the market value of the power when it is provided to the grid, potential CO_2 regulatory compliance costs, and benefits to the general ratepayers as a result of participant turnover.

[17] In addressing the cost-effectiveness of incremental solar investments, I am not opining on whether FPL's process for seeking approval of 1,490 MW of incremental solar capacity through a tariff filing is appropriate. *See* FPL Response to Staff 1st Int. #139 (FPL notes that the "Commission is evaluating not only the design of the program but also the construction costs… Approval of FPL's petition would result in approval of FPL's construction of that capacity at the projected cost" meaning that no future prudence review would be required).

[18] *See* FPL Response to Staff 1st Int. #110.

In summary, FPL's unique "benefit sharing" proposal, which allocates 80% of the net benefits to subscribers and 20% to non-participating customers, could offer a new innovative model of community solar.[19] However, FPL adds to the uncertainty that this program will benefit non-participants by utilizing a "No SolarTogether" alternative baseline that ignores all other solar investments that FPL plans to make over the life of the SolarTogether program - creating a flawed point of comparison.[20] This baseline removes all planned future incremental solar investments from FPL's 2019 Ten Year Site Plan including the 2020 SoBRA projects that it is currently seeking approval for. Whether through more SoBRA additions, the 30x30 proposal to install 30 million solar panels by 2030, or some other mechanism, FPL is very likely to propose increased solar investments in the near future. In fact, FPL states that it plans to move forward with the initial 900 MW of the SolarTogether program even if this tariff is not approved, and will develop this capacity for the benefit of all customers.[21] The end result is that FPL

[19] *See* FPL Response to OPC 1st Int. #1; *see also* FPL Response to OPC 5th Int. #25 (FPL stating that the cost/benefit sharing between participants and non-participants is "a unique attribute not common in other community solar programs").

[20] *See* FPL Response to Staff 1st Int. #76 (FPL removed all planned future incremental solar investments from its 2019 TYSP from its baseline prior to analyzing the cost effectiveness of this program); FPL Response to Staff 2nd Int. #191 (FPL stating that "If FPL's SolarTogether Program is not approved, another resource plan with incremental solar will be more cost-effective to consumers than the No-SolarTogether Plan."); FPL Response to Staff 1st Int. #102 (FPL's No-SolarTogether baseline also excludes 2020 SoBRA projects).

[21] FPL states that it plans to move forward with the initial 900 MW of the SolarTogether program even if this tariff is not approved, and will develop this capacity for the benefit of all customers. *See* FPL Response to Staff 1st Int. #100 ("If the FPL SolarTogether Program is not approved, FPL will continue with the construction of Project 1, Project 2, and Project 3 described in its Petition."); FPL Response to Staff 1st Int. #133 (Project 1 capacity is 223.5 MW; Project 2 capacity is 223.5 MW; and Project 3 capacity is 447 MW).

either intentionally or unintentionally clouds the key issue: not whether more solar is a net benefit, or that this is a choice between SolarTogether or no solar at all to serve customers over the next decade, but whether it is in the public interest to allocate *some* of the solar benefits now to a subset of customers with unique needs - and if so, how this can be done fairly and equitably.

Q. **IS THERE VALUE IN SETTING ASIDE SOME INCREMENTAL SOLAR CAPACITY FOR CUSTOMERS WITH SPECIFIC CLEAN ENERGY NEEDS?**

A. Absolutely. It appears that FPL is planning significant investments in solar resources over the next decade, including its 30x30 solar plan – much of which will serve the entire customer base.[22] At this time, there is immense value in allowing electric utilities to offer clean energy programs that are available to customers on a voluntary basis in order to meet the growing demand for clean energy. The general public and business interests have consistently shown support for expanding the use of clean energy and a desire to participate in a clean energy future.[23] One core principle of community solar is that it should expand access to a broader group of energy consumers than current solar policies and markets

[22] *See* http://newsroom.fpl.com/2019-01-16-FPL-announces-groundbreaking-30-by-30-plan-to-install-more-than-30-million-solar-panels-by-2030-make-Florida-a-world-leader-in-solar-energy.

[23] Nearly 200 companies and over 100 municipalities (including 10 in Florida as of this writing) have 100% clean/renewable energy goals, which can be helped through offerings such as SolarTogether. http://there100.org/companies; https://www.sierraclub.org/ready-for-100.

allow.[24] This is consistent with Florida law, which expresses a clear preference for promoting and encouraging customers' voluntary clean energy investments.[25]

FPL claims that it designed its SolarTogether program to "ensure all customers have an opportunity to participate."[26] There are two customer segments that are particularly unlikely to be served by current solar offerings: those large customers with robust clean energy goals and significant demand that can't be met by rooftop systems alone; and those with financial (*i.e.* low income) or property barriers (such as households living in multifamily dwellings or renters). These are the customer segments that the Commission should focus on in evaluating whether this program is in the public interest, and whether rate-basing a solar subscription program is appropriate: does FPL's program offer a *meaningful expansion* in access to clean energy for those customers who need it, as is encouraged by Florida law?[27]

Q. WILL FPL'S PROGRAM EXPAND CLEAN ENERGY ACCESS?

A. The proposed design of SolarTogether is not responsive to low-income customers' needs, and therefore will not lead to their participation. In contrast, FPL's program appears fairly well-designed when it comes to meeting the clean energy needs of large, sophisticated corporate customers. The program has clearly

[24] *See* Vote Solar and GRID Alternatives, *Low-Income Solar Policy Guide, available at* https://www.lowincomesolar.org/best-practices/community-solar/.

[25] Sections 366.91 and 366.92, F.S.

[26] FPL Response to Staff 1st Int. #64. *See also* FPL Response to Staff 1st Int. #65 (FPL's stated goal to "provide all customer classes a fair and equitable opportunity to participate").

[27] Sections 366.91 and 366.92, F.S. (encouraging renewable energy investment within the state).

been designed to meet the requests and demands of large commercial, industrial, and governmental customers, many of whom were consulted before the program was proposed, with an emphasis from FPL on acceptable payback periods and terms and conditions.[28] SolarTogether is also designed such that the majority of the capacity is reserved for these largest customers. In fact, the top ten subscribers who have pre-registered for the SolarTogether program will absorb 752 MW of the total capacity, or 50.5%, while claiming 40% of its expected net benefits.[29] As such, the program is likely to work well for many of these large customers.

Unfortunately, the same care and approach has not been taken with respect to residential customers, who are being offered similar terms, as if their needs and finances were the same as large retailers and municipalities. No similar outreach effort appears to have been done by FPL to test the program's value proposition or identify the needs and concerns of its residential customers. Additionally, pre-registration was only made available for larger customers. The interests of small business and residential customers don't seem to have been a major concern for FPL in program design or customer engagement.

But this program design creates the most significant concerns when it comes to the customers who are least able to afford higher rates. Low-income customers are particularly sensitive to costs, and will be less able to pay a higher electricity bill for many years. Based on experience from similar programs around the

[28] *See* FPL Response to Staff 2nd Int. #166 (describing FPL's conversations about program design with large corporate customers at events such as the EEI National Key Accounts Workshops).

[29] FPL Response to Staff 1st Int. #123.

country, these customers are unlikely to register in any significant number without immediate bill savings and targeted education and outreach.[30] A first-come, first-served model that does not explicitly engage this customer segment leaves the most vulnerable customers of FPL bearing the greatest risk and the least potential benefits. These poor design decisions must be addressed to improve the distribution of risk and reward of SolarTogether.

Q. WHAT ADDITIONAL PROTECTIONS WOULD NEED TO BE INCORPORATED FOR THE SPECIFIC NEEDS OF LOW-INCOME CUSTOMERS?

A. High electric bills are a real and significant cost to many FPL customers. Paying a utility bill is the most common reason people use small-dollar loan products (payday loans, pawn loans, direct deposit advance loans, auto title loans, non-bank installment loans, etc.), and the U.S. Energy Information Administration reports that nearly a third of Americans skip a meal or medicine in order to pay a utility bill.[31, 32] In a number of communities, it's also been shown that evictions are highly correlated to the number of households living with a high energy

[30] Smart Electric Power Alliance. 2018. "Community Solar Program Design Models," and Interstate Renewable Energy Council. 2016. "Shared Renewable Energy for Low- to Moderate-Income Consumers: Policy Guidelines and Model Provisions".

[31] Levy, Rob, and Joshua Sledge. 2012. A Complex Portrait: An Examination of Small-Dollar Credit Consumers. Center for Financial Services Innovation.

[32] U.S. Energy Information Administration. 2018. Residential Energy Consumption Survey. https://www.eia.gov/consumption/residential/.

burden.[33] With more than 1.4 million customers in energy poverty (defined as households paying more than 6% of their income on electricity expenses alone), FPL cannot afford to ignore this customer segment in any voluntary clean energy program offerings - and certainly not when proposing the largest program in the country (*See* Exhibit MC-2, showing electricity burdens in FPL's service territory).[34]

Low-income customers are especially price-sensitive, and experience with other community solar programs shows that their participation requires rates that are set at or below the retail rate.[35] Successful programs require the opportunity for these customers to save immediately,[36] something which could be available from the existing stream of benefits FPL evaluated and assigned to the program. These customers are also likely to require specialized marketing and outreach.[37] A hold-harmless provision that ensures low-income participants would not experience a bill increase as a result of joining SolarTogether and a shared-savings model to reduce energy burdens would be critical program components in ensuring a more equitable outcome as a result of SolarTogether. It is clear that FPL's one-size-fits-

[33] Brown, M.A., A. Soni, M.V. Lapsa, K.A. Southworth, and M. Cox. (2019). "Low-Income Energy Affordability in an Era of Energy Abundance," *Progress in Energy,* forthcoming.

[34] Greenlink developed Exhibit MC-2 by analyzing microdata from the American Community Survey (2017) at the census tract level and applying appropriate weights to the data to produce statistically valid results for FPL's service territory.

[35] Smart Electric Power Alliance. 2018. "Community Solar Program Design Models."

[36] Interstate Renewable Energy Council. 2016. "Shared Renewable Energy for Low- to Moderate-Income Consumers: Policy Guidelines and Model Provisions."

[37] *Ibid.*

all approach to community solar will not result in a successful program for these customers.

Q. WHAT ARE YOUR RECOMMENDATIONS FOR BETTER SERVING LOW INCOME CUSTOMERS WITH THIS PROGRAM?

A. Well-designed community solar programs share certain themes: expanding access to a broader group of consumers than current policies and markets have allowed; compensating participants for the long-term value of the clean energy produced; allowing for flexibility in ownership and contract models to meet the preferences of potential participants and overcome their most frequent barriers; and representing additive clean energy capacity, rather than undermining existing efforts already underway. At least 11 states have taken steps to recognize the importance and challenges of serving low-income customers with community solar, and best-practices are available and should be put to use.[38]

Given the extensive shareholder benefits that are being provided with minimal risk, there is a need to align the incentives of SolarTogether with the interests of their customers. With the disproportionate risk placed on low-income customers under the current program design, a block of capacity reserved for low-income customers with specific consumer protections would vastly improve this offering.

Given the severe energy poverty experienced by many customers of FPL, I recommend reserving a meaningful amount of program capacity for low-income

[38] *See* Vote Solar and GRID Alternatives, *Low-Income Solar Policy Guide*, *available at* https://www.lowincomesolar.org/best-practices/community-solar/.

customers to experience the financial benefits that will come from the addition of new solar as a part of the SolarTogether program. The Commission should require FPL to either set aside or expand its program by 100 MW of SolarTogether capacity to provide an opportunity for at least 20,000 of FPL's low-income customers to participate. These low-income customers will require some provision of benefits early in order to enable their participation and cannot wait years for benefits to materialize, which the current program design would require. The Commission should require FPL to provide meaningful bill relief that will reduce low income subscribers' annual electric bills by 10% or more.

There are a number of options to achieve this level of savings. One option to bring community solar savings and bill relief to low-income customers is to allow these subscribers to use their generation credits to offset their consumption on a one-for-one basis during the first several years of the program. This would provide the most comparable equivalent to FPL's net metering policy for these low-income subscribers. Other utilities in the Southeast provide this option for community solar participants even without income qualifications.[39] To date, low income consumers have been under-represented in rooftop solar adoption, meaning that many of these households have been unable to participate in the state's net metering policy.[40] This would provide these customers who have been unable to

[39] *See, e.g.*, Georgia Power's Community Solar program, *available at* https://www.georgiapower.com/company/energy-industry/energy-sources/solar-energy/solar/community-solar.html.

[40] Galen Barbose, Naïm Darghouth, Ben Hoen, and Ryan Wiser of Lawrence Berkeley National Lab. 2018. *Income Trends of Residential PV Adopters: An analysis of household-level income estimates, available at*

participate in net metering offerings to date with a real option for accessing this policy for the first time.[41] With this offering, FPL could maintain its proposed subscription charge and address energy poverty by reducing electricity bills of low income participants by 10% or more.

An alternative option would be to provide low-income customers with demand-side savings through energy efficiency simultaneously with the SolarTogether subscription. FPL could couple participation in SolarTogether with delivery of demand-side management offerings that will leverage additional savings to achieve a 10% bill reduction. Research from the National Laboratories has demonstrated a cost-effective opportunity for energy efficiency to offset more than 30% of the average Florida household's electricity consumption with a payback of under five years through smart thermostats, insulation, lighting and appliance upgrades.[42] Other utilities have deployed this approach of coupling community solar with efficiency offerings successfully for their low-income customers.[43]

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http://eta-publications.lbl.gov/sites/default/files/income_trends_of_residential_pv_adopters_final_0.pdf.

[41] *See* Fla. Admin. Code Ann. r. 25-6.065 (Florida's net metering regulation).

[42] Wilson, Eric J., Christensen, Craig B., Horowitz, Scott G., Robertson, Joseph J., & Maguire, Jeffrey B. *Energy Efficiency Potential in the U.S. Single-Family Housing Stock.* United States. doi:10.2172/1414819.

[43] Dominion Energy South Carolina's community solar program includes a carve-out for low income customers, which offers year-1 savings to these participants and also requires customers to complete a free Home Energy Check-Up offered by their utility prior to being eligible to enroll, providing access to the utility's other efficiency programs. *See* Community Solar Rider, https://www.sceg.com/docs/librariesprovider5/electric-gas-rates/community-solar-rider-to-retail-rates.pdf?sfvrsn=2; ORS Status Report,

In all circumstances, a hold-harmless provision should be incorporated to empower low-income customers to participate in SolarTogether without fear that they may further stress their finances by desiring to participate in producing a better future for their communities.

Finally, the Commission should consider and explore a performance-based incentive for low-income participation in future phases of the SolarTogether program. Doing so would help ensure that the interests of these customers are thoughtfully incorporated into the design of the program and benefit all stakeholders at the same time.

Q. WOULDN'T A CARVE-OUT FOR LOW INCOME CUSTOMERS GIVE PREFERENCE TO THEM?

A. Yes, appropriately so. This preference is neither undue nor unreasonable. The Commission is charged with considering the cost of providing service, as well as the rate history, value of service, and experience of the public utility.[44] It is the role of this Commission to consider the unique barriers and burdens that are borne by FPL's low-income customers in fixing rates for this program. Rather, failure to specifically consider whether low income and residential customers will be able to benefit from this offering would not serve the public interest.

https://ors.sc.gov/sites/default/files/Documents/Consumers/Solar/Leading%20Information/2019%20Report%20on%20Status%20of%20DER%20and%20NEM.pdf.

[44] *See* Sections 366.06, F.S.

Q. WHAT ARE YOUR RECOMMENDATIONS WITH RESPECT TO RESIDENTIAL AND SMALL COMMERCIAL SUBSCRIBERS?

A. To ensure fair consideration of these customers' unique needs, I recommend that the Commission require a fixed capacity be set aside for residential and small commercial customers (rather than allowing FPL to reduce or eliminate this capacity based on initial response), in addition to requiring a specific carve-out for low-income customers.[45] FPL should be required to submit annual reports to the Commission on its progress in enrolling these customers in the program, and the Commission should order FPL to engage in a robust stakeholder process to improve program offerings and outreach efforts if the capacity remains unfilled after several years.

Q. DOES SOLARTOGETHER REPRESENT AN ATTRACTIVE EQUIVALENT OPTION TO NET METERING FOR RESIDENTIAL CUSTOMERS?

A. No, it does not. Although FPL frequently notes in its testimony and discovery responses that it proposes this program as an "alternative" to net metering,[46] this comparison is misleading and misinformed at best, and concerning, because the value propositions for FPL's customers are so much better under net metering.

[45] *See* FPL Response to Staff 1st Int. #65 (FPL stating that it is seeking authority to reallocate up to 100% of the program capacity to one customer class in the future without seeking additional approval from the Commission).

[46] Valle, Matthew. *Florida Power and Light Company, Direct Testimony of Matthew Valle, Docket No. 20190061-El.* July 29, 2019. *Before the Florida Public Service Commission.*

SolarTogether offers customers an opportunity to offset their electricity consumption by leasing capacity in utility-scale solar systems and receiving a payment for generation that is typically appropriate for utility-scale generators with net benefits not occurring until 9 years in the future. Net metering, on the other hand, allows those who install solar on their own premises to receive steady compensation at the retail rate of electricity so long as there is not a net surplus at year's end. As a result, the net metering customer typically owns the solar assets and, in most instances today, makes less use of the transmission and distribution system. This provides value to the customer and to the grid by reducing system utilization, improving home values, reducing emissions, adding resiliency to the grid, and creating other values that the system owner may assign to the installation. Many of those values are quantifiable, but not all.

Q. **PLEASE COMPARE THE FINANCIAL VALUE PROPOSITION OF SOLARTOGETHER AND ROOFTOP SOLAR.**

A. Comparing the financial value proposition of each option shows that the net present value of customer owned rooftop solar to the average participating residential customer approaches $7,000 over a thirty-year window with a simple payback period of 9 years with the use of existing incentives. SolarTogether would provide the same customer a net present value benefit of $420 dollars, also with a 9-year simple payback period. The financial value proposition of net metering is roughly 15 times stronger than that of SolarTogether. Residential customers unable to pursue net metering may find SolarTogether represents an

avenue to move to clean energy for their energy supply, but the proposed program is by no means an equivalent replacement for net metering.

Q: WHAT ARE YOUR RECOMMENDATIONS TO THE COMMISSION CONCERNING FPL'S MARKETING OF THIS PROGRAM?

A. It is concerning that FPL plans to present SolarTogether as a comparable alternative to investing in rooftop solar in its marketing materials.[47] Another core principle of community solar is that it should be additive to existing renewable energy programs, and not undermine them.[48] FPL is clear that in designing the rate structure for this program, a primary motivator was to achieve a seven year payback period for subscribing customers.[49] When a monopoly utility is permitted to use its rate-basing authority to impact the economics of a clean energy offering in order to reach a certain value proposition for certain subscribing customers (in this case, seven years), it raises a concern of whether FPL's real intent is to *undermine* current market options from rooftop solar companies, rather than being motivated to *expand* the suite of clean energy offerings for its customers. If FPL is indeed seeking to expand upon rather than compete with rooftop solar

[47] *See* FPL Response to Staff 1st Int. #51 (FPL's web-based enrollment system for SolarTogether will provide a payback calculation for residential and small commercial customers comparing a net metered rooftop solar system to a SolarTogether subscription).

[48] *See* Vote Solar and GRID Alternatives, *Low-Income Solar Policy Guide*, *available at* https://www.lowincomesolar.org/best-practices/community-solar/.

[49] *See* FPL Response to Staff 1st Int. #117 ("In order for participants to achieve a 7-year payback, approximately 94.9% of the system benefits … were allocated to participants."); see also FPL Response to OPC 5th Int. #25; FPL Response to Staff 2nd Int. #170 (FPL sought to offer participants "a simple payback that met the market needs…").

offerings, the Commission should not allow FPL to market subscriptions in SolarTogether as a comparable alternative to rooftop solar.

Q. DOES FPL'S SOLARTOGETHER PROGRAM RECOGNIZE VALUE TO THE GRID IN INNOVATIVE WAYS?

A. No. The program could incorporate a time-varying rate that would better reflect the value of solar to the grid and all of its users instead of using flat, average avoided cost evaluations of generically-provided energy to the grid. These values could be projected and calculated or could be determined in real time, and there are examples nationally of both approaches being proposed and utilized.[50] The value of ancillary services from the generation is also not directly captured by the current proposal, another area where real value to the grid is accruing to FPL and non-participants but not to the customers paying to provide those benefits. Participation in the program could also be contingent on enrollment in time-of-use rates and could come with assistance from FPL like demand-side management activities that would incentivize participants to provide greater benefits for all stakeholders on the grid. Incorporating these opportunities would allow SolarTogether to be notable for more than its sheer size. I recommend that the Commission require FPL to consider such improvements in any future phases of the program offering.

[50] Barua, Priya and Celina Bonugli. 2018. *Emerging Green Tariffs in US Regulated Electricity Markets*. World Resources Institute. https://wriorg.s3.amazonaws.com/s3fs-public/emerging-green-tariffs-in-us-regulated-electricity-markets_1.pdf.

If these recommendations are adopted, SolarTogether can provide over a thousand megawatts of cost-effective new solar capacity, meet the needs and demands of largest customers, improve energy equity for the entire FPL customer base and provide an innovative model for other utilities to follow.

Q. DO YOU HAVE ANY OTHER RECOMMENDATIONS?

A. Yes. In order to further improve the value proposition of this program for all participants, I recommend that the Commission require FPL to retire all the RECs on subscribers' behalf. FPL's current proposal is to retire Renewable Energy Credits (RECs) when subscribers ask for it.[51] FPL explains that "some customers want to contribute to the growth of solar but do not have need for the RECs."[52] All customers need assurance that their investments in the program are actually contributing to the growth of solar. The best way to ensure that is to foreclose the option for FPL or some other party to utilize the RECs associated with a customer's subscription for some future purpose - raising the risk of double-counting and undermining the integrity of FPL's offering.

Q. DOES THIS CONCLUDE YOUR PRE-FILED TESTIMONY?

A. Yes, it does.

[51] *See* FPL Response to Staff 1st Int. #69 (FPL plans to retire RECs only if customers opt in).

[52] FPL Response to Staff 2nd Int. #171.

CHAIRMAN CLARK: Next witness is Mr. Steven W. Chriss. Walmart's witness.

MS. RULE: Mr. Chairman, we also would move that Mr. Chriss' September 23rd, 2019 direct testimony and his exhibit, SWC-1, be entered into the record as though read.

CHAIRMAN CLARK: So ordered.

(Whereupon, Witness Chriss' prefiled direct testimony was inserted into the record as though read.)

Introduction

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.

A. My name is Steve W. Chriss. My business address is 2001 SE 10th St., Bentonville, AR 72716-0550. I am employed by Walmart Inc. as Director, Energy Services.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS DOCKET?

A. I am testifying on behalf of Walmart Inc. ("Walmart").

Q. PLEASE DESCRIBE YOUR EDUCATION AND EXPERIENCE.

A. In 2001, I completed a Master of Science in Agricultural Economics at Louisiana State University. From 2001 to 2003, I was an Analyst and later a Senior Analyst at the Houston office of Econ One Research, Inc., a Los Angeles-based consulting firm. My duties included research and analysis on domestic and international energy and regulatory issues. From 2003 to 2007, I was an Economist and later a Senior Utility Analyst at the Public Utility Commission of Oregon in Salem, Oregon. My duties included appearing as a witness for PUC Staff in electric, natural gas, and telecommunications dockets. I joined the energy department at Walmart in July 2007 as Manager, State Rate Proceedings. I was promoted to Senior Manager, Energy Regulatory Analysis, in June 2011. I was promoted to my current position in October, 2016 and the position was re-titled in October, 2018. My Witness Qualifications Statement is attached as Exhibit SWC-1.

Q. DO YOU HOLD ANY MEMBERSHIPS RELEVANT TO THE ISSUES BEFORE THE COMMISSION FOR CONSIDERATION IN THIS CASE?

A. Yes. I am a member of the Edison Electric Institute National Key Accounts Program Customer Advisory Group and the Renewable Energy Buyers Alliance Advisory Board.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION ("COMMISSION")?

A. Yes. I testified in Docket Nos. 110138-EI, 120015-EI, 130040-EI, 130140-EI, 140002-EG, 160021-EI, and 160186-EI.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE OTHER STATE REGULATORY COMMISSIONS?

A. Yes. I have submitted testimony in over 200 proceedings before 39 other utility regulatory commissions. I have also submitted testimony before legislative committees in Kansas, Missouri, North Carolina, and South Carolina. My testimony has addressed topics including, but not limited to, cost of service and rate design, return on equity, revenue requirements, ratemaking policy, large customer renewable programs, qualifying facility rates, telecommunications deregulation, resource certification, energy efficiency/demand side management, fuel cost adjustment mechanisms, decoupling, and the collection of cash earnings on construction work in progress.

Q. ARE YOU SPONSORING ANY EXHIBITS IN YOUR TESTIMONY?

A. Yes. I am sponsoring Exhibit SWC-1 listed in the Table of Contents.

Q. PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS IN FLORIDA.

A. As shown on Walmart's website, Walmart operates 383 retail units and eight distribution centers and employs over 105,000 associates in Florida. In fiscal year ending 2019, Walmart purchased $8 billion worth of goods and services from Florida-based suppliers, supporting over 116,000 supplier jobs.[1]

Q. PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS WITHIN FLORIDA POWER & LIGHT COMPANY'S ("COMPANY" OR "FPL") SERVICE TERRITORY.

A. Walmart has 148 stores, four distribution centers, and related facilities that take electric service from the Company.

Q. HAS WALMART ESTABLISHED CORPORATE RENEWABLE ENERGY GOALS?

A. Yes. Walmart has established aggressive and significant company-wide renewable energy goals, including: (1) to be supplied 50 percent by renewable energy by 2025, and, ultimately (2) to be supplied 100 percent by renewable energy[2]. Additionally, Walmart has set a science-based target to reduce emissions in our operations by 18 percent by 2025 through the deployment of energy efficiency measures and the consumption of renewable energy.[3] To date, Walmart has contracted for or currently takes electricity from one or more renewable resources in at least 25 states and Puerto Rico.

[1] http://corporate.walmart.com/our-story/locations/united-states#/united-states/florida
[2] http://corporate.walmart.com/global-responsibility/environmental-sustainability
[3] http://news.walmart.com/2016/11/04/walmart-offers-new-vision-for-the-companys-role-in-society

Q. CAN YOU PROVIDE INSIGHT INTO WALMART'S GENERAL FRAMEWORK FOR EVALUATING RENEWABLE OPPORTUNITIES?

A. Yes. Walmart's desire for renewable energy resources must be balanced against its business needs. As a general rule, Walmart does not enter into premium structures or programs that only result in additional costs to our facilities. Rather, Walmart seeks renewable energy resources that deliver industry-leading cost, including renewable and project specific attributes such as renewable energy credits ("RECs"), within structures where the value proposition allows the customer to receive any potential benefits brought about by taking on the risk of being served by that resource instead of, or in addition to, the otherwise applicable resource portfolio. Additionally, Walmart does not enter into programs with terms in excess of 15 years.

Q. WHAT CHANNELS DOES WALMART UTILIZE TO SECURE RENEWABLE ENERGY RESOURCES?

A. To meet our renewable energy goals, Walmart utilizes three primary channels to secure renewable energy resources:

- **Contracting for off-site resources:** These products are typically structured to replace other energy, both physically and on the bill. This mechanism allows Walmart to leverage its scale to drive the best project economics while simultaneously minimizing transaction time and costs. To date, Walmart has contracted for these resources in deregulated markets through Texas Retail Energy, LLC, a competitive electric supplier wholly owned by Walmart that serves as our electric supplier in most deregulated retail markets, to directly serve our

load. We have also entered into "Virtual Power Purchase Agreements" in deregulated wholesale markets, which do not directly serve our load but allow us to bring new large scale renewable resources to the market.

- **Contracting for on-site resources:** Walmart contracts for on-site, behind the meter resources through power purchase agreements ("PPAs") and leases that allow performance guarantees. These resources replace grid energy and are priced with the expectation that the operating costs for the site are reduced.
- **Utility partnerships:** Walmart works with its utility partners to develop useable commercial and industrial programs and economic structures targeted to function within the confines of the regulatory compact and with minimal impact to non-participating customers. When this option is pursued, Walmart works to ensure that programs it assists to develop can be used by the broader group of large commercial and industrial customers, not merely Walmart. Walmart is unique in the large commercial space because we have significant in-house rate and regulatory expertise that we are willing to leverage to create opportunities to move the entire industry forward. The largest of these partnerships that have been executed to date include the development of and participation in Georgia Power Company's Renewable Energy Development Initiative ("REDI") program[4] and Alabama Power Company's 72 MW solar farm in Alabama.[5] Additionally,

[4] https://www.greenbiz.com/article/how-google-and-walmart-work-utilities-procure-clean-power
[5] http://www.alabamanewscenter.com/2018/01/02/chambers-county-solar-project-now-serving-alabama-power-customers/

Walmart worked with Virginia Electric and Power Company d/b/a Dominion Energy Virginia to develop their recently approved Schedule RG[6] and with Ameren Missouri to develop their Renewable Choice program.[7] While Walmart assisted in developing these opportunities, the opportunities are open to other interested large customers, not just Walmart.

Q. DID WALMART ENGAGE IN DISCUSSIONS WITH FPL ABOUT THE SOLARTOGETHER PROGRAM?

A. Yes. Walmart had a conversation with FPL in October 2018 regarding the SolarTogether Program ("SolarTogether" or "Program") development process. Walmart has also preregistered in the program.

Purpose of Testimony and Summary of Recommendations

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to respond to FPL's Petition to approve the proposed SolarTogether Program.

Q. PLEASE SUMMARIZE WALMART'S RECOMMENDATIONS TO THE COMMISSION.

A. Walmart's recommendations to the Commission are:

1) Walmart appreciates FPL's efforts to develop the SolarTogether Program and recommends that the Commission approve the program with one change to clarify

[6] *See Application of Virginia Electric and Power Company For approval to establish a companion tariff designated Schedule RG, pursuant to § 56-234 of the Code of Virginia,* Virginia State Corporation Commission Case No. PUR-2017-00163, Order Approving Tariff (issued Nov. 6, 2018).
[7] *See* Union Electric Company Tariff, M.O. P.S.C. Schedule No. 6, 1st Revised Sheet No. 94.

REC treatment; and,

2) The Commission should require the Company to retire the RECs associated with a participating customer's subscription on behalf of that customer and include language in any approved SolarTogether tariff that clearly articulates this transfer.

Q. DOES THE FACT THAT YOU MAY NOT ADDRESS AN ISSUE OR POSITION ADVOCATED BY THE COMPANY OR ANY OTHER PARTY INDICATE WALMART'S SUPPORT?

A. No. The fact that an issue is not addressed herein or in related filings should not be construed as an endorsement of, agreement with, or consent to any filed position.

SolarTogether

Program Description

Q. WHAT IS YOUR GENERAL UNDERSTANDING OF SOLARTOGETHER AS PROPOSED BY THE COMPANY?

A. My general understanding is that the Company proposes SolarTogether as a voluntary community solar program that allows an eligible customer to subscribe to a share of a solar resource dedicated to the program and receive an energy credit and the option to have the REC retired on their behalf. *See* Direct Testimony of Matthew Valle ("Valle Direct"), page 3, line 10 to line 13 and page 20, line 10 to line 11.

Q. WHAT IS YOUR UNDERSTANDING OF THE PROPOSED PROGRAM APPLICABILITY FOR FPL CUSTOMERS?

A. FPL proposes to offer SolarTogether to all customers that take service under a metered rate schedule and do not have a delinquent balance with the Company. *See*

id., Exhibit MV-1, page 4. The Company proposes that an account be able to subscribe to up to 100 percent of its previous 12 months usage. *See id.*, page 16, line 7 to line 8.

Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED PROGRAM SIZE?

A. My understanding is that the Company proposes a total Program size for Phase 1 of 1,490 MW, constituted of 372.5 MW of capacity for residential and small business customers and 1,175.5 MW of capacity for commercial, industrial, and governmental customers. *Id.,* page 9, line 22 to line 23 and page 16, line 18 to line 19.

Q. DOES THE COMPANY PROPOSE DESIGNATED RESOURCES IN THIS DOCKET?

A. Yes. The Company proposes that the program energy be sourced through 20 new "solar energy centers" to be come online in 2020 and 2021. FPL states that they may propose additional resources in the future if needed to meet customer demand. *Id.,* page 9, line 22 to page 10, line 8.

Q. WHAT TERM LENGTH DOES THE COMPANY PROPOSE?

Q. The Company proposes a term length of not less than one billing cycle. *See id.* Exhibit MV-1, page 1.

Q. WHAT DOES THE COMPANY PROPOSE IF THE CUSTOMER TERMINATES SOLAR DIRECT SERVICE EARLY?

A. FPL proposes that a customer who terminates SolarTogether service, either voluntarily or involuntarily, may not re-enroll for a period of 12 months. *Id.*

Q. WHAT REC TREATMENT DOES THE COMPANY PROPOSE?

A. The Company proposes that participants may elect to have the Company retire the RECs on behalf of the participating customer. *Id.,* page 20, line 10 to line 11. However,

it does not appear that the Company has included this provision in the proposed tariff. *See id.*, Exhibit MV-1.

Q. DOES THE COMPANY PROPOSE A PORTABILITY PROVISION FOR CUSTOMERS MOVING WITHIN THE SERVICE TERRITORY?

A. Yes. *Id.,* page 2.

Q. WHAT DOES THE COMPANY PROPOSE AS THE SOLARTOGETHER SUBSCRIPTION CHARGE FOR PHASE I?

A. The Company proposes a fixed Subscription Charge of $6.76/kW-month for each kW of subscribed capacity. Per the Company's testimony, the Subscription Charge represents 96 percent of the base revenue requirements of the program, including operational costs for the solar centers and program administrative costs. *See id.*, page 10, line 21 to page 11, line 1.

Q. WHAT DOES THE COMPANY PROPOSE AS THE SOLARTOGETHER SUBSCRIPTION CREDIT?

A. The Company proposes a 30 year schedule of $/kWh Subscription Credits based on projected system benefits from the solar centers, escalated annually. *Id.,* page 11, line 2 to line 6 and Exhibit MV-1, page 3.

Walmart's Recommendations

Q. WHAT IS THE WALMART'S OVERALL IMPRESSION OF THE PROPOSED SOLARTOGETHER PROGRAM?

A. Walmart appreciates FPL's efforts to develop the SolarTogether Program and recommends that the Commission approve the program with one change to clarify REC treatment.

Q. DOES THE PROPOSED SOLARTOGETHER PROGRAM MEET THE PARAMETERS SOUGHT BY WALMART IN EXAMINING UTILITY PROGRAMS?

A. Generally, yes. As I describe earlier in my testimony, Walmart does not enter into premium structures or programs that only result in additional costs to our facilities. Rather, Walmart seeks renewable energy resources that deliver industry-leading cost, including renewable and project specific attributes such as RECs, within structures where the value proposition allows the customer to receive any potential benefits brought about by taking on the risk of being served by that resource instead of, or in addition to, the otherwise applicable resource portfolio. Additionally, Walmart does not enter into programs with terms in excess of 15 years. FPL's proposed SolarTogether Program meets all of these parameters.

Q. WHAT IS WALMART'S CONCERN IN REGARD TO THE COMPANY'S PROPOSED REC TREATMENT?

A. Walmart's concern is that the Company's proposed REC treatment does not definitively convey RECs to participating customers, and the proposed tariff does not clearly convey this transfer.

Q. WHY IS THIS IMPORTANT?

A. Requiring the Company to retire RECs for a participating customer's subscription on behalf of that customer and clearly articulating that program feature will ensure that all participating customers can accurately represent their usage of the program as the consumption of renewable energy. Without the RECs that claim is not valid,[8] and the Company's proposal to only retire the RECs upon request, and the exclusion of any supporting tariff language, puts customers at risk for misrepresenting the content of their electricity consumption.

Q. WHAT IS WALMART'S RECOMMENDATION TO THE COMMISSION ON THIS ISSUE?

A. The Commission should require the Company to retire the RECs associated with a participating customer's subscription on behalf of that customer and include language in any approved SolarTogether tariff that clearly articulates this transfer.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

[8] For more information, see the Environmental Protection Agency's Green Guides at https://www.ftc.gov/news-events/media-resources/truth-advertising/green-guides.

CHAIRMAN CLARK: Mr. Cavros, you have Mr. Bryan A. Jacob?

MR. CAVROS: Yes. Thank you, Mr. Chairman. At this time we would request that the testimony of Mr. Bryan A. Jacob be entered into the record though read, as well as one prefiled exhibit, BHA-1 thank you.

CHAIRMAN CLARK: So ordered.

(Whereupon, Witness Jacob's prefiled direct testimony was inserted into the record as though read.)

Q. Please state your name, position and business address.

A. My name is Bryan A. Jacob. My role is Solar Program Director for Southern Alliance for Clean Energy ("SACE"). My business address is 691 John Wesley Dobbs Ave., Atlanta, Georgia, 30312.

Q. On whose behalf are you testifying in this proceeding?

A. I am testifying on behalf of SACE.

Q. Please summarize your qualifications and work experience.

A. I graduated from Georgia Institute of Technology in 1993 with a Bachelor of Civil Engineering. From 1993-2015, I coordinated and led environmental programs for The Coca-Cola Company, including development of a system-wide climate protection strategy The strategy I led incorporated both demand side energy efficiency as well as supply side renewable energy In 2015, I launched Climate Coach International, LLC, to help organizations understand climate-related risks and opportunities, then design and implement practical (and cost-effective) climate mitigation and adaptation strategies. I joined SACE in 2017 to lead the Solar Program efforts across seven Southeastern states. My program responsibilities range from conducting research on solar power trends to advocacy on utility resource planning, and specifically include collaboration with stakeholders in the solar energy development industry

I am the lead author on the SACE *Solar in the Southeast Annual Report* which provides an equitable, unbiased comparison of various-sized utilities ranked by *watts per customer*

(W/C) of solar power. Community and/or shared solar programs have become more common in our database that underpins the SACE reporting efforts. I have reviewed multiple community/shared solar program designs in Florida as well as across the Southeast region and have shared my community solar program experience via SACE communication channels (cleanenergy.org blog) as well as at conferences (for example, the 2018 Alabama Solar Industry Association Conference).

Q. Have you previously testified before the Florida Public Service Commission ("the Commission")?

A. No. This is my first time testifying before the Commission, though I previously filed comment letters in this docket (letter dated June 26, 2019) as well as the docket for a shared solar proposal from Tampa Electric (Docket No. 20180204-EI, letter dated March 20, 2019). I also testified recently before the Georgia Public Service Commission in the Georgia Power Integrated Resource Plan, Docket Nos. 42310 and 42311

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to compare and/or contrast FPL's proposed SolarTogether program with established best practice criteria. This comparison will help inform the Commission on the suitability of the proposed program design and where enhancements may be warranted in this and/or future program expansions.

Q. Are you submitting exhibits along with your testimony?

A. Yes, I am submitting one (1) exhibit with my testimony, as follows:

- BAJ-1 Resume of Bryan A. Jacob.

Q. What is the role of SACE in this proceeding?

A. SACE's mission is to promote responsible energy choices to ensure clean, safe, and healthy communities throughout the Southeast, including Florida. As part of this mission, SACE supports and advocates for the meaningful development of low cost, clean solar power, including community solar programs.

The proposed FPL SolarTogether program will be the largest shared solar program in the United States totaling 1,490 megawatts (MW) in Phase 1 This represents an enormous clean energy opportunity for many of the state's electricity customers, including customers who are SACE members. Shared, or community, solar programs play an important role in extending the economic and environmental benefits of solar power to customers who may not be able to directly take advantage of rooftop solar power. Therefore, a successfully designed community solar program, one which maximizes economic benefit to customers, will advance the adoption of low-cost, clean solar power and is consistent with SACE's mission, and that of its members.

Q. Have you evaluated the FPL SolarTogether proposal?

A. Yes.

Q. What criteria did you use for this evaluation?

A. There is no single set of criteria that can comprehensively prescribe a perfect program design. FPL referenced various reports including the *Community Solar Policy Decision*

Matrix published by the Coalition for Community Solar Access (CCSA) in 2017 and *Community Solar Program Design Models* from the Smart Electric Power Alliance (SEPA) in 2018[1] as well as the 2018 National Renewable Energy Lab (NREL) study, *Focusing the Sun. State Considerations for Designing Community Solar Policy.*[2]

For my evaluation, I compared the FPL SolarTogether proposal with criteria established in *A Checklist for Voluntary Utility-Led Community Solar Programs* published by VoteSolar and the Interstate Renewable Energy Council ("IREC") in November 2018.[3]

These seven criteria include: (#1) expanding consumer access to clean energy; (#2) offering a tangible economic benefit for all participating customers, (#3) identifying ways to promote cost savings; (#4) prioritizing the customer experience; (#5) promoting competition; (#6) optimizing community solar to benefit the grid and the community; and (#7) complementing existing programs.

Q. What conclusions did you reach after applying the criteria to the SolarTogether program?

A. The SolarTogether program will expand access to clean energy Both utility scale and rooftop solar continue to grow in Florida. Yet, a number of customers can't directly take advantage of rooftop solar power They may lease their homes, live in multi-tenant dwellings, have roofs that can't host a solar system or have too much shade, or experience other mitigating factors. Shared (or community) solar programs are intended to provide access and choice to the economic and environmental benefits of solar power for those customers.

In Phase 1, FPL plans to add 20 new solar energy centers between 2020 and 2021, totaling 1,490 MW_{AC}.[4] The SolarTogether program is designed to serve 74,500 residential customers assuming the customers subscribe at 100% of an assumed 1,000 kWh monthly energy usage.[5] This amounts to approximately 1.5% of FPL retail customers), in addition to commercial customers. For comparison, the Tampa Electric Shared Solar program (SSR-1) approved by this Commission in Commission Order PSC No. 2019-0215-TRF-EI will generate enough energy for approximately 2,600 residential customers at the 100 percent subscription level.[6] That represents approximately 0.3% of Tampa Electric's retail customers. Therefore, Phase 1 of the SolarTogether program meets more customer demand than the Tampa Electric program and other programs the Commission has previously approved. Phase 1 Program capacity, allocated for commercial, industrial and governmental customers aligns with the level of capacity reserved during preregistration. Many of these large customers have clean energy and/or sustainability goals and have expressed significant demand for this program. Therefore, Phase 1 of the SolarTogether program, and subsequent phases, will expand customer access to clean energy

The proposed SolarTogether program offers tangible economic benefit directly to participating customers. The subscription rate for Phase 1 is established as $6.76 per kilowatt (kW). Participants will receive a bill credit based on the generation in kilowatt-hours (kWh) from their subscribed capacity For FPL SolarTogether Phase 1, the Benefit Rate starts at 3.42881 cents per kilowatt hour and will escalate at 1.45 percent annually The program is designed to allow participants to achieve simple payback between years

5-7 of program participation after which time, an increasing net benefit continues to accrue to the participant. Therefore, the program provides a more significant and more certain benefit to participants than other shared solar programs that the Commission has previously approved.[7] Given that the benefit does not accrue immediately to participants, the program would be enhanced with a low-to-moderate income (LMI) customer component.

The 74.5 MW capacity of each project and the twenty proposed solar installations leverage economies of scale that promote development cost savings. The Company, for example, appears to have gone though a rigorous Request For Proposal (RFP) process. It indicates that more than 98% of the construction costs are the result of competitive RFP solicitations.[8]

FPL estimates the total construction cost of the Projects, including land, will be $1 79 billion or $1,202 per kW_{AC}. Costs may vary either upward or downward on an individual site basis, but FPL projects that the total cost will not exceed $1 79 billion.[9]

The Company has prioritized the customer experience in the program design by providing participants with transparent and flexible subscription terms. The program will allow participation with no upfront subscription fees, allowing flexible subscription amounts; no cancellation fees for leaving the program; and a portability feature that allows the subscription to stay with customer if they move within the FPL service territory FPL states that participation is voluntary and customers can keep their subscription as long as they remain an FPL customer. Participants may unsubscribe at

any time and are not committed to a long- term contract. Participants may also increase their subscription level once a year based on availability and decrease their subscription level at any time.[10]

Community/shared solar programs should complement existing programs. For example, they should be "additive" and result in additional renewable energy resources on the distribution grid rather than competing with existing programs. FPL's SolarTogether program complements existing programs as these are new solar facilities that will be built for the purpose of serving participants in this program. Although, the Company has committed to build Projects 1 and 2[11] even if the SolarTogether program is not approved by the Commission, it states that it will re-evaluate the timing and amount of any additional solar capacity in that circumstance.[12] FPL should continue to offer and promote existing rooftop solar net metering options for customers preferring on-site self-generation.

Q. Have you previously used these criteria to evaluate other community solar program designs?

A. Yes. Earlier this year, I personally evaluated the shared solar proposal from Tampa Electric, Docket No. 20180204-EI, using these same IREC criteria. Additionally, prior to my joining SACE, another former member of SACE staff performed a similar evaluation of Gulf Power's proposed community solar pilot, Docket No. 20150248-EG That

assessment relied on a previous version of IREC criteria in *Model Rules for Shared Renewable Energy Programs,* June 2013.

Q. Please summarize SACE's evaluation of the FPL SolarTogether proposal.

A. FPL has put forth a novel and significantly-sized investor-owned utility shared solar program design that provides substantial system benefit and prioritizes the customer experience. The FPL proposed SolarTogether program meets many of the best design practice criteria for shared solar programs: (#1) expanding consumer access to clean energy; (#2) offering a tangible economic benefit for all participating customers; (#3) identifying ways to promote cost savings; (#4) prioritizing the customer experience; and (#7) complementing existing programs. In my view, opportunities exist for further alignment on criteria (#5) promoting competition and (#6) optimizing community solar to benefit the grid and the community

Q. Do you have specific recommendations for how FPL could improve the SolarTogether program to further exhibit best practice design?

A. Yes, I have three recommendations to offer

- Regarding promoting competition, FPL should continue to pursue the most cost-effective projects possible and ensure that they are competitively bidding out the construction and panel procurement to a wide range of vendors to get the best pricing and terms. FPL should examine whether competitive solicitation of solar power in

future phases of the program may offer an even more cost-effective way to offer solar to customers.

- Regarding optimizing community solar to benefit the grid and the community, FPL has indicated that residual area at four of the SolarTogether sites could be suitable for energy storage. This would include Project 2, Site 2; Project 3, Site 6; Project 4, Sites 2 and 4.[13] A recent report from the Institute for Energy Economics and Financial Analysis documents substantial system value for utility-scale energy storage ranging from firming intermittent renewable generation to contributing to system peak needs as well as contributing to system resilience.[14] FPL should pursue these opportunities for optimizing the SolarTogether program to further benefit the grid and community by incorporating energy storage at the appropriate sites.
- Some criteria, including those referenced by FPL[15], incorporate considerations for how to engage LMI participation. A specific design that facilitates participation by LMI customers would be a desirable enhancement to the FPL proposal. SolarTogether as currently designed has no goals for participation by LMI customers, nor a mechanism by which to attract LMI customers. The Commission should provide flexibility and encouragement for FPL to return to the Commission with an LMI enhancement that could be incorporated into the program.

Q. Does SACE support the proposed FPL SolarTogether program?

A. Yes. NREL estimated that, as of July 2019, Community solar projects represent more than 1.3 gigawatts alternating-current (GW-AC) of total installed capacity in the United States. Phase 1 of the proposed FPL SolarTogether program will more than double the

current community solar capacity in the country This represents an enormous clean energy opportunity for roughly half of the state's electricity customers, offering them more choices around their electric service. SACE supports Commission approval of this program and respectfully requests the Commission consider the above recommendations for enhancing the program.

Q. Does this conclude your testimony?

A. Yes.

[1] Florida Power and Light, Response to OPC's Third Request for Production of Documents, Request No. 6

[2] Florida Power and Light, Response to Staff's 1st Data Request, No. 66.

[3] Vote Solar and IREC, *A Checklist for Voluntary Utility-Led Community Solar Programs*, November 2018, at https://irecusa.org/publications/checklist-for-voluntary-utility-led-community-solar-programs/

[4] Florida Power and Light, *Direct Testimony of Matthew Valle*, Docket Nos. 20190061-EI, p. 9, July 29, 2019

[5] *Id* at 17

[6] Florida Public Service Commission, Order PSC No. 2019-0215-TRF-EI, Docket No. 2018-0204, June 3, 2019

[7] *See* e.g. Florida Public Service Commission, Order PSC No. 2019-0215-TRF-EI, June 3, 2019; Florida Public Service Commission, Order No. PSC-2016-0119-TRF-EG, March 21, 2016; and Order No. PSC-2017-0451-AS-EU, November 20, 2017

[8] Florida Power and Light, Direct Testimony of William Brannen, Docket No. 20190061-EI, p.10, July 29, 2019

[9] *Id.*

[10] Florida Power and Light, *Direct Testimony of Matthew Valle*, Docket No. 20190061-EI, p. 9, July 29, 2019

[11] Phase 1 of the SolarTogether program will consist of 5 distinct projects. *See Id.* at 19

[12] Florida Power and Light, Response to OPC's 5th Set of Interrogatories, No. 26.

[13] Florida Power and Light, Response to Staff's 1st Data Request, Nos. 4-23.

[14] Institute for Energy Economics and Financial Analysis, *Advances in Electricity Storage Suggest Rapid Disruption of U.S. Electricity Sector,* June 2019 at http://ieefa.org/wp-content/uploads/2019/06/Advances-in-Electricity-Storage-Suggest-Potential-Rapid-Disruption-of-U.S.-Electricity-Sector-1-1 pdf

[15] Coalition for Community Solar Access (CCSA), *Community Solar Policy Decision Matrix,* December 2017 at http://www.communitysolaraccess.org/wp-content/uploads/2017/12/Community-Solar-Policy-Decision-Matrix-2017 pdf

CHAIRMAN CLARK: And, Mr. Trierweiler. Mr. Cayce Hinton is your witness.

MR. TRIERWEILER: Yes, Chairman. Staff would like to move the prefiled direct and supplemental direct testimony of Cayce Hinton into the record, please.

CHAIRMAN CLARK: So ordered.

(Whereupon, Witness Hinton's prefiled direct and supplemental testimony was inserted into the record as though read.)

DIRECT TESTIMONY OF CAYCE HINTON

Q. Please state your name and business address.

A. My name is Cayce Hinton. My business address is 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399.

Q. By whom are you presently employed and in what capacity?

A. I am employed by the Florida Public Service Commission (Commission) as the Director of the Office of Industry Development and Market Analysis. I have been employed by the Commission since April 1999.

Q. Briefly review your educational and professional background.

A. In 1989, I received a Bachelor of Science degree in Business, with a major in Marketing, from the Florida State University College of Business. I have worked for the Commission for twenty years in a variety of roles, including seven years as the chief advisor for two different Commissioners.

Q. Please describe your current responsibilities.

A. The Office of Industry Development and Market Analysis (IDM) consists of four sections, two of which address the Commission's remaining responsibilities in regulating the telecommunications industry in Florida. The other two sections focus mainly on energy issues. IDM has the responsibility of developing eight different reports on an annual basis. We also have primary responsibility for monitoring activities at the Florida Legislature when in session and producing bill analyses when requested by legislators or their staff. I also give presentations before legislative committees when requested on the role of the Commission or particular topics under our jurisdiction. IDM also takes the lead on special projects, analyzes developing policies and prepares recommendations for implementing state laws, such as renewable energy, net metering, nuclear cost recovery, and storm protection plan cost recovery.

Q. Have you previously presented testimony before this Commission?

A. No.

Q. What is the purpose of your testimony?

A. My testimony is limited to discussing certain principles of Florida's regulatory framework and the regulatory treatment of new, electric generation, including solar photovoltaic. I will compare the regulatory treatment being requested for FPL's SolarTogether program with Florida's standard regulatory practices when addressing new electric generation assets. I will also identify policy considerations that are intended to illuminate and provide context for pending decisions regarding FPL's petition.

Q. Please explain the regulatory framework you are referring to.

A. Florida consumers are served by vertically integrated electric utilities that are considered natural monopolies. Florida has a regulatory framework established through statute that grants utilities specific rights and responsibilities, and that establishes particular roles and responsibilities for the Commission as the economic regulatory agency.

For example, as natural monopolies electric utilities are granted exclusive service territories, and they are allowed to charge rates to recover the prudent cost of providing electric service to customers within that territory. The utilities are also given an opportunity to earn a fair and reasonable return on their investment in plant used to provide electric service.

Along with those rights, utilities have the obligation to serve all customers within their service territory, and that service must be adequate, safe, and reliable. Utilities are not permitted to build unnecessary facilities or incur costs for unnecessary services. In addition, utilities may not unduly discriminate or show preference in providing service or charging rates.

The Commission's role is to ensure that customers receive adequate, safe electric service at rates that are fair, just, and reasonable. Those rates may only recover the cost of

plant that is actually used and useful in the public service. The Commission also oversees the reliability and sufficiency of the bulk power grid and ensures that any additions to the grid are necessary and cost-effective.

Q. Describe utility and regulatory practices that ensure sufficient and cost-effective electric service for Florida ratepayers.

A. A large part of that work is accomplished through the resource planning process, a traditional utility function performed to ensure reliable service at the least cost. Utilities annually assess forecasts of customer load and reserve margins for a ten-year period and perform a system reliability analysis. An evaluation of existing generating resources is conducted by the utility in order to identify potential opportunities to improve generation efficiency. If a need for additional capacity is identified in a given year, the utility will develop alternative resource plans, evaluating combinations of demand-side and supply-side resources, to determine the most feasible, cost-effective approach to meet that need. The important principle underlying this process is the idea of "least cost planning."

There are typically two paths for gaining approval for new electric generation assets. One path requires approval by numerous governmental agencies prior to the construction of new electric generation assets. The other path does not require prior-approval. The need for prior-approval depends upon whether the facility is subject to Florida's Electrical Power Plant Siting Act (PPSA). The PPSA applies to solar or steam generating facilities 75 megawatts (MW) or larger. If the utility selects a project as the most cost-effective alternative that meets those criteria, it must obtain a site certification through the PPSA for the project. In that case, the utility must file a petition for a determination of need from the Commission. The utility must support its forecasts of future need for the additional capacity and demonstrate cost-effectiveness by evaluating all alternatives, including purchases from third-party providers. The PPSA also requires obtaining environmental approvals from the Florida Department of

Environmental Protection, with ultimate approval of the site certification by the Governor and Cabinet. Once the project receives all necessary approvals, the utility may construct the facility and seek cost recovery in a future rate proceeding.

The other path forward is for projects that do not require PPSA certification. In that instance, the utility is not required to obtain prior-approval from the Commission to construct the facility. Cost recovery may be sought in a future rate proceeding at the Commission, where the utility will be required to address the prudence of its actions and costs.

Q. How do new generation additions affect rates?

A. Once the utility completes construction and the plant begins generating electricity for customers, the utility will place the costs of the project in rate base. Rates will not be adjusted, however, until the Commission approves a rate change in a subsequent rate proceeding. At that time the Commission will set rates to allow the utility to recover the prudently incurred costs of the new plant. Since the new generating plant is placed in service to benefit all ratepayers, the cost of that plant will be shared by all ratepayers in a non-discriminatory manner, according to their respective rate classes.

The Commission has historically held to the regulatory principle of allocating costs to the cost-causer. That way customers who may benefit from a project are not subsidized by customers who do not enjoy the same benefit. This principle applies to projects both large and small. When a new generating facility is built to meet increases in customer load, the general body of ratepayers is charged in a non-discriminatory manner because they are all the cost-causer. That is, they all equally enjoy the benefit of that additional capacity.

Q. Are there situations when only certain customers are charged rates for a project?

A. Yes. When special projects are requested by a particular customer or set of customers, the customers who benefit from the project cover the full cost of that project. For example, FPL currently has a program called SolarNow, which was first approved by the Commission

as a pilot program in 2014. Under SolarNow, customers voluntarily pay an additional fee to promote the development of small solar facilities throughout FPL's service territory. FPL collects these fees from participants and uses that revenue to finance construction of the solar facilities. The rates charged to customers who do not participate are not impacted by these construction projects. In voluntary programs such as SolarNow, non-participants are shielded from the costs of the program.

Q. How have utility-scale solar generating facilities been addressed in this regulatory framework?

A. In recent years, construction of utility-scale solar facilities have been the result of rate case settlement agreements that created a solar base rate adjustment, referred to as a SoBRA, to recover the costs of such facilities. Basically, the settlements authorized the construction of a certain amount of solar generation as long as the projects met certain criteria. Once approved by the Commission, the utility would adjust its base rates for all customers to recover the costs of the solar facilities without the need for a separate rate proceeding. All of the previous SoBRA units were below the 75 MW threshold and therefore did not require certification under the PPSA. Even though these projects were authorized as part of settlement agreements, the regulatory treatment is consistent with the idea that these facilities are determined by the Commission to benefit the entire body of ratepayers; therefore, the cost for these facilities is allocated to the entire body of ratepayers in a non-discriminatory manner.

Q. Does FPL's proposed SolarTogether program follow the same regulatory framework?

A. No. SolarTogether does not seem to fit in either of the paths of approval I previously discussed. It appears that FPL has taken solar facilities that have been identified by the utility as cost-effective for the general body of ratepayers and allocated the majority of benefits to participants in a voluntary program. The participating customers pay an additional charge and

receive a credit based upon the generation output of the facilities. The charge and credit have been designed to provide a payback period of 5 to 7 years for participants.

The capital costs of the proposed solar facilities would be added to FPL's rate base. The revenues from the SolarTogether charge would be included as base revenues in FPL's monthly earning surveillance reports. The administrative costs for the program would be reflected as base rate recoverable costs. FPL will not increase base rates during the term of its existing base rate settlement, but there may be a request to increase base rates to recover these costs in the future. However, the credits to participants would be recovered from the general body of ratepayers through FPL's fuel cost recovery clause.

Phase 1 of the program involves the construction of 1,490 MW, consisting of twenty 74.5 MW solar arrays. According to FPL witness Valle's testimony, the program contemplates additional phases, with implementation of each phase dependent upon customer interest in participation. Under this scenario, instead of adding generating units to satisfy projected reliability or economic needs for all customers, FPL's proposed SolarTogether program would add solar facilities based upon approving a tariff that reflects the desires of a select group of customers.

Mr. Valle explained in his testimony that customer interest in this program was related to "sustainability and financial goals." The program would offer participants an alternative to the installation of rooftop solar and provide a means to lower their electricity bills over time. The program would also allow participants to achieve desired corporate/political goals of 100% renewable energy. Mr. Valle explained that over 200 customers pre-registered for 1,100 MW of the project's 1,490 MW total, with many of them reserving subscriptions equal to 75% to 100% of their annual energy usage. This represents a very small percentage of FPL's 4.9 million customers participating in a program that impacts the entire body of ratepayers.

Q. Are you recommending that the Commission deny FPL's petition to approve the

SolarTogether program?

A. I am neither recommending approval nor denial. My only goal is to ensure the Commission is fully informed when making its decision. The SolarTogether program seems to represent a departure from traditional least cost planning principles. If generating facilities are being built to meet the desires of a certain portion of customers, should all the benefits and costs of the program be allocated to those customers as the cost causer? In addition, if solar additions are now a cost-effective generation addition for all customers, is it appropriate to implement a voluntary program that allocates the majority of benefits to a small group of customers? Finally, does this allocation of costs and benefits between participants and non-participants represent undue discrimination or preference? These questions express policy considerations raised by the SolarTogether program.

Q. Does this conclude your testimony?

A. Yes.

SUPPLEMENTAL TESTIMONY OF CAYCE HINTON

Q. Please state your name and business address.

A. My name is Cayce Hinton. My business address is the Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399.

Q. Did you previously submit direct testimony in this proceeding?

A. Yes.

Q. What is the purpose of your supplemental testimony?

A. My testimony will briefly respond to the rebuttal testimony of Florida Power & Light Company (FPL), filed September 23, 2019.

Q. In your previous testimony, you posed questions that you felt expressed policy considerations raised by the SolarTogether program. Did FPL witnesses address your questions?

A. Yes. FPL witnesses Valle and Deason both testified regarding the policy observations I made in my testimony and witness Deason provided responses to my specific questions.

Q. Do you believe the questions you raised are still appropriate for the Commission to consider?

A. Yes. I believe the questions are still relevant and should still be considered by the Commission. I raised the questions in my direct testimony in order to prompt discussion of the underlying regulatory policy that may be impacted by SolarTogether. Witnesses Valle and Deason provided FPL's answers to the questions I posed and responded to other observations I expressed in my testimony. Consistent with my direct testimony, however, I am not going to opine on whether FPL's responses alleviate the concerns I raised regarding the SolarTogether program. I will leave that determination to the Commissioners.

Q. Did FPL update the SolarTogether program in rebuttal testimony, and did that update address the policy considerations you raised about the structure of the program?

A. FPL updated its economic analysis by changing some of the assumptions used to calculate the cost-effectiveness of the program, resulting in a new allocation of costs and benefits of the program. However, the program does not appear to have been structurally changed. Certain costs of the program will still be included in rate base and potentially included in base rates in the future, and the credits provided to participants will be recovered from the general body of ratepayers through FPL's fuel cost recovery clause. In addition, future additions of utility-scale solar will still be determined based upon interest in a voluntary program rather than on an analysis of need for additional capacity. So, although FPL has testified that the SolarTogether program is more cost-effective than originally proposed, structurally it still represents a departure from historical regulatory practices that are in place to protect the general body of ratepayers, as explained in my previous testimony.

Q. Does this conclude your supplemental testimony?

A. Yes.

CHAIRMAN CLARK: All right. We've run full circle. Back around to FPL's supplemental rebuttal. Mr. Cox.

MR. COX: Yes. Thank you, Chairman Clark. FPL would call its next witness, Dr. Steven Sim.

EXAMINATION

BY MR. COX:

Q Good afternoon, Dr. Sim.

A Good afternoon.

Q Dr. Sim, just wanted to clarify one thing before we get started. For your testimony that you -- or continued at the start of the hearing today, when the hearing reconvened this morning, you were sworn in yesterday prior to the testimony that you gave both earlier today, as well as the testimony that began yesterday afternoon, correct?

A Yes. I was sworn in yesterday and I understood from the beginning of today I was still under oath.

Q Okay. Good. Could you please state your name for the record?

A Steven R. Sim.

Q And who is your current employer and what is your business address?

A Florida Power & Light, 700 Universe Boulevard,

Juno Beach, Florida.

Q And the last time, your current position with FPL?

A Director of Integrative Resource Planning.

Q Thank you. Dr. Sim, have you adopted Mr. Enjamio's rebuttal and supplemental testimony that was filed on November 27th, 2019 consisting of seven pages in this proceeding?

A Yes.

Q Dr. Sim, did you cause to be filed on January 9th, 2020 an errata that modified Mr. Enjamio's testimony to include your information in place of his?

A Yes.

Q Do you have any other changes or corrections to that testimony?

A I do not.

Q If I were to ask you the same questions today as contained in that November 27, 2019 prefiled testimony, as modified with your information in place of Mr. Enjamio, would your answers be the same?

A Yes, they would.

MR. COX: Chairman Clark, FPL would request that this testimony, the November 27, 2019 rebuttal testimony, supplement testimony, be inserted into the record as though read.

CHAIRMAN CLARK: So ordered.

(Whereupon, Witness Sim's prefiled rebuttal testimony was inserted into the record as though read.)

ERRATA SHEET OF STEVEN R. SIM

November 27, 2019 – Rebuttal of Supplemental Testimony

PAGE #	LINE #	CHANGE
Page 1	Line 3	Delete “JUAN E. ENJAMIO” and insert “STEVEN R. SIM”
Page 2	Line 2	Delete “Juan E. Enjamio” and insert “Steven R. Sim”

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

SUPPLEMENTAL REBUTTAL TESTIMONY OF JUAN E. ENJAMIO

DOCKET NO. 20190061-EI

NOVEMBER 27, 2019

Q. Please state your name and business address.

A. My name is Juan E. Enjamio. My business address is Florida Power & Light Company ("FPL"), 700 Universe Boulevard, Juno Beach, Florida 33408.

Q. Did you previously submit direct and rebuttal testimony in this proceeding?

A. Yes.

Q. What is the purpose of your supplemental rebuttal testimony?

A. My supplemental rebuttal testimony addresses a number of statements made by the Office of Public Counsel ("OPC") witness Dauphinais.

Q. On page 6, lines 10-19, OPC witness Dauphinais states that FPL's testimony and discovery responses undermine "any claim that that need is the motivating factor for the projects." Did FPL make such a claim?

A. No. FPL has not made any claims that meeting a reliability need is the primary motivation for proposing the FPL SolarTogether Program. As stated in the direct testimony of FPL witness Valle, FPL is proposing this program with the primary objective of meeting a substantial demand from customers who are seeking expanded access to solar energy, and to do so in a manner that is also cost-effective for FPL's general body of customers.

Q. But does FPL in fact need the FPL SolarTogether projects to meet its reliability criteria?

A. Yes. Although the primary purpose of this program is to address an unmet need for participation in solar energy by FPL customers in a cost-effective way, the firm summer capacity added by the proposed solar facilities does help meet

FPL's summer reliability requirements. As shown in Exhibit JE-5 from my rebuttal testimony, there is a need, starting in 2020, for additional resources to meet the 20% minimum generation requirement. From 2020 to 2022 the firm capacity contribution of the FPL SolarTogether Projects is higher than the reliability need and therefore the projects fully meet the minimum reliability requirements, plus provide additional reliability for those years. Starting in 2023, the FPL reliability requirement is higher than the summer firm capacity value of the FPL SolarTogether Projects, so incremental generation resources will be needed for reliability purposes, in addition to the reliability contribution of the FPL SolarTogether Projects.

Q. On page 7, footnote 3, Mr. Dauphinais implies that FPL is using the 20% reserve margin criterion in a manner that deviates from the Commission's Order No. PSC-99-2507-S-EU ("Order 2507") which approved that criterion. Is this true?

A. No. FPL's application of the 20% minimum generation reserve margin here is consistent with Order 2507. It is also consistent with the way FPL and the other investor-owned utilities ("IOUs") in the state have applied the 20% minimum generation reserve margin criterion since Order 2507 took effect.

Order 2507 states:

> 1. The IOUs will each voluntarily adopt a minimum reserve margin planning criterion of twenty percent (20%)

2. The twenty percent (20%) reserve margin planning criterion will be a minimum; no maximum or cap will be represented or implied by this criterion

It is clear from this language that the 20% criterion is intended as a minimum reserve margin. It is equally clear that there is no strict upper bound limitation on the resulting reserve margin. Instead, prudent utility resource planning will often result in resource plans that, in some years, have reserve margins in excess of the 20% minimum.

Q. Why would prudent resource planning sometimes result in reserve margins above the 20% minimum?

A. The reason why prudent resource planning sometimes will result in reserve margins larger than the minimum requirement is that the most economic generation resources may have generation capabilities that are much larger than the projected increase in peak load in a given year. An effort to strictly limit reserve margins to be very close to the 20% minimum would preclude the use of large efficient base-load generation such as natural gas-burning combined-cycle units which have been shown to be the most cost-effective options in many dockets brought in front of the Florida Public Service Commission ("Commission") since Order 2507 took effect. A misguided effort to unnecessarily and arbitrarily cap reserve margins, as suggested by Mr. Dauphinais, would necessarily have resulted in higher costs and electric rates to FPL's customers in the past and would do so in the future.

Q. Mr. Dauphinais thinks that FPL has not made an effort to reasonably quantify the current risk exposure of the FPL SolarTogether Program. How do you respond?

A. I disagree. For both its original case and the updated case presented in FPL's rebuttal testimony, FPL has applied a robust risk/benefit analysis, based on a well-established methodology presented by FPL and relied upon by the Commission in many dockets addressing the addition of large generation including solar facilities. This methodology consists of presenting a base case cost-effectiveness analysis as the basis of its petition and supplementing the base case with a sensitivity analysis consisting of an additional eight analyses based on combinations of low, medium and high natural gas fuel prices as well as low, medium and high cost of CO_2 compliance. The results of all these nine cases are set forth in the two tables that follow.

The first table shows the cost-effectiveness results of all nine scenarios prior to allocating to participants. As shown in Table 1 below, in eight out of the nine scenarios, FPL's customers are better off with FPL's SolarTogether Program.

Table 1 – CPVRR Savings to General Body of Customers Prior to Allocating to Participants

Fuel Cost Forecast	Environmental Forecast	Net System Savings (Millions)
High Fuel Cost	Low CO2	($323)
High Fuel Cost	Mid CO2	($414)
High Fuel Cost	High CO2	($563)
Mid Fuel Cost	Low CO2	($159)
Mid Fuel Cost	Mid CO2	($249)
Mid Fuel Cost	High CO2	($401)
Low Fuel Cost	Low CO2	$8
Low Fuel Cost	Mid CO2	($82)
Low Fuel Cost	High CO2	($232)

- Negative ( ) Indicates Savings to FPL Customers

Table 2 shows the cost-effectiveness results for FPL's general body of customers after the allocation of $137 million of benefits to the Program participants.

Table 2 – CPVRR Savings to General Body of Customers After Allocating to Participants

Fuel Cost Forecast	Environmental Forecast	Net System Savings (Millions)
High Fuel Cost	Low CO2	($186)
High Fuel Cost	Mid CO2	($277)
High Fuel Cost	High CO2	($427)
Mid Fuel Cost	Low CO2	($22)
Mid Fuel Cost	Mid CO2	($112)
Mid Fuel Cost	High CO2	($265)
Low Fuel Cost	Low CO2	$145
Low Fuel Cost	Mid CO2	$54
Low Fuel Cost	High CO2	($96)

- Negative ( ) Indicates Savings to FPL Customers.

As shown in Table 2, the general body of customers, including non-participants, is better off in seven out of the nine scenarios. Considered as a whole, this sensitivity analysis shows that there is more potential "upside" benefit than "downside" risk to FPL customers if natural gas prices and carbon emission allowance prices differ from the base case assumptions (mid-fuel and mid-CO_2).

In his supplemental testimony, Mr. Dauphinais attempts to discredit the sound risk/benefit results shown in both these tables by proposing that the results for certain scenarios should be weighted differently, and proposing that those scenarios resulting in lower system benefits (low gas and low CO_2) should be given greater weight. This ignores the fact that the carbon price scenarios are already based on probability-weighted scenarios, with the probabilities developed by ICF, one of the leading experts in the area of emission price forecasting. It also ignores the fact that FPL's high and low fuel price forecasts are chosen based on statistical analysis of natural gas prices, and not on FPL's whim as he seems to suggest. The probabilities assigned by ICF to the different scenarios and the methodology used to determine the high and low gas price forecasts were previously provided by FPL in the discovery process in response to Staff's First Set of Interrogatories No. 96.

Q. Does this conclude your supplemental rebuttal testimony?

A. Yes.

BY MR. COX:

Q Dr. Sim, did you have any exhibits to this testimony?

A No exhibits.

Q Have you prepared a summary of your rebuttal supplemental testimony?

A Yes, I have.

Q Could you please give that to the Commission at this time?

A Yes. Thank you. Good afternoon again, Chairman Clark and Commissioners. Mr. Enjamio's supplemental rebuttal testimony, which I adopt, is very narrowly focused and addresses only three points. The first point is regarding the reliability need for the ST program, the SolarTogether program. The OPC witness states that FPL's testimony and discovery responses undermine, quote, "any claim that need is the motivating factor for the projects," unquote. Now, that statement is inaccurate. FPL has not made such a claim. As we've stated repeatedly here, in Tallahassee, the motivating factor for this program is to meet a substantial demand from FPL's customers for this particular program. However, the firm capacity from the 20 solar facilities will fully meet FPL's resource needs in 2020, through 2022, plus meet most of FPL's resource needs in the year

2023.

The second point is the OPC witness implies that FPL is using the 20 percent reserve margin criteria in a manner that deviates from the Commission's order, which approved that criteria. First, that implication is inaccurate. There is no deviation from the Commission order back in 1999 establishing that criteria. Second, FPL is applying the 20 percent reserve margin criteria in this docket in the same manner it has applied that criteria since the Commission order was issued 20 years ago in all Public Service Commission dockets since the order went into effect.

The third point, the OPC witness believes that FPL has not made an effort to reasonably quantify the current risked exposure of the SolarTogether program. That belief is ill-founded. FPL has presented an examination of the economics of the program under nine scenarios of potential fuel and environmental compliance cost futures. The same methodology has been relied upon by the Commission for years in numerous dockets addressing the planned addition of various resource additions, including solar facilities.

And that concludes the summary of the supplemental rebuttal testimony. Thank you.

MR. COX: Thank you, Dr. Sim. Chairman Clark,

the witness is tendered for cross-examination.

CHAIRMAN CLARK: Mr. Rehwinkel.

MR. REHWINKEL: Thank you, Mr. Chairman. Dr. Sim, good afternoon.

THE WITNESS: Good afternoon, sir.

MR. REHWINKEL: Mr. Bores has advised me to look out for your health. So, in that interest, I'm going to pass on asking you any questions. Thank you.

THE WITNESS: My health and I thank you.

CHAIRMAN CLARK: Mr. Moyle.

EXAMINATION

BY MR. MOYLE:

Q FPL, expert witness testified about the nine box a little bit and ultimately came to the conclusion that the Commission gets to make the call on that. Do you agree with that? Use yes or no.

A Yes. Ultimately the Commission reviews all of the information put before them and makes a judgment call.

MR. MOYLE: That's all I have. Thank you.

CHAIRMAN CLARK: Okay. Staff.

MR. TRIERWEILER: No questions.

CHAIRMAN CLARK: And Commissioners? No questions. All right.

MR. COX: Thank you. May Dr. Sim be excused, Chairman Clark?

CHAIRMAN CLARK: Dr. Sim may be excused. No exhibits, right?

MR. COX: No exhibits.

CHAIRMAN CLARK: Okay. Great. Excused. Thank you.

Next witness.

MS. MONCADA: Thank you, Mr. Chairman. FPL calls Matthew Valle to the stand.

Mr. Chairman, are you ready to proceed?

CHAIRMAN CLARK: Ready. Yes, ma'am.

MS. MONCADA: Thank you.

EXAMINATION

BY MS. MONCADA:

Q Mr. Valle you understand you're still under oath?

A Yes, I do.

Q And I assume your name, business address, employer and position with FPL remain the same as they were yesterday?

A Yes, they do.

Q Great. Thank you. Did you cause to be filed in this proceeding 13 pages of supplemental testimony on November 27, 2019?

A Yes, I did.

Q Do you have any changes or corrections to that testimony?

A I do not.

Q If I asked you the same questions today, would your answers be the same?

A Yes, they would.

Q Thank you.

MS. MONCADA: Mr. Chairman, we request that Mr. Valle's supplemental testimony be entered into the record as though read.

CHAIRMAN CLARK: So ordered.

(Whereupon, Witness Valle's prefiled supplemental testimony was inserted into the record as though read.)

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Matthew Valle. My business address is Florida Power & Light Company, 700 Universe Boulevard, Juno Beach, Florida 33408.

Q. Did you previously submit direct and rebuttal testimony in this proceeding?

A. Yes.

Q. Are you sponsoring any supplemental rebuttal exhibits in this case?

A. Yes. I am sponsoring the following supplemental rebuttal exhibit:

- Exhibit MV-3 – Net Metering Subsidy

Q. What is the purpose of your supplemental rebuttal testimony?

A. The purpose of my supplemental rebuttal testimony is to refute the supplemental testimony of Office of Public Counsel ("OPC") witness Dauphinais related to the demonstration of need, Program risk allocation, and the Settlement Agreement. Additionally, I will add clarification to address statements presented by Florida Public Service Commission ("Commission" or "FPSC") Staff witness Hinton in his supplemental testimony.

II. RESOURCE NEED AND ECONOMIC ANALYSIS

Q. On page 5 of OPC witness Dauphinais's supplemental testimony, he states that FPL has failed to demonstrate that there is a resource need for the FPL SolarTogether projects. Is FPL requesting approval of the FPL SolarTogether Program solely on the basis of resource need?

A. No. The FPL SolarTogether Program is proposed to meet customer demand for this type of voluntary community solar program in a manner that benefits the subscribers and the general body of customers. It is not driven on the basis of meeting a specific system resource need. Nonetheless, while not specifically conceived to meet a resource need, the Program does align with the resource plan presented in FPL's 2019 Ten Year Site Plan ("TYSP") with the exception of a one-year acceleration of 2022 solar to serve customer demand for the Program. In addition, the Program adheres to the fundamental tenet that the solar generation will be constructed only if it is cost-effective. Witness Dauphinais has invented his own standard for approval of new generation that ignores both recent precedent and the Commission's wide latitude in approving new generation facilities. Mr. Dauphinais's "test" that new generation only be approved if it is needed for reliability *and* lowest cost does not leave room for other factors that are laid out in and contemplated by recent Commission rulings.

Q. What factors has the Commission considered for other large-scale solar projects in Florida?

A. The FSPC has recently articulated their view of need in the Duke Energy Florida ("DEF") Solar Base Rate Adjustment ("SoBRA") in Order PSC-2019-0292-FOF-EI.

In that Order, the FPSC concluded that while the projects were "not needed for DEF's system reserve margin, there is an economic need…for ratepayers and a greater fuel diversity gained with the projects." This recognizes that there can also be an economic need and a need to enhance fuel diversity. The FPSC also recognized that this solar generation would "help DEF meet its needs for future capacity…and defer the need for future gas-fired generation." FPL's SolarTogether Program is consistent with this FPSC view. In addition, FPL's SolarTogether Program also directly addresses an expressed customer need for more retail options when it comes to solar energy and direct involvement with implementing solar energy in Florida.

Q. Does FPL's integrated resource planning process take into account factors other than immediate resource needs and cost-effectiveness when evaluating resource options and resource plans?

A. Yes. On page 60 of FPL's 2019 TYSP, FPL explains that it takes into account a number of factors in its resource planning work. FPL typically discusses these in terms of "system concerns" or "system factors." FPL's 2019 TYSP provides a few examples of the system factors such as maintaining/enhancing system fuel diversity which was specifically mentioned in the FPSC's orders in the DEF SoBRA Docket Nos. 20190072-EI and 20180149-EI. Through its development work on the FPL SolarTogether Program, FPL also views customers' desire to help implement the use of solar energy as another factor to be considered.

Q. So in conclusion, how does FPL SolarTogether fit within the framework of what the FPSC considers when evaluating solar and what FPL takes into account in its resource planning?

A. FPL SolarTogether meets three broad needs while providing additional benefits to customers. First, the Program was designed to meet a *customer need* that has been growing over the past several years for direct participation in additional renewables as I have described in previous testimony. Second, the Program meets an *economic need* in that it is a cost-effective program that brings benefits to both participants and the general body of customers. Third, the Program also meets a *resource need* in that it adds capacity that will defer future resource additions, including fossil-fueled generation, and also aligns closely with the resource plan presented in FPL's 2019 TYSP. FPL recognizes that this Program is new and innovative, but believes it is firmly grounded in the view expressed by the FPSC in the DEF SoBRA decision and in FPL's long-standing integrated resource planning process.

Q. How does OPC witness Dauphinais's misidentification of the primary driver for FPL SolarTogether impact his position that the addition of solar facilities under the Program must be the lowest cost option necessary to meet a reliability need?

A. Witness Dauphinais's failure to recognize that the proposed solar generation facilities would be installed principally to meet customer interest in the advancement of solar energy led him to incorrectly rely solely on economic analyses applicable in more traditional utility resource planning contexts. FPL's cost-effectiveness analysis instead follows the same methodology FPL has employed to analyze the cost-effectiveness of all solar sites previously presented to and approved by the Commission (2016 solar

included in FPL's 2016 Rate Case (Order No. PSC-16-0560-AS-EI) and the 2017, 2018, 2019 and 2020 FPL SoBRA Projects (Order Nos. PSC-2018-0610-FOF-EI and PSC-2019-0484-FOF-EI), consisting of four sites each). What is different in the FPL SolarTogether analysis is how those benefits are shared among participants and the general body of customers.

Q. Witness Dauphinais claims on page 4 of his rebuttal testimony that "non-participants" will pay a subsidy to participants of an estimated $133 million. Is there any validity to that claim?

A. None whatsoever. And this misstatement originates from his misunderstanding of the need as discussed above. Similar to FPL's SoBRA projects, the benefits derived from the solar facilities flow to those who are paying for the costs of those facilities. In fact, the participants are paying more than 100% of the cost of the facilities and receiving only 55% of the benefits. Witness Dauphinais's assertion that the benefits belong to the general body even if the general body does not pay for the facilities does not make sense on its face and would be self-defeating for any program that does not count the entire general body as participants. And although the general body is supporting the levelization of costs in the early years, they are more than paid back in both costs and benefits over the life of the projects.

Q. Witness Hinton stated that future additions of large-scale solar will still be determined based upon interest in a voluntary program rather than an analysis of need for additional capacity. Do you agree?

A. No. FPL believes strongly that having a variety of methods by which to add renewables specifically benefits all Floridians. FPL is not proposing that approval of this tariff

would or should prohibit or prevent the addition of new solar via the traditional recovery methods or through specially approved recovery methods such as SoBRA. Rather, FPL SolarTogether would reflect a new, additional option and approach to recovery of future large-scale solar projects.

III. PARTICIPANT AND GENERAL BODY RISK ALLOCATION

Q. Witness Dauphinais noted in footnote 1 of his testimony that he found FPL's use of general body of customers confusing and preferred non-participating customers as those who either have chosen not to subscribe in FPL SolarTogether or were not able to. Do you agree with his clarification?

A. No. All customers, including FPL SolarTogether participants, are part of the general body of customers and remain under their previous rates. Participating customers pay FPL SolarTogether costs and receive benefits, however, their underlying bill remains subject to the same potential movement as customers who do not subscribe to the Program. Therefore, FPL has chosen general body of customers to identify the impacts of FPL SolarTogether that are not allocated to the participants of the Program.

Q. On page 9 of his testimony, witness Dauphinais concluded that FPL SolarTogether is not FPL's most cost-effective solution for FPL's customers *as a whole.* Do you agree?

A. No, I do not. Simply put, the general body of customers are projected to save money, and witness Dauphinais's statements that customers are worse off economically are simply not true. Here, the general body of customers are projected to share in 45% of

the total present value of benefits while not carrying any allocation of the present value of revenue requirements of the projects. As evidenced by the economic analysis included in FPL witness Enjamio's rebuttal, the FPL SolarTogether Program is projected to create total CPVRR system savings of $249 million. FPL proposes to allocate $137 million of those savings, or 55%, to participants, leaving an estimated $112 million, or 45%, to benefit the general body of customers even though the cost of the generation that creates those savings will be covered entirely by the Program participants.

Today, there is no rate base resource option that would allow the general body of customers to realize any percentage of projected savings without bearing a commensurate share of the projected revenue requirements. In fact, the Program participants will pay an estimated 104.5% of the base revenue requirements, further reducing risk for the non-participating portion of the general body of customers. In essence, the non-participating portion of the general body of customers pays none of the CPVRR of the costs while projected to receive approximately $112 million in CPVRR savings.

Q. Are there other benefits that the general body of customers gains from FPL SolarTogether?

A. Yes. For one, the addition of 1,490 MW of new solar generation further diversifies FPL's fuel mix, which reduces risk to the general body of customers of fuel cost fluctuations and reduces dependence on fossil fuels. Secondly, the additional solar generation will further reduce CO_2 and other emissions which packages obvious

environmental benefits together with risk mitigation for FPL customers in the event of future carbon emission regulation pricing or taxing mechanisms. Third, new solar projects create jobs and positive economic impact in the 20 different communities across Florida that will host these projects. Fourth, it is likely that FPL SolarTogether, as an alternative to rooftop solar, may reduce the amount of rooftop solar that otherwise would have occurred and thus reduce the inherent subsidy in current net metering rates. And fifth, FPL continues to hear from customers who support FPL offering this Program even if that particular customer does not plan to participate at this time. Providing customers with a variety of options is important as is positioning Florida to be a leader with community solar nationally.

Q. On page 17 of his testimony, witness Dauphinais is concerned about the risk to the general body of customers under the nine scenarios FPL presented. Do you believe a proper understanding of the nine scenarios should give the Commission any concern?

A. No, I do not. First, the purpose of these "9-box" scenarios is to stress test key assumptions in the analysis. In regard to fuel costs, FPL used the same approach it has used in numerous prior FPSC dockets to develop low and high forecasted fuel costs. This methodology is described on page 109 of FPL's 2019 TYSP.

It is not surprising or atypical that FPL sees at least one but sometimes several negative scenarios given the significant changes to underlying assumptions. Passing seven of nine scenarios is generally a very strong indication of the robustness of the cost-effectiveness analysis. Second, FPL's base scenario already includes historically low

natural gas and emissions forecasted costs. Third, even if the low fuel cost case does occur, FPL's electric rates and customer bills would significantly drop from where they are expected to be in the Medium Fuel/Medium CO_2 cost scenario.

Q. On page 29 of his testimony, witness Dauphinais stated that greater emphasis should be placed on the low price assumption cases. Do you agree?

A. No. Witness Dauphinais brings no credentials to the subjects of long-term forecasting of global commodity pricing, tariffs and election outcomes. His prognostication is surprising – not because of his apparent confidence but because he fails to offer any evidence, exhibit or argument as to why emphasis should be placed in the low fuel cost and low emission cost cases. FPL is left to speculate as to why he thinks "the forecasted net CPVRR savings from those alternatives will not actually materialize." Witness Dauphinais wants it both ways. On the one hand, he wants us to believe that these solar investments are risky and that they likely will cost, not save, customers money over the long run. But only a few pages before, he wants us to be concerned that the FPL SolarTogether participants are taking too large a share of the benefits and the "non-participants" are worse off than they otherwise would have been. Both futures cannot be true. And clearly witness Dauphinais fumbles here with his "Hail Mary Play" analogy. Of course there are risks to any generation addition. There is no such thing as a perfectly hedged generation addition. For example, a fossil generation unit also would be exposed to fuel and emission assumption forecasts as well as load and resource plan risks. Were FPL to adopt witness Dauphinais's view, the Company could not move forward with any new generation addition over concern of the potential risks. The fact of the matter is that FPL, with FPSC approval, has been making smart

generation additions for many years that have driven toward a cleaner, more efficient system that also has resulted in low electric rates and customer bills. FPL's customers have benefitted from these decisions and the FPL SolarTogether Program represents the next evolution of bringing cost-effective clean energy to FPL customers and the State of Florida as a whole.

Q. How does witness Dauphinais's alleged subsidy characterization compare to the net metering subsidy you highlighted in your rebuttal?

A. Witness Dauphinais's subsidy claims and calculations are really opportunity cost comparisons between two alternatives and thus not comparable to the cross-subsidization discussion presented in my rebuttal. The inherent design of net metering creates a cross-subsidy, that is, those who do not participate are burdened with costs. FPL provided an estimate of the value of that cross-subsidy by assuming 1,490 MW of net metering solar were added to the system instead of FPL SolarTogether solar. This was intended to demonstrate that FPL SolarTogether compares quite favorably to net metering from the perspective of the general body of customers: the former offers net savings while the latter imposes a net cost. That was as far as the comparison was intended to go.

Q. Witness Dauphinais states that FPL provided no evidence to support the net metering cross-subsidization claims presented in your rebuttal testimony. Is that true?

A. FPL provided its calculations for the net metering cross-subsidization in its response to OPC's Seventh Request for Production of Documents No. 19, the relevant information from that response is attached as Exhibit MV-3. In the response, FPL

documents how the cross-subsidization values presented in rebuttal were calculated. FPL continues to believe that FPL SolarTogether and net metering complement one another providing customers with a variety of options. FPL SolarTogether has not been designed to replace customer investment in private net metered solar generation. As such, FPL has not analyzed potential load retention attributable to FPL SolarTogether.

IV. SETTLEMENT AGREEMENT

Q. OPC witness Dauphinais contends that the Settlement Agreement should not be approved because it is non-unanimous and it does nothing to resolve OPC's concerns. How do you respond to this contention?

A. Settlement agreements do not always resolve all issues raised by all parties. Rather, settlement agreements are the outcome of negotiations reflecting the solutions the settling parties are willing to accept. The Commission is the sole determiner of whether that settlement agreement is in the public interest. My understanding is that settlement agreements need not be joined by OPC as a precondition for approval. OPC's view of the Settlement Agreement is not the issue; the issue is whether the Commission believes the Settlement Agreement serves public interest.

Q. On what basis should the Commission approve the Settlement?

A. The Commission should approve the Settlement based on a finding that the agreement is in the public interest. In addition to all of the benefits of the FPL SolarTogether Program already demonstrated by FPL, the Commission's approval of the agreement would recognize the significant improvements to the Program offered by the settling

parties through the addition of a new 37.5 MW low-income carve-out. This improvement will allow those most financially disadvantaged the opportunity to lower their energy bills while joining others to expand the use of solar in Florida.

Q. Does this conclude your supplemental rebuttal testimony?

A. Yes.

BY MS. MONCADA:

Q Mr. Valle, in connection with that testimony, did you submit exhibit MV-3?

A Yes, I did.

Q Do you have any changes to that exhibit?

A I do not.

Q Thank you.

MS. MONCADA: Mr. Chairman, MV-3 has been identified on staff's list as Exhibit 29.

BY MS. MONCADA:

Q Mr. Valle, did you prepare a summary of your supplemental testimony?

A I did.

Q Could you please provide that summary to the Commission?

A Sure. Good afternoon, Chairman Clark and Commissioners. I'm pleased to be back here again today. The purpose of my supplemental rebuttal testimony is to refute the supplemental testimony of OPC Witness Dauphinais related to the demonstration of need program risk allocation and settlement agreement.

Contrary to Witness Dauphinais' assertion, FPL's SolarTogether meets three broad needs while providing additional benefits to customers. First, the program was designed to meet a customer need that has

been growing over the past several years, and that is for direct participation in additional renewables as described in my testimony. Second, SolarTogether meets an economic need that is a cost-effective program that is projected to generate net savings for the both participants and general body. And, third, the program also meets a resource need in that it adds capacity that will defer future resource additions, including fossil-fuel generation.

We designed this program to ensure that it does not place undue risk on the general body. In the mid fuel/mid CO2 scenario, the program saves the general body of customers 112 million. If the cost of fuel and/or CO2 ends up being higher than projected, a case that we have not talked much about, the program will save customers even more. And if the cost of fuel and/or CO2 are lower than projected, the program in a vacuum may have a net cost, but overall the worst-case scenario for the program, the customer's overall bill will be significantly lower. Further, in every scenario, this program brings additional benefits to the general body in the form of fuel diversity, lower emissions and instate economic impact such as local jobs.

Finally, I'd be remiss if I did not note that

in addition to all of these benefits of the FPL SolarTogether program, the proposed settlement we developed with the fellow signatories include a 37-and-a-half megawatt carve-out for thousands of low-income customers to participate directly in solar. No other solar program in Florida or elsewhere is as inclusive as SolarTogether. In summary, the program supports adding more solar to the grid, cost-effectively, increases fuel diversity, meets a strong customer demand, and expands access to solar for customers who cannot participate today.

For these reasons and more, we believe the program and the proposed settlement tariff are in -- are very much in the public interest.

This concludes my summary and I'm happy to take your questions.

MS. MONCADA: Thank you, Mr. Chairman. Mr. Valle is available for cross.

CHAIRMAN CLARK: Mr. Rehwinkel.

MR. REHWINKEL: Thank you, Mr. Chairman.

EXAMINATION

BY MR. REHWINKEL:

Q Hello again, Mr. Valle.

A Hi.

Q Can I get you to turn to page 12 of your

supplemental rebuttal?

A Yes, I'm there.

Q So section IV, roman numeral IV of your testimony, is approximately a page of testimony on the settlement agreement, is that right?

A Yes.

Q Okay. Now, you say on line 12, settlement agreements do not always resolve all issues raised by all parties. Do you see that?

A Yes.

Q Now, what is your basis for saying that?

A It is my understanding that settlement agreements are viable or still done if some of the parties who have different opinions at the start of a docket can come together on some common ground, that you do not need all of the parties to reach a settlement agreement.

Q Is that a legal analysis you've made or is that a legal analysis that someone has given you?

A That is my understanding. I'm not a lawyer, but it was informed by some of our team.

Q Okay. Can you read to me line 12 through line 15, starting with the word, rather?

A Sure. Rather settlement agreements are the outcome of negotiations reflecting the solutions the

settling parties are willing to accept. Would you like me to keep going?

Q No. That's good right there. How many settling parties -- I think we did this yesterday, but is it correct that of the settling parties that you refer to here, only one of them is a customer?

A That's correct.

Q Okay. And was the customer account that we have in the record here, 4,961,330?

A Yes.

Q Okay. So would it be fair to say that 4,961,329 FPL customers are not represented by a signatory to this agreement?

A That's correct. The only customer we've already identified is Walmart.

Q Okay. No, have you done an analysis, or been given an analysis, that the public interest can be represented by one out of 4,961,329 customers of a utility?

A Again, I'm not a lawyer, but discussing with our counsel, we have talked through public interest in how to meet that need and that was part of what I included in my summary.

Q Okay. Does the fact of the signatory to the settlement agreement indicate that 4,961,329 customers

have indicated their willingness to accept this settlement agreement?

A No. I would say that the settlement agreement reflects that the parties, the parties that were part of this docket from the outset had reached some common ground overall, A, in that the SolarTogether program made sense for customers and then, B, a low-income element, would further enhance that program and enable greater access for customers. That was the basis of the settlement agreement.

Q Is it your understanding the Office of Public Counsel statutorily represents the 4,961,329 customers who are not signatories to the settlement agreement?

A It is my understanding that the Office of Public Counsel represents customers broadly in Florida. I would add, you know, as a part of this program as I've described, we are also as the utility responsible for prudently planning the system and bringing forward programs we think makes sense for customers.

Certainly we've had a lot of dialogue with many, many customers for this program. Walmart provides a unique perspective from the settling parties in that there is a Walmart in every state in this country and they certainly have a very sophisticated view of energy and what they're trying to achieve and what others are

trying to achieve in the industry. And then Vote Solar and SACE bring the perspective of advocacy groups on solar energy again across the country. So, yes, I agree that Public Counsel is representing the customers, but the other parties in this agreement certainly have a broad view, as well, as what the customers are interested in.

Q Okay. And you would agree with me that the Public Counsel was not advised of the settlement agreement until it was signed?

A I do not. I have had subsequent communications since yesterday on the sequence of events. As I mentioned yesterday, I was not directly involved in these conversations with any of the parties in the settlement agreement.

Q But you would agree that the settlement agreement that was filed was signed before the Public Counsel was made aware that there was settlement negotiations going on with the settling parties, is that right?

MS. MONCADA: Mr. Chairman, I just want to assert here a light objection that I think these questions are not relevant to the issues in the case. However, I will -- I understand we'll give Mr. Rehwinkel a little bit of latitude to ask the

questions, in particular because I'm interested in not leaving a misimpression here about what happened.

CHAIRMAN CLARK: Yeah, and I kind of want to get on the record, too -- but if the witness knows the answer, the answer is yes or no. I mean, I think you all are trying to drag this thing -- both of you are trying to drag this thing. Answer the question. Give him a yes or no answer.

MR. REHWINKEL: We're real close to being done here.

CHAIRMAN CLARK: Good.

THE WITNESS: In the interest of expediency, I will convey what I know has been communicated to me and I can corroborate some of this because, as the program designer, you know, going to the phases and testimony, I was generally aware of what was going on, but -- so my understanding is that in August we attempted to gauge OPC's interest in talking but concluded that OPC didn't seek go to any further.

Subsequently, in December -- excuse me -- in September, FPL entered into discussions with Walmart, Vote Solar and SACE. And ultimately FPL reached settlement with these three parties. We did put the agreement in front of OPC in October

and entered into an NDA. So I can't speak to the specifics of those discussions other than to say they were substantive discussions about matters of this case, but ultimately not fruitful. So the settlement was filed on October 9th with the three parties, but we have continued to engage OPC since then.

BY MR. REHWINKEL:

Q One final question. In August, as what the scenario that you've laid out, you could not have and did not tell the Public Counsel you were talking to the three parties that you ultimately signed with, correct?

A I cannot substantiate that, not having been a part of that conversation.

Q You don't have any knowledge that you were?

A I do not know, at the time.

MR. REHWINKEL: Okay. Mr. Chairman, those are all the questions I have. Thank you.

CHAIRMAN CLARK: Thank you, Mr. Rehwinkel. Mr. Moyle.

MR. MOYLE: We have no questions.

CHAIRMAN CLARK: All right. Okay. Let's move along to staff. Mr. Trierweiler.

MR. TRIERWEILER: Yes, Chairman. We have two of the follow-up questions that were passed by Mr.

Bores to Mr. Valle.

EXAMINATION

BY MR. TRIERWEILER:

Q Very quickly, Mr. Valle. Both the charge and the credit will show up as separate line items under participating customer's bill, is that correct?

A Yes, that's correct.

Q You would agree that the tariff does not specify how the charges and credits will be recovered from the general body of ratepayers?

A I believe that's correct. That's part of the case here, but I'm -- I don't believe it's explicitly laid out there.

MR. TRIERWEILER: Thank you. Nothing further.

CHAIRMAN CLARK: All right. Commissioners. Commissioner Brown.

COMMISSIONER BROWN: Thank you and thank you for coming back up.

THE WITNESS: Absolutely.

COMMISSIONER BROWN: I want to ask you a general question. In our state, the large scale and number of customers FPL has for this -- and with this program affords FPL the ability to spread out the cost while also levelizing it. And it appears from the testimony today provided that the

actual bill impact to the non-participating customers, the general body of ratepayers, would be modest annually on an annual basis before the savings actually occurs, but this approach that FPL is proffering for us does change the inherent approach to community solar and could potentially be petitioned by other utilities in our state who do not have the same size, scale and portfolio that FPL has in the instant case. Why should this Commission accept the proposal, from a policy perspective?

THE WITNESS: I mean, I think from a policy perspective, innovation -- you know, there's nothing -- you know, innovation in and of itself is not, you know, going against the policy of the state. I think as I laid out in my direct, we have been involved in kind of how we've been recovering solar over the years. So it's been our view that this is certainly within the jurisdiction of the Commission to approve a program like this. The one thing that I would say that separates our program -- you were right, Commissioner. I think you called it earlier the first of its kind to one of the other witnesses.

I think, frankly, that's part of the beauty of

it and what has separated it out from any of the other programs, because we have tied -- because we have gone out and understood this demand to be customers of all shapes and sizes want to go a hundred percent solar, but then they're also looking for some certainty on recovery over time. They're happy to pay a premium and they understand they have to work to get there, but they're looking for some certainty they will ultimately get to a payback because their belief is that renewables ultimately will save them money and if they did a rooftop system, for example, if they could do it for their place of business or residence, that they would ultimately get to those benefits.

So the tying of those two things together, what separates out our program, and also makes it unique, but as we've talked about a lot myself and other witnesses, we think there's enough mechanisms in place to protect the general body and that the overall impact to them is modest.

COMMISSIONER BROWN: But that may not be the case for other utilities of smaller scale in the state.

THE WITNESS: Well, I go back to the overall cost-effectiveness of solar. And I agree, if you

saw another program like this, the mechanics may be the same, but the components, the pricing components may be different. Would another utility in the state be able to generate as much cost-effective benefits as FPL? It's not a function of size. It's a function of efficiency of system. Right. So if a solar facility was placed in a different system that was less efficient, it may, on a megawatt-for-megawatt basis generate more CPVRR then our projects do on our system. And with more CPVRR per site, they would have more benefits to then decide how to allocate between participants and non-participants.

COMMISSIONER BROWN: True. Follow-up on the payback period. FPL uses a seven-year payback period for participating customers. I think earlier it was -- they were talking about, and earlier yesterday, a 10- to 12-year payback, I guess, for residential customers. Someone cited that. What happens if you extend the seven-year payback period a few years out?

THE WITNESS: So this is where we spent a lot of time debating with customers over the last few years as to what was the right number, and there is no perfect mathematical formula --

COMMISSIONER BROWN: They want it right away.

THE WITNESS: Well, there's some that do and some that turned us down because they expected a day-one payback. So it's interesting. Most of us in this room live in the utility world where we plan for 30 years, but a lot of retail customers and residential customers and small business customers do not think in 30-year terms. They think in ten-year payback, or they think of their business in ten-year horizons or 15-year horizons. And, therefore, paybacks that are farther out like that start to become not as attractive and they're not as interested in the program.

We heard a lot from customers, the large customers in particular, that five-year paybacks are kind of what they were looking for. Someone in first-year paybacks or second-year paybacks, some were comparing these -- this program against energy efficiency investments, which may pay back in 18 months sometimes, if you were to upgrade a chiller or something like that.

So that's kind of their perspective. And the other thing on the back end of it, 10 to 12 years is where rooftop is today, but rooftop solar is going to become more and more competitive. We

didn't want to set it at ten years, for example, and two years into the program, our program is now less attractive than rooftop and many customers bail out of our program to go do rooftop solar on their own. So it was finding that sweet spot of how can we make this attractive enough to generate enough interest in a program, but not set the benefits too aggressive where we couldn't get an appropriate split between the participants and then the general body of customers.

COMMISSIONER BROWN: Is seven years reasonable, in your opinion?

THE WITNESS: It is.

COMMISSIONER BROWN: I mean, I know you're proposing it, but some of the participating customers have -- I assume that they have solar arrays on their property -- on their properties, and I'm sure there's a different payback period. Are you familiar with what that would be?

THE WITNESS: I don't think many of the preregistered customers have solar arrays already on their facilities. I know a number of them are contemplating that and comparing us against rooftop systems at the time we started talking to them and ultimately decided to go with our program, not just

because of the payback period, but also the flexibility. They really liked the flexibility and the portability for businesses. If you're a big-box retailer, for example, and you shut down a store here, but open up a store in a different market within our territory, you can still shift this around, or if you're a residential customer that moves. So I think it was this combination of flexibility and payback that has made it really attractive.

COMMISSIONER BROWN: And they can tout that they're a hundred percent renewable?

THE WITNESS: Exactly, and on day-one. And to the point I made yesterday, you were to wait for FPL to get to -- and not that any of us even have a view, our ten-year site plan doesn't even go this far out, a hundred percent renewables for the overall system may take 30 years for us to get there, and they're looking for some ways to get there today. And this program very quickly allows them to get there.

COMMISSIONER BROWN: Thank you.

CHAIRMAN CLARK: Any other questions?

Ms. Moncada.

MS. MONCADA: Thank you.

EXAMINATION

BY MS. MONCADA:

Q Mr. Valle, you agreed earlier that the Southern Alliance for Clean Energy is one of the signatories to the settlement, is that right?

A Yes.

Q Do you know if their members are customers of FPL?

A Yes, they do have members in our service territory.

Q Do you know if Vote Solar's members are customers of FPL?

A Yes. Vote Solar also has members in our service territory.

Q How many customers already have preregistered for the program?

A 206.

Q Okay. And of those subscribers, can you tell me what type -- what type of entities they are?

A There are big-box retailers. There are school districts. There are municipals. There are cities. There's counties. There are small businesses who are still demand customers. There are large industrial customers, as well, who have major operations in Florida.

Q So thank you for that. Just a couple of those you mentioned, school districts, municipalities, counties, do you know if those subscribers have their own constituents?

A Yes --

MR. REHWINKEL: I'm going to object to this as being outside the scope of cross and it's -- on this basis: Is my questions were only as to signatories and Mr. Valle testified, without a doubt, that there was only one signatory that represented customers and --

CHAIRMAN CLARK: I'll sustain the objection.

MS. MONCADA: Mr. Chairman, if I could, Mr. Rehwinkel's questions made it seem as though there's only one customer in the State of Florida in FPL's territory who is in support of the settlement. I would like to explore that.

CHAIRMAN CLARK: His question was specifically the signatories to the agreement. Objection sustained.

MS. MONCADA: Okay. No further questions.

CHAIRMAN CLARK: Okay. All right. Still your witness.

MS. MONCADA: Would like to move MV-3, which has been marked as Exhibit No. 29 on the list.

CHAIRMAN CLARK: So ordered.

(Whereupon, Exhibit No. 29 was entered into the record.)

MS. MONCADA: Pardon me. Would like to excuse Mr. Valle.

CHAIRMAN CLARK: Your witness is excused.

MS. MONCADA: Thank you.

CHAIRMAN CLARK: Thank you, Mr. Valle.

THE WITNESS: Thank you.

CHAIRMAN CLARK: Okay. I believe that gets everybody. Mr. Trierweiler.

MR. TRIERWEILER: Mr. Chairman, I have two housekeeping issues. Just to be sure the -- first of all, is the testimony and CV of witness Terry Deason and JTD-1. I may have just missed it -- it went in? Good.

MS. MONCADA: Yes.

MR. TRIERWEILER: Okay. Now, the second one I know is not in -- Candace, could you hand out 62, please? I've been provided with a nonconfidential errata of Witness William Brannen, which is a confidential deposition. This errata is nonconfidential and has not been shared previous to this occasion. I would like to move it in as an update to Exhibit 62 on staff's CEL.

CHAIRMAN CLARK: This is basically an errata to Exhibit 62, correct?

MR. TRIERWEILER: That is correct.

CHAIRMAN CLARK: Okay. So ordered.

(Whereupon, Exhibit No. 62 was entered into evidence.)

CHAIRMAN CLARK: All right. Staff, do you have any other matters that need to be addressed?

MR. TRIERWEILER: Post-hearing briefs are due June 30th, 2020.

CHAIRMAN CLARK: June -- January.

MR. TRIERWEILER: What did I just say?

CHAIRMAN CLARK: June.

MR. TRIERWEILER: June. That was a long vacation I was looking forward to taking.

CHAIRMAN CLARK: Let's go with January.

MR. TRIERWEILER: I appreciate the correction. January 30th, 2020. Briefs should be no longer than 40 pages and position summaries should be no more than 50 words offset with asterisks.

CHAIRMAN CLARK: All right. We're all in agreement. Very good. Commissioner Graham said if I had kept this summary testimony to three minutes, we would have been out of here almost ten minutes ago.

I think you all did a great job. Thank you very much for your cooperation and thank you for your tolerating me today getting through this first hearing and I hope everybody has a great week.

Any member of the parties -- any parties have any other issues? If not, we stand adjourned. Thank you.

(Proceeding concluded at 2:53 p.m.)

CERTIFICATE OF REPORTER

STATE OF FLORIDA)
COUNTY OF LEON)

I, DANA W. REEVES, Professional Court Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 21st day of January, 2020.

_____

DANA W. REEVES
NOTARY PUBLIC
COMMISSION #FF968527
EXPIRES MARCH 22, 2020