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1	ET 05 T	BEFORE THE	
2	FLORIDA PUBLIC SERVICE COMMISSION		
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5	In re:	DOCKET NO. 20250011-EI	
6	Petition for rate	=	
7	Florida Power & I	Light Company.	
8			
9		VOLUME 3 PAGES 343 - 629	
11	PROCEEDINGS:	HEARING	
12	COMMISSIONERS		
13	PARTICIPATING:	CHAIRMAN MIKE LA ROSA COMMISSIONER GARY F. CLARK	
14		COMMISSIONER ANDREW GILES FAY COMMISSIONER GABRIELLA PASSIDOMO SMITH	
15	DATE:	Tuesday, October 7, 2025	
16	TIME:	Commenced: 9:00 a.m. Concluded: 5:55 p.m.	
17	DIACE.		
18	PLACE:	Betty Easley Conference Center Room 148	
19		4075 Esplanade Way Tallahassee, Florida	
20	REPORTED BY:	DEBRA R. KRICK	
21		Court Reporter	
22			
23		PREMIER REPORTING TALLAHASSEE, FLORIDA	
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1		PROCEEDINGS
2		(Transcript follows in sequence from Volume
3	2.)	
4		CHAIRMAN LA ROSA: All right. Let's go ahead
5		and let's start to kind of fall back to where we
6		were yesterday.
7		Just as are a quick recap, FEL was in question
8		of Witness Olson. Mr. Olson, just a reminder, you
9		are still obviously under oath sitting there in the
10		witness stand, so thank you for taking your seat.
11		I don't think there is any preliminary matters
12		we got to go through today, so I think we can jump
13		back in it, or is there something?
14		MR. MARSHALL: Mr. Chairman, yeah, we with
15		FPL's cooperation, we have developed or FPL has
16		helped develop four paper exhibits that we are
17		currently handing out. So if we could just have
18		another couple of minutes to hand those out?
19		CHAIRMAN LA ROSA: Yeah, absolutely. Yeah,
20		let's do that. Certainly, we want efficiency. We
21		will give it a few more seconds as you guys get
22		those handed out.
23		MR. MARSHALL: Great. Thank you.
24		CHAIRMAN LA ROSA: Sure.
25		MR. MARSHALL: And as these get handed out, we

1	would request that the that these be marked for
2	identification as Exhibits 1523, 1524, 1525 and
3	1526, and that the first one with the three
4	tables
5	MR. SPARKS: Can you hold on a second? We
6	just we haven't even gotten ours yet.
7	MR. MARSHALL: Okay.
8	CHAIRMAN LA ROSA: Yeah, and we will go
9	ahead we will identify them, and then we will
10	enter them at the end, is where I think you are
11	going with it. So certainly, with the
12	understanding of which is which.
13	MR. MARSHALL: It looks like okay, I think
14	they have been handed out.
15	CHAIRMAN LA ROSA: Yeah. We may have yeah,
16	so you were saying something.
17	MR. MARSHALL: Yes. If we could identify the
18	one that has three tables on it, that says Actual
19	Historical
20	CHAIRMAN LA ROSA: I don't have one. I can
21	see through yours, yeah, mine doesn't look like
22	that, right. Yours don't either?
23	MR. MARSHALL: I am sorry, we are starting
24	with the logistics at this point.
25	CHAIRMAN LA ROSA: All good.

1	MR. MARSHALL: We have got copies coming.
2	CHAIRMAN LA ROSA: Okay. No worries. Thank
3	you.
4	I think staff has got them. Are we are good
5	to go?
6	MR. MARSHALL: Okay. I will try that again.
7	CHAIRMAN LA ROSA: Yeah, let's do it.
8	MR. MARSHALL: All right. So we would like to
9	mark for identification as Exhibit 1523 the one
10	page document that has three tables Actual
11	Historical Hourly FPL Data, Simulated Historical
12	Hourly FPL Data and the Delta.
13	CHAIRMAN LA ROSA: Okay. We are going to
14	enter it in at the end, but let's still identify it
15	as 1523 for the three charts.
16	(Whereupon, Exhibit No. 1523 was marked for
17	identification.)
18	CHAIRMAN LA ROSA: Go ahead.
19	MR. MARSHALL: And then mark just for
20	identification purposes as 1524 the one-page
21	handout that has a graph and, well, numbers at the
22	top, but it says at the bottom, FPL Historic Hourly
23	Load Shape.
24	CHAIRMAN LA ROSA: 1524.
25	(Whereupon, Exhibit No. 1524 was marked for

1 identification.) 2 MR. MARSHALL: And then just to mark for 3 identification purposes for 1525 is a very similar looking piece of paper but does not have any title 4 5 at the bottom. 6 CHAIRMAN LA ROSA: Okay. 7 (Whereupon, Exhibit No. 1525 was marked for 8 identification.) 9 And then the longer, should be MR. MARSHALL: 10 the stapled together document that says, NW Values 11 from E3 Analysis at the top, would be marked for 12 identification as 1526. 13 CHAIRMAN LA ROSA: Awesome. Well, I think we 14 are clear. 15 Okay. Great. MR. MARSHALL: 16 (Whereupon, Exhibit No. 1526 was marked for 17 identification.) 18 CHAIRMAN LA ROSA: Let's go ahead and jump in, 19 and you were in the middle of questioning when we 20 convened yesterday. 21 Whereupon, 22 ARNE OLSON 23 was recalled as a witness, having been previously duly 24 sworn to speak the truth, the whole truth, and nothing

25

but the truth, was examined and testified as follows:

- 1 EXAMINATION continued
- 2 BY MR. MARSHALL:
- 3 Q Good morning, Mr. Olson.
- 4 A Good morning.
- 5 Q I would like to first turn your attention to
- 6 what's been identified as Exhibit 1523, and I do want to
- 7 thank you for working with us overnight on producing
- 8 some of these documents, and I think it's very helpful
- 9 for our questioning today.
- Do you have that in front of you?
- 11 A I didn't write down which exhibits are which.
- 12 Okay. Yes, I have it. Thank you.
- 13 Q And this compares the -- well, I will let
- 14 you -- can you explain what is shown on this document?
- 15 A Yes. Yes. So this is an example of some of
- 16 the benchmarking that I mentioned yesterday, numbers
- 17 that we look at to give us a sense of how well our load
- 18 simulations are matching with historical load with
- 19 respect to the variation of load around that median one
- and two peak.
- So all of the load levels that we are
- 22 simulating are benchmarks to the one and two peak. And
- 23 so the one and two peak comes from the FPL load
- 24 forecast. What recapped as -- is -- simulates how the
- weather and, therefore, the electric load might vary

- 1 around that one and two peak, might vary within the
- 2 year, but in particular might vary across years. So one
- 3 and two peak for the load forecast means literally that
- 4 you would expect in half the years the peak load to be
- 5 lower than that number, but then in half the years the
- 6 peak load in that year to be higher than that one and
- 7 two peak.
- 8 And for loss of load modeling for resource
- 9 adequacy, we are particularly interested in the years in
- which the actual load is much higher than the one and
- 11 two peak. And so what we have done here is to look at
- 12 how our load simulations our load shapes that were
- 13 created with the artificial neural network model, are
- 14 aligning with -- which are aligning with the actual
- 15 historical data that we got from FPL with respect to
- 16 their -- the hourly shapes across all of the years.
- And so maybe just to start off on our left.
- 18 The table -- the first table is showing load levels from
- 19 the actual historical data that we got from FPL. This
- 20 would have been from 2003 to 2023. So 20 years worth of
- 21 actual data. And each of these is indexed to the
- 22 maximum, the one and two peak value for the year. And
- 23 so you can see, like in -- let me just refresh myself.
- Yes, so let's just look at July, the maximum
- 25 value you see is 100 percent. So what this means -- let

- 1 me just refresh my memory. Well, what this means is
- 2 that the maximum value that we observed in July in the
- 3 historical data as a fraction of the maximum value that
- 4 we observed across all of the months across all of the
- 5 hours. So, in July, there is a value that is 100
- 6 percent of the maximum. Then if you move to the left,
- 7 the 99.9th percentile load level is equal to 99 percent
- 8 of that maximum. If you move to the left again, the
- 9 99th percentile load level, so the 99th highest out of
- 10 100 is equal to 96 percent of that maximum load level.
- 11 And if you move to the left one more, the 95th
- 12 percentile, so the 95th highest load level is equal to
- 13 93 percent of the maximum in July. That's for the
- 14 historical data that we receive from FPL.
- 15 Then the middle table shows the similar
- 16 statistics for the simulated historical data. So this
- 17 is now the result of our artificial neural network
- 18 model. And you can see that our simulated number load
- 19 levels are also showing the maximum equal to 100 percent
- of that year, and if you look to the left the 99.9th
- 21 percentile is also exactly equal to 99 percent of the
- 22 maximum. If you move one more to the left, the 99th
- 23 percentile value is equal to 95 percent of the maximum.
- Now, here there is a little difference between
- our simulated load shape and historical load shape,

- 1 because if you look to the left, in the simulated table
- 2 the 99th percentile is at 96 percent. So our value is
- one percent less in July at 95th perc -- at the 99th
- 4 percentile.
- And then if you go one more to the left and
- 6 look at the 95th percentile in July, our simulated shape
- 7 is showing 89 percent, and to compare that to the
- 8 actual, which was 93 percent.
- 9 And then the right-hand chart shows the
- 10 difference, so the historical minus the simulated. And
- 11 whenever there is a positive value there, that's a case
- 12 where our simulated load shape is showing higher values
- than historical. And whenever there is a negative, it's
- 14 showing that our simulated load shapes show a lower
- 15 value than the historical.
- So when we were developing our artificial
- 17 neural network model, we were only focused on the
- 18 highest hours of the year, trying to make sure that we
- weren't overestimating FPL's load during each of those
- 20 conditions. And if you look at the max number,
- 21 especially in the summertime, we are very close to FPL's
- 22 actual maximum historical load hour.
- But then what you also observe as you move to
- 24 the left is for the 90 -- for the lower levels of load
- 25 the 95th through the 99th, and that would be, let's say,

- 1 if FPL's load is 30,000, this would be for load levels
- 2 that are in the, you know, 28, 29,000 megawatt range.
- 3 Our simulated load shapes are actually a little bit low
- 4 relative to the historical shapes. You see all those
- 5 values there in the table on the right.
- Now, we observed loss of load in our
- 7 simulations not just at the highest peak hour, but
- 8 really during a lot of hours when the load is actually
- 9 much lower than that. It's a combination of very high
- 10 loads, but also a series of resource outages, forced
- 11 outages, in particular, the combination of those things
- 12 is what creates the conditions in which the supply might
- 13 not be enough to serve the load.
- So it's not just the highest hour that we are
- 15 -- that matters for our simulation. It's really all of
- 16 the hours that you see here are potentially important
- 17 hours for loss of load. So this is the kind of
- 18 information -- and we talked about this a little bit
- 19 yesterday -- that we use to assure ourselves that we are
- 20 not overstating the load that FPL would be expected to
- 21 serve under the weather conditions that we are modeling.
- 22 In fact, if anything, we are a little bit understating
- 23 the load that FPL might have to serve, and, therefore, a
- 24 bit -- might be a bit optimistic about the resource
- 25 adequacy position of the utility.

- 1 Q I mean, we had a series of questions about the
- 2 April load numbers yesterday, and am I reading this
- 3 correctly that the simulated historical hourly FPL data
- 4 for April, the max, as compared to the actual historical
- 5 hourly FPL data for April, that those -- that that max
- 6 peak is six percent higher absolute value going from, it
- 7 looks like, you know, rounding 91 to 96 percent as
- 8 compared to the peak, the total peak of that year?
- 9 A Yeah. So let's just -- if we can just focus
- 10 on April in particular, since that's the month that came
- 11 up yesterday. And you were pointing to the, Mr.
- 12 Marshall, to the -- those -- a couple of examples of
- 13 very high load levels in April that were observed in our
- 14 load shapes. And so, yes, this indicates that the very
- 15 highest value is six percent -- six percentage points
- 16 more in the simulated shape than in the -- than the
- 17 actual FPL historical shape.
- Then if you move to the left, you will see
- 19 that the rest of the hours in April are again, like in
- 20 the other months, slightly below what you might expect
- just looking at the historical shape. So the 99.9th
- 22 percentile is dead on at 87 percent, and the 99th
- 23 percentile, our simulation is showing 78 percent of the
- 24 max as compared to the historical, which would have
- 25 showed 82 percent of the max.

- 1 And so, yes, the conclusion was there was an
- 2 hour in April that was anomalously high. The rest of
- 3 the hours in April were, in fact, somewhat lower than
- 4 what FPL would have observed.
- 5 Q Okay. If we can move on to what's been
- 6 identified as 1524. This is going to have -- it will
- 7 say FPL Historic Hourly Load Shape at the bottom.
- 8 And is -- this is the historic hourly load
- 9 shape based on the data FPL gave you for 2003 through
- 10 2023?
- 11 A Yes. And what I don't recall is whether
- 12 that's just the raw shapes that we receive directly from
- 13 FPL, or whether it would have been indexed to the 2023
- 14 load levels. It might have been indexed to the 2023
- 15 load levels, but I don't recall. I made this just this
- 16 morning.
- 17 Q I appreciate that. And if I represent to you
- 18 that I was also able to just look at the raw data and
- 19 that it was not -- I don't believe it was indexed, that
- it was just the raw data, is that helpful?
- 21 A Yeah. I mean, the charts are intended to show
- 22 not the raw numbers, but the daily shape. It's the
- 23 diurnal shape that I was focused on here.
- 24 O Great. And then the next one that we have
- 25 identified as 1525 looks very similar but doesn't have

- 1 it at the bottom, this would be the simulated load
- 2 shapes?
- 3 A Yes. Exactly.
- 4 Q And the simulated load shapes and the actual
- 5 load shapes look, you know, very much alike, would you
- 6 agree with that, generally?
- 7 A Yes. And to be clear, the lines that you see
- 8 on the chart -- so each one of the lines on the chart is
- 9 the diurnal load shape for a given month. So there is
- 10 12 lines on the chart, one for each month across the
- 11 hours of the day. These are averages across all of the
- 12 data. So these aren't the individual load shapes. Some
- 13 load -- days might be lower than this. Some might be
- 14 higher. Some might have very different shapes than
- 15 this. These are the average shapes across all of the
- data which, you know, tells us, on average, to do our
- 17 load shapes that we are simulating, that came out of our
- 18 artificial neural network model, look like reasonable
- 19 load shapes for the FPL system. And our conclusion from
- looking at the two charts that look very similar to each
- 21 other, that these are very reasonable load shapes.
- 22 Q And they both peak in the summer months,
- 23 typically around hour 16?
- 24 A That's correct.
- 25 Q And the FPL historic hourly load shapes for

- 1 those summer month for that hour 16, that's in Daylights
- 2 Savings -- Eastern Daylights Savings Time, isn't it?
- 3 A No, that's in standard time.
- 4 Q What makes you say it's in standard time?
- 5 A Well, in the spreadsheet that I used to
- 6 develop this, the label at the top says -- it says that
- 7 it's in standard time. It's -- as I discussed
- 8 yesterday, it's our practice to instantly convert all
- 9 data from different time zones into a standard time
- 10 zone, and to use that as the -- throughout the rest of
- 11 the analysis for the purpose of avoiding potential
- 12 confusion around time zones, because it abounds.
- 13 Q I agree, and that's what we need to try to
- 14 sort through.
- 15 If -- and I know this is very unorthodox, but
- 16 if Mr. Baker is willing, I was wondering if we could
- 17 have a quick break to confer about this issue, because
- 18 it's hard to reproduce all the documents behind this,
- 19 **but** --
- 20 CHAIRMAN LA ROSA: Sure. Let's take a
- three-minute break and allow you guys to confer.
- 22 (Discussion off the record.)
- MR. MARSHALL: Thank you, Mr. Chairman, I
- 24 appreciate that.
- 25 CHAIRMAN LA ROSA: Sure.

- MR. MARSHALL: We are going to return to this
- 2 topic after a longer break.
- 3 CHAIRMAN LA ROSA: Okay. Lunch isn't too far
- 4 off, so perfect.
- 5 BY MR. MARSHALL:
- 6 Q We have been talking about the loads in the
- 7 2026 -- that were used in the 2026 stochastic loss of
- 8 load probability analysis, but the -- I just want to
- 9 clarify for 2027, essentially the same methodologies
- 10 were used except the loads were scaled up a bit to
- account for the higher load of 2027?
- 12 A Yes, for each year, the loads are scaled to
- 13 match the one and two median peak forecast for that
- 14 year.
- Okay. We are going to put loads to the side
- 16 for now and talk about forced outage rates. If we could
- 17 go to master page E61719, will be start of FEL Exhibit
- 18 382. And so the battery forced outage rate that was
- used in the analysis was 3.82 percent?
- 20 A Yes.
- 21 Q And do you know if that's higher than FPL's
- 22 actual and expected forced outage rates for their
- 23 batteries?
- 24 A I don't know that FPL has a lot of batteries
- on its system to have developed a long record on forced

- 1 outages, and I am not aware specifically of the value
- 2 that they are using for expected future forced outages.
- 3 So this is an area where, and we talked about
- 4 yesterday, most of the data that we would use to
- 5 represent the fleet of power plants for a utility would
- 6 come from the utility because they would have the
- 7 detailed information about those units. New units may
- 8 be a different story. The company might have good
- 9 information about its new units, but it might be a case
- 10 where they don't have good information, and this is one
- 11 of those cases.
- 12 Grid scaled batteries are relatively new in
- 13 the country. We have really only had them for about
- 14 five years at any scale. And so the rate at which those
- 15 batteries are out on forced outages has been of great
- interest to resource adequacy practitioners, and we have
- 17 watched them as Texas and California, in particular,
- 18 have developed large amounts of batteries over the last
- 19 few years.
- 20 And so this is an area where we determined
- 21 that it would be more supportable to utilize a value
- 22 that's from the industry from a jurisdiction with the
- 23 most experience with batteries in the country. And so
- 24 this was a case where we -- so E3 has the role of
- 25 supporting the Commission staff in the IRP proceeding in

- 1 California, which is -- it's a bit unusual. The
- 2 Commission staff does a lot of modeling in California of
- 3 the California system, and E3 leads that modeling.
- 4 So this number, the 3.82 percent number is
- 5 from a document called inputs and assumptions into the
- 6 California IRP. My staff, my team developed -- develops
- 7 many of the numbers that go into that inputs and
- 8 assumptions document, and the battery forced outage rate
- 9 is one that we developed. And that's really based on
- 10 operating experience within the California ISO system.
- So California now has something like 17,000
- 12 megawatts of batteries on-line. That's been growing
- 13 steadily over the last several years. And the
- 14 performance of those batteries, again, as I said, has
- been of great interest to us. We have watched them very
- 16 closely.
- In the early years, the batteries were having
- 18 a tough time staying on-line. The forced outage rates
- were higher, and so we used to use numbers that were
- 20 more like 10 or 12 percent for forced outage rates for
- 21 batteries. What we have seen, which is what expected,
- 22 is that as the industry gets more experienced with this
- technology, they have learned better how to keep them
- on-line. They have learned better how to manage heat
- 25 the build-up within the units. They have learned better

- 1 how to manage if there was a fire, have the units
- 2 modularized so that the fire doesn't spread to the
- 3 entire plant.
- And so we've seen a steady improvement in the
- 5 performance of the battery fleet in California over that
- 6 time period. The 3.82 percent was taken from an
- 7 analysis of the California ISO master data file on plant
- 8 availability in California.
- 9 Q And FPL does have some batteries already on
- 10 its system?
- 11 A As I understand, FPL has a small amount of
- 12 batteries on its system today, yes.
- 13 Q If we could go to master page E59871.
- The available terminal capacity from -- well,
- 15 for FPL's system is going to be based, in part, on the
- 16 forced outage rates provided to you by FPL?
- 17 A Yes.
- 18 O And if FPL's units have the lower forced
- 19 outage rates than the rates that were provided to you,
- that could potentially change the results of the
- 21 analysis?
- 22 A Yes. So if the forced outage rates were
- lower, then that would mean that there would be more
- 24 megawatts available during every hour of the year, and,
- 25 therefore, a lower need for resource adequacy resources.

- 1 Q If I could direct your attention to page 40 of
- 2 your rebuttal testimony.
- 3 A Yes.
- 4 Q And the figures on the left, those are
- 5 supposed to be based on the forced outages rates?
- 6 A Yeah. So what we are looking at here is the
- 7 comparison of two distributions of fleet availability,
- 8 thermal fleet availability on the FPL system. On the
- 9 left-hand side is the distribution that comes out of our
- 10 RECAP simulation, and on the right-hand side on the
- 11 yellow is the distribution that we would expect if we
- 12 just ran a statistical simulation along.
- So if we solved the one on the right in closed
- 14 form, so we used the appropriate statistical
- 15 calculations, it's the binomial distribution, resources
- are on-line or off-line with certain probabilities. If
- 17 we multiply that through by each of FPL's units with its
- 18 assigned forced outage rate and its assigned size, then
- 19 what you see on top is what the distribution of what
- 20 percent of the fleet would be available with the given
- 21 levels of probabilities.
- So it's like a bell curve of how many units
- would you expect to be available given the forced
- outages rates. It doesn't have quite the same shape as
- 25 the bell curve, but that's what it represents.

- 1 And the purpose of this was to compare, to
- 2 evaluate whether the Monte Carlo forced outage
- 3 simulations that we conducted in RECAP, whether they
- 4 deviate from what you might expect based on the
- 5 statistics alone.
- So we are using a Monte Carlo on the left. On
- 7 the right, we are solving that in closed form. Now,
- 8 they don't match precisely, because RECAP uses
- 9 mean-time-to-failure and mean-time-to-repair. The one
- on the right is just an hour-by-hour. It doesn't take
- into consideration when some units might be longer than
- 12 others. But at a high level, the charts should look
- 13 similar. And generally, we find that they do.
- And I think the bottom one is particularly
- instructive. This is the cumulative availability
- 16 distribution, again, simulated on the left in RECAP,
- 17 solved in closed form on the right. And you can see
- 18 those charts look almost identical. And that tells us
- 19 that our simulation is accurately reflecting the
- 20 stochastic properties of the FPL fleet with respect to
- 21 forced outages.
- 22 And maybe just to give you one example of what
- 23 this means. So if you draw a line -- if you go to the
- 24 20-percent level on the bottom left and draw a mental
- line -- I am sorry, the 10 -- let me -- I am sorry --

- 1 the 10-percent line on the bottom left was what I
- 2 intended to focus on, and draw a line from there to the
- 3 right. And you can see then it corresponds, it hits the
- 4 columns at about 80 percent of the thermal fleet.
- 5 So what that means is that there is a
- 6 10-percent chance that the thermal fleet availability
- 7 will be below 80 percent of the total. So 80 percent of
- 8 the total thermal fleet, let's say it's about 30,000
- 9 megawatts, so that means there is about an 80 percent
- 10 chance that you will have as few as 24,000 megawatts
- 11 available in any given hour. And that's why that's
- 12 meaningful and important for resource adequacy.
- And if you go to the right-hand chart, and you
- 14 to go 10 percent and trace a line out, it gets you,
- again, exactly to that 80 percent level. So in both the
- 16 closed form theoretical calculation and in our Monte
- 17 Carlo simulated outages, we are saying that there is
- 18 about a 10-percent chance that your fleet will -- that
- 19 you will have only 80 percent of your fleet available.
- 20 That that's what these two charts are intended to
- 21 represent.
- 22 Q And so maintenance outages are not meant to be
- 23 included in these figures?
- 24 A That's correct.
- 25 Q If we could go to master page F10-12801. It's

- 1 part of CEL Exhibit 1023. And so on the first tab is
- 2 the E3 model thermal availability that helps comprise
- 3 the figures that we were just looking at?
- 4 A Yes.
- 5 Q And so if I was to go through all these
- 6 numbers -- and we can either use an Excel form or take
- 7 that this subject to check -- the most common occurrence
- 8 would be -- would not be surprising. The most common
- 9 occurrence was the total number of megawatts in the --
- 10 without any outages for the summer months, which would
- 11 be 28,767.98706 megawatts?
- 12 A I am sorry, could you repeat that?
- 13 Q Yeah, that the most common occurrence is the
- 14 **28,767.98706** megawatts?
- 15 A Yeah, I would have to take that subject to
- 16 check.
- 17 Q And that that would be the, you know, capacity
- 18 available in the RECAP model with no units out in the
- 19 summer months? I am happy to take that subject to
- 20 check.
- 21 A Yeah, I will take it subject to check.
- 22 O And the second most common occurrence is
- 23 31,637.10827 megawatts, which is the number of capacity
- 24 available in the winter months with zero units out? And
- again, I am happy to take that subject to check.

- 1 A I am just trying to understand the meaning of
- 2 this. This is a sheet that has a million values in it.
- 3 The -- so the meaning of any individual line is pretty
- 4 minimal. This is why we summarized it in our histogram,
- 5 which reflects groupings of availability. So 82 to
- 6 84 percent, 84 to 86 percent, 86 to 88 percent. The
- 7 individual values would -- any other individual value
- 8 besides the maximum in would be very uncommon.
- 9 Q Right, is what you would expect, except would
- 10 it surprise you -- and again, I hope you take this
- 11 subject to check -- that the third most common instance
- 12 appearing 19,719 times in there is exactly 26,104.25586
- 13 megawatts?
- 14 A 26,000.
- 15 **o** 104.25586.
- 16 A Okay.
- 17 Q And that that would be exactly 2,663.731198
- 18 megawatts less than the total, you know, 100 percent
- summer capacity available in the RECAP model?
- 20 And if we could go to confidential -- do you
- 21 have the confidential binder in front of you?
- CHAIRMAN LA ROSA: Mr. Marshall, of course, I
- am trying to dictate, or I am trying to guess the
- direction you are going, and I am looking to break
- for lunch. Is now a good time?

1	MR. MARSHALL: Yeah. Absolutely. Now is a
2	good time, and I think that would help us also
3	continue to work through these issues.
4	And I will I just I do you want to say
5	my appreciation on the record for FPL and Mr. Olson
6	helping us shorten this cross. I know it doesn't
7	feel like it's shorter, but it's a lot shorter than
8	it otherwise would have been.
9	CHAIRMAN LA ROSA: We share those same
10	sentiments. Thank you.
11	Let's go ahead and let's break for lunch.
12	Let's be back here at one o'clock, and we will
13	reconvene then.
14	MR. BURNETT: Mr. Chairman?
15	CHAIRMAN LA ROSA: Yes, sir.
16	MR. BURNETT: I am sorry, briefly. May I
17	please ask Mr. Marshall how much longer he thinks
18	he has just so we can get the right witnesses here?
19	CHAIRMAN LA ROSA: Yep. That's a good idea.
20	MR. MARSHALL: We still have a lot. I mean, I
21	think we will definitely finish Mr. Olson today. I
22	am very confident about that, but I am not,
23	depending how late we are intending to go, whether
24	how many other witnesses we would be able to
25	accommodate today maybe some others

1	
1	CHAIRMAN LA ROSA: When you say today, do you
2	think that that would be a long today or a short
3	today?
4	MR. MARSHALL: I think at the I am not
5	entirely sure. It depends. We still have a lot of
6	different areas to cover, and I am hoping we can
7	shorten things get some agreements over lunch to
8	shorten things further, but
9	CHAIRMAN LA ROSA: Yeah, that would
10	MR. MARSHALL: I don't want to overpromise.
11	CHAIRMAN LA ROSA: Yeah. All good. And
12	that's fair. So just you guys talk,
13	communicate, see what happens. After lunch not
14	after lunch, but after we start rolling with the
15	questioning after lunch, then I may ask that
16	question again just to kind of keep us all updated
17	as we go. And then, of course, we will break we
18	will try to break twice after lunch just
19	sporadically, of course, giving our court reporter
20	enough time to break, so fair? Awesome.
21	All right. Guys, one o'clock, let's be back.
22	Thanks.
23	MR. MARSHALL: Thank you.
24	(Lunch recess.)
25	CHAIRMAN LA ROSA: I think we can go ahead and

1 get started. I am assuming these were -- the red 2 confidential binders were open for a reason or --3 Mr. Chair, I opened the binders MR. STILLER: to the first exhibit that will be discussed this 4 5 afternoon. 6 CHAIRMAN LA ROSA: Awesome. Thank you. Ι 7 appreciate the efficiency. 8 So I think we are ready to go. Anything --9 any news or anything to report during the lunch 10 hour? Anything exciting? 11 MR. MARSHALL: I think we did shorten a few 12 more hours off, but that still leaves a few hours 13 to go. 14 CHAIRMAN LA ROSA: All right. As long as we 15 are chomping away, we are in good shape. 16 So the witness still in the witness stand. 17 Obviously still under oath, thank you, in the 18 middle of questioning. 19 FEL, you can pick up where you left off. 20 MR. MARSHALL: Thank you, Mr. Chairman. 21 BY MR. MARSHALL: 22 Do you recall before the break that we were 0 23 talking about the thermal availability comparison chart 24 used to created the figures in your rebuttal testimony?

Α

Yes.

25

- 1 Q And subject to check, would you accept that
- 2 the third most common megawattage available is
- 3 26,104.25586 megawatts occurring 19,719 times?
- 4 A Yes.
- 5 Q And if you would go to confidential Exhibit
- 6 356E, I am going to try to do this without verbalizing
- 7 any confidential information. If you could go to page
- 8 three of that document when you get there.
- 9 A Yes.
- 10 Q And 26,104.25586 megawatts is 2,663.731198
- 11 megawatts less than the full RECAP summer capacity of
- 12 **28,767.98706** megawatts, subject to check?
- 13 A Yes.
- 14 Q And if I could direct your attention to rows
- 15 -- are you on page three?
- 16 A Yes.
- 17 Q Starting on rows 224 through 229, do you see
- some maintenance outages?
- 19 A Yes.
- 20 Q And subject to check, would you accept that
- 21 the -- that number that we just said, that 2,663 and
- 22 change megawatt number difference corresponds exactly to
- 23 the RECAP capacity of those units that are out for
- 24 maintenance in that timeframe?
- 25 A I guess I don't see the nameplate megawatts in

- 1 this maintenance file, but subject to check, I could
- 2 accept that.
- 3 Q And would you also accept, subject to check,
- 4 that some of the other most common megawatts appearing
- 5 in this document correspond with the megawatts of units
- 6 that are simultaneously -- the deduction of some units
- 7 that are simultaneously scheduled for maintenance
- 8 according to this confidential document?
- 9 A I can accept that subject to check, yes.
- 10 Q If we could go to master E92235. That's part
- of Exhibit 437. And before I get there, the
- 12 confidential document we have in front of us, I just
- 13 want to confirm, this is the maintenance schedule that
- 14 E3 used for their analysis?
- 15 A I believe so. Yes.
- 16 Q And this is part of Exhibit 437. And this is
- 17 a analysis of the outage characteristics of -- the
- 18 document we have in front of us now on the screen -- of
- 19 loss of load events in the -- one of the loss of --
- stochastic loss of load probability analyses for 2027?
- 21 A Yes.
- 22 Q And the unit CCEC, which is Cape Canaveral,
- that's out in every scenario that's presented here?
- 24 A Yes, it appears that way.
- 25 Q And then MR4 is not out in every scenario, but

- 1 it is out in a lot of them?
- 2 A Yes.
- 3 Q If we could next go to master page E58871.
- 4 And if we could go to the first tab, unit generator
- 5 **AURORA**.
- 6 Does this document contain the forced outages
- 7 rates used by E3 in their analysis?
- 8 A That's not what I have on my screen. One
- 9 second. Thank you. Yes, it does.
- 10 Q If I could next -- while keeping that up on
- 11 the screen, if we can go to -- if I could direct your
- 12 attention to within the confidential book Exhibit 356C.
- 13 A Okav.
- 14 Q And if you could go to the page that says
- 15 factors at the bottom, the first page that says factors
- 16 at the bottom.
- 17 A Okay.
- 18 Q And do you see a table that says, equivalent
- 19 forced outage factor?
- 20 A Yes.
- Q Would you agree with me, with a couple of
- 22 exceptions, the forced outages rates in that table are
- lower, and sometimes substantially lower than the forced
- 24 outages rates used in the unit generator inputs AURORA
- 25 document?

- 1 A I am sorry, does the --
- 2 Q Is it should say factors at the bottom, page
- 3 one.
- 4 A Oh, I am sorry. I am sorry, so are you
- 5 referring to the table on the right, where it says,
- 6 equivalent forced outage factor predicted?
- 7 **Q** Yes.
- 8 A Okay. And you are asking whether these values
- 9 are lower than the ones that are in the table that's on
- 10 this screen?
- 11 Q With a couple of exceptions, yes.
- 12 A Okay. Yes, these are generally lower than the
- ones that are on the screen, yes.
- 14 Q If we could go to -- keep this document
- available, the unit generator inputs AURORA, but go to
- 16 master page F10-2188. This is part of Exhibit 970. Do
- you have that in front of you?
- 18 A Yes.
- 19 Q And would you agree with me that the forced
- outages rates for, you know, for most of these units are
- 21 lower than the -- these historical forced outages rates
- 22 for most of these units are lower than the ones that
- 23 were in that inputs AURORA document?
- 24 A Yes.
- 25 Q Those are my questions on forced outages

- 1 rates. We are going to briefly return to loads, but
- 2 most of those have been answered. I just have a few
- 3 quick questions on loads.
- 4 A Yeah. I mean, there is some context around
- 5 the forced outages rates and how the historical and the
- 6 projected might roll up into the E3 model, which I think
- 7 is probably important to discuss.
- 8 Q You will certainly get the opportunity for
- 9 that on redirect.
- 10 If we could go to master page E79918. I think
- 11 it was actually yesterday we discussed that some of
- 12 those really high peak loads were at 6:00 p.m. standard
- 13 time, which would have been 7:00 p.m. Daylights Savings
- 14 Time, is that right?
- 15 A We did discuss that, yes.
- 16 Q And this document -- it might be hard to see
- and you might need to zoom in, including pan and zoom,
- but you are also welcome to take this subject to check
- 19 -- that this includes monthly peaks from 1998 through
- 20 2024 as compared to the -- and also as a percent as
- 21 compared to the peak of the year. It does have the
- 22 monthly peaks, and that the summer monthly peaks are
- generally in the 3:00 to 4:00 p.m. and sometimes 5:00
- 24 p.m. timeframe?
- 25 A I am sorry, can you show me where you are

- 1 looking?
- 2 Q Yes. If you zoom in on the very left-hand
- 3 side, if you can click the pan and zoom button can
- 4 sometimes help you zoom in.
- 5 A Okay. Thank you. I am sorry, so can you give
- 6 me an example of what you are looking at there, Mr.
- 7 Marshall?
- 8 Q Sure. So let's just -- we have 1998 up there,
- 9 so we will start with 1998. So if you look at the
- summer months of June, July, August, you know, you can
- include September, if you want, or May, that the --
- 12 gives the time of the monthly peak for FPL, and that
- 13 those times in the summer months are generally in the,
- of the monthly peak, is generally in the 3:00 to 4:00
- p.m. timeframe, and sometimes 5:00 p.m.?
- 16 A Yes, it appears that way in this file.
- 17 Q Next we are going to discuss maintenance
- 18 schedules. Everyone's favorite topic. We already
- 19 discussed the maintenance schedule that was used by E3,
- 20 and the forced -- the other confidential document that
- 21 we looked at with the forced outage factors, that also
- 22 contains a maintenance schedule, is that right?
- 23 A Forced outage factors? I am sorry, can you
- 24 repeat the question?
- 25 Q Sure. If you looked at exhibit -- we were

- 1 looking at 356C earlier in the binder.
- 2 A Yes.
- 3 Q That's the one that had the forced outages
- 4 factors in which we were doing the comparison, if you
- 5 will recall?
- 6 A Yes.
- 7 O That also contains the maintenance schedule
- 8 for FPL's thermal units?
- 9 A Yes, from what I can see, it appears to
- 10 contain a scheduled planned outage factor for the years
- 11 '25 through '34, so going forward.
- 12 Q And if you go to the -- a few pages before
- that, where it says maximo input at the bottom, that's
- 14 a -- it is a maintenance schedule?
- 15 A Yes. Yes, I believe so.
- 16 Q And if I could now direct you to what was
- identified earlier as Exhibit 1526, which is the printed
- 18 handed out copy from this morning?
- 19 A Yes.
- 20 Q The second column, where it says, fossil OHIRP
- 21 megawatts, that is based on that maintenance schedule we
- 22 were just looking at in that confidential document,
- 23 correct?
- 24 A Yes.
- 25 Q And then the third column is the maintenance

- 1 schedule based on the maintenance schedule that was
- 2 given to E3?
- 3 A Yes.
- 4 Q And then the fourth column, the delta is the
- 5 difference between those two maintenance schedules?
- 6 A Yes.
- 7 Q And the capacities on here are generally, with
- 8 some exceptions we can discuss later as to how they were
- 9 used in the RECAP model, are the capacities used by E3
- 10 with a few exceptions?
- 11 A Yes.
- 12 Q And so in both 2026 and 2027, E3 used the 2027
- 13 maintenance schedule that was given to it to establish
- 14 the maintenance schedule to be consistent, is that
- 15 right?
- 16 A I am sorry, can you say that again?
- 17 Q I am sorry. That was a long question.
- 18 The maintenance schedule E3 used in 2026 and
- 19 2027 was the 2027 portion of the maintenance schedule
- 20 given to it to be consistent?
- 21 A Yes, E3 used the 2027 maintenance schedule for
- 22 all -- all of our model runs.
- 23 Q And the comparison here is with, you know, in
- 24 that second column of fossil OHIRP, that is from the
- 25 2026 maintenance schedule of that maintenance schedule?

- 1 A Yes.
- 2 Q And would you agree with me if you go to, for
- 3 example, October 1st, 2026, that there is a delta of a
- 4 little over 3,600 megawatts between the two?
- 5 A Yes.
- 6 Q And looking at the 2026 stochastic loss of
- 7 load probability loss of load event analysis, one of the
- 8 days with the most loss of load events is October 1st?
- 9 A Subject to check.
- 10 Q And looking at October 1st, 2027, there is a
- similar delta of a little over 3,500 megawatts?
- 12 A Yes.
- Q Would you accept, subject to check, that
- 14 October 1st in the 2027 stochastic loss of load
- probability analysis with the loss of load events, that
- 16 October 1st was one of the more common days for loss of
- 17 load event?
- 18 A Subject to check.
- 19 Q We are going to move on to solar output, and
- we are going to try to keep this shorter than I had
- 21 originally planned.
- You would agree that there is a positive
- 23 correlation between load and solar output?
- 24 A Yes. I think that's -- that's generally the
- 25 case. It's noisy, as I am sure you can imagine, and

- 1 it's more -- it's less noisy in jurisdictions with a
- 2 high clarity index. So in jurisdictions where it's
- 3 clear all the time, like in the desert, then that
- 4 correlation is quite strong up until the point where
- 5 heating in the panels becomes a factor, and then it
- 6 tends to tail off. But, yes, generally more sunshine
- 7 means more heat, means more cooling that's required, and
- 8 also means more solar availability.
- 9 Q What is your understanding of firm capacity?
- 10 A I am sorry, what's the term?
- 11 Q Firm capacity.
- 12 A Firm capacity? Well, the way that -- that's a
- 13 term that's used in a variety of ways across the
- 14 industry, the way that FPL uses it is with respect to
- 15 the amount of capacity that one could count on in a
- 16 statistical sense from a particular resource or resource
- 17 type. So it's what I would call an effective load
- 18 carrying capability. In fact, we have used the
- 19 effective load carrying capability method to estimate
- the equivalent from capacity from each of the different
- 21 resource types on the FPL system.
- 22 Q If we go to master E90561, which is part of
- 23 Exhibit 416 on the CEL. And does this document contain
- 24 the -- FPL's solar peak firm capacity for the month --
- 25 for the year -- for each month of the year for 2026 and

- 1 2027?
- 2 A Yes, I believe this would be the firm capacity
- 3 value calculated using FPL's old methodology.
- 4 Q And that should be calculated for the gross
- 5 peak, correct, not the net peak?
- A Well, the way that I understood FPL's
- 7 methodology was that they were subtracting the amount of
- 8 solar from the load in every hour, and then estimating
- 9 the solar firm value at the net peak.
- 10 Q That -- I believe that's how they calculate
- 11 the incremental solar firm capacity is what you are
- 12 describing?
- 13 A That's my understanding as to how they have
- 14 calculated that value, but I could be wrong about that.
- 15 That's just my general understanding.
- 16 Q And if we could -- well, and for March through
- November, this shows that FPL expects over 3,000
- 18 megawatts of firm capacity in 2026 for -- at the peak?
- 19 A Based on their load methodology, yes.
- 20 Q If we could go to master E91039. If we go to
- 21 the tab, I am sorry, 2026 summer peak. And this shows a
- variety of information, but contains FPL's expected
- 23 solar contribution in terms of megawatts for every hour
- of the day on August 6th?
- 25 A Yes.

- 1 Q Now, if we could go back to the -- it probably
- 2 would be helpful at this point to bring up the loss of
- 3 load events in the 2026 stochastic loss of load
- 4 probability analysis, which is going to be master
- 5 **E82537.**
- 6 We touched on this briefly yesterday, but the
- 7 solar outputs that are in here are drawn from solar
- 8 profiles that were provided to E3 from FPL and NextEra?
- 9 A Yes.
- 10 Q And I think you mentioned yesterday that some
- of the solar profiles were drawn from the wrong hour?
- 12 A Yeah, so -- after the deposition where we went
- 13 through that issue, we went back and looked at all of
- 14 the profiles that we were given. Again, we don't know
- what the right profile should be for any given site, so
- we made a little rule that said this is going to look
- 17 like it might be shifted away from the hour that you
- 18 would expect. And based on our postscript, we
- 19 identified 37 profiles that appear to be shifted early
- one hour and 20 that appeared to be shifted late one
- 21 hour. That's out of 150 something different profiles.
- 22 Q And I think some of that -- could some of that
- 23 been caused by a time zone issue with some of the solar
- 24 plants being in central time?
- 25 A It's possible that on the NextEra side that

- 1 that might have been the case. We -- as I understand
- 2 it, they were rendered to us in Eastern Standard Time,
- 3 and which is, again, what we use as a standard. I don't
- 4 know why that would affect the ones that were --
- 5 appeared to be shifted late, though.
- 6 Q Do you have an example of one that appeared to
- 7 be shifted late?
- A I don't have one off the top of my head.
- 9 Q If we could -- yeah, looking at this document
- 10 here, if you look at weather day June 16th, 2023, and
- 11 let's do draw 52.
- 12 A I am sorry, 52, June which?
- June 16th, 2023, and at hour 19, which is
- 14 going to be 8:00 p.m. in savings time.
- 15 A Yes.
- 16 Q And you can take this subject to check, but
- 17 you can also go over to the solar sites and outputs and
- 18 add it up, but would you accept, subject to check, that
- 19 the total megawatts of the utility solar, so not behind
- the meter, but utility solar, is 32.68 megawatts?
- 21 A Subject to check.
- 22 Q If we could go to -- compare this to the
- 23 document that's at master E58844, which is the -- has
- 24 FPL historical load and solar actuals for January 2023
- 25 through August 1st, 2023. And scroll down or take it

- 1 subject to check, but if you actually go down to June
- 2 16th, 2023, at 8:00 p.m., does it show a total solar
- 3 outputs of 149.8 megawatts?
- 4 A Yes.
- 5 Q My question is, is that, you know, knowing
- 6 that this is a -- I will save it, actually. Let me go
- 7 on to my next question.
- 8 You would agree that there is -- there is more
- 9 solar on FPL's system now than there was in 2023?
- 10 A Yes.
- 11 Q And if we then go down to July 23rd, 2023, in
- 12 the loss of load event document. That one, 388. Thank
- 13 you. And go down to MC draw 92, and you can take this
- 14 subject to check that at hour 19, it has a total utility
- solar output of 7.43 megawatts.
- 16 A Subject to check.
- 17 Q If we flip back to that -- the actuals of
- solar output in 2023, and you can take this subject to
- 19 check, it had an actual output of 83 megawatts.
- 20 A I will take that subject to check.
- 21 Q And if we did the same exercise for July 24th,
- 22 2023, at hour 19, there were a variety of Monte Carlo
- 23 draws from different loss of load events with outputs at
- 24 hour 19 of between nine and 18 megawatts, subject to
- 25 check?

- 1 A Subject to check.
- 2 Q And that the actual at 8:00 p.m. output in
- 3 2023 was 97 megawatts?
- 4 A Yes, subject to check.
- 5 Q And the same question, then, for July 25th,
- 6 2023, there is only one loss of load event and draw,
- 7 seven underscore two, with a total utility solar output
- 8 of 18.36 megawatts, subject to check?
- 9 A Yes.
- 10 Q And that the actual at 8:00 p.m. on that day
- in 2023 output was 120 -- 120 megawatts, subject to
- 12 check?
- 13 A Yes. Yes, as I stated yesterday, Mr.
- 14 Marshall, we did look through these profiles and
- identified some that were shrift shifted, again,
- 16 forwarded, some that were shifted back. And high level
- 17 estimate of the net impact on FPL's total fleet
- availability would be in the hundred megawatt type of
- 19 range.
- Q And so -- I mean, if we look through this and
- looked at every hour 19, and, in fact, there is, you
- 22 know, for example June 22nd, 2009, has a loss of load
- event in every Monte Carlo draw, so there is 10 loss of
- load events on June 22nd, 2009, and the max draw from
- 25 all the solar profiles at hour 19 is, subject to check,

## 1 43 megawatts?

- 2 A Subject to check.
- 3 Q And the actual on that day, and not 2009 but
- 4 in 2023 on June 22nd, at 8:00 p.m. was 79 megawatts,
- 5 subject to check?
- 6 A Subject to check. Those are all -- those are
- 7 all in the right range of the issue, as we understand
- 8 it. There might be 100 megawatts or so of
- 9 underrepresentation of the solar profiles right around
- 10 that hour after -- hour before sundown during the
- 11 summertime. So, yes, that's -- we agree that that's
- 12 potentially an issue.
- 13 Again, with all of the issues that we found in
- 14 all the loss of load events, 100 megawatts is a very
- 15 small impact. It's really inconsequential to the
- broader conclusions that we draw from this study, which
- is FPL's near-term need and continued need to invest in
- 18 resources over time to ensure resource adequacy.
- 19 Q And if we go to down top December 25th, 2025,
- there is three different draws at hour seven, you know,
- one, for example, the highest one would be in draw 30.
- 22 And if we add up all the solar output at that time in
- 23 this event, it's over 300 -- and you can take this
- 24 subject to check -- over 350 megawatts?
- 25 A I will take that subject to check.

- 1 Q And if we could go to Case Center master page
- 2 04-1438. This is going to be part of CEL Exhibit 1506.
- Now, I will represent to you that this --
- 4 well, this document contains sunrise and sunset times
- 5 at -- sunrise times FPL's eastern most solar site and
- 6 sunset times at FPL's western most solar site.
- 7 A Okay. Yes.
- 8 Q And on December 25th, the sun doesn't rise at
- 9 FPL's eastern most solar site until after 7:00 a.m.?
- 10 A Yes.
- 11 Q And going back to the loss of load analysis,
- 12 many so of them most productive solar at that time, that
- 13 seven hour were solar sites in the Panhandle of Florida?
- 14 A Based on that loss of load event, yeah, it
- 15 appears -- if we could go back to it, it looks like what
- 16 you are saying is that we are showing solar generation
- during an hour when, likely, there shouldn't be because
- 18 it's before sunrise. And just to be clear, what that's
- doing is improving FPL's loss of load situation in that
- 20 hour, it's helping it to avoid -- there is less loss of
- 21 load than you might otherwise have expected if the solar
- 22 profiles are shifted for an hour later.
- So I think this exchanges just gives a good
- indication of, you know, there are a lot of issues when
- you look at three million hours of inputs and outputs,

- 1 and some things are going to go one way and some things
- 2 are going to go the other way. This is a case where
- 3 this issue with the solar shift -- with the solar
- 4 profiles, hurts string some hours, the sunset hours, it
- 5 helps you during the sunrise hours in the wintertime
- 6 when we are seeing some loss of events in our model.
- And, again, we have done some
- 8 back-of-the-envelope analysis that says it's -- the net
- 9 would be somewhere in the range of 100 megawatts
- 10 underrepresentation of the solar fleet during the hours
- 11 that matter the most, and those are during the loss of
- 12 load hours.
- 13 Q I think it was in there, but you would agree
- 14 with me that there shouldn't be 350 megawatts of solar
- production before the sun is up?
- 16 A 350 would be high. I mean, it wouldn't be
- 17 unusual to see some production. I mean, it says here
- 18 that the sunrise is at 7:04, so you would expect some
- daylight to be hitting the panels during the hours
- 20 before 7:00 a.m., minutes before 7:00 a.m. So you
- 21 wouldn't expect to see zero production in the 6:00 a.m.
- 22 hour, but 350 does seem high. I am not the solar panel
- 23 efficiency expert.
- 24 Q And sort of the converse of that when is, you
- know, the sunset is after 8:00 p.m., there should be

- some solar production before that time, but if we looked
- 2 at the loss of load events -- let's scratch that
- 3 question.
- But specifically at this timeframe, for this
- 5 December 25th, some of the most productive sites were
- 6 not the eastern sites but were the western sites?
- 7 A That's subject to check.
- 8 Q And also you can take this subject to check,
- 9 but it's also just under the BTMPV column of the loss of
- 10 load event analysis. For that December 25th at hour
- seven, it's showing around 25 megawatts of solar
- 12 production?
- 13 A I will take that subject to check, yeah, those
- 14 profiles came from the same source.
- 15 Q And you can take this subject to check so we
- don't have to break out the file, but the solar profiles
- you were given for behind-the-meter solar do actually
- 18 indicate solar production at 7:00 a.m. -- does indicate
- 19 those solar productions in that solar profile?
- 20 A I will take that subject to check, yes.
- 21 Q And would you also take subject to check that
- that same profile shows no production after 7:00 p.m.
- 23 even in June?
- 24 A Yes.
- 25 Q And so just sticking with behind-the-meter

- 1 solar -- those are actually my questions on solar
- 2 generation. Hopefully that covers it.
- 3 Looking at the loss of load event analysis
- 4 again, the maximum capacity for DBEC -- and DBEC, that's
- 5 going to be Dania Beach?
- 6 A Yes.
- 7 Q The max capacity in the analysis for that in
- 8 the summer is 995 and change megawatts?
- 9 A I am sorry, where are you looking?
- 10 Q At the loss of load event. So this would be
- 11 all unserved energy and reserve hours, this is part of
- 12 staff's 388 corrected supplemental. Yes, that's the
- 13 document. Maximum capacity of --
- 14 A Yes. Yes, Mr. Marshall. So we did identify
- an issue with that unit where the capacity is
- understated in the RECAP model by 300 -- well, 254
- 17 megawatts in the summertime. This was -- occurred --
- 18 came up very late as we were reviewing the maintenance
- 19 schedules and trying to get all that lined up, that we
- 20 identified five units where the capacity had been
- 21 misspecified in the RECAP model, so that was one of
- 22 them.
- And some of the other units that you have been
- 24 pointing me to were the other ones, the OCEC, Okeechobee
- 25 Clean Energy Center, the WCEC3, West County, and the MR3

- 1 and 4, Martin 3 and 4, so three of those units had their
- 2 capacity overstated, including the Dania Beach one that
- 3 you just identified. And then two of them had their
- 4 capacity values understated, and those were the Martin 3
- 5 and Martin 4.
- And then if I add all of those up, the net
- 7 effect is that the model understated -- I am sorry, the
- 8 model overstated the capacity available from the FPL gas
- 9 fleet by about 300 megawatts.
- 10 Q All right. Let's go through that math, if you
- 11 don't mind.
- 12 A Uh-huh.
- 13 Q So we have -- and just stick with summer to
- 14 make things --
- 15 A That's -- yes, let's start with summer.
- 16 Q Right. And so we have 250 megawatts -- I am
- 17 trying -- that the model understates for Dania Beach,
- 18 right?
- 19 A Understates Dania Beach by 254 megawatts.
- 20 Q 54. And then Okeechobee?
- 21 A It understates Okeechobee by 428 megawatts.
- 22 Q And then West County 3?
- 23 A It understates West County 3 by 605 megawatts.
- Q All right. And then it overstates MR 3 and 4
- 25 by how much?

- 1 A Overstates Martin 3 by 812 megawatts.
- 2 Q And how about Martin 4?
- 3 A It overstates Martin 4 by 778 megawatts.
- 4 Q And did you look at SN 4 at all?
- 5 A We didn't identify that unit as having mass
- 6 specification.
- 7 Q If we look at the chart, then, for SN 4, you
- 8 agree with me that the maximum capacity in the analysis
- 9 is 1,094.281 megawatts?
- 10 A Subject to check. I am sorry, can you -- let
- 11 me write that down.
- 12 O Sure. 1,094.281.
- 13 A Okay.
- 14 Q And if we go to Case Center page master page
- 15 F10-20676. I am sorry, actually, a later page in this
- document might be better, because it has the unit
- 17 numbers. If we go to master page F10-20687. And this
- 18 has a list of FPL's existing generating fleet as of
- 19 December 31st, 2024, as included in FPL's 2025 Ten-Year
- 20 Site Plan?
- 21 A Yes.
- 22 Q And there is summer firm capacities on the
- 23 right-hand column?
- 24 A Yes.
- 25 Q And if we scroll down a few pages to Sanford

- 1 Unit 4, does it show a firm capacity of 1,209 megawatts?
- 2 A I assume these are in alphabetical order, but
- 3 I am not finding the plant.
- 4 Q It should be Sanford. Should be -- yes, they
- 5 are in alphabetical order, yeah, on the big screen
- 6 there. Are you able to see that 1,209 --
- 7 A Yes.
- 8 Q -- firm megawatts?
- 9 A Yes.
- 10 Q What was the megawatts, because we have a
- 11 still slight discrepancy, that you were using for
- 12 Okeechobee for summer as the -- as the -- not the one in
- 13 the model, but the real world one?
- 14 A 1,689.
- 15 O Scroll to Okeechobee for summer firm
- megawatts, does it show 1,720?
- 17 A Yes.
- 18 Q And we also had a slight discrepancy still
- 19 with West County 3. What was the megawatts that you
- 20 have for actual?
- 21 A 1,245.
- 22 Q That's pretty close, but if we go down to West
- 23 County 3 in here, does it show a summer firm capacity of
- 24 **1,257** megawatts?
- 25 A Yes. Yeah, and I believe that these

- 1 discrepancies are due to the rating that we use in the
- 2 model, which was the hot summer day rating.
- So you might know about, especially gas-fired
- 4 power plants, that the output capacity actually varies a
- 5 lot with temperature, particularly, but also with
- 6 atmospheric pressure, it can vary with fuel combustion.
- 7 The amount of energy that's in the fuel can vary, even
- 8 with natural gas. It varies a lot with coal. And so
- 9 what you can actually get out of a power plant at any
- 10 given point in time is not just a fixed number. It's
- 11 common in loss of load modeling to use, well, first of
- 12 all, the summertime rating. But then if it's a hot
- 13 weather area and you are expecting loss of load events
- 14 to occur during very hot weather, then there is a hot
- summer rating, which is slightly lower than the summer
- 16 rating that you will see here.
- 17 O And those would be the -- I assume those would
- 18 be the differences between the numbers that you have and
- 19 I was discuss -- from the ten -- the difference between
- the actual numbers you were discussing in the ten-year
- 21 site plan, not the numbers between the model and the
- 22 ten-year site plan?
- 23 A These would be the difference between the
- 24 model and the ten-year site plan, because in the model,
- 25 we used the very hot summer ratings for the plants.

- 1 Q And so is it your testimony, then, that the
- West County 3, which is missing about half of its
- 3 capacity between the ten-year site plan and the model,
- 4 that that's because of hot summer weather?
- 5 A I am sorry, Mr. Marshall, I thought we were
- 6 comparing the 1,245 from West County 3 to the 1,257.
- 7 Q That's what I was trying to clarify, was that
- 8 what you were comparing --
- 9 A Yes.
- 10 Q -- or was it the -- okay. Now we are on the
- 11 same page.
- 12 A Yeah, so we were comparing the hot -- the hot
- 13 summer whether rating that we have in the model to the
- information that we have about the hot summer ratings
- 15 for the plants in the ten-year site plan.
- 16 Q I think that helps clarify things. You are
- 17 not saying that the proper hot summer weather rating for
- West County 3 is a max of 641 megawatts?
- 19 A No. No. Yeah, 12 -- that's where the
- 20 1,245 comes in.
- MR. MARSHALL: If I could just have a minute,
- Mr. Chairman, I think we are getting close to the
- end here?
- 24 CHAIRMAN LA ROSA: Sure.
- MR. MARSHALL: All right. Thank you, Mr.

1	Chairman. Thank you, Mr. Olson. And I would like
2	to also thank FPL for helping cut this cross by a
3	lot by providing some of those documents today.
4	CHAIRMAN LA ROSA: Well, we do as well, for
5	sure.
6	So let's move on to next, FAIR.
7	MR. SCHEF WRIGHT: Thank you. I am going to
8	make everybody happy and tell you that we have no
9	cross for Mr. Olson. Thanks.
10	CHAIRMAN LA ROSA: All right. Then let's go
11	to FIPUG.
12	MS. PUTNAL: No questions.
13	CHAIRMAN LA ROSA: All right. FRF. Oh, they
14	are not here, right. So let's go to Walmart.
15	MS. EATON: No questions.
16	CHAIRMAN LA ROSA: FEIA.
17	MR. MAY: No questions, Mr. Chairman.
18	CHAIRMAN LA ROSA: All right. So Commission
19	staff?
20	MR. STILLER: Staff has no questions.
21	CHAIRMAN LA ROSA: Commissioners?
22	Back to you, FPL, redirect.
23	MR. BAKER: Certainly, Mr. Chairman. And
24	would it be appropriate to take a short break
25	before the redirect? I think we have just a couple

1 of clarifications I would like to make with 2 counsel. 3 CHAIRMAN LA ROSA: Sure. Let's take a 4 five-minute recess, I think that's fine, 5 five-minute recess and reconvene then. 6 MR. BAKER: Thank you. 7 (Brief recess.) 8 CHAIRMAN LA ROSA: All right. I think we can 9 maybe get going. So let's go back to FPL for 10 redirect. 11 Thank you, Mr. Chairman. MR. BAKER: Mr. 12 Chairman, I have one and only one question on 13 redirect for Mr. Olson. 14 CHAIRMAN LA ROSA: Sure. 15 FURTHER EXAMINATION 16 BY MR. BAKER: 17 Mr. Olson, in your discussion with Mr. 0 18 Marshall, you had mentioned that there was something 19 that you wanted to Mr. Olson clarify with regard to the 20 projected outage rates that E3 used as part of its 21 analysis. Can you please make that clarification that 22 vou wanted to? 23 So we were discussing the forced outages 24 rates that we used in the model for each of the units,

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and then Mr. Marshall was pointing to some documents

- 1 that appeared to show lower forced outages rates than
- 2 what we were using in the model, and I wanted to just
- 3 clarify what rates we used and what we interpret them to
- 4 mean. And I believe Mr. Whitley might have more to say
- 5 about how the specifics of the forced outages rates were
- 6 developed.
- We received them from FPL. When we received
- 8 them, they were approximately three to five percent,
- 9 give or take, across all of the units, and so we looked
- 10 to them, looked to the unit type, and those all looked
- 11 like very reasonable forced outages rates just given our
- 12 experience in the industry and other projects that we
- 13 had done, other plants that we had seen, and so we used
- 14 those as is.
- My understanding with the way that those were
- developed is that there are actually multiple codes for
- 17 when a unit goes on forced outage with FPL. So one code
- 18 might be it's just out and it was forced off. There is
- 19 another code, as I understand it, that might be called
- 20 forced maintenance. So if there is a unit that's forced
- off-line, while it's off-line, they might decide that
- 22 they are going to keep it off-line for another, you
- 23 know, 10 days, a couple of weeks, whatever it takes to
- do some maintenance that they had already had planned
- and were waiting for an opportunity to do. My

- 1 understanding is that there is a separate code for that
- 2 type of activity. Mr. Marshall might have been pointing
- 3 to the pure forced outage rates which are more in the
- 4 kind of one-to-one-and-a-half percent range, but when
- 5 you take into consideration this forced maintenance
- 6 additional code, that's what brings them up to the
- 7 three- to five-percent range, which we use in all of our
- 8 modeling.
- 9 MR. BAKER: Nothing further from FPL. Thank
- 10 you.
- 11 CHAIRMAN LA ROSA: Excellent.
- 12 Let's go ahead and excuse the witness. Thank
- 13 you. Thank you.
- 14 THE WITNESS: Thank you.
- 15 (Witness excused.)
- 16 CHAIRMAN LA ROSA: And then let's move to
- 17 exhibits. Mr. Marshall -- OPC.
- 18 MS. WESSLING: Yes, we had one exhibit --
- 19 CHAIRMAN LA ROSA: Go ahead.
- MS. WESSLING: -- Mr. Chair. We would ask to
- 21 move into evidence Exhibit -- CEL Exhibit 627,
- which is OPC 142.
- 23 CHAIRMAN LA ROSA: Opposition?
- MR. BAKER: No objection.
- CHAIRMAN LA ROSA: Okay. Then so moved.

1 (Whereupon, Exhibit No. 627 was received into 2 evidence.) 3 CHAIRMAN LA ROSA: FEL? 4 MR. MARSHALL: We have got a list here of 5 exhibits that we used. 6 CHAIRMAN LA ROSA: Yeah, go ahead. MR. MARSHALL: I will just use the CEL number 7 8 for all of them to keep things simple. 9 CHAIRMAN LA ROSA: Sure. MR. MARSHALL: Exhibit 382, 389, 390, 445, 10 11 388, 1223, 356, including the confidential 12 subparts, 366, 1523, 1524, 1525, 1526, 1023, 437, 13 970, 416, 425 and 1506. 14 CHAIRMAN LA ROSA: Okav. Is there any 15 opposition or objection? 16 MR. BAKER: No objection to FPL. 17 (Whereupon, Exhibit Nos. 356, 366, 382, 18 388-390, 416, 425 437, 445, 970, 1023, 1223, 1506, 19 1523-1526 were received into evidence.) 20 Okay. And I should have CHAIRMAN LA ROSA: 21 went to you, staff, and asked, do we have exhibits 22 numbers for those? 23 MR. STILLER: Yes, Mr. Chair, staff hearing 24 exhibits on the CEL are listed as numbers 335 to

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485, some have been referred to in this hearing

1 already. Unless any party has an objection, staff 2 would like to move all of their hearing exhibits on 3 the CEL. Again, that is Exhibits 335 through 485 into evidence at this time. 4 5 CHAIRMAN LA ROSA: Seeing no objection so 6 moved. 7 (Whereupon, Exhibit Nos. 335-485 were received 8 into evidence.) 9 CHAIRMAN LA ROSA: Any other parties? 10 MR. BAKER: Just to be sure. We would also 11 move 291 through 294. 12 Okay. Objections to those? CHAIRMAN LA ROSA: 13 Okay, so moved. 14 (Whereupon, Exhibit Nos. 291-294 were received 15 into evidence.) 16 CHAIRMAN LA ROSA: All right. Well, I think 17 we are good there, and I think we are ready to move 18 to the next witness. I know that we are scheduling 19 -- we have got a few running schedule, so I am just 20 going to go to FPL and ask to call your next 21 witness. 22 MR. BAKER: Thank you, Mr. Chairman. We call 23 Michael Jarro to the stand. 24 CHAIRMAN LA ROSA: Mr. Jarro, do you mind

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remaining standing and raise your right hand to be

1 sworn in? 2 Whereupon, 3 MICHAEL JARRO 4 was called as a witness, having been first duly sworn to 5 speak the truth, the whole truth, and nothing but the truth, was examined and testified as follows: 6 7 THE WITNESS: Yes. 8 CHAIRMAN LA ROSA: Excellent. Thank you. You 9 may have a seat feel. Free to get settled in and 10 we will get you to here in a second once you are 11 ready. 12 FPL, you are recognized to start with your 13 witness. 14 MR. BAKER: Thank you. 15 EXAMINATION 16 BY MR. BAKER: 17 0 Good afternoon, Mr. Jarro. 18 Good afternoon. Α 19 You were just sworn, correct? O 20 Α That's correct. 21 Q Could you please state your name and business 22 address for the record?

Α

33478.

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address is 15430 Endeavor Drive, Jupiter, Florida,

Sure. My name is Michael Jarro. My business

- 1 Q By whom are you employed and in what capacity?
- 2 A I am employed by Florida Power & Light as
- 3 Vice-President of Power Delivery.
- 4 Q And have you reviewed the 39 pages of direct
- 5 testimony of Witness Eduardo De Varona submitted in this
- 6 proceeding on February 28th of 2025?
- 7 A Yes, I have.
- 8 Q Did you, by notice dated August 6th of 2025,
- 9 adopt the direct testimony of Witness De Varona as your
- 10 own?
- 11 A Yes.
- 12 Q Do you have any corrections or revisions to
- 13 that prepared direct testimony?
- 14 A Yes. On page three, line seven, states:
- 15 Distribution operations should be revised to say Power
- 16 Delivery to reflect my most current title and role. In
- this role, I am responsible for planning, engineering,
- 18 construction, operation, maintenance and restoration of
- 19 FPL's transmission and distribution electric grid.
- Q Mr. Jarro, other than those changes, if I
- 21 asked you the same questions contained in your adopted
- direct testimony today, would your answers be the same?
- 23 A Yes.
- MR. BAKER: Mr. Chairman, I would ask that the
- direct testimony of Mr. Jarro be inserted into the

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          record and as though read?
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                CHAIRMAN LA ROSA: So moved.
                (Whereupon, prefiled direct testimony of
 3
     Michael Jarro was inserted.)
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1	BEFORE THE
2	FLORIDA PUBLIC SERVICE COMMISSION
3	DOCKET NO. 20250011-EI
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8	FLORIDA POWER & LIGHT COMPANY
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10	DIRECT TESTIMONY OF EDUARDO DE VARONA
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23	Filed: February 28, 2025

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1	I.	INTRODUCTION

- 2 Q. Please state your name and business address.
- 3 A. My name is Eduardo De Varona. My business address is Florida Power & Light
- 4 Company, 15430 Endeavor Drive, Jupiter, FL 33478.
- 5 Q. By whom are you employed and what is your position?
- 6 A. I am employed by Florida Power & Light Company ("FPL" or the "Company") as Vice
- 7 President of Power Delivery.
- 8 Q. Please describe your duties and responsibilities in that position.
- 9 A. As Vice President of Power Delivery, I am responsible for the planning, engineering, 10 construction, operation, maintenance, and restoration of FPL's transmission and
- 10 construction, operation, maintenance, and restoration of FPL's transmission and
- distribution ("T&D") electric grid. This includes the systems, processes, analyses, and
- standards utilized to ensure FPL's T&D facilities are safe, reliable, secure, effectively
- managed and in compliance with regulatory requirements. I also serve as the chair of
- the North American Transmission Forum, an organization comprised of electric
- transmission system owners and operators in the United States and Canada that seeks
- to advance transmission performance and reliability throughout North America.
- 17 Q. Please describe your educational background and professional experience.
- 18 A. I have a Bachelor of Science degree in Electrical Engineering from the University of
- 19 Florida. I joined FPL in 1991 and have more than 34 years of technical, managerial,
- and commercial experience gained from serving in a variety of positions within FPL,
- NextEra Energy Transmission, and NextEra Energy Resources. Over the last 20 years,
- I have served in a variety of leadership positions including executive director of
- 23 transmission business management, senior director of emergency preparedness,

1	director of transmission operations, director of technology, and Vice President of
2	Transmission and Substation.

- 3 Q. Are you sponsoring any exhibits in this case?
- 4 A. Yes. I am sponsoring the following exhibits:
- Exhibit EDV-1 List of MFRs Co-Sponsored by Eduardo De Varona
- Exhibit EDV-2 FPL FPSC T&D SAIDI
- Exhibit EDV-3 FPL FPSC Distribution MAIFIe
- Exhibit EDV-4 National & Regional Distribution SAIDI Benchmarking
- Exhibit EDV-5 FPL's AFS Avoided/Actual Customer Interruptions
- 10 Q. Are you sponsoring or co-sponsoring any Minimum Filing Requirements in this
  11 case?
- 12 A. Yes. Exhibit EDV-1 lists the minimum filing requirements ("MFR") that I am co-
- 14 Q. What is the purpose of your testimony?

sponsoring.

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15 A. The purpose of my testimony is to describe how FPL's Power Delivery organization 16 provides excellent performance benefiting more than 6 million customer accounts in 17 Florida. I describe how Power Delivery initiatives have been and continue to be 18 utilized to strengthen and modernize our T&D infrastructure and support customer 19 growth in Florida, as well as how our team of highly dedicated and motivated 20 employees continues to share best practices and align processes, procedures, material, 21 applications and systems. My testimony also lays out and explains the ongoing plan 22 for capital investments that are making our T&D infrastructure smarter, more reliable, 23 secure, and resilient. Finally, my testimony demonstrates that the capital costs and T&D operations & maintenance ("O&M") expenses for Power Delivery are reasonable.

### Q. Please summarize your testimony.

FPL customers, Florida's economy, and the state's critical infrastructure, rely on, require, and increasingly expect safe and reliable electric service to meet the demands of a growing customer base. As FPL witnesses Bores and Cohen explain, Florida has seen significant population growth and expects that growth to continue. FPL has an obligation to not only provide safe and reliable service to its existing customers, but also to ensure that it can serve those new customers and businesses that request electric service within the FPL service area. Power Delivery requires significant ongoing capital investments in infrastructure to meet this growing demand, changes in load patterns, and challenges in customer requirements and expectations. Meeting the demands of customer growth throughout the service area is a major portion of Power Delivery's investment, along with the associated engineering and construction effort required to meet these demands.

A.

As FPL strives for continuous improvement in every aspect of the business, we endeavor to expand and develop new opportunities to increase overall customer satisfaction, ensure compliance with all federal, regional, state, and local regulations and agency policies, and make advances that improve the electric grid. Through the use of technology, FPL has implemented numerous programs, several of which are outlined in my testimony, that have improved the customer experience, enabled employees to be more efficient and make timely decisions, ensure compliance, and

improved the performance of the grid in a way that has allowed FPL to provide customers service reliability that is top-decile in the industry and the best amongst Florida's investor-owned utilities ("IOU"). As an example, smart grid technology implemented by FPL was responsible for avoiding approximately 1.9 million non-storm related customer interruptions in 2024.

Power Delivery's ability to deliver exceptional service reliability has been recognized throughout the industry. One specific example of this is the ReliabilityOne® National Reliability Award, which FPL has received in seven of the last ten years – a testament to FPL's commitment to provide reliable service to the customers and communities we serve.

Going forward, FPL remains committed to continuing the effective management of investments and expenses necessary to construct, operate, maintain, protect and improve the T&D electrical grid. These investments and expenses result from: (1) maintaining excellent reliability by executing our comprehensive T&D reliability/grid modernization initiatives; (2) customer growth and system expansion; (3) complying with regulatory requirements; and (4) servicing the electrical grid/other support activities. Effective management of these programs has resulted in excellent service, such as back-to-back best-ever Florida Public Service Commission ("FPSC") T&D System Average Interruption Duration Index ("SAIDI") in 2023 and 2024.

Consistent with FPL's forward-looking approach and the expectation of continued growth, FPL is anticipating the need to construct or upgrade facilities to serve prospective customers with new or incremental loads that are significant in size. It is imperative that we fulfill our mission to serve every customer but, at the same time, ensure that extensions of new service are not being made to the detriment our existing customers. FPL is therefore proposing a tariff modification to add a new contribution-in-aid-of-construction ("CIAC") requirement for large new or incremental loads to better protect our customers and reduce the risk of subsidization.

FPL is positioned to meet the challenges of tomorrow through the continued and successful implementation of programs to strengthen, modernize, and maintain the reliability of the electric grid. These efforts are producing excellent results and providing a foundation for continuing the capital investments targeted at maintaining and improving the safety, reliability, and security of the grid to the benefit of our customers.

A.

#### II. OVERVIEW OF FPL'S GRID

## Q. Please provide an overview of FPL's T&D grid.

FPL manages the most expansive T&D grid in the state of Florida. FPL's T&D grid is flexible and dynamic and continuously expanding to serve a rapidly growing customer base. Currently, FPL serves more than 6 million customer accounts representing approximately 12 million people in 43 counties in peninsular and Northwest Florida, with approximately 82,000 miles of distribution lines, 9,500 miles of high-voltage

transmission lines, and 921 substations. FPL's operation of this T&D infrastructure
has enabled, and continues to enable, the Company to bring reliable power to customers
representing more than half of Florida's total population.

- Q. Does operating and maintaining an electrical system in Florida present uniquechallenges?
- 6 A. Yes. As an electric service provider in the state of Florida, FPL faces Florida's unique 7 geographic and weather-related challenges daily. FPL's service area is encompassed by approximately 610 miles of coastline (one of the longest of any utility in the U.S.), 8 9 which presents challenges unlike those faced by any other electric system in the 10 country. For example, because the vast majority of our customers live within 20 miles of the coast, a significant portion of our electric infrastructure is constantly exposed to 11 12 the corrosive effects of salt spray and to the highest wind speeds when a storm hits. In 13 addition to being more susceptible to tropical storms and hurricanes, Florida 14 experiences more lightning strikes by density than any other U.S. state, with FPL's 15 service area experiencing approximately 172,000 lightning strikes in 2024 alone. 16 Florida's subtropical climate also promotes one of the fastest vegetation growth rates in the nation, which presents unique challenges for operating and maintaining the T&D 17 18 system.
- 19 Q. Have there been operational changes to FPL's T&D system since FPL's prior rate 20 case in 2021?
- 21 A. Yes. In 2022, the peninsular Florida and Northwest Florida electrical systems were 22 electrically interconnected, allowing FPL to dispatch electricity from across our

modernized and diverse power generation fleet to generate long-term savings for customers.

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#### III. SAFETY

# Q. Please describe FPL's commitment to safety.

The Company considers safety to be paramount to effective operations. Embracing this philosophy, FPL has provided excellent reliability and service while maintaining a continual focus on safety. As a result of concerted and sustained efforts, FPL achieved a 27.14% improvement from 2014 to 2024 in the Occupational Safety and Health Administration's ("OSHA") industry-standard metric of reportable injuries per 200,000 man-hours. A key reason for this improvement is our continued commitment to safety, which the Company has furthered through innovation, leveraging technology, and engineering out injuries with enhanced tools, processes, and equipment. The Company's safety programs involve establishing a partnership with employees to institute an environment where actions are guided by our safety principles. These principles are in addition to the corporate-sponsored safety program "Zero Today," which serves to constantly reinforce the need for everyone's continued commitment to safety principles. "Zero Today" is our commitment to maintaining a safe work environment and creating an inclusive safety culture where safety is everyone's job – a philosophy that all injuries are preventable.

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FPL's commitment to safety has been repeatedly recognized in the electric industry. In 2022, Power Delivery was honored with two prominent safety-specific awards: the

Southeastern Electric Exchange Top Performance Safety Award for T&D Safety and the AEIC Achievement Award for FPL's utilization of safety-related technology and mobile applications that make safety inspection information more accessible in real time.

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A.

#### IV. T&D RELIABILITY PROGRAM

### Q. Please provide an overview of FPL's T&D reliability program.

Society's ever-increasing reliance on digital technology and customers' increasing demands for reliable service require a focus on continuous reliability improvement. As a result, the goals of the T&D reliability initiatives are to reduce day-to-day outages and restoration times. FPL's T&D reliability program, which has produced excellent results for our customers, includes multiple initiatives that prevent outages and reduce outage durations. For distribution, in addition to smart grid technology, and predictive and proactive reliability measures, reliability initiatives are also developed by identifying and analyzing causes of past interruptions. FPL then targets the causes of those interruptions to determine if they can be remedied proactively to the benefit of customers. For the transmission system, reliability initiatives focus on facility/system assessments, targeted maintenance, prevention through prediction, utilizing smart grid technology, and prevention of recurrence.

#### Q. Please provide an overview of FPL's results.

Since 2021, FPL's T&D initiatives have enabled FPL to maintain excellent reliability metrics. FPL's 2023 FPSC T&D SAIDI was the best among the Florida IOUs and FPL maintained excellent performance results for FPSC T&D SAIDI and FPSC Distribution

Momentary Average Interruption Frequency Event Index ("MAIFIe") in 2024 as can be seen on Exhibits EDV-2 and EDV-3. FPL's excellent distribution performance has particularly benefitted FPL's Northwest customers, whose service reliability has improved by 63% since 2018. Exhibit EDV-4 shows FPL's Distribution SAIDI performance (calculated using the Institute of Electrical and Electronics Engineers ("IEEE") 2.5 beta methodology) for 2023 (49.7 minutes), which ranked 59% better than the national average. This ranking was determined utilizing the most recent data reflected in PA Consulting's annual 2023 ReliabilityOne® benchmarking summary and the U.S. Energy Information Administration's 2023 Annual Industry Report. This benchmarking study included 2023 Distribution SAIDI results (the vast majority calculated using IEEE's 2.5 beta methodology) from approximately 100 IOUs throughout the nation. Achieving these excellent reliability performance results in 2023 and 2024 demonstrate that our grid modernization and reliability initiatives are effective and beneficial.

- With FPL's continued commitment and the necessary investments to employ these initiatives, we expect to continue to provide excellent reliability performance for our customers.
- Q. Please provide specific examples of FPL's key distribution system initiatives to
   maintain and improve reliability.
- A. FPL continuously seeks to identify programs and initiatives that enhance its distribution system to the benefit of customers. To that end, FPL has identified, planned, and implemented the following key distribution reliability initiatives:

Grid Modernization/Smart Grid – This program includes several focused initiatives that have advanced FPL's effort to develop a modern, automated and self-healing grid. Included in these initiatives are smart devices, *e.g.*, automated feeder switches ("AFS"), automated lateral switches, automated underground switches, automated transformer switches, fault current indicators ("FCI"), and distribution transformer monitors ("DTM"), that are used to automatically identify and isolate problematic line sections and clear temporary faults – avoiding or mitigating interruptions and reducing restoration times and costs. These devices are providing significant reliability improvement results. For example, as shown in Exhibit EDV-5, AFS devices were responsible for avoiding approximately 1.9 million non-storm related FPL customer interruptions in 2024. This illustrates that the smart grid technology implemented through these initiatives continues to improve reliability for our customers.

<u>Targeted Performance Improvement</u> – This includes multiple initiatives that target specific infrastructure and devices experiencing a higher number of outages and/or momentary interruptions. Examples of these reliability initiatives include prioritization feeders, submarine cable, momentary outliers and device outliers.

<u>Underground Cable</u> - This initiative addresses "direct-buried" feeder and lateral cable failure modes through rehabilitation (by injecting cable with silicone, which extends its useful life) or, when rehabilitation is not an option, replacement of the cable. These solutions help prevent interruptions and improve service on underground facilities.

1	Q.	Please provide specific examples of FPL's transmission initiatives to maintain and
2		improve reliability.
3	A.	As with its distribution initiatives, FPL also continuously seeks out transmission
4		innovations that enhance service to customers. Key transmission system reliability
5		initiatives include:
6		
7		<u>Facility/System Assessments</u> – Under this initiative, transmission line and substation
8		assessments are conducted utilizing equipment diagnostics and both on-site and remote
9		system surveillance to evaluate the health of facilities and equipment. Holistic station
10		and equipment assessments, including oil sampling and testing, equipment and
11		protective systems testing, and thermal imaging are performed, providing information
12		used to prevent or predict equipment failures. Also, certain system surveillance is
13		accomplished through equipment performance monitoring and diagnostics, using
14		remote monitoring tools and analysis programs.
15		
16		Grid Modernization/Smart Grid - FPL continues to incorporate intelligent
17		technology within substation systems to better anticipate and respond to system
18		disturbances. For example, the substation transformer relay scheme upgrades, use of
19		microprocessor-based systems to gather data and assess equipment operating
20		conditions, and the use of auto-restoration and self-healing systems result in improved
21		reliability, increased situational awareness of grid operations, and optimized asset
22		utilization.
23		

<u>Prevention through Prediction</u> – By considering advanced diagnostics of asset performance and risk assessment, our team develops plans to replace major transmission equipment and facilities in a more predictive manner. Following these replacements, the team makes technological advances and design improvements to reduce future interruptions and maximize asset utilization.

<u>Prevention of Recurrence</u> – Through the use of an event response process where each outage event is recorded, classified, and analyzed, our team develops countermeasures to prevent the recurrence of similar events. For example, if it is determined that a relay operated improperly, the team determines the root cause, and implements countermeasures for similar devices throughout the system to prevent recurrence.

- <u>Targeted Maintenance</u> Our team evaluates information from condition assessments using predictive models. The team then develops a plan to replace or conduct targeted maintenance on major equipment and facilities. Targeted maintenance extends the useful life of equipment and minimizes costs by optimizing the assets and deferring the need for substantial investment in new equipment and facilities.
- 18 Q. Is FPL undertaking any other major construction projects for the purposes of 19 ensuring FPL customers continue receiving reliable power?
- 20 A. Yes. FPL has been and continues to undertake a rebuild of its 500 kilovolt ("kV") 21 system, which is the electricity delivery backbone of FPL's system. Since beginning 22 the project in 2019, FPL has replaced more than 3,700 aging transmission structures.

1		This replacement project is crucial to ensuring the continued performance of the
2		electric system in Florida.
3	Q.	Please describe how the 500 kV rebuild furthers FPL's goal of providing reliable
4		service.
5	A.	FPL's assessment of key facilities and its analysis of the age of its critical infrastructure
6		led FPL to begin the rebuild of its 500 kV system. The rebuild program replaces the
7		system structures that are nearing the end of their useful life, a process that requires the
8		removal and replacement of each structure that is part of the program. The majority of
9		the 500 kV transmission structures were originally built during the same timeframes in
10		the 1970s and 1980s and are being replaced with steel or concrete structures.
11		Replacement structures are engineered and constructed to meet or exceed current
12		National Electrical Safety Code design requirements, providing the additional benefit
13		of enhanced resiliency.
14		
15		The 500 kV system provides Florida the means to transport bulk power around the state
16		and serves as Florida's only major connection to the eastern interconnection of the
17		United States. As such, it is imperative that this critical transmission infrastructure
18		function properly and securely to meet FPL's goal of providing reliable service to
19		customers now and in the future.

#### V. EMERGENCY PREPAREDNESS & RESPONSE

<b>2 Q. Does FPL hav</b>	e plans and	processes in	place to resi	pond to emer	gency events?
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1

- A. Yes. Emergency preparedness is a core focus for the Company, and is the central tenet in FPL's Corporate Emergency Management Plan ("CEMP"). The CEMP provides a response framework and applies to all threats and incidents including severe weather, cybersecurity, grid or supply disruptions, physical security, floods, fires, chemical spills, pandemics, civil unrest, or any other hazards that threaten the company's systems, employees or contractors.
- 9 Q. Does FPL conduct training and exercises to ensure the organization is ready to
  10 respond to potential threats or incidents?
- 11 A. Yes. FPL's comprehensive and multifaceted emergency response training occurs
  12 throughout the year to ensure that employees are ready and prepared to respond to an
  13 emergency event. Additionally, for certain potential significant threats or events,
  14 simulated events and response exercises are conducted annually to enhance training
  15 and preparedness (e.g., company-wide storm dry run, capacity shortfall, and
  16 cybersecurity simulations/exercises).

# 17 Q. Please describe FPL's emergency preparedness and training.

A. FPL engages year-round in emergency preparations and drills. One such example is our annual storm dry-run exercise, which simulates a hurricane impacting FPL's service area. Emergency preparation drills like this provide opportunities for interactions between FPL and governmental agencies as well as other external entities (e.g., the FPSC, Office of Public Counsel, U.S. Department of Energy, the Edison

Electric Institute ("EEI"), and other utilities) who routinely attend annual storm dry run events to observe and learn about our industry-recognized restoration processes.

As part of FPL's continued leadership in emergency preparedness and response, FPL serves as a founding member of the National Response Executive Committee ("NREC"). The NREC is an industry group, as part of EEI, that is responsible for overseeing nationwide mutual assistance and resource sharing during events that are larger than can be accommodated through the industry's regional mutual assistance processes. As a member of NREC, FPL closely coordinates with the Southeastern Electric Exchange and other industry regional groups as needed to provide and receive mutual assistance.

In the area of cybersecurity, FPL performs annual internal drills with the participation of federal agencies (e.g., Department of Homeland Security, U.S. Secret Service, Federal Bureau of Investigation). These drills help ensure the readiness of the organization. In addition, FPL participates with other electric utilities across the country in the North American Electric Reliability Corporation's ("NERC") biennial GridEx exercise, and participates in industry forums (e.g., Electricity Subsector Coordinating Council and NERC activities) to ensure lessons learned are effectively applied.

Having these trainings, plans, and processes in place allows FPL to timely execute on its commitment to provide safe and reliable service to the customers and communities it serves.

A.

#### VI. GROWTH AND EXPANSION

Q. How do new service accounts, major new construction projects, and increased electrical demand affect FPL's T&D planning operations?

All of these factors can significantly impact resources, costs, and reliability. Forecasted new service accounts, as sponsored by FPL witness Cohen, are expected to total approximately 462,000 over the course of FPL's proposed four-year rate plan. As a reference point to better understand the pace of this growth, this number of new service accounts would equate to approximately the total number of customers served by Gulf Power Company prior to its consolidation with FPL. This rapid growth trend is expected to continue as Florida is the fastest growing state in the nation and is projected to continue to grow in the coming years. Accommodating new customers, whether a typical residential customer or a major project, requires the installation of new infrastructure. Depending on the new customer's load and requirements, the new infrastructure to serve this load could be as simple as installing a single service line to a home or business or could require constructing new feeders and/or transmission lines and substations.

The cumulative effect of increases in load due to new customers and increased customer demand in certain areas also can require upgrades to existing infrastructure

and/or the installation of new facilities. FPL's fast-growing service area will require significant ongoing capital investment to meet customer growth, additional load requirements, and new construction development, such as the State Road ("SR") 70 and 80 projects that I describe below. Importantly, our customers are depending on us now more than ever, and Power Delivery is committed to meet those expectations by continuing to provide safe and reliable service for both our existing and new customers.

Major new infrastructure projects throughout FPL's service area also have a significant impact on resources and costs (*e.g.*, projects require new feeders, new transmission lines and even new T&D substations). Some examples of major projects that are currently under construction or expected to be under construction in the next several years include the following:

Master Planned Communities – Multiple large community projects each serving approximately 4,200 to 24,000 residential homes with associated commercial, hospitality, educational, and recreational facilities in Walton, Bay, Sarasota, and Martin counties.

 Florida Space Coast – Transmission and distribution expansion continues with interest from aerospace companies, including plans for a second launch pad, Space Launch Complex (SLC-37).

Major Medical Campuses – Large medical and emergency facilities with multiple buildings in Panama City Beach and Fort Myers that require construction of a new feeder and upgrades to an additional feeder for redundancy.

While these are considered major construction projects for the electric grid, they are also examples of community economic growth projects that impact growth in the residential and commercial markets as well.

- Q. Please describe how growth and expansion initiatives such as FPL's SR 70 and SR
   80 projects benefit customers.
- 6 A. As a result of FPL's recent transmission assessment studies and continued load growth 7 throughout FPL's service area, we initiated the SR 70<sup>1</sup> and SR 80 projects in late 2021. 8 These projects involve installing new transmission lines, rebuilding and reconductoring 9 existing transmission, and completing various substation projects. FPL undertook 10 these projects to address the need for additional transmission paths to increase power 11 transfers from east to west. The SR 70 and SR 80 projects provide additional hardened 12 and resilient 230 kV circuits, relieve potential overloads, improve reliability and low 13 voltage conditions in the case of contingency events, and reduce line loading on 14 existing transmission circuits. The projects meet area load requirements by serving 15 potential future load while maximizing system reliability. The 500 kV rebuild project 16 I discussed earlier is similarly imperative for proper functioning of FPL's expanding 17 transmission system.

<sup>&</sup>lt;sup>1</sup> FPL's SR 70 project is part of the Sweatt-Whidden transmission line, the need for which was approved by the FPSC in Order No. PSC-2022-0196-FOF-EI, issued on June 3, 2022 in Docket No. 20220045-EI.

1	Q.	As part of the required expansion of the system to meet the growing customer
2		demand, please describe some of the considerations that the Company must take
3		into account in acquiring and holding T&D Property Held for Future Use
4		("PHFU").
5	A.	Customer growth, increased electrical demands, and major new construction projects
6		require T&D to acquire and hold PHFU for this new infrastructure. As provided in

MFR B-15, these T&D PHFU investments have been identified as being geographically and strategically located and necessary to meet future customer load growth, maintain and improve customer reliability, comply with NERC standards regulating the reliability of the grid, and/or integrate future generation into the grid. With suitable properties on hand for future needs, FPL avoids being in a time pressure

situation or being limited on suitable options, both scenarios in which property sellers

may take advantage, resulting in higher costs for our customers.

T&D substations and transmission lines can take years to plan, design, permit and construct. This includes securing necessary sites and properties. Additionally, the annual planning process is very dynamic and, by virtue of its close linkage to load growth forecasts, results in yearly modifications of system expansion plans. PHFU ensures we are able to secure the land we need to move an adequate and reliable supply of power across the system to meet an ever-evolving set of electrical grid conditions and customer needs.

# VII. REGULATORY COMPLIANCE

2	Q.	Are the operation and maintenance facilities of FPL's T&D system significantly
3		impacted by mandated compliance and regulations?
4	A.	Yes. As a regulated electric utility, FPL's T&D system operation and maintenance
5		facilities must comply with a variety of policies, standards, orders and requirements of
6		federal, regional, state and local regulatory commissions and agencies. In addition to
7		FPSC rules and requirements, these include the requirements of the Federal Energy
8		Regulatory Commission ("FERC"), NERC, the U.S. Environmental Protection Agency
9		("EPA"), Department of Energy ("DOE"), OSHA, Florida Department of
10		Environmental Protection ("FDEP"), and numerous cities and counties. Of course,
11		compliance with newly mandated requirements can incrementally increase costs for
12		new and existing assets and require implementation of new or enhanced processes and
13		related training.
14	Q.	Please provide examples of rules, regulations, and requirements that can have a
15		significant impact on FPL's T&D operations, processes, and costs.
16	A.	FPL currently complies with 88 FERC and NERC reliability standards for reliability,
17		physical security and cybersecurity, containing in excess of 1,600 requirements and
18		sub-requirements that govern the operation and maintenance of FPL's bulk electric
19		system and prevent malicious cyber-attacks on the grid. FERC has recently finalized
20		and is in the process of creating additional transmission rules that may result in future
21		compliance responsibilities for the Company. There are also new transmission
22		standards from FERC and NERC related to transmission operations and planning,
23		generation, and cybersecurity that are scheduled to take effect in mid-2025 and 2026,

requiring increased investment. As the national grid continues to evolve, new standards and requirements will likely continue to be added to NERC's list for mandatory compliance.

FPL is also subject to a wide range of environmental laws and regulations from government agencies (*e.g.*, EPA, FDEP, the Florida Fish and Wildlife Conservation Commission) to protect and minimize impacts to Florida's natural resources. These state and federal regulations require FPL to incorporate environmental considerations and protection measures into the design, construction, operation, and maintenance of its T&D facilities.

Lastly, Regulatory Compliance includes obligations associated with the construction and relocation of facilities as required by state agencies, such as the Florida Department of Transportation, and local municipalities to meet the needs of the state and communities we serve.

A.

#### VIII. CUSTOMER SATISFACTION AND TECHNOLOGY

# Q. What efforts have been made to improve customer communications?

In addition to maintaining and improving the reliability of electric service, FPL continually strives to increase overall customer satisfaction, including how the Company communicates with customers, provides clear and timely information, and improves customer access to that information. Many of these processes and interactions are described in the testimony of FPL witness Nichols. Not only do these

initiatives improve customer satisfaction, but they also enable customers to make informed and timely decisions. For example, the new Advanced Distribution Management System ("ADMS") utilized by FPL's control center operators leverages the smart grid network to better determine customers affected by outages, improves estimated time of restoration ("ETR"), and streamlines notifications to customers.

## Q. Please elaborate on how the ADMS improved service to customers.

A.

A.

ADMS has evolved how FPL manages the grid to the benefit of customers. ADMS is a specialized system that centralizes and visualizes grid-related data including technical information from meters, which in turn enables FPL enhanced system visibility and intelligence. Using ADMS, FPL can automatically ping an individual customer's meter to retrieve outage information, and better identify potential service issues and restoration needs. ADMS also provides a heatmap functionality, which allows FPL a visual assessment of restoration progress in nearly real time and identifies pockets of challenged restoration areas, such as nested outages (secondary points of damage that were initially unknown), to more efficiently allocate resources during restoration events. These capabilities allow FPL to deliver more precise information to customers, such as ETRs and notifications, which improve the customer's experience.

#### Q. How has FPL used technology to improve system reliability?

FPL has focused its efforts on significantly increasing the utilization of information technology and automation to modernize its grid to make it smarter, self-healing, and more reliable. This focus was initiated by FPL in 2006 with the installation of advanced metering infrastructure that provides two-way communication with the customer's meter and has continued with smart grid devices such as automated feeder switches,

automated lateral switches, automated underground switches, automated transformer switches, fault current indicators and distribution transformer monitors, which also provide data to ADMS. These investments in developing an intelligent, modernized grid have improved the customer experience and led to increased reliability. To highlight a specific data point, FPL's smart grid helped avoid more than 1.4 million storm-related outages during the last three hurricane seasons. This operational efficiency, enabled by FPL's investment in advanced technology, keeps customers' lights on while at the same time creating efficiencies and putting downward pressure on costs.

### Q. Has FPL implemented other technological initiatives?

11 A. Yes. FPL has also implemented the following technological initiatives to efficiently

12 serve its customers and contribute to customer satisfaction:

System Control Center ("SCC") – FPL's SCC is a sophisticated facility that enables more efficient operation and coordination of FPL's transmission and substation network. Another central purpose of the SCC is ensuring full compliance with applicable standards, *e.g.*, NERC Operating and Critical Infrastructure Protection cybersecurity standards/requirements. The quality and availability of energy management system tools and status information on FPL's transmission and substation system housed within the SCC allow for improved and continuous monitoring and control by system operators.

<u>Distribution Control Center ("DCC")</u> – FPL's DCC is a sophisticated facility that enables centralized and more efficient operation and coordination of FPL's distribution network.

Power Delivery Diagnostic Center ("PDDC") – The PDDC acts as a "nerve center" for FPL's smart grid. The PDDC provides real-time monitoring of critical operating parameters of T&D equipment/devices; gathers and analyzes data from advanced sensors, monitors, switches, and smart meters; and utilizes FPL-developed analyses, applications, algorithms, and other tools to predict likely equipment failures so that remediation can be efficiently planned and completed before a failure or outage occurs. The PDDC also provides analyses of system events and coordination and support to the SCC, DCC, and T&D operations. For example, when an outage event occurs, the PDDC immediately begins to collect and analyze pertinent data, before a restoration crew has even reached the event site. Equipped with this information upon arrival, the restoration crew can perform the restoration more quickly and effectively.

Restoration Spatial View ("RSV") – RSV, an FPL-developed application that runs on tablets, smart phones, and laptops, provides real-time situational awareness (from multiple systems) and acts as a "one-stop shop" for restoration crews. It provides real-time outage information, weather radar and alerts, electrical network information, customer energy consumption data, voltage detail, crew location and more – all layered on a map view. A significant customer benefit is the restoration confirmation feature, which allows restoration crews to confirm the power status of all smart meters affected

by an outage before leaving the area. This has resulted in fewer repeat customer calls and restoration crew visits.

<u>Drones</u> – FPL uses drones with high-definition and thermal cameras in day-to-day operations and after severe weather events to assess overhead power equipment, which is an especially valuable tool to assess the energy grid in areas that may be impassable for various reasons. In 2022, FPL launched FPLAir One, a remotely operated drone the size of a small plane equipped with LiDAR (Light Detection and Ranging) technology for day-to-day data collection and onboard cameras, which allows it to create a digital twin of FPL's infrastructure and obtain high-quality images of FPL equipment. FPL's use of drones allows FPL to gather real-time information, assess the electric grid, and identify the causes of outages both for day-to-day reliability purposes and in response to an outage event, such as a storm.

A.

<u>Predictive Algorithms</u> – Power Delivery continues to develop intricate algorithms to detect distinct patterns such as voltage fluctuation in residential smart meters, which allows the team to better predict individual customer outages in advance and avoid power loss.

# 19 Q. Has FPL been recognized for its efforts to provide reliable service for customers?

Yes. In 2023, PA Consulting presented FPL with its Outstanding System Resiliency Award. FPL also received the ReliabilityOne® National Reliability Award in 2022 for the seventh time in ten years. The ReliabilityOne® National Reliability Award is given to the company that has demonstrated sustained leadership, innovation, and

achievement in the area of electric reliability. Criteria for the award are based primarily on system reliability statistics that measure the frequency and duration of customer outages. After provisional recipients are selected, each company undergoes an on-site certification process, which provides an independent review and confirmation of the policies, processes and systems used to collect, analyze and report a company's reliability results. In addition to the national award, FPL was awarded the ReliabilityOne® award for Outstanding Reliability Performance in the Southeast Region Metropolitan Service Area for the eleventh straight year in 2024.

## 9 Q. Have these initiatives been recognized by customers?

Yes, the cumulative success of FPL's initiatives to improve our service and how we engage with our customers has contributed to reducing FPSC reliability-related logged complaints per 10,000 customers by 49% since 2020.

A.

#### IX. FPL T&D COSTS

## Q. Please provide an overview of FPL's actual/forecasted T&D costs.

A. FPL's base T&D capital costs and O&M expenses result from five major cost drivers:

(1) reliability/grid modernization; (2) growth and system expansion; (3) other base rate costs of removal; (4) complying with regulatory agency requirements, and (5) grid servicing/support. For T&D capital costs, the major drivers have been growth and grid reliability and modernization. For T&D O&M expenses, the major drivers have been grid servicing and support, regulatory compliance, and grid reliability and modernization. For 2025-2027, these same major cost categories are expected to continue to drive T&D capital costs and O&M expenses.

#### A. T&D CAPITAL COSTS

- Q. What are FPL's T&D actual/projected base (i.e., non-clause) capital costs for 2024-2026 and 2027?
- 4 A. FPL's T&D base (i.e., non-clause) capital costs for 2024-2026 and 2027 are \$8.0 billion
  5 and \$2.7 billion, respectively. As discussed, the major drivers for capital costs
  6 historically and for the projected period are the same.
- Q. Please provide 2024-2027 base (i.e., non-clause) capital costs by major driver for
   FPL.
- 9 A. Below are the 2024-2027 base (i.e., non-clause) capital costs for each major driver for 10 FPL:

Major Drivers (\$Billions)	2024	2025	2026	2027	Total 2024-2027	Total Driver Ratio %
Reliability/Grid Modernization	\$0.37	\$0.31	\$0.36	\$0.36	\$1.40	13%
Growth/System Expansion	\$1.58	\$1.58	\$1.67	\$1.60	\$6.43	60%
Other Base Cost of Removal	\$0.09	\$0.13	\$0.11	\$0.13	\$0.46	4%
Regulatory Compliance	\$0.07	\$0.09	\$0.09	\$0.09	\$0.33	3%
Grid Servicing/Support	\$0.61	\$0.46	\$0.52	\$0.51	\$2.10	20%
Total	\$2.71	\$2.57	\$2.75	\$2.68	\$10.71	100%

Note: Totals may not add due to rounding.

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Key components of these drivers, and their importance in maintaining a resilient, reliable and compliant T&D system, were discussed earlier in my testimony. These figures are also reflective of the inflationary and cost pressures described in the testimony of FPL witness Bores, which have affected numerous parts of our activities and operations, including both construction and cost of removal.

1	Q.	Please provide additional details for capital costs driven by distribution-related
2		Reliability/Grid Modernization.
3	A.	Distribution smart grid devices account for \$0.17 billion for 2024-2026 and
4		\$0.08 billion for 2027. The capital costs associated with the installation of underground
5		inspection, repair, and rehabilitation of existing underground facilities are \$7 million
6		for 2024-2026 and \$2 million for 2027. The remaining components for this category,
7		accounting for \$0.19 billion for 2024-2026 and \$0.09 billion for 2027, are associated
8		with other various distribution reliability initiatives, such as the installation of hand-
9		hole and pad-mount transformer and submarine cable replacements.
10	Q.	Please provide additional details for capital costs driven by transmission-related
11		Reliability/Grid Modernization.
12	A.	Capital costs associated with transmission facility/system assessments, replacements
13		and the prevention through prediction/reoccurrence initiatives account for \$0.27 billion
14		in 2024-2026 and \$0.12 billion for 2027. The remaining transmission reliability-related
15		capital costs are associated with modernizing the transmission grid. Capital costs for
16		these initiatives are \$0.40 billion for 2024-2026 and \$0.07 billion for 2027.
17	Q.	Please provide additional details for capital costs driven by Growth/System
18		Expansion.
19	A.	The capital costs associated with the forecasted addition of new service accounts being
20		added to FPL's service area are \$1.51 billion in 2024-2026 and \$0.49 billion for 2027.
21		Capital costs for expansion and upgrades of both T&D facilities/infrastructure to ensure
22		the safe and reliable operation of the grid for 2024-2026 are \$0.27 billion, and
23		\$0.24 billion for 2027. Remaining capital costs in this cost category associated with

1		new large major construction projects such as SR 70 and 80, new substations, and new
2		streetlight systems for 2024-26 are \$3.05 billion and \$0.87 billion for 2027.
3	Q.	Please provide details for capital costs driven by Regulatory Compliance.
4	A.	This remaining major driver category, accounting for approximately \$0.24 billion in
5		2024-2026 and \$0.09 billion for 2027, includes costs associated with FPL's T&D
6		system operation and maintenance facilities complying with various regulatory
7		mandates, rules and regulations as previously discussed.
8	Q.	Please provide details for capital costs driven by Grid Servicing/Support.
9	A.	Capital costs associated with the major components of this key driver category include:
10		(1) restoring customers' service, \$0.58 billion for 2024-2026, and \$0.19 billion for
11		2027; (2) the company's vehicle fleet, \$0.09 billion for 2024-2026 and \$0.05 billion
12		for 2027; (3) installation of fiber for utility use; and (4) other various support activities
13		(e.g., purchase of tools, computer systems/software, maintenance/ upgrades of office
14		facilities, and responding to customer requests). For 2024-2026, these costs are
15		\$0.92 billion, and \$0.27 billion for 2027.
16		
17		B. T&D O&M COSTS
18	Q.	What are FPL's T&D base O&M expenses for the 2026 projected test year and
19		2027 projected test year?
20	A.	FPL has forecasted T&D base O&M expenses of \$181.3 million for the 2026 projected
21		test year and \$188.4 million in the 2027 projected test year.

1	Q.	How do 1&D base O&M expenses compare to typical benchmarks utilized by the
2		FPSC for evaluating the reasonableness of O&M expenses?
3	A.	FPL's T&D base O&M expenses for the 2026 and 2027 projected test years compare
4		favorably to the benchmarks typically used by the FPSC to evaluate the reasonableness
5		of O&M expenses. For example, the T&D O&M expenses for the 2026 projected test
6		year and 2027 projected test year are significantly below the FPSC O&M benchmark
7		as calculated by FPL witnesses Fuentes and Laney in MFR C-41, which are
8		approximately \$54.3 million and \$57.4 million for 2026 and 2027, respectively.
9		Further details of changes in the O&M expense are provided in MFR C-8 and the O&M
10		benchmark by function is provided in MFR C-41.
11	Q.	Is there other information available indicating that FPL's T&D O&M expenses
12		are reasonable?
13	A.	Yes. As contained in FPL witness Reed's testimony, benchmarking of T&D O&M
14		expenses demonstrates that FPL has "shown excellence in controlling its Distribution
15		O&M expenses" and "performed well in controlling Transmission O&M expenses."
16	Q.	Are FPL's T&D forecasts for capital costs and O&M expenses reasonable?
17	A.	Yes. For the reasons outlined in detail in my testimony and exhibits, FPL's 2026
18		projected test year and 2027 projected test year T&D forecast for capital costs and
19		O&M expenses are reasonable and reflect our intentions for continued excellent
20		performance. As previously discussed, Power Delivery has the people, the processes
21		and a track record of managing and sustaining excellent T&D system performance for
22		our customers.

# Q. Is FPL proposing Company O&M and Capital adjustments related to the Storm

## Protection Plan Cost Recovery Clause ("SPPCRC")?

Yes. There are certain O&M and capital costs related to FPL's Storm Protection Plan ("SPP") that are currently being recovered in base rates. Because these costs are for SPP programs, FPL is proposing accounting adjustments of \$1.2 million to move O&M expenses related to FPL's transmission visual patrols and approximately \$7.1 million to move capital related to wire and cable materials associated specifically with FPL's SPP capital projects from base rates to the SPPCRC starting in 2026. FPL's SPP Transmission Inspection Programs are line patrol and visual inspections including assessments and thermography of overhead transmission lines. The wire and cable materials are charged to a holding blanket account and then subsequently charged to a SPP capital project. FPL witness Fuentes further discusses these adjustments to move these SPP costs from base to the SPPCRC.

A.

A.

#### X. CIAC TARIFF

## Q. Please provide an overview of CIAC.

CIAC is the amount due from applicants who request new or upgraded facilities in order to receive electric service. The CIAC amount to be paid by the applicant is equal to the total estimated transmission and distribution costs to extend service minus four years of expected annual revenue. The amount required to be paid by each applicant varies based on (i) the total cost to extend service to meet the applicant's electrical needs and (ii) the annual revenues estimated to be received based on the applicant's

projected load. These factors are unique and specific to each applicant requesting new or upgraded facilities.

A.

The total cost to extend service to a new applicant is initially assigned to the general body of customers and "repaid" by the applicant through both the CIAC amount and base revenues paid by the applicant. If the applicant's actual load meets or exceeds the projected load used to calculate the CIAC amount, FPL will fully recover the cost to extend service to the applicant through the CIAC amount and the base rates paid by the applicant over the initial four-year period used to calculate the CIAC amount due. However, if the applicant's forecasted load does not fully materialize, there will be a revenue shortfall over that same four-year period and the burden for recovery of the remaining costs to extend service to the applicant will fall to the general body of customers.

Q. Can you provide an example of the impacts to the general body of customers if the applicant's forecasted load used to calculate the CIAC amount does not fully materialize?

Yes. The table below provides simplified illustrative examples of the potential impacts to the general body of customers for an applicant that requires FPL to incur \$125 in costs to extend service to the applicant with a projected load that produces an estimated annual revenue of \$25.

-1

		(1)	(2)	(3)	(4)	(5)
Ī		Cost to	Estimated			Burden to
		Extend	Annual	CIAC	Actual Annual	Other
	Example	Service	Revenue <sup>2</sup>	Amount Due <sup>3</sup>	Revenue	Customers <sup>4</sup>
ſ	1	\$125	\$25	\$25	\$25	\$0
	2	\$125	\$25	\$25	\$15	\$40
Γ	3	\$125	\$15	\$65	\$15	\$0

Under these simplified examples, the applicant would be responsible to pay a CIAC amount of \$25 and the remaining \$100 incurred to extend service to the applicant would be recovered through the base rates paid by the applicant over a four-year period. In Example 1, there is no burden placed on the general body of customers because the applicant's actual load resulted in revenues that are equivalent to the estimated annual revenue of \$25 used to calculate the CIAC amount. In Example 2, however, the applicant's load only produces actual annual revenues of \$15, well below the amount projected by the applicant. Therefore, the remaining balance of \$40 would be recovered from FPL's other customers. The incremental impact to the general body of customers could be significant if the examples above were in millions of dollars, as would be the case for a new applicant requesting FPL to extend and upgrade transmission and distribution facilities to serve significantly large new or incremental loads.

 $<sup>^{\</sup>rm 2}$  Based on applicant's projected load used to calculate the CIAC amount.

 $<sup>^{3}</sup>$  CIAC = column 1 – (4 x column 2).

<sup>&</sup>lt;sup>4</sup> Burden to Other Customers = column  $1 - \text{column } 3 - (4 \times \text{column } 4)$ .

<sup>&</sup>lt;sup>5</sup> Example 3 shows what the CIAC amount would have been if estimated annual revenue was equivalent to the actual revenues in Example 2 (\$15). Under this scenario, there would be no burden on the general body of customers, but the applicant would have paid a much higher CIAC amount of \$65 as opposed to \$25 in Example 2.

1	Q.	Is FPL proposing a modification to its CIAC tariff to mitigate this risk to the
2		general body of customers for large projects requiring significant costs to extend
3		service?
4	A.	Yes. As explained by FPL witness Cohen, FPL is seeking to modify Tariff Sheet No.
5		6.199, to implement a proposed new CIAC tariff requirement that, if approved, will
6		apply to all non-governmental applicants that (i) have total projected load of 15
7		megawatts ("MW") or more at the point of delivery or (ii) require new or upgraded
8		facilities with a total estimated cost of \$25 million or more at the point of delivery. As
9		further explained by FPL witness Cohen, an applicant for service that meets these
10		thresholds will be required to advance the total estimated costs to extend service subject
11		to refund minus the CIAC amount, minimizing the risk held by the general body of
12		customers.
13		
14	Q.	Please explain why FPL is proposing this new CIAC tariff requirement.
15	A.	An applicant's load is the primary driver of the total cost to extend service – typically,
16		the higher the load the higher the total costs to extend service. Additionally, the cost
17		to extend service is dependent on the applicant's proximity to existing facilities, as well
18		as whether it requires primary service or secondary service. Installation of these
19		facilities even for a single customer can be costly, ranging into the tens of millions of
20		dollars.
21		

As shown in the simplified examples above, the general body of customers bear the

interim risk that the projected load and estimated annual revenue used to calculate the

22

applicant's CIAC amount will, in fact, materialize over the four-year period. If FPL does not fully recover its investment from the applicant because the projected load did not materialize, the burden for these costs would be placed on FPL's other customers. The purpose of the new CIAC tariff requirement is to better protect the general body of customers from the risks associated with the cost incurred to install new or upgraded facilities to serve significantly large new or incremental loads. The CIAC calculation under the new tariff requirement is also consistent with the calculation of the CIAC amount in Rule 25-6.064, Florida Administrative Code.

A.

# Q. How were the 15 MW and \$25 million thresholds for the proposed CIAC tariff requirement determined?

The 15 MW and \$25 million thresholds were set with the intent that the tariff would apply only to applicants of substantial size, such that enhanced risk mitigation is appropriate. By way of scale, and to better understand the size of applicant that the tariff affects, it would take approximately 10,000 homes to equate to 15 MW of added electrical load. Applicants of this size, and above, are uncommon and require unique upgrades and investments to the T&D grid that customers of a smaller size do not. For example, applicants with 15 MW of new or incremental load require significant capital investment in new T&D facilities and upgrades, and often involve the need to construct feeders, substations, and/or transmission lines. These are costly facility expenses that can exceed \$25 million in grid investment, representing a substantial financial undertaking. Given the magnitude of the cost to be incurred to serve a single applicant of this size, and having that single applicant as the responsible party for the full payment of those service costs, there is a significant risk to the general body of customers if the

forecasted load used to calculate the CIAC does not materialize. If such a situation were to occur, costs in the near term would be borne by the general body of customers. For that reason, FPL submits these thresholds are reasonable and appropriate to reflect and mitigate the inherent risk the general body of customers must otherwise bear for the large costs they would be required to front to extend service to applicants of this magnitude in absence of the proposed new CIAC tariff requirement further discussed by FPL witness Cohen.

Q.

A.

#### XI. OTHER TARIFF MODIFICATIONS

## Are there any other tariff modifications that your testimony is supporting?

Yes. My testimony also supports changes to two tariff provisions (Tariff Sheet No. 6.030.1, Section 4.7 and Tariff Sheet No. 6.040, Section 5.3) related to the costs of temporarily relocating FPL facilities to accommodate existing customers' electrical installations, as well as the associated disconnection and reconnection of service to enable such installations. Existing customer installations requiring FPL facility relocation are becoming more common and often include scheduled maintenance work such as painting exterior structure walls, roofing, and siding, and other customer work. To perform these relocations in the field, FPL must send a truck to a customer's premise with trained personnel, necessitating that the Company incur time, travel, and vehicle expenses to support the temporary relocation. Currently, there are no applicable tariff provisions that address the treatment of these costs. As such, the costs are currently borne by the general body of FPL's customers, nearly all of whom are not requesting or benefitting from the installation requiring the temporary relocation. FPL is

- 1 proposing changes to ensure that the customer who is causing FPL to incur additional
- 2 temporary relocation expenses pays for those expenses.
- 3 Q. Does this conclude your direct testimony?
- 4 A. Yes.

#### **ERRATA SHEET**

# WITNESS: MICHAEL JARRO ADOPTING DIRECT TESTIMONY OF EDUARDO DE VARONA DATED FEBRUARY 28, 2025

1	10	Change "EDUARDO DE VARONA" to "MICHAEL JARRO"
3	3	Change "Eduardo De Varona" to "Michael Jarro"
3	7	Change "Power Delivery" to "Distribution Operations"
3	9-16	Change "As Vice President of Power Delivery, I am responsible for the planning, engineering, construction, operation, maintenance, and restoration of FPL's transmission and distribution ("T&D") electric grid. This includes the systems, processes, analyses, and standards utilized to ensure FPL's T&D facilities are safe, reliable, secure, effectively managed and in compliance with regulatory requirements. I also serve as the chair of the North American Transmission Forum, an organization comprised of electric transmission system owners and operators in the United States and Canada that seeks to advance transmission performance and reliability throughout North America."

"As Vice President of Distribution Operations, my responsibilities include oversight over the operation and maintenance of FPL's distribution infrastructure. The functions and operations for which I am responsible are diverse and include distribution operations, major projects and construction services, power quality, meteorology, and other operations."

Page(s) Line(s)

Change

to

#### **ERRATA SHEET**

# WITNESS: MICHAEL JARRO ADOPTING DIRECT TESTIMONY OF EDUARDO DE VARONA DATED FEBRUARY 28, 2025

# Page(s) Line(s) Change

3-4 18-2

Change "I have a Bachelor of Science degree in Electrical Engineering from the University of Florida. I joined FPL in 1991 and have more than 34 years of technical, managerial, and commercial experience gained from serving in a variety of positions within FPL, NextEra Energy Transmission, and NextEra Energy Resources. Over the last 20 years, I have served in a variety of leadership positions including executive director of transmission business management, senior director of emergency preparedness, director of transmission operations, director of technology, and Vice President of Transmission and Substation."

to

"I graduated from the University of Miami with a Bachelor of Science Degree in Mechanical Engineering and Florida International University with a Master of Business Administration. I joined FPL in 1997 and have held several leadership positions in distribution operations and customer service, including serving as distribution reliability manager, manager of distribution operations for the south Miami-Dade area, control center general manager, director of network operations, senior director of customer strategy and analytics, senior director of power delivery central maintenance and construction, and vice-president of transmission and substations."

38 12 Change "6.030.1" to "6.031"

- 1 BY MR. BAKER:
- 2 Q Mr. Jarro, do you have exhibits that were
- 3 identified as EDV-1 through EDV-5 attached to your
- 4 adopted direct testimony?
- 5 A Yes.
- 6 Q Have you, by the previously referenced notice,
- 7 adopted Exhibits EDV-1 through EDV-5 as your own?
- 8 A Yes.
- 9 MR. BAKER: Mr. Chairman, I would note that
- these exhibits have been pre-identified in staff's
- 11 Comprehensive Exhibit List as Exhibits 44 through
- 12 48.
- 13 CHAIRMAN LA ROSA: Okay.
- 14 BY MR. BAKER:
- 15 Q Mr. Jarro, do you have any corrections or
- 16 changes to any of those exhibits?
- 17 A No, I do not.
- 18 Q Have you also reviewed the 23 pages of
- 19 prepared rebuttal testimony of Witness Eduardo De Varona
- submitted in this proceeding on July 9th, 2025?
- 21 A Yes.
- Q And did you, by notice dated August 6th, 2025,
- 23 adopt the rebuttal testimony of Eduardo De Varona as
- your own?
- 25 A Yes, I did.

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1
               Do you have any changes, or revisions to that
          Q
2
    prepared rebuttal testimony?
 3
          Α
               No.
               And if I asked you the same questions
 4
          Q
 5
    contained in your adopted rebuttal testimony today,
 6
    would your answers be the same?
7
          Α
               Yes, they would.
 8
               MR. BAKER: Mr. Chairman, I would ask that
 9
          Mr. Jarro's prepared rebuttal testimony be inserted
10
          into the record as though read.
11
               CHAIRMAN LA ROSA: So moved.
12
               (Whereupon, prefiled rebuttal testimony of
13
    Michael Jarro was inserted.)
14
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1	BEFORE THE
2	FLORIDA PUBLIC SERVICE COMMISSION
3	DOCKET NO. 20250011-EI
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8	FLORIDA POWER & LIGHT COMPANY
9	
10	REBUTTAL TESTIMONY OF EDUARDO DE VARONA
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23	Filed: July 9, 2025

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1		I. INTRODUCTION			
2	Q.	Please state your name and business address.			
3	A.	My name is Eduardo De Varona. My business address is Florida Power & Light			
4		Company ("FPL" or the "Company"), 15430 Endeavor Drive, Jupiter, FL 33478.			
5	Q.	Have you previously submitted direct testimony in this proceeding?			
6	A.	Yes.			
7	Q.	Are you sponsoring any rebuttal exhibits in this case?			
8	A.	Yes. I am sponsoring the following exhibit:			
9		• Exhibit EDV-6 – List of PHFU (Power Delivery T&D)			
10		• Exhibit EDV-7 – FPL's Response to OPC's First Set of Interrogatories No. 56			
11	Q.	What is the purpose of your rebuttal testimony?			
12	A.	The purpose of my rebuttal testimony is to respond to the testimony of Office of Public			
13		Counsel ("OPC") witness Helmuth W. Schultz III regarding Property Held for Future			
14		Use ("PHFU") and Planned Transmission Capital Maintenance. I will also respond to			
15		contentions from the Florida Industrial Power Users Group ("FIPUG") witness Jeffry			
16		Pollock regarding FPL's proposed contribution-in-aid-of-construction ("CIAC") tariff			
17		modifications and Florida Energy for Innovation Association, Inc. ("FEIA") witness			
18		David Loomis concerning FPL's Large Load Contract Service ("LLCS") tariffs.			
19	Q.	Please summarize your rebuttal testimony.			
20	A.	My testimony rebuts OPC witness Schultz's recommendations to remove certain			
21		Transmission & Distribution ("T&D") properties and their associated costs from FPL's			
22		2026 and 2027 forecasted PHFU balances. His proposed T&D PHFU			
23		recommendations should be rejected as these properties are essential components for:			

meeting future customer and load growth; maintaining reliability; complying with North American Electric Reliability Corporation ("NERC") standards; and/or integrating future generation into the grid. Exclusion of these properties would compromise FPL's ability to implement its dynamic planning process for locating and cost-effectively acquiring properties on which to build essential T&D facilities.

My testimony also supports and reaffirms the Company's proposals for the implementation of its CIAC tariff modification and the appropriate acceptance period for the LLCS tariffs.

Finally, my testimony rebuts OPC witness Schultz's recommendation to reduce FPL's planned transmission capital maintenance. My rebuttal testimony demonstrates that this investment is necessary for the continued reliable operation of FPL's transmission system.

#### II. PROPERTY HELD FOR FUTURE USE – T&D

17 Q. You mentioned that FPL's PHFU practices were contested by OPC witness
18 Schultz. What is FPL's practice for acquiring and retaining properties in
19 anticipation of future T&D use?

A. FPL's practice for acquiring T&D properties for future use is guided by the identification of specific system needs and is fundamental to securing needed property at a favorable value for our customers. New T&D substations and transmission lines take years to plan, design and construct. Each of these activities is essential to project

development and occurs well prior to a facility's service to customers. To support future T&D system needs, FPL proactively secures suitable sites and properties to accommodate necessary facilities, ensuring they are in place when needed to deliver reliable service to our customers. Were FPL to not engage in this process, customers would be put at risk of paying increased (or, in the worst case, exorbitant) prices on properties that, if reasonable foresight had been applied, could have been acquired much earlier and for less money.

FPL T&D planners evaluate the usefulness of the T&D PHFU properties as they review plans for upcoming projects. On a monthly basis, FPL T&D planners provide the Company's Property Accounting group updates to the expected in-service dates (as needed) for T&D PHFU properties, according to the outcome of these evaluations.

FPL's acquisition practices take into account that the process to initiate construction can be lengthy and may involve rezoning from local entities and permitting from local, state, and federal agencies. Additionally, the annual planning process is dynamic due to its close link to the Company's load growth forecast and can, and often does, result in modification each year to system expansion plans. In determining whether an acquired parcel is appropriately included in PHFU, the Company considers, based on the planning and factors known to the Company, whether parcel is needed or likely to be needed to support customer-serving T&D investment. Sometimes it is as simple as applying common sense given certain key factors like location, population density, anticipated growth, relative availability of alternative corridors, and proximity or

contiguity to other substations and transmission lines. At other times, the Company must make careful decisions about the likelihood of future need, and balance that consideration with the cost to acquire property.

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FPL's property acquisition practices are also consistent with FPL's obligation to provide reliable service to customers over both the near- and long-term. The Commission itself recognized many years ago the need for property to be acquired well in advance for the purpose of long-range planning. In a 1971 Order, the Commission stated the following:

Suitable sites for generation plants, transmission lines, and

10 11 12

substations, are becoming more and more difficult to obtain. Longrange planning for adequate and reliable electric energy requires that 13 every effort be made by electric utilities to make prudent 14 acquisitions of suitable sites for necessary expansion and 15 development. This is a vital part of long-range planning for 16 consumer service and protection.... Prudence requires acquisition of 17 suitable land sites long before definite plans can be developed for specific use. 1

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FPL's acquisition practices are consistent with the Commission-recognized need.

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In general, FPL acquires T&D properties using a 10-year forward-looking planning window where possible. For many projects, the 10-year horizon provides FPL perspective on what may be required in terms of design, new builds, or other considerations during that time frame. As I mentioned earlier, if FPL were to wait to

<sup>&</sup>lt;sup>1</sup> In Re: Investigation of the Earnings & Rates & Charges of Fla. Power & Light Co. for the Purpose of Requiring Such Adjustments, If Any, As May Be Appropriate & Proper As A Result of the Facts Developed Through Said Investigation; Docket No. 9777-EU; Order No. 5280 (F.P.S.C. December 7, 1971)

acquire property for future T&D needs when there is a definitive in-service date for a new substation and/or transmission line or a specific need manifested in the ten-year planning cycle, often we would be left with limited or perhaps no suitable choices and potentially face higher costs (*e.g.*, less preferred and more contested corridors, and/or paying higher prices to sellers who are aware of the time pressure faced to acquire the necessary properties).

A.

# Q. Do OPC witness Schultz's contentions regarding FPL's T&D PHFU disregard the critical need to acquire properties in advance of use?

Yes. OPC witness Schultz does not take into account the realities of electric system planning and the importance of obtaining and holding property for future T&D needs to meet future growth and ensure reliability. The T&D properties challenged by OPC witness Schultz have been identified by the Company as being geographically and strategically located and necessary to meet future customer load growth, maintain customer reliability, and comply with NERC standards regulating the reliability of the grid and/or integrating future generation into the grid. Denying the inclusion of these properties in PHFU would disincentivize FPL from applying reasonable property acquisition practices that are designed to create value for customers and enable reliable service.

#### Q. What are the categories of T&D PHFU that OPC witness Schultz challenges?

A. OPC witness Schultz groups his contested T&D parcels into three separate categories:

(i) properties that have been held by FPL for longer than 25 years; (ii) properties that are forecasted to be acquired in 2025-2027, and (iii) properties that are denoted as "various" in his Exhibit HWS-3. My testimony addresses the properties identified by

1		witness Schultz in each of these categories and their appropriateness for inclusion in
2		PHFU.
3	Q.	What are the T&D parcels held for longer than 25 years that are challenged by
4		OPC witness Schultz?
5	A.	OPC witness Schultz contests the inclusion in PHFU of the following properties: (1)
6		Arch Creek; (2) Conservation-Levee 500 kV Line; (3) Levee-South Dade; (4) Rima
7		Sub & Rima Volusia; (5) Desoto-Orange River; (6) Challenger; (7) Terminal; and (8)
8		Satori.
9	Q.	Does FPL have specific plans for the use of these properties?
10	A.	Yes. As demonstrated in my Exhibit EDV-6, all of the properties challenged by witness
11		Schultz that FPL has held for more than 25 years have a specific planned use within
12		the next ten years or have been removed from PHFU.
13	Q.	Does the fact that a property has been held for an extended period indicate that
14		the property has no planned future T&D use?
15	A.	No. The fact that a property has been held for years in advance of use does not mean
16		that there is not a near-term planned use for the property. System planning, and the
17		acquisition of properties to support those plans, evolve together. Whether or not a
18		property should be held for PHFU turns on whether the property has a specific, planned
19		future use and not on the length of time that it is held.
20	Q.	What are the T&D properties forecasted to be acquired in the 2025-2027
21		timeframe that OPC witness Schultz contests?
22	A.	OPC witness Schultz identifies nine transmission properties and 10 distribution
23		properties that he claims should be excluded from PHFU. Specifically, OPC witness

1		Schultz identifies the following transmission properties for exclusion: (1) Bickett-
2		Zoysia ROW; (2) Alico-Terry ROW; (3) Valencia ROW; (4) Parker-Callaway ROW;
3		(5) Shalimar Loop ROW; (6) Brook Injection ROW; (7) Punta Gorda Injection ROW;
4		(8) Coast Myakka ROW; and (9) Ft. Myers SC ROW.
5		
6		The distribution properties OPC witness Schultz identifies for exclusion are the
7		following: (1) Green Cove Substation; (2) Valentine Substation; (3) Wilson Grove
8		Substation; (4) Breakfast Point Substation; (5) Julia Substation; (6) Radiant-Chester
9		Substation; (7) Silverleaf Substation; (8) Wild Heron Substation; (9) Lake Pk
10		Expansion Substation; and (10) Federation Substation.
11	Q.	Do each of these identified T&D properties have a specific and identifiable T&D
12		purpose for which they would be acquired?
13	A.	Yes, the specific purpose of each of these properties is detailed in my Exhibit EDV-6.
14		Also, each of these properties are projected to be in service to customers by no later
15		than January of 2031. For these reasons, these properties are reasonably forecasted to
16		support needed T&D infrastructure and included in FPL's PHFU upon their
17		acquisition.
18	Q.	What types of T&D properties comprise the "various" category of costs?
19	A.	The T&D properties which list "various" as the acquisition and in-service dates in
20		Exhibit HWS-3 include the following three categories: (1) future solar rights of way to
21		support the solar installations described in detail in the direct and rebuttal testimonies
22		of FPL witness Oliver; (2) new transmission rights of way; and (3) new substations.

1	0.	How are the	properties :	that comi	orise the	"various"	categories	determined?
	$\sim$ .	mon are the	properties	mat com	or ise the	various	categories	acter minea.

A.

A.

A. The "various" properties are determined based on the Company's T&D plans, which are formulated to support new generation and provide safe and reliable service to existing and future customers. To support the needed T&D investment identified in those plans, the Company must acquire, either now or at a future time, land and rights of way to enable construction of future transmission infrastructure. For example, to meet the anticipated demands of customer growth, FPL will make plans to acquire property for new distribution substations or the right of way for transmission lines to serve a substation.

#### 10 Q. Are the "various" properties needed to support essential future T&D investment?

Yes, these properties are required to support identified future transmission and distribution system needs. The specific planned use for each of the properties that comprise the "various" categories is provided in my Exhibit EDV-6. Ultimately, not acquiring these properties in advance of significant forecasted customer growth in the state could be considered imprudent because of the likelihood that the identified properties could be more costly or unavailable if acquisition is delayed into the future. For these reasons, these properties are reasonably forecasted to support needed T&D infrastructure and included in FPL's PHFU upon their acquisition.

# Q. Are the properties challenged by OPC witness Schultz appropriate for inclusion in FPL's T&D PHFU?

Yes. The effects of increasing population growth and rapid residential and commercial development, permitting challenges, and ensuring and maintaining reliability are some examples of factors that make it more difficult for FPL to find and acquire properties

to build necessary future substations and transmission lines. If sold, these properties could have limited replacement options and result in increased total project costs. The acquisition and retention of the above listed rights-of-way, easements, and land plots are prudent acquisitions due to their strategic locations for the development of critical reliability infrastructure. Therefore, these properties are appropriately included in PHFU.

A.

#### III. CIAC TARIFF MODIFICATION

Q. What are your general observations about the nature of intervenor challenges to FPL's proposed CIAC tariff modification?

The challenges posed to the CIAC tariff modification, in particular from FIPUG witness Pollock, disregard the intent of the modification. The intent of the new CIAC tariff requirement is to better protect the general body of customers from the risks associated with the costs to install new or upgraded facilities to serve significantly large new or incremental loads. The thresholds specified in the tariff, 15 MW or \$25 million, were set with the intent that the tariff would apply only to applicants of substantial size, such that enhanced risk mitigation for the general body is appropriate. Given the magnitude of the cost to be incurred to serve a single applicant of this size and having that single applicant as the responsible party for the full payment of those service costs, there is a significant risk to the general body of customers if the forecasted load used to calculate the CIAC does not materialize. If such a situation were to occur, costs in the near term would be borne by the general body of customers. Notably, even witness

Pollock acknowledges that there is "merit in mitigating cost-shifting," but he nonetheless opposes FPL's CIAC proposal.

## Q. FIPUG witness Pollock argues that there has been no showing that the current CIAC structure is unworkable. Is that accurate?

A.

A.

No. The current CIAC tariff would leave FPL's general body of customers exposed to the significant cost risk that is mitigated through FPL's proposal. By way of scale, and to better understand the size of applicant that the tariff modification affects, it would take approximately 10,000 homes to equate to 15 MW of added electrical load. Applicants with 15 MW of new or incremental load require significant capital investment in new T&D facilities and upgrades, and often involve the need to construct feeders, substations, and/or transmission lines. These are costly facility expenses that can exceed \$25 million in grid investment, representing a substantial financial undertaking. The proposed CIAC shifts the cost risk from the general body of customers to the individual cost causer in a way that is consistent with the calculation of the CIAC amount in Rule 25-6.064, Florida Administrative Code (the "CIAC Rule").

# Q. FIPUG witness Pollock alleges that the tariff modification will "punish customers who fail to predict their future loads with 100% accuracy." Is that the case?

No. This tariff modification is a protective measure, not a punishment. As explained in the direct testimony of FPL witness Cohen, it is the applicant, not FPL or the general body of customers, that controls whether the projected load that caused the costs to be incurred will actually materialize. Ultimately, it is the applicant that drives the CIAC costs. In other words, the costs FPL incurs to serve an applicant are based on the applicant's indicated electrical need, and based on that conveyed need, FPL determines

and constructs the facilities needed to serve the customer. Given that, it is more
sensible to place the interim risk of load materializing on the applicant, as opposed to
the general body of customers.

- Q. How do you respond to FIPUG witness Pollock's contention that FPL has not offered an explanation supporting the 15 MW and \$25 million thresholds and how they correlate?
  - A. Although both thresholds could apply to a single applicant, the 15 MW and \$25 million thresholds are independent thresholds designed to reflect the potential significant capital investment required to serve applicants of these magnitudes. As I discussed earlier in my rebuttal testimony, a new or incremental addition of 15 MW or more is a tremendous size for a single customer, representing an equivalent electrical load of approximately 10,000 homes, and would require significant capital investment to serve. Likewise, a capital investment of \$25 million or more to serve new or incremental service is, on its face, significant investment. Thus, any customer, whether they are existing or new, that is adding net new incremental load of 15 MW or more on to FPL's system, or that requires the installation of new or upgraded facilities that cost \$25 million or more, should be subject to the proposed CIAC tariff to better protect the general body of customers from the risks associated with these costly new or upgraded facilities.

1	Q.	FIPUG witness Pollock also claims that the new CIAC policy should apply when

customers request more than 50 MW of new load. Do you have any thoughts on

3 the threshold limits?

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- A. Yes. While there is no singularly "correct" size threshold to apply to the CIAC tariff modification, FPL considered multiple thresholds but based on its engineering experience determined that a 15 MW threshold is appropriate, as significant investments would be necessary for new/upgraded T&D facilities beyond these thresholds. It is also important to recognize that any increases to FPL's proposed thresholds increase the level of risk borne by FPL's general body of customers. In other words, if witness Pollock's 50 MW threshold were to be adopted, the costs associated with serving new applicants of between 15 MW and 49.9 MW would be held by FPL's general body of customers, whereas under FPL's proposal they would not. Also, to illustrate the magnitude of serving 50 MW of new load, such a threshold increase would equate to the load of more than 33,000 homes, or approximately 23,000 more than under FPL's proposal.
- Q. FIPUG witness Pollock recommends delaying implementation of the CIAC modification, suggesting the Commission open a rulemaking to determine CIAC policy. Would this be a wise course of action?
- 19 A. No. Given that the CIAC tariff modification is a protective measure, delaying its 20 implementation leaves FPL's general body of customers less protected than if FPL's 21 modification were approved and implemented on January 1, 2026. Also, as made 22 evident in FEIA's five testimonies in this case, there is significant interest from large 23 load customers in potential projects located in FPL's service area. Opening a

rulemaking to determine CIAC policy may result in delays and regulatory uncertainty
for prospective large load customers seeking to establish operations in Florida.

- FIPUG witness Pollock also questions four specific assumptions concerning the cost-shifting risk held by the general body of customers. Can you please respond to those?
- A. Yes. The first assumption FIPUG witness Pollock raises is that FPL assumed that none of the equipment, such as transformers, feeder lines, capacitors, and pull offs, can be kept in inventory to meet emergency needs or repurposed to serve other loads. This position is flawed for several reasons. First, FPL already has a process for maintaining and ensuring it has sufficient 'storm stock' ahead of peak hurricane season. Therefore, additional materials from an unrealized project would be of minimal benefit. Most large load customers would require significant investment in transmission equipment, which is not the type of equipment that typically fails during an extreme weather event and would certainly not be needed in the quantities that would be purchased as part of a prospective large load project. Furthermore, FIPUG witness Pollock is ignoring the more realistic scenario of this inventory being utilized to upgrade T&D facilities ahead of a large load project. If the large load project was ultimately cancelled or the corresponding load was less than forecasted, it may result in the general body of customers bearing the costs of these materials and the corresponding carrying costs to store them.

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FIPUG witness Pollock's second allegation is that FPL has not studied or made a precise determination of how much of a customer's projected load must materialize to

prevent cost-shifting. Such a finding, however, does not need to be made. The four-year period used to determine if the total project costs to extend service to customers who request new or upgraded facilities in order to receive electric service is based on the CIAC calculation required by the Commission's CIAC Rule. If load does not materialize such that these costs are recovered over the four-year period, the result is that that customer would receive a subsidy from the general body of customers for the shortfall in revenues received. Therefore, no study of "the load that must materialize" is necessary.

FIPUG witness Pollock's third allegation is that FPL has not demonstrated how the proposed \$25 million spending threshold would balance the needs of new and existing customers. As I explained earlier in my rebuttal testimony, applicants spending \$25 million for new or incremental load require significant capital investment to our T&D infrastructure, such as a new substation, new transmission lines, rights-of-way, and new feeders. These are significant costs and investments for a single customer that the general body of customers should be shielded from.

The fourth allegation from FIPUG witness Pollock is that an applicant should not be expected to accurately forecast its load five years into the future. As previously explained in my rebuttal and in the direct testimony of FPL witness Cohen, it is the applicant that controls whether the projected load will actually materialize. Also, the fact that load may come in under expectations is exactly the risk that the tariff is intending to address.

- Q. Are there other factors not taken into account by FIPUG witness Pollock that support placing the near-term cost risk on the applicant?
- 3 A. Yes. It is important to note that some of the applicants requesting engineering impact studies from FPL are not necessarily the end users who would install the large load 4 5 equipment, but rather developers who may or may not be associated with the larger 6 entities that will use the energy. As a result, these projects in FPL's service area could 7 be subject to cancellation or reduction in size (i.e., reducing energy usage and 8 associated revenue). FPL has already seen prospective large load applicants make 9 material changes to their load, layout, and engineering needs during the engineering 10 impact study phase. Future energy load or technological changes such as more energy 11 efficient chips or advancements in electronic cooling technologies could result in 12 impacts to future energy usage and revenue shortfalls which, without the CIAC 13 modification, would result in the general body of customers bearing the cost of the 14 upfront T&D investments needed to serve these customers. All of these reasons 15 reinforce the Company's decision to modify its CIAC tariff for large load customers 16 and to propose the LLCS tariffs, which allows the Company to effectively balance the 17 need to accommodate prospective large load customers while simultaneously 18 protecting the general body of customers.
  - Q. FIPUG witness Pollock claims that the proposed CIAC tariff modification could be applicable to replacing equipment needed to maintain service to an existing customer. Is that accurate?

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A. No. The proposed CIAC tariff modification is clear that it is only applicable to applicants that require "new or upgraded facilities" – it would not apply to a customer

replacing existing equipment. Furthermore, this proposed CIAC modification is limited to the extension of facilities, it does not address transmission network upgrades that may be necessary to serve a customer under the proposed LLCS-1 tariff. Those transmission network upgrade costs would be allocated to and recovered from FPL's general body of customers, including customers under LLCS-1, because transmission network upgrades benefit the entire system serving all customers, which is consistent with FPL's treatment for network upgrades today.

Q.

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Could the spending threshold result in "different treatment for otherwise similarly situated customers who may require the same equipment to connect to the FPL system at the point of delivery but at different points in time", as FIPUG witness Pollock alleges?

FIPUG witness Pollock's point is not fully clear, but he appears to be trying to argue that industrial and large load customers are similar and as a result the tariff does not need to be modified. However, the proposed tariffs have been purposefully designed by FPL to protect the general body of customers from incurring costs on behalf of large load applicants while establishing energy usage thresholds that avoid inadvertently capturing industrial customers. NERC made a similar distinction in their recent 2025 State of Reliability Report<sup>2</sup>, stating, "The size of individual facilities often represents a step-change increase in the load forecast for a geographic area, often within a two-year timeframe. This is in sharp contrast to the more gradual increase in load due to traditional sources of load growth or more traditional large loads, such as industrial loads, which can take several more years to plan and construct." Also, large load

<sup>&</sup>lt;sup>2</sup>https://www.nerc.com/pa/RAPA/PA/Performance%20Analysis%20DL/NERC\_SOR\_2025\_Overview.pdf

customers typically would connect at a different point of delivery than indu	stria
customers. For example, a large load applicant would typically be served a	t the
transmission level, while industrial customers are served at the distribution	n oi
transmission level – as a result industrial customers may utilize different equipme	ent.

5 Q. Having reviewed the testimony of intervenors, do you see any need to change or revisit any element of the proposed CIAC modification?

No. There is risk to the general body of customers if the forecasted load of large load customers used to calculate the CIAC does not materialize. If this situation were to occur, costs in the near term would be borne by the general body of customers who are not causing the costs to be incurred. For that reason, FPL submits the proposed CIAC thresholds of 15 MW or \$25 million are reasonable.

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#### IV. LARGE LOAD CONTRACT SERVICE

Q. The duration of the engineering impact study acceptance period contained in the LLCS tariff is contested by FEIA witness Loomis. Can you please explain the engineering process leading up to and including this period?

The engineering impact study that is performed by the Company as a result of a potential large load project involves: (i) reviewing documents provided by the applicant that describe electrical needs; (ii) conducting a system load planning study; (iii) identifying required equipment upgrades for both substation and transmission engineering; (iv) creating detailed site plans and electrical layouts; and (v) developing detailed cost estimates, which includes validation with construction vendor(s). Also, during this process prospective large load applicants may provide significant changes

to their engineering needs, resulting in FPL recalculating aspects of the engineering impact study. The cost for FPL to produce the engineering impact study is charged directly to the large load customer that requested the study. Due to the complexity and potentially significant impact on the T&D grid, the engineering impact study currently may take up to 6 months to complete. Once completed, the study is provided to the LLCS applicant to review. Consistent with other customer service requests that require a transmission engineering impact study, FPL intends to provide the LLCS applicants with 6 months to accept the results of the study.

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# How do you respond to the contention of FEIA witness Loomis that the LLCS acceptance period of 6 months should be extended to 18 months?

It is not appropriate to extend this period due to the potential cost and system planning impacts it would entail. The estimated costs for the project include the costs for materials and labor expected at the time the engineering study is prepared, which costs are not static and will change over time. Moreover, the project scope and associated costs are based on the status of FPL's system and the impacts/growth known at the time the engineering study is prepared, which continue to change over time as new demand, generation, and facilities are added to FPL's system. Delayed acceptance by an applicant, even within the 6-month timeframe, may result in the impact study being no longer fully reflective of T&D material costs and new growth in the system since the study was initiated. Extension of the acceptance period, as proposed by FEIA witness Loomis, would exacerbate this issue, and particularly so if additional significant large load customers, such as LLCS customers, seek service between the time the engineering study is completed and accepted.

For example, an extension of the acceptance period from 6 months to 18 months could result in a substantial underestimation of the T&D material costs, which would have been calculated 24 months prior. Such an underestimation could result in costs shifting onto the general body of customers. Furthermore, this 24-month timeframe complicates system planning should multiple competing large load customers request engineering impact studies subject to a combined total load of 3 GW in the Company's service area under LLCS-1. This potential 3 GW represents approximately 10.6% of FPL's 2024 Peak Load (MFR Schedule C-34); a load of this magnitude being subject to acceptance or denial by the applicant for 24 months, instead of the Company's proposed timeframe, negatively impacts the ability of FPL system planners to make planning decisions. Additionally, system conditions and technical parameters change dynamically over time, making study results stale and not fully representative of reliability and operating requirements. Extending the acceptance period beyond the current timeframe of six months would require new studies to ensure reliability criteria is met for all FPL customers.

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In summary, the standard 6-month acceptance period in the LLCS tariff should be retained in order for FPL to be able to (1) reflect T&D material costs associated with these projects which ultimately benefits the general body of customers and (2) accurately perform T&D system planning.

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#### V. PLANNED TRANSMISSION CAPITAL MAINTENANCE

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Q. How do you respond to OPC witness Schultz's recommendation to use a five-year average variance percentage in recommending a reduction to the planned transmission maintenance?

A broad reduction in funding for FPL's planned transmission maintenance, as OPC witness Schultz recommends, is inappropriate and ignores the necessity of the associated transmission maintenance activities. Furthermore, OPC witness Schultz appears to have mistakenly assumed that the planned transmission maintenance is expense instead of capital. FPL's planned transmission capital program primarily consists of multiple items including condition-based follow-up work (reactive work identified in the field), replacement of equipment which is beyond repair, follow-up on industry and manufacturer equipment alerts, and proactive substation equipment replacements. As a result, costs within this program will naturally vary year-to-year. As shown in FPL's response to OPC's First Set of Interrogatories, No. 56, provided as Exhibit EDV-7, FPL proactively reduced the budgeted spend for planned transmission capital maintenance for years 2024-2029 to better align with historical actual costs, as recommended by OPC witness Schultz. Further reduction of the budget, however, would place FPL's transmission and substation equipment at risk due to having insufficient funding to address issues identified as part of this program. Forgoing maintenance would lead to situations where we cannot serve our customers and need to shed or curtail loads on the system. As such, it is imperative that FPL have appropriate funding levels associated with transmission and substation facilities maintenance. OPC witness Schultz raised a similar recommendation associated with

- Nuclear and PGD maintenance expenditures, which are addressed and ultimately
- 2 rejected in FPL witness Laney's rebuttal testimony.
- 3 Q. Does this conclude your rebuttal testimony?
- 4 A. Yes.

#### **ERRATA SHEET**

### WITNESS: MICHAEL JARRO ADOPTING REBUTTAL TESTIMONY OF EDUARDO DE VARONA DATED JULY 9, 2025

Page(s)	Line(s)	Change
1	10	Change "EDUARDO DE VARONA" to "MICHAEL JARRO"
3	3	Change "Eduardo De Varona" to "Michael Jarro"

- 1 BY MR. BAKER:
- 2 Q Mr. Jarro do you have exhibits that were
- 3 identified as EDV-6 and EDV-7 attached to your rebuttal
- 4 testimony?
- 5 A Yes.
- 6 Q Have you, by the previous -- previously
- 7 referenced noticed, adopted Exhibits EDV-6 and EDV-7 as
- 8 your own?
- 9 A Yes, I have.
- MR. BAKER: And, Mr. Chairman, I would note
- that these exhibits have been pre-identified in the
- 12 Comprehensive Exhibit List as Exhibits 288 and 289.
- 13 CHAIRMAN LA ROSA: Okay.
- 14 BY MR. BAKER:
- 15 Q Mr. Jarro, do you have any corrections or
- 16 changes to any -- either of those exhibits?
- 17 A No, I do not.
- 18 Q Mr. Jarro, would be please summarized the
- 19 topics addressed in your direct and rebuttal
- 20 testimonies?
- 21 A Yes. And good afternoon, Chairman and
- 22 Commissioners.
- In my testimonies, I address FPL's reliability
- record and the power delivery unit's expenditures in
- 25 2026 and 2027 that are required to maintain that record.

- 1 My testimonies also discuss features of FPL's
- 2 transmission and distribution operations such as system
- 3 growth, safety, compliance, emergency preparedness.
- 4 Additionally, my testimonies address
- 5 transmission and distribution property held for future
- 6 uses, as well as elements of FPL's proposed contribution
- 7 in aid of construction and large load contract service
- 8 tariffs.
- 9 Q Thank you, Mr. Jarro.
- MR. BAKER: Mr. Chairman, I tender the witness
- for cross-examination.
- 12 CHAIRMAN LA ROSA: Great. thank you.
- OPC, you are recognized for questioning.
- MR. PONCE: Thank you very much.
- 15 EXAMINATION
- 16 BY MR. PONCE:
- Q Good afternoon, Mr. Jarro.
- 18 A Good afternoon.
- 19 Q You were just asked about adopting Mr. De
- 20 Varona's direct and rebuttal testimony?
- 21 A That is correct.
- 22 Q Is it also your understanding that you are
- 23 adopting his deposition and discovery responses as well?
- 24 A Yes, sir.
- 25 Q Thank you.

- And when I refer to your testimony, just to be
- 2 clear, I am actually referring to your testimony --
- 3 Mr. De Varona testimony that you are adopting, is that
- 4 okay?
- 5 A Sure. Yes.
- 6 Q Okay. So your testimony in this case, in
- 7 part, supports FPL's transmission and distribution plant
- 8 for future purpose -- for future use, is that correct?
- 9 A Yes. That's correct.
- 10 Q This is a component of FPL's rate base, right?
- 11 A Yes. That's correct.
- 12 Q So ultimately, this means that customers are
- paying for these properties, right?
- 14 A Yes, customers are paying for the properties
- as a part of the property held for future use process.
- 16 Q That includes paying for the property taxes on
- 17 those properties, right?
- 18 A I believe so. Yes.
- 19 Q Just as a kind of a general idea, when we are
- 20 talking about plant held for future use, these are
- 21 properties that are being included in rate base because
- 22 it is probable that they are going to be used for FPL's
- 23 purposes in the near future, right?
- 24 A Yes, that's correct. All properties listed
- 25 have a expected use in the next 10 years.

- 1 Q Now, this is the big picture -- this is not
- 2 just for, you know, power generation or transmission and
- distribution, but just overall, FPL is requesting
- 4 approval for about 1.5 billion in plant held for future
- 5 use for 2026, right?
- 6 A Subject to check, I would say yes.
- 7 Q Sure. And subject to check, I guess, and
- 8 again, 1,000,533,000 for 2027?
- 9 A Subject to check, yes.
- 10 Q These numbers are up from approximately
- 11 1,122,882,000 in 2024, right?
- 12 A Subject to check.
- Q Sure. And again, subject to check, about
- 14 1.2 -- excuse me, 1.2 billion in 2025?
- 15 A Yes.
- 16 Q Beginning -- narrowing it down specifically
- 17 for transmission and distribution, your testimony is
- supporting about 100 million of that, right?
- 19 A Yes. That's correct.
- 20 Q And just to be clear, sorry, for the 2026 test
- 21 year?
- 22 A Yes.
- 23 Q And then for the -- and then for distribution,
- 24 that's about 89 million?
- 25 A It would be subject to check, but if you are

- 1 referring to distribution substations, yes.
- 2 Q And then for the 2027 test year, it's about
- 3 104 million for transmission?
- 4 A Subject to check.
- 5 Q And then for distribution, it's about 79
- 6 million?
- 7 A Yes.
- 8 Q Now, when it comes to -- when it comes to how
- 9 FPL decides what properties to include as plant held for
- 10 future use, doesn't FPL use, or, rather, the T&D
- 11 division, use an annual planning process that goes out
- 12 about 10 years?
- 13 A That is correct. We use, as a part of our
- 14 long-range planning process, a ten-year site plan, and
- 15 those properties are identified as -- for projects that
- 16 are needed within the next 10 years.
- 17 Q I think you just mentioned it, but that
- 18 basically corresponds with the ten-year site plan that
- 19 FPL files annually?
- 20 A Yes. That's correct.
- 21 Q Due to a recent FERC order, is it true that
- 22 FPL intends to take this planning out to 20 years?
- 23 A Which FERC order are you referencing?
- Q Unfortunately, I don't -- FERC Order 1920.
- 25 A So FERC Order 1920 is an order, certainly,

- 1 that is requesting that companies do look at things from
- 2 a planning horizon of approximately 20 years, and FPL is
- 3 working -- well, two things, it's not only the
- 4 timeframe, but also looking from a regional level, and
- 5 FPL already complies with the regional view through the
- 6 Florida Reliability Coordinating Council, the FRCC.
- 7 And then in terms of the timeframe of 20
- 8 years, that's something that we are working through the
- 9 FRCC that will submit plans back to FERC to make sure we
- 10 are in compliance. But that isn't expected until '26.
- 11 And don't -- we don't anticipate that to impact the
- 12 planning cycle until 2028, so we don't anticipate that
- 13 to have my influence on this proceeding.
- Q Okay. But just as far as this rate case is
- 15 concerned, FPL was using the ten-year planning process?
- 16 A That's correct. 10 years.
- 17 Q Thank you.
- And historically, it's been 10 years, right?
- 19 A Yes. That's correct.
- Q I think we touched on this briefly, but when
- 21 FPL is categorizing a property as being acquired for
- transmission and distribution plant held for future use,
- 23 FPL is articulating that there is a need for that,
- 24 right?
- 25 A Yes, there is a projected need for every

- 1 project that we have in our plan.
- Q Well, with that being said, isn't it true that
- 3 FPL is holding certain T&D properties for future use for
- 4 longer than 10 years?
- 5 A Yes, we do have properties that we have held
- 6 for longer than 10 years, all with a projected need over
- 7 the next 10 years.
- 8 Q So if they have been held for over 10 years,
- 9 that means they have already been held for the 10 --
- 10 longer than the ten-year planning process?
- 11 A Well, I think one thing that's important to
- 12 keep in mind is the transmission planning process is
- just one element of putting a property in service,
- 14 right. You have to certainly design the project. You
- have to permit for the project, and then construct for
- 16 said project. And that, at times, can certainly take
- 17 beyond 10 years.
- And then beyond that, just the expected loads
- 19 and the growth that is seen in our system certainly it's
- 20 forecasted but can change, and those changes could
- 21 certainly influence your ten-year site plan, and that's
- 22 why it's a process that is done on a yearly basis and
- 23 reviewed. And then the properties that are required,
- like I said before, have a specific project over the
- 25 next 10 years.

- 1 Q Well, even with all that, you know, being the
- 2 case, at least one of these projects has been held for
- 3 47 years, right?
- 4 A Which project are you referring to, or
- 5 property?
- 6 Q This is Levee-South Bay property?
- 7 A Yes. So, yes, that is correct. That property
- 8 has been held for 47 years, but I think it's important
- 9 to provide a little bit of color and context as to what
- 10 that property is.
- 11 That property was a part of a purchase that
- 12 happened in the '70s, which is an area called the west
- 13 corridor in Miami-Dade County, and is, in fact, at the
- 14 far west portion of Dade County. And this property that
- is still in our possession runs parallel to a property
- 16 that has been in service, and this property in question
- is about a 330-foot right-of-way and, again, is in
- parallel to a transmission right-of-way existing.
- So this is essentially the last piece of that
- 20 western corridor that is expected to be put in service
- over the next 10 years, and, again, a critical component
- 22 to our transmission system, right. It includes a 230
- 23 line and 500 kV line, which the backbone of our
- 24 transmission grid --
- MR. PONCE: I am sorry, I hate to cut the

- witness off, but just maybe a reminder that per the
- 2 prehearing order, if we can get a yes or no.
- 3 CHAIRMAN LA ROSA: I think he answered a yes
- or no, but then I know he gave additional
- 5 clarification and context, but he certainly may
- 6 have gone a little bit far into explaining the
- depth of the property that is being questioned.
- 8 MR. PONCE: Thank you.
- 9 BY MR. PONCE:
- 10 Q Now, when talking about the Levee South
- 11 property, even so, FPL, nonetheless, still thinks it
- won't go into service until 2032?
- 13 A Yes. That's correct.
- 14 Q So in other words, this could -- if it does go
- into service in 2032, this would still be after FPL's
- 16 next rate case?
- 17 A I believe that's the timing of things, yes,
- 18 sir.
- 19 Q So even for a property that's been held for,
- 20 by that point it will be close to half a century, FPL --
- 21 if it's still included in plant held for future use in
- 22 FPL's rate case, FPL will still be expecting the
- 23 customers to pay for it?
- A Again, as I mentioned a couple of times, is
- 25 that that property is for a specific project that has a

- 1 specific use over the next 10 years, and it was a
- 2 property that was purchased years ago.
- And again, part of the property held for
- 4 future use process is to ensure that we are providing --
- 5 or purchasing properties with value to our customers
- 6 with a specific need, to make sure that we have the
- 7 properties needed to build and be able so serve our
- 8 customers reliably and in compliance to all standards
- 9 that we are required to serve to.
- 10 Q So you say that it has a specific -- has a
- 11 specific project for a specific use. Does that mean,
- 12 then, that when FPL bought it 47 years ago, it didn't
- 13 have those things?
- 14 A No. Anything that would have been purchased
- would have had a projected need, as per our process,
- 16 within 10 years.
- 17 Q So for the past, again, almost half a century,
- 18 FPL has been coming up with specific projects and
- 19 specific plans for this piece of land that just haven't
- 20 materialized, right?
- 21 A Yes. That's correct. As I mentioned, the
- 22 transmission planning process is a long one and is
- ever-changing, and that's why it's something that is
- 24 reviewed on a yearly basis.
- And then to take it even further, our property

- 1 held for future use list is something that is reviewed
- 2 with our accounting team on a monthly basis to make sure
- 3 that the properties that we do have in hand are
- 4 absolutely required, and if not, we move them to
- 5 nonutility.
- 6 Q Since January -- you mentioned moving them to
- 7 nonutility. Since January 1, 2021, FPL has only
- 8 reclassed as nonutility approximately 8.49 percent of
- 9 properties acquired for T&D plant held for future use,
- 10 right?
- 11 A I am sorry, could you repeat that?
- 12 **O** Sure.
- Since January 1st, 2021, FPL has only
- 14 reclassed property as nonutility that was previously
- 15 classed as plant held for future use only for about
- 16 8.49 percent of those properties?
- 17 A It's approximately about 10 percent, yeah.
- 18 No, I think that's correct, subject to check.
- 19 Q If we can go to page E4439. Scroll down. I
- am sorry, but maybe if you could zoom in as well. My
- 21 eyesight isn't what it used to be. Thank you.
- 22 Are you able to see those?
- 23 A I -- am I -- I have to scroll here? Got it.
- 24 Okay. Yes, sir.
- 25 Q So we are looking at this is the discovery

- 1 response that was either sponsored or cosponsored by
- 2 Mr. De Varona that you have agreed to adopt. It looks
- 3 like from January 1, 2021, the sum of transfers from --
- 4 to -- the sum of transfers -- excuse me, the properties
- 5 reclassified as nonutility from plant held for future
- 6 use amounted to what looks like 6.3 million there?
- 7 A 8.49 percent, yes.
- 8 Q You said 80 or eight?
- 9 A Eight.
- 10 Q So it doesn't sound like this happens very
- 11 often?
- 12 A Well, the lion's share of the properties are
- 13 put in service, those that aren't held for any longer,
- but, again, I think the difference is those are held in
- 15 service. However, the same period, I believe we have
- 16 put about 50 properties in service as a comparison to
- 17 what we show here as what's been -- what's been moved
- 18 to -- or reclassed to nonutility.
- 19 Q Isn't it true that even when properties aren't
- 20 reclassed as nonutility, that FPL has not ultimately
- 21 sold or disposed these?
- 22 A I am sorry, can you ask the question again?
- 23 **O** Sure.
- Even when a property is reclassed as
- 25 nonutility, isn't it true that FPL has not been selling

#### 1 these either?

- 2 A From what I know, I believe that those that
- 3 are reclassed or moved to nonutility are sold in the
- 4 distant future.
- 5 Q If we can go to E4445. It says here, during
- 6 this period, and that period being from January 1, 2021,
- 7 through June 30, 2025, that there were no properties
- 8 transferred from PHFU to nonutility that were ultimately
- 9 disposed or sold?
- 10 A Again, what this request is is the past five
- 11 years. And my response was, in due time, in the future.
- 12 Again, that's my understanding of what happens, but I
- 13 would suggest asking Witness Ferguson any further
- questions about what happens after properties are moved
- 15 to nonutility.
- Okay. So even though -- so as long as you
- have this limited to the past five-year timeframe, that
- 18 still means that for at least the past five years, there
- 19 have been things classed as nonutility that FPL has not
- 20 sold?
- 21 A That's what this response says. Yes, sir.
- 22 Q It's not your opinion that this demonstrates
- 23 that FPL is resistant to the idea of giving up a piece
- of property once it's been acquired?
- 25 A No, I can't agree with that. We are not

- 1 resisting to go give up a property. What we do is we
- 2 evaluate the properties, or actually the projects that
- 3 we have, and if there is properties that are needed, we
- 4 work with our corporate real estate team to purchase
- 5 properties.
- And then, again, as I mentioned, we evaluate
- 7 the properties that are held on a monthly basis and make
- 8 a determination if that need is still required, and if
- 9 not, we work with our accounting team to move it to
- 10 nonutility.
- 11 Q Isn't it true that FPL has become one of the
- 12 top 10 landowners in the state of Florida?
- 13 A I don't know the answer to that question.
- 14 Q So even -- so long as FPL is able to
- 15 articulate a project or plan for a piece of property,
- it's your opinion, then, that FPL can hold on to it even
- 17 though it's not being used to generate or transmit
- 18 **electricity?**
- 19 A My testimony supports that all properties that
- 20 we have as a part of our property held for future use
- 21 have a specific need in the next 10 years.
- Q But even so, I mean, we have been talking
- 23 about the -- a property, but there is other properties
- that have been held for longer than 10 years, right?
- 25 A There are that have been held longer than 10

- 1 years, yes.
- 2 Q Some of these, as our expert identified, 25
- 3 years or longer?
- 4 A There are some that are greater than 25 years
- 5 all with a specific need over the next 10 years.
- 6 Q Presumably when they were first bought by FPL,
- 7 FPL identified a specific need for them, right?
- 8 A Yes. That's correct.
- 9 Q Can you explain how, after 25 years, FPL has
- 10 been able to determine plans for these properties within
- 11 the next 10?
- 12 A As I mentioned earlier, it's part of our
- 13 planning process. And as a part of our planning
- 14 process, we determine projects that are needed to serve
- our customers reliably, contending with any growth
- that's coming to our service territory, and staying in
- 17 compliance.
- And as a result of that process, we identify
- 19 properties that are needed, and we work with our
- 20 corporate real estate team to acquire those properties.
- 21 If they are currently held, and they were for a
- 22 different purpose and that purpose is no longer needed,
- then we reapply the new project to that, again, as a
- 24 part of our yearly review of our ten-year site plan.
- Q Okay. Let's move on.

- 1 Your testimony also supports the adoption or
- 2 the creation of a new CIAC tariff, right?
- 3 A Yes. That's correct.
- 4 Q When I say CIAC, we understand that's
- 5 contribution in aid of construction?
- 6 A Yes, sir.
- 7 Q If you could just describe this new CAIC in
- 8 your direct testimony?
- 9 A Sure. So the new CIAC is related to large
- 10 load customers that are expected to be joining -- coming
- 11 to our service territory. And the intent of the CIAC is
- 12 to provide a protection to the general body of
- 13 customers. For any customers that are coming with loads
- 14 greater than 15 megawatts, that would require an
- 15 investment of over \$25 million of T&D assets in order to
- 16 feed that load -- or serve that load.
- 17 Q Thank you for that description.
- 18 CIAC, just to be clear, is the amount due from
- 19 applicants who are requesting new or upgraded
- 20 facilities, right?
- 21 A Yes, that's correct.
- 22 Q And in this case, the new tariff only applies
- 23 to nongovernmental applicants?
- 24 A Yes. That's correct.
- 25 Q And the way CIAC works is that the amount of

- 1 CIAC paid is equal to the total estimated transmission
- 2 and distribution costs to extend service minus four
- years of expected annual revenue?
- 4 A The current CIAC is that's how it's
- 5 calculated. However, this is different. The
- 6 expectation is the cost causer, or the new customer
- 7 coming to the service territory that meets that
- 8 threshold, or that criteria, would pay those costs up
- 9 front.
- 10 Q You mentioned the phrase cost causer. That's
- 11 a principle that the Commission uses to review these
- 12 sort of things?
- 13 A I believe so. Yes.
- 14 Q Is it generally true that an applicant's load
- is the primary driver of cost to extend service to them?
- 16 A Yes. That's correct.
- 17 Q So just in general, all things being equal,
- 18 the higher of a load, the higher the cost to extend
- 19 service?
- 20 A I think that's a fair assessment. Yes.
- 21 Q It can cost FPL millions of dollars to extend
- 22 service sometimes for even a single customer, right?
- 23 A I think for a single customer, that would
- 24 be -- that would be rare. But, again, for a broader
- 25 sense for customers, you know, moving to our service

- 1 territory, large subdivisions, commercial customers,
- 2 subdivisions, as I mentioned, you know, there is, you
- 3 know, the system expansion work that is required, and
- 4 then certainly any growth expenditures to connect those
- 5 customers.
- 6 Q If the applicant's forecasted load does not
- 7 fully materialize, that causes a revenue shortfall,
- 8 right?
- 9 A Under what scenario are you referencing.
- 10 Q They have taken up service under the CIAC
- 11 tariff, as part of that, their load is estimated,
- 12 right -- excuse me, their revenues are estimated, right?
- 13 A So the CIAC that we are proposing or the CIAC
- 14 that exists?
- 15 Q That you are proposing.
- 16 A Under the proposal, as I mentioned earlier,
- 17 the customer would prepay the cost, and then in terms of
- 18 the mechanics of how that works and any credits that are
- 19 established thereafter based on their load -- or
- 20 revenues coming in, better said, I think that would be
- 21 better suited for Tiffany Cohen to answer.
- Q Okay. The tariff uses 15 megawatts as one of
- 23 its threshold requirements, right, for new applicants?
- A As a the BAFO my testimony, yes, that's what
- 25 my testimony supports, 15 megawatts.

- 1 Q And that's about enough power to power on
- about 10,000 homes, right?
- 3 A Yes, that's a fair comparison.
- 4 Q Because of the amount in terms of both the
- 5 dollar amounts and the expected loads, it's a big risk
- 6 for the general body of ratepayers if these customer's
- 7 loads don't materialize, right?
- 8 A Yes, and hence why, you know, we put forth as
- 9 a part of this rate case the introduction of the CIAC,
- 10 again, to -- as protection for the general body of
- 11 customers in the event those costs -- or those revenues
- 12 don't materialize.
- 13 Q In such an event, then, the customer would be
- 14 getting a subsidy from the general body of customers,
- 15 right?
- 16 A Without this CIAC provision, there is a
- 17 semblance of a subsidy. However, there is also an
- 18 existing provision of a performance guarantee that
- 19 exists in our current CIAC provisions that could be
- leveraged as well to, again, provide a protection for
- 21 our general body of customers.
- 22 Q When it came time -- when FPL determined the
- 23 15-megawatt and \$25 million thresholds, FPL didn't
- 24 determine those arbitrarily, right?
- 25 A We looked at our current customer base, and

- 1 particularly customers of large load in our service
- 2 territory, there is about 19 that we serve that are
- 3 greater than 15 megawatts, and, again, it points to the
- 4 uniqueness of these customer loads. So again, we came
- 5 up with that threshold based on, again, our current
- 6 customer base, our engineering expertise and some of the
- 7 interest that has been expressed by customers that have
- 8 expressed interest to move to our service territory.
- 9 Q FPL considered other thresholds as part of
- 10 this process, right?
- 11 A Did we consider other thresholds? We did.
- 12 But as a part of my testimony, we supported 15 megawatts
- 13 and \$25 million of investment.
- 14 Q Isn't it true that any increase to these
- 15 thresholds would increase the level of risk borne by
- 16 FPL's general body of customers?
- 17 A I think it would increase -- it could,
- depending on the customers that are moving to the
- 19 service territory, right. So I think that's important
- 20 -- that's an important measure to understand of the size
- 21 and load of these customers that have expressed interest
- 22 to see, you know, what their load would be.
- 23 Q If we could go to, I believe it is DC366.
- 24 This should be your rebuttal testimony page 14. I
- believe it is D6-366, of course, the rebuttal page 14,

- 1 if that helps?
- MR. SCHULTZ: D6. I heard E6. I am sorry.
- MR. PONCE: D as in dog, sorry.
- 4 BY MR. PONCE:
- 5 Q Are you there?
- 6 A Yes, sir.
- 7 Q You state here that it is important to
- 8 recognize that any increases to FPL's proposed
- 9 thresholds increase the level of risk borne by FPL's
- 10 general body of customers. In other words, if Witness
- 11 Pollock's 50 megawatt threshold were to be adopted, the
- 12 costs associated with serving new applicants between
- 13 15 megawatts of 49.9 megawatts would held by FPL's
- 14 general body of customers. Is that still your
- 15 testimony?
- 16 A I am sorry, you read that pretty fast.
- Q Oh, I am sorry.
- 18 A What line are we talking about? Sorry.
- 19 Q Please take your time -- take your time
- 20 reading and let us know when you have had a chance to
- 21 read it.
- 22 A Which line are you starting at?
- Q Starting at line eight.
- 24 A Line eight. Okay.
- 25 Q Although, if you need context, please feel

- 1 free to read it.
- 2 A I might need those as well.
- Yes, I think that's certainly factual, but
- 4 again, I think it's also important to highlight what's
- 5 said above that, particularly that no singularly correct
- 6 size threshold. There isn't a perfect threshold to
- 7 apply here, but again, as I mentioned, we used our
- 8 expertise, knowledge, knowhow and essentially the
- 9 customers that have expressed interest to establish the
- 10 threshold that we have is a part of my testimony.
- 11 Q And at least as of the time of your direct and
- 12 rebuttal, wasn't it true that FPL had not identified any
- 13 applicants meeting these thresholds within the past five
- 14 years?
- 15 A Say -- ask the question again. I am sorry.
- 16 Q Yes. At least at the time of your direct and
- 17 rebuttal, isn't it true that FPL had not yet identified
- 18 any applicants meeting these tariff thresholds within
- 19 the past five years?
- 20 A If I am not mistaken, I believe we had
- 21 received interest from several parties, but how official
- 22 that interest was, I think, is what the question is. I
- 23 don't believe there was an official ask.
- Q If you can give me one moment.
- 25 A Sure.

- 1 Q If we could go to E, as in Eric, 92753. If
- you could read response A., just to yourself, I mean,
- 3 and let me know when you are ready.
- 4 A Okay. Yes, I have read it.
- 5 Q So at least as of the time discovery was
- 6 submitted, FPL had not identified any applicants that
- 7 would have met the CIAC thresholds?
- 8 A That's what this says, correct.
- 9 Q Just for the sake of clarity, these
- 10 facilities, they are not being built by FPL, right? I
- 11 mean, they are being built by the customers who are
- 12 applying?
- 13 A When you say facilities, what do you mean by
- 14 facilities?
- 15 Q That would be covered by this tariff.
- 16 A Well, electrical facilities to serve said
- 17 property or said customer would be built by FPL, but the
- 18 properties, themselves, would certainly be built by the
- 19 customers.
- 20 Q That's what I meant. I meant the customer's
- 21 property.
- 22 A Yes.
- Q When it comes to data centers, isn't it true
- 24 that their construction timelines typically vary by two
- 25 to five years?

- 1 A I can't speak to that.
- Q Okay. Let me ask this, then: A customer who
- 3 asked FPL for an engineering study may not actually
- 4 begin operating until 2030?
- 5 A Again, I can't speak to that. What I can say
- 6 is for our process, is that when a customer approaches
- 7 us and requests an engineering study, that takes us
- 8 about six months to prepare our detailed analysis, and
- 9 then provide that information back to the customer so
- 10 they understand the general cost of the project and some
- of the expected technical requirements we are asking of
- 12 them. But how long it will take them to build, again, I
- 13 think that's on the customer and I can't answer that.
- 14 Q Isn't it true that regardless of the
- 15 customer's aims, that FPL is not able to fully design,
- 16 procure a permit and construct the necessary facilities
- on its ends for these customers prior to 2028?
- 18 A I don't believe that's a true statement. I
- 19 think there is a lot to be asked of that question. What
- 20 kind of customer? What type of load?
- We have the ability to serve our customers,
- and we are expecting close to 400,000 additional
- 23 customers over the four-year period, which we will be
- 24 prepared to serve.
- 25 Q If we could go to E91815. That was E as in

- 1 Eric. E91815. Actually, it may be better if we go to
- 2 **814.**
- If you could read to yourself, Mr. Jarro, the
- 4 answer at paragraph D, and let us know when you are
- 5 ready.
- 6 A D as in David?
- 7 O D as in David.
- 8 A Okay. Okay, I have read it.
- 9 Q It says here: Additionally, FPL estimates
- 10 that it is not technically feasible for either FPL or an
- 11 LLCS customer to fully design, procure a permit and
- 12 construct the respective necessary facilities and begin
- 13 taking service prior to 2028. Is that no longer your
- 14 understanding?
- 15 A No, that's what it says here, so I agree with
- 16 that. Yes.
- Q Okay. Thank you.
- Isn't it true that some of the applicants
- 19 requesting engineering impact studies from FPL are not
- 20 necessarily going to be the end users of FPL's
- 21 electricity?
- 22 A I can't speak to that. All I can speak to are
- the customers that have requested engineering studies,
- 24 and those studies that we have undertaken and what's
- been completed and provided back to customers.

- 1 Q If we can go to your rebuttal testimony again.
- 2 This is D, as in David, 6-369. Actually, scratch that,
- 3 give me a sec.
- 4 Now, you mentioned these engineering studies.
- 5 FPL has seen prospective applicants making changes to
- 6 their load layout and engineering needs during these
- 7 studies, right?
- 8 A During the studies, that would change the
- 9 elements of the study, so I would say I haven't seen
- 10 that. My team hasn't seen it. You know, we receive the
- initial information from these customers, and based on
- 12 the attributes and the variables, and everything that
- they provide to us, that's what we conduct the studies
- on. If it changes, then that clock restarts and we have
- to redo the study, because that certainly will have
- 16 impacts to the grid.
- Now, you mentioned there is a six-month
- 18 timeframe, why is that?
- 19 A Again, it's important to -- for -- on the
- 20 engineering side, the engineering study side, it takes
- 21 time. There is a lot of analysis that has to be done,
- 22 analysis not just to understand what's going to be
- needed to procure, build from a transmission substation,
- 24 sometimes even distribution to serve these loads. But
- 25 beyond that, what are the impacts to the system, right,

- of connecting a customer of this size and magnitude,
- 2 depending on where they are being connected to. So,
- 3 again, it takes time to do that analysis and then
- 4 provide that information back to the customer.
- 5 Q FPL isn't anticipating having any of these
- 6 customers until 2028, right?
- 7 A Our current projections are 2028. That's
- 8 correct.
- 9 Q Isn't it true that even when 2028 comes, the
- 10 forecasted annual energy and monthly demands are
- 11 forecasted to be 172 megawatts?
- 12 A I believe that's what was provided in a
- interrogatory response, and then there will be a ramp-up
- 14 period thereafter.
- 15 O So if the absolute earliest that FPL
- 16 anticipates these customers coming on-line is 2028,
- 17 isn't it fair to say that that's plenty of time for the
- 18 Commission to host a workshop or rulemaking procedure
- 19 concerning large load customers?
- 20 A I can't speak on the behalf of the Commission
- of what it would take them to -- or how much time they
- 22 would need to put together a session as you describe.
- What I can say is it certainly takes a while
- to engineer, permit and certainly construct some of
- 25 these projects and to feed these customers. So, again,

- 1 I think that certainly can take some time. But again,
- 2 there is not only the six months that we provide to
- 3 customers, but then it's also their review and
- 4 acceptance period, which adds to that timeline as well.
- 5 Q Let me move on, then.
- 6 Your testimony also supports the maintenance
- 7 budget for your division, right?
- 8 A Yes, it does.
- 9 Q Isn't it true that for every year from 2020 to
- 10 2024, FPL's actual T&D planned maintenance has been
- 11 lower than its budgeted maintenance?
- 12 A Are you referencing EDV-7?
- 13 Q I am sorry, could you repeat that?
- A Are you referencing EDV-7?
- 15 **O** Yes.
- 16 A Okay. Can you ask the question again, please?
- 17 Q Isn't it true that for every year from 2020 to
- 18 2024, FPL's actual T&D maintenance has been lower than
- 19 its budgeted maintenance?
- 20 A Yes. Our actuals were below the budgeted
- 21 amounts, that's correct, for those periods that you
- 22 mentioned.
- 23 Q The largest variance being 23 percent in the
- 24 year 2023?
- 25 A Yes.

- 1 Q Given this consistent trend, isn't it fair to
- 2 say that the Commission should entertain a further
- 3 adjustment reducing T&D maintenance?
- 4 A What I think is important to highlight is that
- 5 the FPL team, the power delivery team specifically in
- 6 this space has already taken a reduction. And it's also
- 7 important to point out that this is a cyclical and
- 8 condition-based maintenance program. So, again, there
- 9 is varying degrees of issues that are found or occurred.
- 10 And then there is also outside influences, right,
- 11 particularly in the peninsula, we are influenced and
- 12 impacted by storms, and that can certainly impact our
- 13 ability to execute on our maintenance plans and
- 14 projects.
- 15 Q In your direct testimony, do you specifically
- 16 identify any new employee positions for your division?
- 17 A I don't believe I do. No, sir.
- 18 Q How about in your rebuttal testimony?
- 19 A I don't believe I do.
- Q Let me move on from that, then.
- In your direct testimony, as evidence of FPL's
- 22 reliability, you discuss FPL's System Average
- 23 Interruption Duration Index, right?
- 24 A Yes. That's correct.
- 25 Q That is S-A-I-D-I, is that pronounced SAIDI?

- 1 A SAIDI. Yes, sir.
- 2 Q SAIDI. Excuse me. Thank you.
- If we could go to F, as in frank, 2-481. Are
- 4 you there?
- 5 A Yes, sir.
- 6 Q Feel free to take a sec to look at this graph
- 7 if you need to.
- A I know it fairly well, so I am used to seeing
- 9 these numbers, so go ahead.
- 10 Q Fair enough.
- 11 Isn't it true that the former Gulf Power's
- 12 SAIDI in 2021 was 38.7?
- 13 A 38.7 in 2021. Yes. That's correct.
- 14 Q Isn't this a better SAIDI than the
- consolidated FPL SAIDIs in the subsequent three years?
- 16 A The number is lower than the subsequent FPL
- 17 aggregated system level of 19 management areas. Yes,
- 18 that's correct.
- 19 Q If we can go to your graph in your direct.
- 20 This is EDV-2. I believe it is F, as in frank -- excuse
- 21 me, C as in Charlie, 7-1658. I am going there myself.
- 22 One moment.
- Now, from 2021, that value is about 45.9?
- 24 A Subject to check, yes, but on the graph it
- 25 looks like it's close.

1 0 I am just looking at the graph myself --2 А Yes. 3 -- and in 2024, that is 43.9? Q 4 Α Yes, that's correct. 5 And these aren't -- I mean, obviously an Q 6 improvement is an improvement, and that's good, but 7 these aren't very large differences, right? 8 Α From an order of magnitude, no, they are 9 not -- they are not large deltas as depicted on this 10 But I think it's important, particularly back to 11 the comment about customers in northwest, the 12 reliability in northwest has improved by 63 percent 13 since 2018, which is a pretty significant I improvement. 14 Isn't it true in 2024, FPL disconnected Q 15 residential customers for nonpayment approximately 1.2 16 million times? 17 Chairman, if I may, that would be MR. BAKER: 18 a question -- I mean, that is not a part of Mr. 19 Jarro's testimony, customer disconnections, and I 20 think that that would likely be a better question 21 for Ms. Nichols. 22 CHAIRMAN LA ROSA: You want to redirect that 23 question to a different witness? 24 MR. PONCE: Well, I was --

Can you point to it within

25

CHAIRMAN LA ROSA:

1 the testimony? 2 MR. PONCE: Not within his testimony, but 3 since we are talking about areas where customers 4 have been without power, I think it's fair to 5 compare it to SAIDI. That's where I am going with this. 6 7 CHAIRMAN LA ROSA: Can you repeat the 8 question? 9 MR. PONCE: Isn't it true that in 2024, FPL 10 disconnected residential customers for nonpayment 11 approximately 1.2 million times? 12 THE WITNESS: I can't --13 MR. BAKER: Chairman, I think that that's --14 that that is the same question. I mean, if he 15 would like to ask a reliability question that is 16 looking at a particular customer segment or region, 17 I think Mr. Jarro is prepared to take that. 18 Customer disconnections is not something that 19 Mr. Jarro testifies to in direct or rebuttal. 20 MR. PONCE: I will rephrase. 21 BY MR. PONCE: 22 It's fair to say that this SAIDI is the 0 23 cumulative end result of all of the investments that FPL 24 has made into its system, right? 25

Α

Yes.

Certainly over the last several years,

- 1 the strategies that we deployed, this is absolutely a
- 2 result that we have driven to.
- 3 Q Isn't it fair to say that it doesn't matter
- 4 how reliable FPL's system is it if a customer can't
- 5 afford it?
- A Again, what I would say is that the
- 7 reliability of service that this, and the performance
- 8 that this depicts is not something that we see as
- 9 optional. We see it as our responsibility to make sure
- 10 that we are providing reliable service to our customers.
- 11 And that's why, again, we are proud of the facts that we
- 12 are 59 percent below the national average, and we have
- 13 continued to show an improving trend year after year.
- MR. PONCE: If I could just have one moment.
- I want to make sure I don't have anything else left
- for this witness.
- 17 CHAIRMAN LA ROSA: Sure.
- 18 BY MR. PONCE:
- 19 Q Actually, I do have one last question. I am
- 20 sorry. If we can go back to the CIAC tariff. This
- 21 tariff isn't intended to recoup the incremental
- 22 generation costs, right?
- 23 A Ask the question again. I missed the last
- 24 part.
- Q Of the new CIAC tariff, its goal is not to

- 1 recoup customers' incremental generation costs?
- 2 A No, it is not.
- 3 Q Thank you. I don't have anything else. Thank
- 4 you very much, Mr. Jarro.
- 5 A Thank you.
- 6 CHAIRMAN LA ROSA: Thank you.
- 7 Let's go to FEL, you are recognized for
- 8 questioning.
- 9 MR. LUEBKEMANN: Thank you, Mr. Chairman.
- 10 EXAMINATION
- 11 BY MR. LUEBKEMANN:
- 12 O Good afternoon, Mr. Jarro.
- 13 A Good afternoon.
- Q Okay. So I would like to pull back a little
- 15 bit. Your department is power generation and delivery?
- 16 A Just power delivery, transmission and
- 17 distribution.
- 18 Q Would I have seen PGD somewhere in company
- 19 documents refer to all three?
- 20 A No. PGD is a separate business unit, and I
- 21 think those questions would be best suited -- or
- 22 answered by Witness Broad.
- Q But looking at of transmission and delivery,
- 24 which is your shop.
- 25 A That is correct.

- 1 Q You cover the entire process of getting an
- 2 electron from wherever it's generated to wherever it's
- going to be consumed by an end user, at least to where
- 4 they would take delivery?
- 5 A I would say my business unit is responsible
- 6 for transporting and transmitting that electron from the
- 7 power plant all the way down to the meter.
- 8 Q That's a better way to put it.
- 9 So would that include making decisions, then,
- 10 about the overall planning for that transmission and
- 11 distribution system?
- 12 A For the transmission and planning group, yes.
- 13 That is correct.
- 14 Q And that would include making sure the system
- is sufficiently strong to live out its service life here
- 16 in Florida?
- 17 A I would say yes. That's correct.
- 18 Q Does the relative strength or frequency of
- 19 storms or hurricanes in particular enter into the
- 20 consideration of the transmission planning department?
- 21 A Transmission planning, I would say I think all
- 22 the elements that our system contends with, right, you
- 23 know, with regards to 610 miles of coastline and the
- 24 lightning density that we are impacted by, and certainly
- 25 storms is something that is part of our engineering

- 1 standards for both the T&D system.
- 2 Q And you mentioned coastline. I assume that
- 3 sea level -- the mean sea level would also be something
- 4 that would be considered by the planning department?
- 5 A I don't believe that's something -- that's an
- 6 element that we look at from a transmission planning
- 7 perspective.
- 8 Q Are you aware that considerable work has been
- 9 done to raise transformer vaults in recent years?
- 10 A I would say yes, we have worked and partnered
- 11 with -- so when you talk about transformer vaults, the
- 12 vault is owned by the customer. So, for instance,
- 13 several of these customers that are building highrises
- on beach front property, we work very closely with them
- 15 to make sure that we have, you know, as elevated as
- 16 possible, that we have the right type of louvered doors
- 17 to make sure that they are -- to protect against any
- 18 flood conditions. So, yes, I would say yes, we work
- 19 with customers on the vault transformers. Yes.
- 20 Q And in general, when you are looking at --
- 21 understanding, that that is a customer sited -- that is
- 22 a customer sited asset, I guess, that --
- 23 A That's correct, and we negotiate with the
- 24 customer on the size for whatever equipment we need to
- 25 place in there to provide them service.

- 1 Q But generally speaking, with FPL's assets, you
- 2 are looking over the design service life of that asset
- 3 trying to ensure that it will be able to fulfill its
- 4 function here?
- 5 A Yes. Absolutely.
- And just one point of correction about the sea
- 7 rise. Again, you know, it's something that we certainly
- 8 look at in terms of floodings for substations, and
- 9 that's something that's captured as a part of our storm
- 10 protection plan.
- 11 Q And that's where I wanted to go with this. So
- 12 if you are looking into the future, and I know it used
- 13 to be a 10-year planning horizon, and now you are
- looking at more towards a 20-year with FERC Order 1920,
- 15 it is important for your team to consider the future
- 16 conditions over the lifetime of that asset?
- A Again, just a point of clarification, we
- 18 haven't changed, as a part of this rate case, to a
- 19 20-year planning horizon. But as a part of our planning
- 20 exercise, we take in all the elements that we are
- 21 contending with in our system, both on the transmission
- 22 and distribution side.
- 23 Q Sure. And I can keep it to 10 years for now,
- 24 with the understanding that you are moving in the
- 25 direction of 20 years. But it would be fair to say that

- 1 even on a 10-year time planning -- planning horizon, you
- 2 are trying to account for the conditions in year 10 as
- 3 part of that plan?
- 4 A Yes.
- 5 Q And so would that include things like
- 6 accounting for changes in climate over the course of the
- 7 planning horizon?
- 8 A If those changes in climate were known and
- 9 there were impacts potentially expected on the
- 10 transmission or distribution system, yes.
- 11 Q Does the planning and transmission team at FPL
- 12 have an opinion on climate change?
- 13 A No, I do not.
- 14 Q No stance on whether or whether not it's
- 15 occurring?
- 16 A I don't. No, sir.
- 17 Q And you are seeking for FPL on this subject?
- 18 A I am speaking for the power delivery business
- 19 unit.
- 20 Q And I will represent to you the big boss, Mr.
- 21 Pimentel, yesterday referred us to ask some questions on
- 22 this subject to you --
- 23 A Okay.
- 24 O -- and that's the context in which these are
- 25 coming.

- 1 A Understood.
- 2 Q Do you have an awareness that climate change
- 3 is considered to be related to increased storm severity
- 4 and frequency?
- 5 A I don't know if it's driven by climate change,
- 6 but I can certainly say that I have certainly felt and
- 7 noticed an increase in storm activity over the last
- 8 several years.
- 9 Q Okay. Thank you.
- 10 Transmission and distribution also has -- and
- 11 really this is more on the transmission side. It would
- 12 be fair to say that you have a role in the siting of new
- 13 generation resources?
- 14 A No, that's not correct.
- 15 Q Not in the ultimate responsibility, but would
- 16 it be fair to say that transmission is consulted as part
- 17 of the overall process when deciding where to site a new
- 18 generation asset?
- 19 A I would say we work with our resource planning
- 20 team and provide them where -- we work with them to
- 21 understand where the expected loads are anticipated in
- 22 the future, but our focus is ensuring that we build the
- transmission and distribution grid required to serve
- 24 those loads. The generation would be handled -- I think
- 25 bettered suited questions for Witness Oliver.

- 1 Q And again, I am not trying to get into the
- 2 generation side specifically. Without going and looking
- y up the specific citation in a deposition conversation
- 4 with your league, Mr. De Varona, we discussed somewhat
- 5 the adjacent role of transmission in looking at putting
- 6 new generation resources, and I would say, you know, if
- you have got a proposed power plant that's in the middle
- 8 of nowhere, there is going to need to be some kind of
- 9 transmission upgrade to serve that, right?
- 10 A There is going to be a transmission
- interconnection that is required, yes.
- 12 O And so I would just assume that transmission
- is involved in this conversation, maybe you don't get
- 14 the overall detail on where something might go, but you
- would be involved in the conversation?
- 16 A I think that's a fair thing to say, yes.
- Q Okay. Could we go to Exhibit 1108? And this
- 18 is at master page F10-16008. Okay. Are you there?
- 19 A Yes.
- 20 Q Do you recognize this?
- 21 A Yes, I do.
- 22 Q And what does this represent?
- 23 A This depicts, essentially, the lay of the land
- 24 for our transmission system across the entire state.
- 25 Q And if I am looking at the top of the

- 1 Panhandle here, there is a pink line that basically runs
- from the legacy Gulf system, or FPL Northwest, towards
- 3 the FPL East system?
- 4 A Yes, that's our Raven to Sinai line. Yes,
- 5 sir.
- 6 Q Sorry, it's your what?
- 7 A Raven to Sinai, the substations it connects.
- 8 Q But would that pink line also be the North
- 9 Florida Resiliency Connection, or NFRC?
- 10 A Yes, we refer to it as that as well.
- 11 Q That's how I got to know it.
- 12 That line passes outside of FPL's service
- 13 territory to connect the two geographically distinct
- 14 units of its territory?
- 15 A It goes through other service territories.
- 16 Q Do you know if the NFRC is currently
- 17 transmission constrained?
- 18 A I am not sure I understand your question.
- 19 Q Do you know if there are times of year
- 20 currently where the NFRC cannot use its full nameplate
- 21 capacity due to interactions with other interconnected
- 22 systems?
- 23 A I would say that we are -- we are still
- dependent on the completion of system upgrades that are
- outside of our service territory to be able to utilize

- 1 the design capacity of the NFRC.
- 2 Q And that would be interactions on the Duke
- 3 system and the Seminole system?
- 4 A Yes. That's correct.
- 5 Q Are you aware that FPL is developing two 74.5
- 6 megawatt solar installations in Leon County alongside
- 7 the NFRC?
- 8 A I am not aware of that. No.
- 9 Q Could we go to master number D12-592? This is
- 10 not one of your exhibits, but this is from your
- 11 colleague Mr. Oliver. And I would just like to scroll
- down near the bottom of the second page of this exhibit.
- 13 And do you see the last line and the fifth to last line
- 14 referencing solar centers in Leon County?
- 15 A I am sorry, so you said page two?
- 16 O Yes. This would be D12-592. It should be the
- page that you were directed to?
- 18 A Understood. I scrolled. My apologies.
- 19 Q It was bad directions on my part.
- 20 A Okay. So say it again. I am looking for
- 21 something in Leon County?
- 22 Q So you are looking at the very last line on
- that chart, which should say Shepherd Branch Solar
- 24 Energy Center.
- A Again, page two, right? I see Wood Stork

- 1 Solar Energy Center. I scrolled down to the next page.
- 2 Sorry. Shepherd Branch Solar Energy Center. I see it,
- 3 yes. Leon County.
- 4 Q Leon County. And then four more rows above
- 5 that, do you see Lutterloh --
- 6 A Yes.
- 7 Q -- Solar Energy Center, also in Leon County?
- 8 A I see that, yes.
- 9 Q Okay. Are you familiar with FPL having any
- 10 other transmission lines in Leon County than the NFRC?
- 11 A I am not aware of any. So, again, I would say
- 12 the questions regarding these two properties, two
- 13 locations, probably best suited for Witness Oliver.
- 14 Q Just in general, you would agree that the
- 15 longer distance that an energy -- that a generation
- 16 resource needs to be transmitted, all things equal, the
- more electricity that can be lost this line losses?
- 18 A It would be something that I would have to
- 19 study. I just -- again, I need to understand all the
- 20 elements where we are coming from, the line voltage, the
- 21 ampacity, a lot of -- there is a lot of attributes that
- 22 we need to evaluate to make that statement.
- 23 Q Sure. I just mean pulling back to
- 24 hypothetically first principles, the longer you send an
- 25 electron through a line, the more line losses you are

- 1 going to have?
- 2 A Is it a DC line? Is it an AC line? I mean,
- 3 there is a lot of attributes or questions I could ask.
- 4 I think in the purest sense, to answer your question,
- 5 there would be losses, yes.
- 6 Q That's all I am getting at. I understand if
- 7 you look at a, you know, HDDC -- or HDVC, you are going
- 8 to see smaller losses than an AC, but all lines are
- 9 going to have line losses, right?
- 10 A I could generally agree to that, yes.
- 11 Q Again, understanding that you are not in
- 12 charge of siting decisions, would FPL's transmission
- team have an opinion on the propriety of siting 150
- 14 megawatts of solar outside of its territory on a
- 15 transmission constrained line?
- 16 A No, we would not.
- Q Okay. You talked with Mr. Ponce earlier about
- 18 the CIAC tariff, and I have got a few follow-ups on
- 19 that.
- To begin with, I don't think you covered this.
- 21 What is the policy purpose of the CIAC tariff?
- 22 A The policy purpose, again, the general purpose
- of this is, one, to provide protection to the general
- 24 body of customers to make sure that any of these
- 25 anticipated loads from these customers that are -- have

- 1 expressed interest to coming to our service territory
- 2 are protected. And then beyond that, the policy is to
- 3 make sure that the cost causers are paying up front for
- 4 those costs, again, to not burden the general body of
- 5 customers.
- 6 Q And when you talk about cost causer, this is
- 7 related to the principle of cost causation?
- 8 A It's related to the customer that is coming to
- 9 our service territory and requesting to request to our
- 10 service territory.
- 11 Q Are you familiar with the sort of general
- 12 principle of cost causation?
- 13 A At an extremely high level, yes.
- 14 Q What is your understanding?
- 15 A Cost causation is coming from -- again, I
- 16 think in the general example that I have used, I would
- 17 say that's high my understanding, is somebody that is
- 18 requiring our service is the cost causer.
- 19 Q I guess let me put it this way: Would it be
- 20 fair to characterize the principle of cost causation as
- 21 the cost causer should pay the cost?
- 22 A I think we are getting to a level that I think
- is best suited for Witness Cohen to respond to.
- Q I understand that, and we will certainly ask
- 25 Ms. Cohen as well, but would you agree with that on a

- 1 general basis?
- 2 A On a general basis, yes.
- Okay. And you were speaking with my colleague
- 4 at OPC about your rebuttal testimony, would be your
- 5 adopted rebuttal testimony --
- 6 A Yes.
- 7 Q -- I shall say. And that affirmatively
- 8 rejected the proposal by FIPUG Witness Pollock to
- 9 increase the threshold under which CIAC would be tripped
- 10 and apply?
- 11 A Yes, and it also referenced that there is no
- 12 singularly correct threshold that could apply here.
- 13 Q Understood. But you specifically rejected
- 14 Witness Pollock's proposal because it would be less
- protective of the general body of ratepayers?
- 16 A The way it was described, and, again,
- 17 responded to in my rebuttal testimony supports that,
- 18 ves.
- 19 Q Okay. And I think there was a question about
- 20 the cost to hook up just a single customer. If we could
- 21 go to Exhibit 445 at master number E, as in echo, 93043?
- 22 And so here, I just wanted to confirm that
- even a single additional customer could actually have
- 24 costs of tens of millions of dollars to the system to
- 25 complete the necessary network upgrades to deliver

- 1 service to that customer?
- 2 A I think that's correct. Yes.
- 3 Q And just for my edification, looking at this
- 4 one, this response mentions a \$26.7 million cost to
- 5 build a 230 kilovolt transmission substation and
- 6 one-and-a-half or so miles of associated line?
- 7 A That's correct.
- 8 Q Recognizing, again, without getting into a
- 9 complicated electrical engineering pop quiz, what is the
- 10 maximum load that you would be able to serve -- ballpark
- 11 is fine -- on one-and-a-half miles of 230 kilovolt
- 12 transmission?
- 13 A I couldn't answer or give you a ballpark for
- 14 that.
- 15 Q That's totally fine.
- There was also a question about your testimony
- 17 that the threshold at which the CIAC tariff is triggered
- 18 represents 10,000 homes?
- 19 A The equivalent of 15 megawatts, yes.
- 20 Q And just to confirm, that would be the peak
- demand of 10,000 homes, not just median use?
- 22 A Yes. That's correct.
- 23 Q I have a few questions now for you on data
- 24 centers and the proposed large load customer service?
- 25 A Contract service.

- 1 Q Contract service. There it is. LLCS, I would
- 2 always use the acronyms.
- If we could go to Exhibit 890, and this is
- 4 master number F10-67. Is this an interrogatory that you
- 5 have adopted?
- 6 A Yes.
- 7 Q And the response in this interrogatory
- 8 indicates that FPL has entered into NDAs with multiple
- 9 third parties to explore the feasibility of locating
- 10 data centers in its service territory?
- 11 A Yes. That's correct.
- 12 Q But at the time of this response, FPL had not
- 13 executed any service construction or operating
- 14 agreements with any such party?
- 15 A That's what this says. Yes. Correct.
- 16 Q Do you know if that is still the case?
- 17 A What I can say is we have completed two
- 18 studies for two customers that have expressed interest
- 19 under this LLCS tariff.
- 20 Q And those would be engineering studies?
- 21 A Correct.
- 22 Q And under the proposed LLCS -- I believe you
- 23 spoke with my colleague about this -- there is a
- 24 six-month period for which the results of that study
- remain good, and the applicant can lock it in and act on

## 1 those values?

- 2 A That's what's supported within my testimony,
- 3 yes. A six-month engineering period and then a
- 4 six-month review period on the customer side.
- 5 Q Right. So once the customer receives the
- 6 study, they basically have six months to act on it, and
- 7 if they wait seven months, that study would be
- 8 considered stale and need to be redone?
- 9 A It could, yes.
- 10 Q And the point of that six-month period,
- 11 capping it at six months, is really to protect the
- 12 utility and existing customers because of the costs that
- 13 are locked into that analysis?
- 14 A Yeah, I think it goes a little lit beyond just
- 15 the costs. It's also the impacts to the grid, all the
- 16 technical engineering studies that take place on what
- 17 those loads are going to mean to the transmission or
- 18 distribution grid as well, and things could change.
- 19 Additional customers could come to request service, and
- 20 that could certainly impact and influence what was
- 21 provided to said customer in that window, or that
- 22 timeframe what we provided.
- 23 Q Yeah, and maybe I should have phrased it that
- 24 way. Cost is only one potential impact to other
- 25 customers on the grid. It could also impact the

- 1 availability of necessary capacity and other things,
- 2 right?
- 3 A Yes. That's correct.
- 4 Q So would it still be fair to characterize that
- 5 six-month cutoff as being protective of the existing
- 6 grid, and protecting customers on the existing grid from
- 7 the uncertainty that would come with adding a large load
- 8 at an increasingly distant step in the future?
- 9 A I think any definitive line in the sand. So
- 10 for instance, as supported in my testimony, it's six
- 11 months, but I think any timeframe, regardless of the
- 12 conditions or the length of that time, would require --
- 13 could require additional studies or the fact that those
- 14 studies have become stale.
- 15 Q Yeah, and I am not looking for the magic
- 16 number, tonic ideal of a time. Just the general
- 17 principle, it would be more protective to limit that
- 18 time period to six months than, say, a year?
- 19 A Earlier is absolutely better, yes.
- Q Do you know if the engineering studies that
- 21 FPL has completed requested service -- requested serving
- 22 load in 2027?
- 23 A I don't believe so. I think I answered before
- 24 rebuttal testi -- or interrogatory that was responded
- 25 that showed the beginning of 2028.

- 1 Q And why did FPL agree not to meet 2027 request
- 2 for load service?
- 3 A Well, part of that is the ability to serve
- 4 said load in a given timeframe, and that's why, as a
- 5 part of the LLCS-1 tariff, we have identified three
- 6 locations within our transmission grid to be able to
- 7 serve three gigawatts of load. So again, it's just to
- 8 make sure that we have the ability to serve that load
- 9 within that timeframe.
- 10 Q And you have identified three gigawatts of
- 11 capacity to serve that load?
- 12 A Yes. That's correct.
- Q Does that capacity not exist today?
- 14 A It does not exist today.
- 15 Q And where will that capacity come from?
- 16 A I think that's a better question for Witness
- 17 Whitley.
- 18 Q This is a generation idea, and not a
- 19 transmission capacity idea?
- 20 A The cost -- or the payments are associated to
- 21 generation.
- 22 Q The IGC is, right?
- 23 A That is correct.
- 24 Q And for the record, the IGC is the incremental
- 25 generation charge?

- 1 A I would point that question to Witness Cohen.
- 2 Q If we could go to Exhibit 416. This is master
- 3 number E90562. And this is another response that you
- 4 have adopted?
- 5 A Okay.
- 6 Q I meant that as question, but you will take
- 7 that subject to check?
- 8 A Subject -- if it was a question, yes, I would
- 9 say subject to check, yes.
- 10 Q I am happy to give you a master number with
- 11 Mr. De Varona's signature on it if that would be
- 12 helpful.
- 13 A No, I recall this response.
- Q Okay. So FPL is working with seven customers
- 15 that have submitted requests for engineering studies, as
- 16 vou have mentioned?
- 17 A The number is nine now. Two have been
- 18 completed, seven are currently active.
- 19 Q Thank you.
- Without revealing any confidential
- 21 information, do you know if any of these potential
- 22 customers are FEIA members?
- 23 A I don't know the answer to that question, but
- 24 I do not believe. I don't know.
- 25 Q And two customers have received those

- 1 engineering studies already. Without revealing any
- 2 confidential information, do you know when the six-month
- 3 period to accept and move forward with those studies
- 4 will expire?
- 5 A The exact timeframe, I don't.
- 6 Q Ballpark idea?
- 7 A I would say over the next couple of months.
- 8 Q In order to file for an engineering studies,
- 9 an applicant has to show site control of the property
- 10 where the load would be located, is that right?
- 11 A I believe that's the process, yes.
- 12 Q I believe it might be in this response. Well,
- 13 we can just take this one subject to check, but the site
- 14 control is really what I am trying to get at here. Do
- 15 you have an understanding of what site control means?
- 16 A No, I do not.
- Q Okay. If we could stay in Exhibit 416 and go
- 18 to E, as in echo, 90565? And do you recognize this as
- another interrogatory response that you have adopted?
- 20 A I believe this one has a cosponsor, correct?
- 21 Q Yes. Mr. De Varona was one of the sponsors?
- 22 A Understood.
- 23 Q And I suspect at least one other one would be
- 24 Ms. Cohen.
- 25 A That's correct. Yes.

- 1 Q This response asks what FPL is doing to manage
- 2 or mitigate the risk of data center customers being
- 3 cross-subsidized by the general body of ratepayer, is
- 4 that a fair characterization?
- 5 A Where exactly is that comment in the document?
- 6 I would have to read the whole thing just to make sure.
- 7 Q Just looking at the question itself: Please
- 8 describe FPL's approach to risk management or mitigation
- 9 with data centers and large loads and possible
- 10 subsidization from other classes. That's the subject of
- information that's being sought in this answer -- or in
- 12 the -- by the question.
- 13 A Understood.
- 14 **Q** Okay.
- A And then the subsequent comments, I would
- 16 point that directly to Witness Cohen to be able to
- 17 provide a response to that, regarding credit analysis
- 18 and risk --
- 19 Q Sure. Sure. For the detailed ones.
- 20 A Yes.
- Q Generally speaking, large data centers can
- 22 impose large upfront costs to the grid?
- 23 A Large load customers can, yes.
- 24 O And the risk to other customers would be that
- 25 if those upfront costs were incurred by upgrading

- 1 facilities to serve those customers and then the load
- 2 ultimately did not materialize, FPL would end up
- 3 recovering those capital costs from the general body?
- 4 A Well, there is actually -- I think there is
- 5 two elements to that question. So if you could ask it
- 6 again, I just want to make sure I am answering exactly
- 7 what you are asking.
- 8 Q Let's look at -- is where you are going the
- 9 generation side versus the transmission side?
- 10 A I am also -- well, to answer -- the way I
- 11 understand your question is a customer, a large load
- 12 customer comes to our service territory, the costs
- associated with the T&D upgrades -- or the -- to serve
- 14 their load will be paid up front by that customer
- through the new CIAC proposal that we have as a part of
- 16 this rate case.
- 17 Q And really, that -- I guess, looking at the
- 18 CIAC part of that, the difference in what has been
- 19 proposed in this case versus the current is paying up
- 20 front and having that refunded back to the customer
- versus paying incrementally over the four years?
- 22 A Correct, and it wouldn't be paid based on the
- loads or the revenues based on the CIAC calculation,
- 24 correct.
- Q Okay. Thank you.

- If we could go to Exhibit 428 at master number
- 2 E91812. If you could scroll to the answer on the next
- 3 page for subpart E.
- Is there any question I would ask you about
- 5 this something that you are going to want to refer to
- 6 Ms. Cohen?
- 7 A Not necessarily. No.
- 8 Q Okay. Well, then we will try.
- 9 It says in this second paragraph, if any
- 10 transmission network upgrades were necessary to serve
- 11 customers under the proposed LLCS-1 tariff, the costs
- would be recovered from the general body. Do I have
- 13 that right?
- 14 A Yes, that's correct.
- 15 Q How does that square with the cost causer
- principle that we were talking about earlier?
- 17 A Okay. So I think it's important to
- understand, one, why we selected three zones and have
- 19 proposed three zones -- or actually one area with three
- 20 zones. Again, it was to make sure that our system could
- 21 essentially serve three gigawatts of load, right, with
- 22 the expectation that customers of this size and scale
- would be coming to our service territory.
- The second reason was, and why those -- that
- 25 area is important is because it minimizes the need for

- 1 transmission upgrades. The transmission upgrades, as
- 2 referenced here, is something that the general body of
- 3 us customers would benefit from in the duration of that
- 4 service of that project, and that's why that is not
- 5 specifically pointed out in the CIAC, or would be
- 6 provided or charged to the large localed customer that
- 7 is coming to our service territory.
- 8 Q Yeah, I think I understand your testimony
- 9 that, as a general principle, any increase in
- 10 transmission facilities will serve the general body
- 11 because it makes it easier for FPL to transmit
- 12 electricity?
- 13 A Is there a question there?
- 14 Q I am asking, is that a fair characterization
- of your testimony?
- 16 A Say it again, please.
- 17 Q All new transmission good?
- 18 A Say that again. I am sorry.
- 19 Q Basically the idea that it's okay to recover
- 20 the cost of associated transmission facilities for
- 21 serving new large load customers, because as
- 22 transmission, that is something that will ultimately be
- 23 able to serve the entire grid and all customers on it?
- A For all transmission upgrades, yes, the
- 25 general body of customers will benefit from that,

- 1 correct.
- 2 Q Now, understanding the areas that have been
- 3 selected for LLCS-1 are based on proximity to high
- 4 transmission areas with existing technology, or rather,
- 5 existing assets there that would not need a lot of
- 6 additional build-out, how would the general body of
- 7 ratepayers be served by a lateral transmission line that
- 8 was going from, say, your big 500 kV lines there to a
- 9 one-off data center campus?
- 10 A So, again, as mentioned earlier in our
- 11 discussion, the transmission grid is interconnected,
- 12 right. So a transmission line that is directly serving
- 13 a customer connected to a large load customer, that is
- 14 to serve, provide service to that large load customer,
- but if because of that service there were impacts
- outside of that service territory to the grander
- 17 transmission grid and upgrades were required, those are
- 18 the upgrades I am referring to that the general body of
- 19 customers would serve -- would provide -- would be
- 20 provided service from in the future.
- 21 Q So let me make sure I understand this
- 22 correctly. Are you saying that if you need to build,
- 23 let's call it a mile-and-a-half of additional
- 24 transmission line, connect from that 500 kV line to a
- 25 new hypothetical data center, the data center would pay

- 1 for that, but if you needed to build a new substation to
- 2 connect that line -- a new substation to basically get
- 3 from the 500 kV line to a smaller line that could go to
- 4 that customer?
- 5 A No. That -- the substation, the transmission
- 6 line to connect and provide service to that customer
- 7 would be paid for by that customer. However, if
- 8 connecting that customer had an impact and required
- 9 transmission upgrades in another location in our service
- 10 territory to make sure that we could still provide
- 11 service to our customers reliably and in compliance,
- 12 that -- those are the upgrades I am referencing that the
- 13 general body of customers would pay for.
- 14 Q Thank you for that clarification.
- 15 A You are welcome.
- 16 Q Do you have any familiarity with the load
- profile of a large load customer?
- 18 A At a very high level.
- 19 Q What is your understanding?
- 20 A There is a lot of load that they are providing
- 21 -- connecting to the service territory, and there is
- 22 certainly, as it continues to grow, there is a ramp-up
- period, and then there is a consistent nature associated
- to that load profile once it's ramped up to, it's called
- 25 100 percent load factor.

- 1 Q And, yes, you sort of got to it there, but you
- would consider them to have a very high load factor?
- 3 A It depends on the customer you are referring
- 4 to. Large load customers, I think it's very -- there is
- 5 varying degrees of load factors as we see with our
- 6 current customers that are large load customers, but
- 7 particularly data centers tend to have a higher power
- 8 factor.
- 9 Q And you anticipated where I was going. If
- 10 we -- not just your general large load kind of
- 11 manufacturing, but if you focus on just data centers, we
- would associate these with a pretty high load factor?
- 13 A That is my understanding. Yes.
- 14 Q And do you have any understanding on the
- 15 general willingness of a data center to be an
- 16 interruptible customer?
- 17 A I am not really familiar with what the
- 18 expectations of data center customers are.
- 19 Q Okay. So you wouldn't know one way or the
- 20 other whether that would be -- interruptibility, for
- instance, would be compatible with data center
- 22 functions?
- 23 A I think that's something that we would
- evaluate as a part of our engineering studies for any
- 25 customer that comes to our service territory. To me,

- 1 that's one of the variables that they would provide to
- 2 us and we would evaluate it and make sure if, one, we
- 3 could serve it under those conditions, and if not, give
- 4 them whatever provisions we needed to be able to serve
- 5 their load.
- 6 Q Okay. Some questions now on transmission
- 7 planning and plant held for future use. So we are going
- 8 to try to avoid what's already been asked.
- 9 A Okay.
- 10 CHAIRMAN LA ROSA: Let's do this, since we are
- 11 kind of -- it looks like you are pivoting. Let's
- take a quick break. Let's give our court reporter
- a little bit of time. Let's reconvene in 10
- minutes, it's five minutes till four o'clock.
- MR. LUEBKEMANN: Thank you.
- 16 CHAIRMAN LA ROSA: Thank you.
- 17 (Brief recess.)
- 18 CHAIRMAN LA ROSA: All right. I think we can
- 19 go ahead and get started.
- 20 All right. FEL, you started to pivot your
- line of questioning, so you may pick up wherever
- you would like to go.
- MR. LUEBKEMANN: Thank you, Mr. Chairman.
- 24 CHAIRMAN LA ROSA: Sure.
- 25 BY MR. LUEBKEMANN:

- 1 Q And fortunately, OPC did cross off the great
- 2 majority of my plant held for future use questions, I
- 3 think, to everybody's delight.
- If we could go to Exhibit 7456. This would be
- 5 master F2-3833. Is this one you recognize?
- 6 A Yes, sir.
- 7 Q Okay. FPL has not triggered its capacity
- 8 shortage levels at any time in the last three years?
- 9 A That is correct.
- 10 Q And FPL has also not violated its obligations
- 11 to the Florida sharing group's contingency reserve over
- 12 the last three years?
- 13 A That's correct.
- 14 Q And if we could now go to Exhibit 335. And
- this will be master number E135.
- I know you had some questions on -- related to
- the additions to transmission plant held for future use,
- and I just wanted to look specifically, if you look at
- 19 the difference between the incremental plant held for
- future use for transmission in 2025 versus 2024, would
- 21 you agree it's a substantial increase?
- 22 A I would agree with the difference in the
- 23 numbers, but again, everything that is projected here
- has a project associated to it and a need in the next 10
- 25 years.

- 1 Q Would you say it's about a six times increase
- 2 over the preceding year?
- 3 A Six times five million, yes, that's correct.
- 4 Q Would it be fair to call a six fold increase
- 5 over the preceding substantial?
- A I think it's important to also understand
- 7 what's in the 4.49 to do that comparison, but on the
- 8 surface, four million to 26 million is an increase,
- 9 significant increase.
- 10 Q And the plant held for future use then floats
- 11 around that level for the remainder of the period?
- 12 A That's what it shows on this document, yes.
- On the distribution side, the increase is not
- 14 so dramatic, but would you also agree that it -- the
- 2025 value is elevated over the 2024 value?
- 16 A It is elevated, yes. But again, I think it's
- important to give some context behind what's in 2024.
- 18 Q And would you accept, subject to check, that
- 19 the increase in 2025 over 2024 on the distribution side
- is about two-and-a-half times?
- 21 A Yes. That's how the math works. Yes.
- 22 Q If we could now go to Exhibit 341 at page
- 23 E1068. Actually, you know, what it will probably be
- 24 easier to go to the demonstrative of this. Could we go
- 25 **to E1253?**

- 1 A I am there.
- 2 Q Great. And again, I am going to try not to
- 3 retread too much old ground, but I would like to make
- 4 sure that I am reading this chart correctly.
- 5 So if we look at Excel row -- can you find the
- 6 row for Sunbreak Substation? I apologize, I see what's
- 7 happened. This is the generation side.
- 8 All right. We can go back to the E1068. I
- 9 think I marked down the wrong demonstrative. And if you
- 10 could scroll to the next page amendment -- or to the
- 11 attachment. Are you able to enhance the size of that at
- 12 all? There we go okay.
- So if we look at the Sunbreak Substation,
- 14 which will be the fourth row down in that second group.
- 15 And I just want to confirm, if I look across the far
- 16 side of that row --
- 17 A Thank you.
- 18 Q -- that property was acquired in September of
- 19 2022, that's what the September '22 refers to, not
- 20 September 22nd?
- 21 A Correct.
- Q Okay. And what would be Excel row 55 is the
- 23 Levy South Dade you were speaking about earlier with
- 24 Mr. Ponce. I am trying to translate that here. There
- 25 it is. If you look at the beginning balance for 2026,

- it's about \$2.3 million for that particular property?
- 2 A The Levee-South Dade?
- 3 Q Yes.
- 4 A Yes.
- 5 Q Yes.
- 6 A Yes.
- 7 Q And then if you look at the ending balance for
- 8 2027, is it that same value?
- 9 A That's what it shows, yes.
- 10 Q Is that because land that is held in plant for
- 11 future use because it is land that does not depreciate?
- 12 A I would refer that question to Witness
- 13 Ferguson on the accounting practices of this process.
- 14 Q If you know, and then I am happy to follow up
- with Mr. Ferguson, if you know, is land that's held in
- plant for future use eligible for a return on equity?
- 17 A I believe it is.
- 18 Q And so if a parcel like Levee-South Dade sits
- in plant held for future use for almost 50 years, it's
- 20 earning a return each year?
- 21 A Again, I would refer that to Witness Ferguson
- 22 for the specifics.
- 23 Q A question I do think would be more fairly put
- 24 to you, you had a conversation with my colleague at OPC
- 25 about all land in the plant held for future use having

- an identified need in the next 10 years?
- 2 A Yes. That's correct.
- 3 Q How specific of a purpose is required to be
- 4 held in plant for future use?
- 5 A Well, generally, all of these projects have
- 6 either a transmission project associated to them, a
- 7 substation project associated to them, or a solar
- 8 interconnection associated to them.
- 9 Q For instance, would future transmission
- 10 right-of-way be a specific enough project?
- 11 A Yes, but there would be a little bit more
- 12 specifics in terms of the area and where -- to and from,
- but, yes, a transmission right-of-way could fall into
- 14 this, yes.
- 15 Q And when you look at something like the
- 16 Levee-South Dade property, has it this had the same
- 17 identified purpose for the over four decades that it's
- been in plant held for future use, or has that purpose
- 19 changed over time with updates to the transmission grid?
- 20 A I can't speak to the previous purposes for the
- 21 Levee to South Dade line. What I can say is that it
- does have a purpose over the next 10 years, and to be
- 23 put in service in 2032.
- Q Do you know if it had -- if that land had
- 25 previous in-service dates that would have been sooner

## 1 than 2032?

- MR. BAKER: I believe the witness just
- answered that question, Mr. Chairman.
- 4 CHAIRMAN LA ROSA: I agree. Can you rephrase
- 5 the question, or move in a --
- 6 MR. LUEBKEMANN: I can move on.
- 7 BY MR. LUEBKEMANN:
- 8 Q It would be fair to say that the 500 kV system
- 9 transmission rebuild would be one of the larger
- 10 applicable projects that the company is seeking recovery
- 11 for as part of this rate case, on the transmission and
- 12 distribution side specifically?
- 13 A Subject to check, it is one of the larger
- 14 projects, yes, that we are seeking recovery for. But,
- 15 again, the 500 kV sys -- transmission system, the
- 16 rebuild of that is critical for the service of our
- 17 customers, and it's, as I mentioned earlier in my
- 18 explanation of the Levee to South Dade, it is the
- 19 backbone of our transmission grid.
- 20 Q And that project is due to be completed this
- 21 year?
- 22 A No, our projections are, I believe, subject to
- check, by 2027, that project should be completed.
- 24 O For the 500 kV rebuild?
- 25 A That is correct. The last 200 structures

- 1 should be done over the next two years.
- 2 Q And are you familiar with the costs associated
- 3 with the full 500 kV rebuild project?
- 4 A I believe there was an interrogatory response
- 5 associated to that.
- 6 Q All right. Could we go to Exhibit 339, master
- 7 number E797? And would this show the capital costs for
- 8 that project from 2019 to 2024?
- 9 A Yes, it does.
- 10 Q Subject to check, if you were to add up the
- 11 budgeted and actual lines, does it sound right that the
- 12 project has exceeded the budgeted amount by about 367
- million over that time period?
- 14 A Subject to check, I believe there has been
- some puts and takes associated to actuals versus the
- 16 budget, as this depicts.
- Q Generally, have those puts and takes put it
- over or under the budgeted amount?
- 19 A I believe it's over, but I think it's also
- 20 important to highlight several of the conditions and
- 21 signs of the times that we were contending with while we
- 22 were working it this project. You know, in the midst of
- 23 COVID, you certainly were executing this project,
- 24 certainly a lot of increased costs associated to not
- only material, but also labor, had been seen and

- 1 materialized and impacted the execution of this project
- 2 over the last couple of years.
- 3 Q Switching gears slightly. FPL uses metrics
- 4 like the SAIDI, which was referred to earlier, to
- 5 measure its performance and its improvements in
- 6 reliability?
- 7 A That's one of the many metrics we use, yes.
- 8 Q And if we could go -- this was seen earlier,
- 9 but I would like to go back to it. Could we go to
- 10 Exhibit 528, and this is as F2497 -- 479 -- excuse me,
- 11 F2-479. And this would be an interrogatory that you
- 12 have adopted the answer to?
- 13 A Yes, sir.
- 14 Q And it shows FPL's historic SAIDI and SAIFI
- performance from 2020 to 2024?
- 16 A Yes. That's correct.
- 17 Q And SAIDI is the System Average Interruption
- 18 Duration Index?
- 19 A Yes.
- 20 Q And that would be the measure of the average
- 21 cumulative outage generation for each customer served
- 22 over a given time?
- 23 A Yes.
- Q So here, we are talking total minutes of
- 25 outage per year, right?

- 1 A That is correct.
- 2 Q And this data is adjusted to move outages
- 3 associated with extreme weather like hurricanes?
- 4 A Yes, we are following the Public Service
- 5 Commission exclusion criteria for this. Correct.
- 6 Q Yeah, generally the weather adjusted SAIDI is
- 7 what this would be?
- 8 A Not weather adjusted. I would say extreme
- 9 weather. Extreme weather, and then whatever the rules
- 10 are provided to us by the Commission on what can be
- 11 excluded from these numbers.
- Q Okay. So if we go to page four of five of
- this exhibit, this shows that in 2023, FPL's combined
- 14 system total was a 43.2?
- 15 A That is correct.
- 16 Q So that means that in 2023, the average FPL
- 17 customer would have experienced 43 minutes and 12
- 18 seconds of outages?
- 19 A Of outage time. Outage minutes.
- 20 Q Outage time -- of outage minutes over the
- 21 course of the year?
- 22 A That is correct.
- 23 Q And the total for the new combined system is
- 24 **42.4** in 2024?
- 25 A Yes.

- 1 Q So would you agree, that's a decrease of about
- 2 .8 minutes, or 48 seconds?
- 3 A Yes.
- 4 Q And on page five, this shows FPL's SAIFI
- 5 performance?
- 6 A Yes, it does.
- 7 Q And that's the System Average Interruption
- 8 Frequency Index?
- 9 A That is correct.
- 10 Q And that metric calculates the average number
- of times a customer on the system would experience
- 12 service outages over the course of a year?
- 13 A An interruption, correct. Yes.
- 14 Q An interruption. And that would be defined as
- 15 more than momentary?
- 16 A More than 60 seconds, correct.
- 17 Q And you say yours are also adjusted per
- 18 Commission rules to remove hurricanes?
- 19 A Yes, they are.
- 20 Q In 2023, FPL's combined system had a .62
- 21 SAIFI?
- 22 A Yes. That's correct.
- 23 Q So in other words, the average customer didn't
- 24 get interrupted even one time over the course of the
- 25 year?

- 1 A With exclusions, yes.
- 2 Q Setting aside storms and other extreme
- 3 weather, the average customer didn't experience even one
- 4 interruption over the course of the year?
- 5 A Correct.
- 6 Q And if we look at the combined system average
- 7 for 2024, it was a .55?
- 8 A Yes.
- 9 Q So, again, that average customer didn't get
- interrupted outside of any storm events -- extreme storm
- 11 events?
- 12 A Say it again, please.
- 13 **Q** Sure.
- With a value of .55, which is less than one --
- 15 A Uh-huh.
- 16 Q -- is it fair to say that in 2024, the average
- 17 customer did not experience any non-extreme weather
- 18 related interruption?
- 19 A That's what that shows, yes.
- 20 Q If we could go to your adopted direct at page
- 21 29. This is C-7-1646. And in the middle of this
- 22 page -- are you there?
- 23 A Yes, I am.
- 24 Q In the middle of this page, there is a chart
- 25 that is showing FPL's incremental capital spending on

- 1 transmission and distribution projects between 2024 and
- 2 2027?
- 3 A Yes. That's correct.
- 4 Q It says FPL spent \$2.71 billion on
- 5 transmission and distribution in 2024?
- A All together yes.
- 7 Q And that's incremental and capital?
- 8 A It's capital.
- 9 Q That's total capital?
- 10 A Total, yes.
- 11 Q If I wanted to create a per unit cost for
- 12 improvements in a particular reliability metric, would
- 13 you agree that I could add up the total spending in a
- 14 given period of time and divide the delta of that metric
- 15 into it?
- A Generally speaking, yes, but the reliability
- does not work that way. There is several components of
- 18 reliability, call it story, there is the prevention and
- detection side of reliability which are several of our
- 20 programs which prevent outages. And then there is not
- 21 only the prevention, but also then the restoration or
- 22 response to reliability, which is when outages occur,
- 23 allow for those, you know, to build the system that
- 24 makes sure that you can respond and restore service to
- our customers quickly, and certainly safely.

- So again, I think there is a lot of moving
- 2 parts to be able to make that calculation. And again,
- 3 it's also important to highlight that, as I mentioned
- 4 earlier, that, you know, the reliability of service that
- 5 we have provided to our customers is not something that
- 6 we see as optional, and we also see that what our
- 7 customers have begun to expect from a reliability
- 8 perspective is something that we want to certainly
- 9 invest in and certainly maintain. And in order to
- 10 maintain, it requires the investments that are
- 11 highlighted here on this page.
- 12 Q And FPL does not track, perhaps for the
- 13 reasons you have just named, FPL does not track such a
- per unit performance on reliability metrics?
- 15 A No. What FPL does from a reliability
- 16 perspective, is we use the metrics, several of the ones
- is that we covered, and we benchmark with the industry
- 18 all of those metrics, and it's consistent with what
- 19 other utilities do across the United States.
- Q But you would agree there is a cost for every
- input into FPL's reliability from upgraded, transformer
- 22 hardened pole, better insulator, better vegetation
- 23 management, all of this has a cost, right?
- 24 A Yes, all of those devices you mentioned do
- 25 cost money.

- 1 Q So we talked about the improvement going from
- 2 2023 to 2024 on the SAIDI score of being 48 seconds.
- 3 A That's the difference between the two years,
- 4 yes.
- 5 Q And would you accept my math, subject to
- 6 check, that 2.7 billion divided by 48 is about 56.4
- 7 million?
- 8 A If you were just doing that calculation just
- on the math perspective, yeah, subject to check, I could
- 10 agree with that calculation only.
- 11 Q Okay. If you accept that calculation -- if
- 12 that is a fair calculation, would that then mean that
- 13 FPL spent about \$56.4 million per decreased -- for each
- 14 second saved on its SAIDI index?
- 15 A No, I couldn't agree with that, because if you
- look particularly on this page of the direct testimony,
- 17 there is many elements that are included within that
- 18 \$2.7 billion as highlighted here, and reliability is .37
- of that amount that you are referencing, or utilizing
- 20 for your calculation.
- 21 Q That's all my questions. Thank you very much,
- 22 Mr. Jarro.
- 23 A Thank you.
- CHAIRMAN LA ROSA: Let's go to FAIR.
- MR. SCHEF WRIGHT: Thank you, Mr. Chairman. I

- just have a very few questions for Mr. Jarro.
- 2 EXAMINATION
- 3 BY MR. SCHEF WRIGHT:
- 4 Q Good afternoon, Mr. Jarro.
- 5 A Good afternoon.
- 6 Q Nice to see you.
- 7 A Likewise.
- 8 Q My first -- these are all follow-ups on
- 9 questions proposed to you by Mr. Luebkemann.
- 10 My first question is: In terms of dollar
- 11 value, if you know, can you tell us how much plant FPL
- 12 has that is not in the plant held for future use rate
- 13 base?
- 14 A I do not know the answer to that question.
- 15 Q Fair enough.
- 16 My next question relates to the questions he
- 17 asked you about sea level rise. I was born and raised
- in Miami. Are you from South Florida, by any chance?
- 19 A Home in it is in Miami.
- Q Okay. I bet you know about king tides?
- 21 A Yes.
- 22 Q Have the king tides influenced your work in
- 23 terms of getting power from the -- from where the
- transmission system picks it up to the meter?
- 25 A No. I think, particularly areas like Miami

- 1 breach, certainly where we have duck and manhole
- 2 systems, any water intrusion is something that can
- 3 certainly impact that, particularly if it's saltwater.
- 4 I don't know if it's necessarily attributed to king
- 5 tides, but I can say it's something that we contend with
- 6 when we are doing new construction, when we are doing
- 7 restoration work, any work that we are doing in those
- 8 areas, we certainly have saltwater to contend with.
- 9 Q So is that associated with sea level rise?
- 10 And I am not trying to go into the seaward land. I am
- just trying to ask -- I used to go to Matheson Hammock
- 12 all the time and -- to go to the wading beach. I tried
- 13 to go there a few years ago. The road was not passable,
- 14 it completely ripped up by the water. Just have you had
- 15 that experience, and is that sea level rise?
- 16 A I can't answer that. I have been to Matheson
- 17 Hammocks also, and that beach is still there, so -- but
- 18 I don't know what's contributing to your comment.
- 19 Q Okay. Thanks.
- And finally, Mr. Luebkemann was trying to ask
- 21 you about how much power a 230-kV line could deliver.
- 22 What's the -- and I have actually practiced a couple of
- 23 transmission line need determination cases involving
- 24 FPL. What is the typical amperage capacity of a 230-kV
- line on your system?

- 1 A I couldn't answer that question.
- 2 Q Do you know how much juice the
- 3 Bobwhite-Manatee Line carries?
- 4 A No, sir. I do not.
- 5 Q Do you -- would you agree that 1,000 amps to
- 6 2,000 amps is a reasonable range for what a 230-kV line
- 7 could carry depending on whether it's single circuit or
- 8 double circuit?
- 9 A Subject to check, but, yes, I think that's
- 10 reasonable.
- Q Okay. Just in ballpark terms, a 2,000-amp
- 12 230-kV line would deliver about 430 MVA?
- 13 A It depends on the size of the transformers and
- 14 the substation and what you are stepping it down to,
- but, again, it all depends on those elements.
- Okay. Is that a reasonable ballpark estimate,
- 17 **400, 500 MVAMW?**
- 18 A Generally, yes.
- 19 Q Thanks very much. That's all the questions I
- 20 had.
- 21 A Thank you.
- 22 CHAIRMAN LA ROSA: Thank you.
- 23 FIPUG?
- MS. PUTNAL: No questions.
- 25 CHAIRMAN LA ROSA: Walmart?

- MS. EATON: No questions.
- 2 CHAIRMAN LA ROSA: FEIA?
- MR. MAY: No questions.
- 4 CHAIRMAN LA ROSA: Staff?
- 5 MR. STILLER: Just a few, Mr. Chair.
- 6 EXAMINATION
- 7 BY MR. STILLER:
- 8 Q Good afternoon, Mr. Jarro.
- 9 A Good afternoon.
- 10 Q Do you recall when Mr. Luebkemann was asking
- 11 you about the North Florida Resilience Connection?
- 12 A Yes, I do.
- 13 Q And you mentioned that there were certain
- 14 constraints impairing the full functioning of that line
- 15 right now?
- 16 A Yes, sir.
- 17 O Is there a timeline when those constraints
- will be addressed?
- 19 A As I mentioned, there is third parties that
- 20 are responsible for the projects associated to that
- 21 work. And all indications are that by the end of this
- 22 year, we should essentially have those proj -- they
- 23 should have those projects completed. But just like
- 24 with any project, it all -- sometimes it depends on
- 25 Mother Nature, their ability to have their resources

- 1 available to execute that. So right now, the word is by
- 2 the end of this year.
- 3 Q And when those projects are complete and the
- 4 constraints are lifted, what is the full capacity of
- 5 that line?
- A I believe it's about 100 -- 850 megawatts,
- 7 approximately.
- 8 Q And when those constraints are lifted and it
- 9 can be fully utilized, is that line capable of being
- 10 used bidirectionally?
- 11 A Yes, I believe so.
- 12 Q Can you explain what that means?
- 13 A I believe it means, again, that the power can
- 14 flow to and from, call it the northwest region to the
- peninsula side of our infrastructure.
- 16 Q When that is complete, and the line is fully
- functional and able to function bidirectionally, will
- 18 that increase the reliability of the overall FPL system?
- 19 A I don't know that it necessarily will have an
- 20 increased impact on the reliability. I think making
- 21 sure that our transmission grid is operating at its
- 22 fullest and optimal position is good for reliability.
- 23 Q That's all the questions we have.
- 24 CHAIRMAN LA ROSA: Great. Thank you.
- 25 Commissioners, any questions?

1	Commissioner Fay.
2	COMMISSIONER FAY: Thank you, Mr. Chairman.
3	Just one quick question.
4	Mr. Ponce asked you about some of the
5	properties that you guys hold, you mentioned that
6	there is the ten-year structure, where you look at
7	what you are holding, and every year you reevaluate
8	that. You also mentioned there is an accounting
9	evaluation that's done on that, and you said that
10	was done monthly.
11	THE WITNESS: Correct.
12	COMMISSIONER FAY: Can you just explain how
13	that's correlated, if at all, for the decision to
14	either retain or move a property in a different
15	category, or get rid of it?
16	THE WITNESS: Absolutely.
17	So the ten-year site plan is something that is
18	essentially evaluated and created on a yearly
19	basis. And as a part of the ten-year site plan
20	process, we identify, we need a transmission line,
21	we needed a substation. And then, again, if there
22	was a property available for that need, then we
23	leverage that property. If we need a property then
24	we work with our corporate real estate team to
25	purchase said property for that purpose.

1	On the monthly basis, is we review essentially
2	everything that we are holding and we ensure that
3	the needs that we have identified are still
4	required. And then if they are not needed, then we
5	move that on to, as I mentioned earlier,
6	nonutility, or we put the property in service
7	because the project is completed.
8	COMMISSIONER FAY: Gotcha. Okay, so there
9	is to your point, there is an evaluation that's
10	done on a monthly basis that determines if a
11	property may be used into a different category and
12	then potentially sold off, I guess, if not
13	THE WITNESS: Correct.
14	COMMISSIONER FAY: not used? Okay. Thank
15	you.
16	THE WITNESS: Yes, sir.
17	CHAIRMAN LA ROSA: Commissioners, there wasn't
18	anymore questions, correct? All right. Excellent.
19	Let's send it back to FPL for redirect.
20	MR. BAKER: No redirect for Mr. Jarro. Thank
21	you.
22	CHAIRMAN LA ROSA: Okay. Let's go ahead and
23	excuse the witness.
24	THE WITNESS: Thank you.
25	CHAIRMAN LA ROSA: Thank you for answering

1 questions. 2 (Witness excused.) 3 CHAIRMAN LA ROSA: Are there any items that --I am not sure if anything was identified, but 4 5 any -- go ahead, OPC. 6 MR. PONCE: Thank you. I just have one to 7 offer into evidence. This is identified on the 8 staff CEL as Exhibit 528. That's 528. 9 CHAIRMAN LA ROSA: We have got an exhibit 10 number for that? 528. Okay. Anything else, FEL? 11 MR. LUEBKEMANN: Thank you, Mr. Chair. FEL12 would move Exhibits 428, 745, 890 and 1108. 13 CHAIRMAN LA ROSA: Any objections? 14 apologize, I didn't ask that. 15 MR. BAKER: No objections to either OPC or 16 FPL -- or FEL, I should say. 17 CHAIRMAN LA ROSA: Yeah, I got it. 18 MR. BAKER: Thank you. 19 CHAIRMAN LA ROSA: All right. 20 (Whereupon, Exhibit Nos. 428, 528, 745, 890 & 21 1108 were received into evidence.) 22 CHAIRMAN LA ROSA: Staff, anything else? 23 MR. BAKER: Mr. Chair, if I may, we will move 24 Exhibits 44 through 48, along with Exhibits 288 and

289, please.

25

1 CHAIRMAN LA ROSA: Okay. 2 MR. BAKER: Thank you. 3 CHAIRMAN LA ROSA: No objections to those, so 4 moved. 5 (Whereupon, Exhibit Nos. 44-48, 288 & 289, 6 please were received into evidence.) 7 I look to staff, we don't CHAIRMAN LA ROSA: 8 have anything that we are -- there is nothing from 9 staff moving in? 10 No, Mr. Chair. MR. STILLER: 11 CHAIRMAN LA ROSA: Okay. All right. Let's go 12 ahead and move to the next witness. It's 4:30 now. 13 I would like to land somewhere around the six 14 o'clock hour if we can, so I think we can get a 15 good jump start on the next witness. 16 FPL, you may call your next witness. 17 MR. BURNETT: Mr. Chairman, we call Tom Broad. 18 CHAIRMAN LA ROSA: Mr. Broad, when you are 19 settled, just do you mind stay standing and raise 20 your right hand when you get a chance? Thank you. 21 I will just swear you in quickly. 22 Whereupon, 23 THOMAS BROAD 24 was called as a witness, having been first duly sworn to

25

speak the truth, the whole truth, and nothing but the

- 1 truth, was examined and testified as follows:
- THE WITNESS: Yes.
- 3 CHAIRMAN LA ROSA: Excellent. Thank you.
- 4 FPL, it's --
- 5 MR. COX: Good afternoon, Chairman and
- 6 Commissioners.
- We call our next witness, Chairman La Rosa,
- 8 Witness Thomas Broad.
- 9 EXAMINATION
- 10 BY MR. COX:
- 11 Q Mr. Broad, could you please state your name
- 12 for the record?
- 13 A Thomas Broad.
- Q What is your business address, Mr. Broad?
- 15 A 4300 Kyoto Gardens Drive, Palm Beach, Florida,
- 16 33410.
- 17 Q By whom are you employed and in what capacity?
- 18 A I am employed by Florida Power & Light as
- 19 Vice-President of Operations of Fossil Operations and
- 20 Pipelines.
- 21 Q And on whose behalf are you testifying in this
- 22 proceeding for your direct testimony?
- 23 A Florida Power & Light.
- Q Mr. Broad, did you cause to be filed on
- 25 February 28th, 2025, 17 pages of direct testimony in

1	this proceeding?
2	A Yes, I did.
3	Q Did you cause to be filed on April 29th, 2025,
4	an errata with corrections to your direct testimony?
5	A Yes.
6	Q At this time, Mr. Broad, do you have any other
7	changes or corrections to your direct testimony?
8	A No, I do not.
9	Q If I were to ask you, Mr. Broad, the same
10	questions today as contained in your prefiled testimony
11	as filed on February 28th, 2025, as corrected by your
12	April 29th, 2025, errata, would your answers be the
13	same?
14	A Yes.
15	MR. COX: Chairman La Rosa, FPL would request
16	that Mr. Broad's February 28th, 2025, prefiled
17	testimony direct testimony as corrected be inserted
18	into the record as though read.
19	CHAIRMAN LA ROSA: So moved.
20	MR. COX: Thank you.
21	(Whereupon, prefiled direct testimony of
22	Thomas Broad was inserted.)
23	
24	
25	

1	BEFORE THE
2	FLORIDA PUBLIC SERVICE COMMISSION
3	DOCKET NO. 20250011-EI
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8	FLORIDA POWER & LIGHT COMPANY
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10	DIRECT TESTIMONY OF THOMAS BROAD
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23	Filed: February 28, 2025

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<sup>2</sup> C3-1360

1		I. INTRODUCTION
2	Q.	Please state your name and business address.
3	A.	My name is Thomas Broad, and my business address is 4300 Kyoto Gardens Drive,
4		Palm Beach Gardens, Florida 33410.
5	Q.	By whom are you employed, and what is your position?
6	A.	I am employed by Florida Power & Light Company ("FPL" or the "Company") as the
7		Vice President of Power Generation Operations and Pipelines in the Power Generation
8		Division ("PGD") Business Unit.
9	Q.	Please describe your duties and responsibilities in that position.
10	A.	I am responsible for the operations and maintenance of all the Company's fossil power
11		plant generation across Florida, including traditional fossil fuel-fired steam boilers,
12		combined cycle ("CC"), aero-derivative and large frame simple cycle combustion
13		turbine ("CT") technologies.
14	Q.	Please describe your educational background and professional experience.
15	A.	I earned a Bachelor of Science Degree in Engineering - Marine from Maine Maritime
16		Academy and a Master of Business Administration from Nova Southeastern
17		University. I also am a Certified Six Sigma Black Belt. Overall, I have more than three
18		decades of Power Generation related experience. My extensive professional
19		background involves technical, managerial, and commercial experience in
20		progressively demanding assignments.
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22		I joined FPL in 1985 on the Marketing Services Team. I have since served as Vice
23		President - Central Maintenance, where I led the safe and cost-effective execution of

<sup>3</sup> C3-1361

1		major maintenance activities throughout the U.S. and Canada. I also served as Vice
2		President - Engineering & Construction, where I was responsible for leading all
3		engineering and construction activities for NextEra Energy's generation fleet.
4		Beginning in 2018, I served as Vice President – Solar, Battery Storage, and Pipelines
5		for NextEra Energy projects across the United States, Canada, and Spain.
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7		I am currently Vice President of PGD's Fossil Operations with a combined non-nuclear
8		production capacity of over 32,000 MW in 2024.
9	Q.	Are you sponsoring any exhibits in this case?
10	A.	Yes. I am sponsoring the following exhibits:
11		• Exhibit TB-1 List of MFRs Sponsored or Co-sponsored by Thomas Broad
12		• Exhibit TB-2 FPL Fossil and Renewable Fleet MW Capability and Technology
13		Changes
14		• Exhibit TB-3 FPL Fleet Performance vs. Industry
15		• Exhibit TB-4 FPL vs. Industry Benchmark Comparisons
16		• Exhibit TB-5 FPL Fossil/Solar Fleet Heat Rate Comparison
17		• Exhibit TB-6 Cumulative Benefits from FPL's Modernized Fleet
18		• Exhibit TB-7 CC & PV Plant Level O&M \$/kW Comparisons
19	Q.	Are you sponsoring or co-sponsoring any Minimum Filing Requirements in this
20		case?
21	A.	Yes. Exhibit TB-1 lists the minimum filing requirements ("MFR") that I am sponsoring
22		and co-sponsoring.
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#### Q. What is the purpose of your testimony?

A. The purpose of my testimony is to support the reasonableness of the fossil and renewable generating fleet non-fuel operating and maintenance expenses ("O&M") and capital expenditures ("CAPEX") in order to provide reliable, cost-efficient electricity to customers. My testimony addresses two major areas: (1) fossil and renewable generating fleet performance; and (2) fossil and renewable generating fleet non-fuel O&M and maintenance/reliability CAPEX. Consequently, any references to FPL and generating fleet in my testimony and exhibits exclude the nuclear fleet.

#### 9 Q. Please summarize your testimony.

- FPL has continuously transformed its fossil/solar generating fleet and has substantially improved its operating performance across key indicators integral to the reliable and cost-efficient generation of electricity for customers (as shown on Exhibits TB-2 and TB-3). Also, among large electric utility fossil fleets between 2021 and 2023 (as shown on Exhibit TB-4), FPL's performance has been best-in-class in non-fuel O&M, heat rate and Equivalent Forced Outage Rate ("EFOR"). Some of the accomplishments since FPL's last rate case include:
  - reducing heat rate (fuel use) by nearly 6 percent
    - achieving 1.31 percent average EFOR
    - reducing air emission rates by 8 percent for CO<sub>2</sub>, 44 percent for NOx, and 68 percent for SO<sub>2</sub>
    - reducing total non-fuel O&M cost per kilowatt ("kW") by 31 percent, despite increases in the Consumer Price Index ("CPI") of 16 percent over that period.

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These accomplishments have produced tremendous value for FPL customers. For example, heat rate improvements for fossil and solar have saved \$16.4 billion since 2001, \$5.2 billion of which was realized since FPL's last rate case in 2021. In 2024, FPL saved customers more than \$867 million in fuel costs compared to 2001. These savings demonstrate that the investments FPL is making over the long-term are paying off in the result of significant recurring fuel savings that customers are experiencing each year.

FPL's renewable capacity to serve customers has increased from 14 percent of our generating capacity (excluding nuclear) in 2022 to a projected 30 percent in 2026. These fleet changes are key drivers of FPL's continued operating improvements (as reflected in Exhibits TB-3 through TB-6). FPL's outstanding performance improvements provide customers with cleaner, more cost-effective, and fuel-efficient generation. Maintenance/reliability CAPEX and non-fuel O&M funding are essential to providing these performance improvement benefits, and PGD's prudent management of these expenditures plays a significant role in achieving our exceptional generating fleet performance.

#### 1 II. FOSSIL AND RENEWABLE GENERATING FLEET 2 **OPERATING PERFORMANCE** 3 Q. What indicators does FPL use to measure the operating performance of its 4 generating fleet? 5 A. FPL uses several indicators to measure the operating performance of its generating 6 fleet. These indicators include, among others shown on Exhibit TB-4: heat rate to 7 measure the amount of fuel used to produce a unit of electricity; EFOR to measure 8 reliability; and non-fuel O&M in dollars per installed kW of capacity ("\$/kW") to 9 measure resource management cost effectiveness. As shown in the exhibits to my 10 testimony, the indicators for FPL's generating fleet performance consistently have been 11 top decile or best in class against energy industry peers, which is consistent with FPL's 12 long-term historical performance.

## 13 Q. Please describe the indicator FPL uses to measure generating efficiency.

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A. The key indicator of generating efficiency in converting fuel to electricity is heat rate, which measures the amount of fuel required to generate a kilowatt hour ("kWh") of electricity. Heat rate is expressed in British Thermal Units per kilowatt-hour ("Btu/kWh") and calculated by dividing the total Btu heat input (from fuel burned) by the net kWh of electricity generated by those units. Significantly, the lower the heat rate, the less fuel is required to generate the same amount of electricity, and the greater the customer savings in fuel costs.

#### 21 Q. Has the generating efficiency of FPL's fleet improved over time?

A. Yes. FPL's generating efficiency improvement is included in Exhibit TB-5 showing a generating fleet heat rate reduction from 9,635 Btu/kWh in 2001 to 6,384 Btu/kWh in

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1 2024. This represents nearly a 34 percent efficiency improvement. Since FPL's last rate 2 case, heat rate has improved from 6,763 Btu/kWh in 2021 to 6,384 Btu/kWh in 2024, a nearly 6 percent efficiency improvement. Although fuel prices may vary in the future, 3 FPL customers will always have lower relative fuel charges because of FPL's 4 5 generating efficiency improvements. 6

#### Q. How does the generating fleet heat rate performance compare to the industry?

7 A. As shown on Exhibit TB-5, FPL's generating fleet heat rate compares extremely 8 favorably to the industry. Between 2021 and 2023, the industry average heat rate 9 improved 1.6 percent (from 9,364 Btu/kWh to 9,218 Btu/kWh). In contrast, FPL's heat 10 rate improved 3.8 percent (from 6,763 Btu/kWh to 6,505 Btu/kWh) over the same period, even though FPL was already a superior performer on this measure. FPL's 12 generating fleet heat rate performance has been best-in-class every year since FPL's 13 last rate case as shown on Exhibit TB-4.

#### 14 Q. Please describe the indicator used to measure plant reliability.

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15 EFOR represents generating plant reliability and is a measure of a unit's inability to A. 16 provide electricity when dispatched to operate. EFOR is reported as the percentage of 17 hours when a generating unit could not deliver electricity relative to all the hours during which that unit was called upon to operate. FPL continually strives for – and has 18 19 achieved – a low EFOR. This results in greater availability of efficient generating 20 capacity for customers.

#### Has the EFOR of the generating fleet also improved over time? Q.

22 A. Yes. Since FPL's last rate case the EFOR of FPL's generating fleet has averaged 23 1.31 percent while the industry has averaged 10.2 percent through the latest available

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1		2023 industry data. Also, FPL's generating fleet EFOR performance has been best-in-
2		class between 2021 and 2023, as shown on Exhibit TB-4.
3	Q.	How does excellent generating fleet EFOR performance benefit customers?
4	A.	Excellent fleet EFOR performance represents better reliability and provides more
5		opportunity for highly efficient capacity to operate and minimize customer fuel costs
6		and air emissions.
7	Q.	What are FPL's generating fleet performance accomplishments since its last rate
8		case?
9	A.	FPL's generating fleet performance improvements include:
10		• Reducing heat rate by nearly 6 percent.
11		• Achieving a 1.31 percent average EFOR.
12		• Reducing air emission rates by 8 percent for CO <sub>2</sub> , 44 percent for NOx and
13		68 percent for SO <sub>2</sub> .
14		• Reducing total non-fuel O&M cost per kW by 31 percent.
15		
16		Also, since the last rate case, FPL's generating fleet performance has been top decile.
17		In fact, in 2023 FPL was best-in-class, not just top decile, in every key indicator FPL
18		uses to measure the operating performance of its generating fleet.
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### 1 III. FOSSIL AND RENEWABLE GENERATING FLEET 2 **NON-FUEL O&M AND CAPEX** 3 Q. How has FPL improved the generating fleet's non-fuel O&M over time? 4 A. We have worked aggressively to reduce and contain expenses since FPL's last rate case 5 (January 2021 through December 2024) despite a nearly 16 percent cumulative increase 6 in the CPI. For example, between 2021 and 2024, FPL's total non-fuel O&M per unit 7 of installed capacity was reduced 31 percent, from \$11/kW to \$7.6/kW (as shown on 8 Exhibit TB-4). Another indication of FPL's excellent O&M performance (also as 9 depicted on Exhibit TB-4) is that when comparing to the latest available 2023 industry 10 peer group average cost (\$32.8/kW), FPL's \$8.3/kW cost is \$24.5/kW or 75 percent 11 lower. Given FPL's 2023 fleet capacity of approximately 30,240 MW, this \$24.5/kW 12 difference resulted in significant annual non-fuel O&M savings of more than 13 \$740 million in 2023 alone. 14 15 Additionally, Exhibit TB-4 shows that since FPL's last rate case, FPL's generating fleet 16 has been best-in-class in total non-fuel O&M per kW among its large electric utility 17 fleet peers. FPL witness Reed's Productive Efficiency O&M comparison (Exhibit JJR-18 7) further supports FPL's production fleet non-fuel O&M performance excellence. 19 20 21 22

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1	Q.	Considering that combined cycle and solar photovoltaic assets are nearly all the
2		generating assets in FPL's fossil/renewables operating fleet, how does FPL's
3		O&M performance for these plant types compare to the industry's performance
4		with similar CC and PV technologies?
5	A.	In a comparison of the CC and PV technology plants shown on Exhibit TB-7, FPL CC
6		O&M cost performance was approximately 73 percent lower than industry peers. FPL's
7		solar PV plant group's O&M performance was approximately 62 percent lower than
8		industry peers. The 2023 solar PV performance was \$1.98/MWh in 2023, and the
9		industry top decile performance was \$3.48/MWh.
10	Q.	What steps has FPL taken to reduce fossil fleet and solar O&M and CAPEX
11		associated with operating and maintaining the fleet?
12	A.	PGD's cost practices and procedures for controlling expenses have led to a continually

PGD's cost practices and procedures for controlling expenses have led to a continually improving cost profile, as evidenced by Exhibits TB-4, TB-5, and TB-6. Both O&M and capital cost discipline, combined with reliable operations, are top priorities for PGD. We continually strive for operational excellence by sharing and replicating cost and reliability improvements across the generating fleet. FPL has implemented multiple actions to reduce costs, including optimizing overhaul cycle intervals. By applying condition-based maintenance principles, we balance spending effectively while maintaining excellent reliability. This involves focusing on equipment conditions and adhering to calendar or cycle-based maintenance schedules. This is achieved through collaboration between FPL's centralized engineering experts and equipment manufacturers.

FPL has also implemented real-time operational monitoring technologies at PGD's 2 Fleet Control Center ("FCC") for the fossil fleet, which detect issues before failure, allowing for timely and cost-effective corrective actions to maintain high reliability. 3 Since the last rate case, the commissioning of the FCC, which enables remote operation 4 5 of over 20,000 MW of fossil installed assets, has resulted in a reduction of 6 approximately 80 personnel with no impact on daily plant operations. 7 We have developed advanced analytical tools that provide the fossil fleet operators with 8 increased awareness and daily feedback on startup timing, system response accuracy, 9 and other critical parameters that may affect fuel costs and equipment performance. 10 Services like overhaul work planning, execution, engineering, and technical services continue to be centralized around equipment fleet teams. 12 FPL uses these same real-time, "24/7/365" operational monitoring and diagnostic 13 technologies at the Renewable Operations Control Center ("ROCC") for the 14 renewables fleet, enabling us to detect issues in advance of failure to ensure timely, 15 lower cost corrective actions and maintain high reliability. 16 FPL also continuously negotiates pricing and contract terms for equipment and 17 services. We standardize operational processes and procedures for sharing and 18 replication across the generating fleet. 19 Additionally, FPL has retired approximately 1,136 MW of older, less efficient 20 generating units since the last rate case, including Scherer Coal Unit 4 (634 MW share) and Daniel Coal Units 1 & 2 (502 MW share). Resource management has been

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1		enhanced as modern power plants require fewer staff compared to older plants, and our
2		solar power plants demand even lower staffing levels. Lastly, we employ Six Sigma
3		quality tools to drive continuous improvements across the fleet.
4		These efforts collectively contribute to a more cost-efficient and reliable fossil and
5		solar fleet operation.
6	Q.	How does FPL's O&M performance for Battery Energy Storage System ("BESS")
7		sites compare to industry performance?
8	A.	According to a 2024 study by Black and Veatch, industry information ranges between
9		\$8/kW to \$14/kW AC-year for stand-alone BESS assets' plant O&M (inclusive of
10		BESS, inverters, MV transformers, substation, but exclusive of augmentation,
11		scheduling, utilities, assets management, regulatory, interconnect, and other G&A).
12		FPL's BESS asset performance in 2023 was \$3.83/kW or about 52 percent better than
13		the low end of the range mentioned above. FPL's average EFOR for its BESS assets
14		from the period of 2020 – 2024 is 1.13 percent.
15	Q.	How do PGD's levels of base non-fuel O&M for the Steam and Other Production
16		functions for the 2026 Projected Test Year and the 2027 Projected Test Year
17		compare to the Commission's benchmarks on MFR C-41?
18	A.	PGD's Steam and Other Production level of base non-fuel O&M for the 2026 Projected
19		Test Year is below the MFR C-41 O&M benchmark levels. For the 2026 Projected Test
20		Year, PGD's base non-fuel O&M funds request is \$39.1 million below the benchmark.
21		For the 2027 Projected Test Year, PGD's base non-fuel O&M funds request is
22		\$32.5 million below the benchmark. On a \$/kW basis, FPL's excellent O&M

1	performance of \$8.3/kW cost is 50 percent lower than the latest available 2023 industry
2	peer group top decile cost (\$16.5/kW).

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As shown on Exhibit TB-2, FPL transformed and modernized its generating fleet portfolio. This transformation reduced costs, air emissions, and fuel oil reliance, significantly improving fleet performance.

# Q. What is FPL's actual and projected generating fleet non-construction CAPEX over the 2022-2027 period?

"Non-construction" refers to all operating plant overhaul and non-overhaul maintenance/reliability capital expenditures. From 2022 to 2027, FPL is set to invest an average of \$802 million annually in its fleet, focusing on non-construction and essential maintenance activities that ensure long-term reliability and reduced fuel consumption. Notably, 85 percent of this investment is earmarked for critical overhaulrelated costs. These efforts are a cornerstone of FPL's robust maintenance program, which leverages expert recommendations from Original Equipment Manufacturers ("OEM"), condition-based equipment assessments, and FPL Engineering experts' strategic determinations. Our most significant and intensive undertakings, the combustion turbine Hot Gas Path and Major outages, are essential, adhering strictly to OEM-mandated operating hours and start limitations to guarantee optimal performance. In 2024, we executed 11 Hot Gas Path and Major Outages, with ten more planned for 2025. As we look ahead to the projected test year of 2026, we anticipate performing 18 additional outages, and in 2027, a further 21 are scheduled. The remaining CAPEX will be strategically allocated to vital non-outage projects across

1	our renewable and fossil fleet, reinforcing our commitment to operational excellence
2	and sustainability.

- Q. Why is the 2026 and 2027 level of fossil fleet non-construction CAPEX of \$746 million and \$906 million, respectively, higher than the 2024-2027 average of fossil fleet non-construction CAPEX of approximately \$682 million?
- A. The 2026 and 2027 levels of fossil fleet non-construction CAPEX are higher than the 2024-2027 average due primarily to the increased number of Other Production major overhauls scheduled in 2026 and 2027.

#### 9 Q. What are the drivers of the major overhauls scheduled for 2026 and 2027?

A.

With the growth of FPL's fossil fleet, numerous major overhauls are required to be performed in 2026 and 2027. From 2001 through 2027, FPL will have added more than 19,000 MW of combined cycle units at 12 different sites. These additions include 51 CTs and their associated major components – generators, heat recovery steam generators ("HRSG") and steam turbine generators – along with the balance of plant equipment (motors, fans, valves, etc.). Each of these major components ultimately require a major overhaul, but the cycle varies depending upon the manufacturer of the equipment and the type of component. To secure the operational benefits of this growing fleet of fuel-efficient facilities, ongoing maintenance CAPEX is necessary. Several units that came into service in the early to mid-2000s will require major overhauls of critical components at the same time. Major overhauls are necessary to maintain unit and system efficiency, performance, and reliability. Failure to perform required overhauls would also potentially invalidate the parts warranty. FPL has to do maintenance when required or expose its customers to higher costs.

#### 1 Q. Are FPL's generating fleet O&M and CAPEX forecasts reasonable? 2 Yes. For the reasons detailed in my testimony and exhibits, FPL's 2026 Projected Test A. 3 Year and 2027 Projected Test Year generating fleet O&M and CAPEX forecasts are reasonable and reflect our intentions for continued superior performance. As discussed 4 5 previously, PGD has the leadership and performance track record for managing and 6 sustaining excellent generating fleet performance for the benefit of FPL's customers. 7 Summarizing: PGD's commitment to low-cost, reliable generating fleet performance has been 8 9 demonstrated by holding non-fuel O&M \$/kW cost essentially flat despite 10 inflation, resulting in best-in-class cost performance. 11 Our investments have provided and will continue to provide long-term 12 customer benefits through direct operating or maintenance cost savings, 13 increased generating efficiency that provides fuel and air emission avoidance, 14 and maintains or improves system reliability. 15 Ongoing maintenance in the form of additional reliability overhauls and 16 acquisition of spare parts, however, is required to continue achieving the 17 operational benefits of this growing fleet of fuel-efficient facilities. FPL has a 18 demonstrated track record, as my testimony and exhibits demonstrate, to ensure 19 such costs are reasonable and prudent. 20 FPL's fleet \$/kW costs outperform the industry by: 21 Total fleet non-fuel O&M as shown on Exhibit TB-4. CC and PV non-fuel O&M as shown on Exhibit TB-7. 22

In all cases, FPL's costs are lower for customers relative to the industry and FPL's past performance while providing a lower average heat rate and higher system reliability. Our value proposition continues to get even better through investments in highly efficient equipment, operational improvements, and cost-efficient performance. PGD has demonstrated prudent management of its operations over extended periods, with exceptionally positive results. We are an organization that is enthusiastic and focused on continuing to transform and improve FPL's generating fleet to provide even more cost-effective, reliable, and environmentally responsible power for customers.

- 9 Q. Does this conclude your direct testimony?
- 10 A. Yes.

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Rate Increase by Florida

Power & Light Company

Docket No. 20250011-EI

Filed: April 29, 2025

## FLORIDA POWER & LIGHT COMPANY ERRATA SHEET OF THOMAS BROAD

Florida Power & Light Company ("FPL") hereby submits this errata sheet to correct certain portions of the Direct Testimony and exhibits of FPL witness Thomas Broad originally filed in the above referenced docket on February 28, 2025.

<b>Direct Testimony</b>	Changes/Corrections
Pg. 10, ln. 7	Remove "\$11.0/kW" and insert "\$10.7/kW" Remove "\$7.6/kW" and insert "\$7.4/kW"

Exhibit/MFR	Changes/Corrections
Ex. TB-3, pg.1	For the blue bar for O&M Cost (\$/kW), remove "9.60" and replace with "9.50"
Ex. TB-4, pg. 1	In the first chart (Cost \$/kW), remove "11.0" above the 2021 bar and insert "10.7", remove "9.8" above the 2022 bar and insert "9.6", and remove "7.6" above the 2024 bar and insert "7.4"

Respectfully submitted this 29th day of April 2025,

By: <u>/s/ William P. Cox</u>

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#### **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by Electronic Mail to the following parties of record this 29th day of April 2025:

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/s/ William P. Cox

William P. Cox Senior Counsel Fla. Bar No. 0093531 Attorney for Florida Power & Light Company

- 1 BY MR. COX:
- 2 Q Mr. Broad, did you also have Exhibits TB-1
- 3 through TB-7 attached to your prefiled testimony?
- 4 A Yes, I did.
- 5 Q And did you cause to be filed an errata
- 6 correcting errors on Exhibits TB-3 and TB-4 on April
- 7 **29th**, **2025**?
- 8 A Yes.
- 9 Q At this time, Mr. Broad, do you have any other
- 10 changes or corrections to your exhibits?
- 11 A No, I do not.
- MR. COX: Chairman La Rosa, I would note that
- Mr. Broad's exhibits as corrected have been marked
- as hearing exhibits and identified on staff's
- 15 Comprehensive Exhibit List as CEL Exhibits 49
- through 55.
- 17 CHAIRMAN LA ROSA: Okay.
- 18 BY MR. COX:
- 19 Q Mr. Broad, could you please summarize the
- 20 topics addressed in your direct testimony for the
- 21 Commission?
- 22 A Yes.
- Chairman and Commissioners, thank you for the
- opportunity to provide my testimony today.
- On February 28th, 2025, I provided written

- 1 testimony that supports the reasonableness of Florida
- 2 Power & Light's fossil and renewable fleet operations
- 3 request. In that testimony, I outlined the capital and
- 4 nonfuel O&M expenditures required to operate the fossil
- 5 and renewable fleet in a safe and reliable manner to
- 6 meet the customer needs.
- 7 I am happy to answer any questions regarding
- 8 my testimony.
- 9 Q Thank you, Mr. Broad.
- 10 MR. COX: Chairman, La Rosa, Mr. Broad is
- tendered for cross-examination.
- 12 CHAIRMAN LA ROSA: Great. Thank you.
- OPC, you are recognized for questioning.
- MR. PONCE: Thank you, Mr. Chair.
- 15 EXAMINATION
- 16 BY MR. PONCE:
- Q Good afternoon, Mr. Broad.
- 18 A Good afternoon.
- 19 Q So as you basically just mentioned, one of the
- 20 purposes of your testimony is in support nonnuclear O&M
- 21 costs?
- 22 A That's correct.
- Q When it comes to 2026, I believe the budget
- for nonnuclear maintenance is approximately 22 million?
- 25 A Could you repeat that number?

- 1 O I believe it's 22 million.
- 2 A 22 million?
- 3 Q Correct.
- 4 A No. That's incorrect.
- 5 Q Give me one moment. Maybe I phrased this
- 6 wrong, but generation maintenance costs?
- 7 A No.
- 8 Q If we can go to E148. And that was E, as in
- 9 Eric. Do you recall sponsoring or co-sponsoring this
- 10 discovery interrogatory here?
- 11 A Yes. What you are referring to is a subset of
- 12 the O&M budget. This is the outage budget, which is a
- 13 subset. The overall budget is thereabouts 265 million.
- 14 Q Thank you.
- 15 If we could scroll down to E149. Is this the
- same type of budgeting that you just told me?
- 17 A Excuse me?
- 18 Q Is this the same type of budget that you just
- 19 told me?
- 20 A Yes, for the outage.
- Q Okay. When it comes to the outages, it's fair
- 22 to say that the budgets for -- have been -- since 2020,
- 23 the budgets for these have been consistently below the
- 24 actuals?
- 25 A Yes. That is correct.

- 1 Q In 2022, we see that the variance was 52.7
- 2 percent?
- 3 A Yes. That is correct.
- 4 Q It's fair to say it's a pretty significant
- 5 variance, right?
- 6 A Yeah. I would note that the overall outage
- 7 budget represents about 10 percent of our O&M budget.
- 8 And, yes, we have gone through them, and we are able to
- 9 reduce costs and we are carrying those costs forward as
- we continue for our proposal here through '26 through
- 11 '29.
- 12 Q When you say carrying the costs forward, is it
- 13 that in relation to the explanation here, that this
- variance was due to outage deferrals?
- 15 A Yes, some were due for outage deferrals.
- 16 Q And when you say outage deferral, what is
- meant by that?
- 18 A Yeah, work may get delayed, but eventually all
- 19 the maintenance that's slatted for an outage gets done.
- 20 We might have, in this case, deferred some work.
- Q As they say, you know, chickens will
- 22 eventually come over to roost. That means that
- eventually that outage is going to have to be accounted
- 24 for, right?
- 25 A That is correct.

- 1 Q Okay. In 2024, you see the variance
- percentage there was 70.3 percent?
- 3 A Yes.
- 4 Q So that means the actuals were off by over
- 5 two-thirds from the budget?
- 6 A Yes. I would note there is some one-time
- 7 events there, but what I would also like to highlight,
- 8 if you look at that budget as we go forward from '26
- 9 through '29, the actual four-year term is less than what
- 10 we spent in the previous years.
- So, you know, as you tack about the costs
- 12 going forward, we are lower going forward than we were
- 13 historically.
- 14 Q You mentioned that the costs in 2024 are
- lower, but when we get to 2025, they are back up to 15.2
- 16 million, right?
- 17 A Where are you showing that?
- 18 Q That is E153, about two or three pages down.
- 19 A Yeah, I would -- if I could note, on 2024,
- 20 there were -- there was a strategic vendor relationship
- 21 that was a two-year cost savings that represented almost
- 22 \$5 million. Those were one-time events that we had.
- 23 Some of these deferrals are one-time events and don't
- 24 carry forward.
- So when I look at the budget, the budget is

- 1 built bottoms-up by a team of experts. What we have
- 2 proposed here is based upon our current condition and
- 3 expectation of the repairs that are needed for the work
- 4 as we go forward. So the fact that we were under
- 5 previously does not necessarily mean that it's
- 6 appropriate, but these numbers would be going forward.
- 7 However, I will also note that we have carried
- 8 many of these savings forward, and continue to try to
- 9 drive costs out of the business.
- 10 Q For variances ranging from 50 to 70 percent,
- is isn't it fair to say that adjustments downward by a
- 12 corresponding amount would be fair?
- 13 A No, I would disagree with that. Again, this
- 14 budget is built from ground -- from ground-up. It's
- done by our team of experts that go through, many
- 16 factors affect that; the current age of the condition,
- 17 the operating factors that go with that. So as we go
- 18 through that history, it does not necessarily mean that
- 19 that's going to repeat as we go forward.
- 20 Q Isn't it true that historical information was
- used in developing historical projected costs for 2025
- 22 through 2027?
- 23 A Historical costs are used to generate
- estimates, not necessarily the scope of work. As we
- 25 spoke, you know, spoken before, historical costs are

- 1 used to generate the estimate.
- 2 Q I'm sorry, so was that a yes or no then?
- 3 A Would you repeat the question, please?
- 4 Q So was that a yes or no then?
- 5 A Would you repeat the question, please?
- 6 O Isn't it true that the historical information
- 7 is used in developing projected costs for 2025 to 2027?
- 8 A Yes. It's one piece.
- 9 Q If -- even if it's only one piece. If this
- 10 historical information is included, doesn't that mean
- 11 that it's likely these costs are overstated as well?
- 12 A Again, as I mentioned, as we look at the
- 13 budget, what's been proposed, we have gone through a
- 14 very, very extensive review and analysis of the current
- 15 condition of the equipment, the operating condition, we
- 16 have put forth what is needed to ensure the reliability
- of the equipment over the current rate period. So these
- 18 numbers --
- 19 Q Please go ahead.
- 20 A The fact that we underran on those before is
- 21 not a predicator of the costs that we would have going
- 22 forward.
- Q Again, I appreciate all the detail, but if I
- 24 may ask if you could preface the detail with yes or no.
- 25 Let me ask the question again.

- 1 So the fact that historical information was
- 2 used in developing these costs, doesn't that mean that
- 3 these costs were also likely overstated?
- A No, I would disagree. As I said, it's one
- 5 portion of it.
- 6 Q And one of the ways FPL has tried to decrease
- 7 its nonfuel O&M includes implementing realtime
- 8 operational technologies at PGD's fleet control center,
- 9 right?
- 10 A That is correct.
- 11 Q This resulted in a reduction of approximately
- 12 **80 personnel?**
- 13 A Yes. That's correct.
- 14 Q Isn't it true that at least some of these 80
- personnel were moved into other roles?
- 16 A Excuse me? Could you repeat the question?
- 17 Q Isn't it true that at least some of these 80
- 18 personnel were moved into other roles at FPL?
- 19 A Yes, they were moved into other roles.
- 20 However, the staffing, the overall staffing was reduced
- 21 across the plants by 80 positions.
- 22 Q Isn't it true, then, that while the positions
- themselves may be gone, at least some of these actual
- 24 people are not?
- 25 A Yes.

- 1 Q Doesn't that mean that irrespective of whether
- 2 the positions went down or not, these employees are
- 3 still contributing to FPL's payroll expenses?
- 4 A Yes, but there is 80 less people there, so,
- 5 you know, in this case, they may have taken a different
- 6 role, which, you know, we really try to make sure we
- 7 take care of our employees. And if there are different
- 8 roles when we eliminate positions, we absolutely would
- 9 take advantage of that. But as we have gone through the
- 10 implementation of that, there are 80 less people. The
- 11 payroll has been reduced by 80 people.
- 12 Q It's your opinion that FPL's heat rate
- 13 improvement since 2020 -- since 2001 have saved
- 14 customers approximately 16.4 billion?
- 15 A That is correct.
- 16 Q Isn't it true that this figure was calculated
- 17 by deriving the additional fuel needed if FPL did not
- 18 modernize its fleet in 2001?
- 19 A That is correct.
- 20 Q So in other words, at least in part, this
- 21 calculation was made by assuming that FPL maintained the
- 22 same fleet it had just over 10 years ago?
- 23 A Yes, that was the assumption.
- Q Now, the other assumption that was made by the
- 25 calculation was if FPL did not start adding solar

- 1 generation in 2009, is that right?
- 2 A Yes.
- 3 Q So, again, this assumption means -- the
- 4 assumption that was relied on was that FPL would add no
- 5 solar over the course of 15 years?
- A No, that was not the assumption. I think what
- 7 we are trying to demonstrate is the actions that we have
- 8 taken over the past two decades to modernize our fleet,
- 9 bring in advanced gas turbines and solar has resulted in
- 10 over \$16 billion of fuel savings for the customer. Had
- 11 we not engaged in any of that, obviously, the fuel costs
- 12 would have been over \$16 billion more.
- 13 Q But that was based on the assumption that FPL
- 14 would not have had added solar generation in 2009 and
- 15 beyond?
- 16 A Would you repeat that question?
- 17 **O** Sure.
- 18 So again, that assumption was that FPL did not
- add solar to its system starting in 2009 and beyond?
- 20 A When I look at the matrix, I don't have that
- in front of me, but all the solar that we have added has
- 22 been included in that fuel savings. That total number
- is a function of the advanced gas turbine, the
- 24 modernization, the upgrades and the solar that we have
- 25 added to the system that has resulted in substantial

- 1 fuel cost savings.
- 2 Q If we could go to F, as if frank, 2-3369? Do
- you remember sponsoring or co-sponsoring this
- 4 interrogatory response?
- 5 A Yes.
- 6 Q If you -- take a moment, if you need it, to
- 7 read the response.
- 8 A Yes, and to your point, it noted thereon, too,
- 9 that it's -- that the workpaper uses actual output to
- 10 calculate fuel if needed. We did not add the solar
- 11 since 2009.
- 12 Q If we can move on, then, to your Exhibit TB-5,
- this is at C, as in Charlie, 3-1381.
- So if we look at this timeline here, I think
- it's fair to say that FPL starts in 2001 with primarily,
- 16 if not entirely, traditional CC plants?
- 17 A That's correct.
- 18 Q When I say CC plant, if you could explain what
- 19 CC means?
- 20 A CC is combined cycle, which is a combination
- of gas turbine heat recovery steam generator going into
- 22 also connected with the steam turbine.
- 23 Q And it looks like it's not noted at least,
- unless I am missing it, in which case, please feel free
- 25 to correct me, that the first instance of solar is at H,

- 1 at least on the graph -- excuse me, it looks like G has
- 2 solar?
- 3 A Which number?
- 4 Q G, when we look at the appendix below.
- 5 A Yes, 220 megawatts at G.
- 6 Q And that looks like it was added about
- 7 mid-2015?
- 8 A Yes, that's correct.
- 9 Q When it comes to solar and heat rate -- I am
- 10 sorry, let me repeat that.
- When it comes to solar and heat rate, solar is
- 12 fuel free, right?
- 13 A Yes, it is.
- 14 Q So doesn't that mean that, by definition,
- solar is always going to improve heat rate efficiency?
- 16 A Yes, it does.
- 17 Q And then if we go towards the end of that
- 18 chart, starting at I, which is a little after 2020, it
- looks like, it looks like other than K, all of these are
- 20 solar additions?
- 21 A I, as Okeechobee Clean Energy Center.
- 22 Q Thank you. I missed that. FPL --
- 23 A And --
- Q Sorry go ahead.
- 25 A Yeah, and K. But also, L has Dania Beach

- 1 Energy Center at 1,200 megawatts.
- 2 Q I see. Thank you for that as well.
- Relatedly, FPL is in the process of acquiring
- 4 Vandolah, right?
- 5 A Yes, that's my understanding.
- 6 Q What kind of plant is Vandolah?
- 7 A Accuse me?
- 8 Q What kind of power plant is Vandolah?
- 9 A Vandolah is a simple cycle GE.
- 10 Q Compared to solar, since solar has no fuel, by
- 11 definition, then, Vandolah is going to be less efficient
- 12 for FPL's heat rate, right?
- 13 A It depends on how much we run, but, yes, if
- 14 you -- if you look at, you know, a combined cycle plant
- 15 compared to a solar addition, yes, it has -- it's not
- 16 fuel free.
- 17 Q Has FPL done any calculus on how the
- 18 acquisition of Vandolah is going to affect its heat
- 19 rate?
- 20 A No, I would refer to any of those
- 21 calculations, or any of those determinations to Witness
- 22 Whitley, with resource planning.
- Q I can follow up with Witness Whitley, but do
- you have any general knowledge about that?
- 25 A No, again, I would refer that to Witness

- 1 Whitley.
- 2 Q I am sorry, we have been talking this whole
- 3 time about heat rate. If you could just explain what we
- 4 mean by heat rate?
- 5 A Yeah, heat rate is measured in BTU, British
- 6 Thermal Units, per kilowatt hour, and it's a measure of
- 7 efficiency. We use that to determine -- in this case
- 8 here, you can see as the title, we are looking at the
- 9 combined FPL fossil and solar heat rate.
- 10 Q Going forward, FPL is mostly basing more solar
- 11 generation on battery, right?
- 12 A Yes.
- 13 Q Looking at the chart again, going from 2001 to
- 14 2024, I think it's noted here, but it's an overall 30
- 15 percent improvement, right?
- 16 A Yes.
- 17 Q If we look at 2021, if I am interpreting the
- 18 chart right, in 2021, FPL's heat rate was at 6,763 BTUs
- 19 per kilowatt hour?
- 20 A That is correct.
- 21 Q And then if we go to 2024, FPL has improved to
- 22 6,384 BTUs per kilowatt hour?
- 23 A That is correct.
- 24 Q And now, again, obviously any improvement is
- good, but if we are going from these three years, that's

- an improvement of about five to six percent?
- 2 A Yes, thereabouts.
- 3 Q You are familiar with the concept of the law
- 4 of diminishing returns, right?
- 5 A Yes, I am, but I will note that each and every
- one of these projects were analyzed through the resource
- 7 planning. They are all CPVR positive, and they are
- 8 beneficial to the customer.
- 9 Q That's fair enough, but nonetheless, isn't it
- 10 fair to say that FPL is experiencing diminishing returns
- 11 when it comes to its heat rate?
- 12 A Albeit diminishing returns, it's still
- 13 outstanding value for our customers. They continue to
- 14 value with our addition to solar.
- 15 Q That sounded like a yes to me, is that right,
- 16 vour answer?
- 17 A The returns are not as big as they were back
- in the years, but still each and every one of these
- 19 projects are cost beneficial, and the customers will
- 20 continue to receive value.
- 21 Q You may have been present when I basically
- 22 asked the last question to Mr. Jarro, but is there any
- point to a system that has perfect heat rate but is
- 24 unaffordable to customers?
- 25 A Again, all those analysis are done through

- 1 Witness Whitley and resource planning, and all those
- 2 calculations, so I would defer that question to him.
- 3 Q You don't have any independent knowledge
- 4 yourself?
- 5 A No, I do not.
- 6 Q If you give me one moment. I think that's
- 7 everything I had. Thank you very much, Mr. Broad.
- 8 A Thank you.
- 9 CHAIRMAN LA ROSA: Thank you.
- 10 Let's move to FEL.
- MR. MARSHALL: Thank you, Mr. Chairman.
- 12 EXAMINATION
- 13 BY MR. MARSHALL:
- 14 Q Good afternoon.
- 15 A Good afternoon.
- 16 Q I am going to pick up on sort of the theme of
- 17 the line of questions that we were just asking -- that
- 18 Mr. Ponce was just asking about right now.
- 19 FPL's generation fleet has become an industry
- 20 leader on low heat rate?
- 21 A Yes.
- 22 Q That leads to a lot of fuel savings?
- 23 A Yes, it does.
- Q And that's thanks -- those savings are thanks
- in part to FPL's capital investments in its generation

- 1 fleet?
- 2 A Yes, I would agree.
- 3 Q And some of those capital investments in the
- 4 existing in the preexisting generation thermal fleet
- 5 have been made to improve their efficiencies, is that
- 6 right?
- 7 A Yes.
- 8 Q And that's led to an overall \$5.2 billion in
- 9 fuel cost savings?
- 10 A I am not sure what you are referring to. If
- 11 you had a document that --
- 12 Q If we could go to Exhibit TB-6 attached to
- 13 your testimony. Do you see the reference there to the
- 14 approximate \$5.2 billion in fuel cost savings?
- 15 A Yes.
- 16 Q Can you explain what that is based on?
- 17 A Yes. That's going back and looking at the,
- 18 again, it carries on from what we talked about
- originally from the 16.7 billion that originated from
- 20 the start of the modernization through 2021. It picks
- 21 that up from 20 -- excuse me, 2001. It picks that up
- from 2021 and carries that through 2024.
- 23 So it -- within -- embedded within that is
- some of the previous savings that we have got from the
- long-term program we have had on upgrading modernization

- 1 and adding solar to the fleet.
- 2 Q And when you make capital investments in your
- 3 generation fleet, that can add to rate base?
- 4 A Yes.
- 5 Q And do you know if fuel costs are allocated --
- 6 I am sorry, first, a previous question.
- 7 So these savings in fuel costs, that leads to
- 8 lower fuel costs on customer bills, that portion of the
- 9 **bill?**
- 10 A Yes, I would agree.
- 11 Q And do you know if fuel costs are allocated on
- 12 an energy bases to a customer class, or is that a better
- 13 question for Ms. Cohen and Mr. DuBose?
- 14 A I would defer that to Ms. Cohen.
- 15 Q If we could go to master F10-3735, part of FEL
- 16 127, which is on the CEL as Exhibit 1001.
- This document includes new solar plant
- 18 addition through 2024?
- 19 A Yes, it does.
- Q Would you agree that in recent years, the
- 21 majority of nameplate capacity has been from solar
- 22 additions?
- A Would you repeat that question, please?
- Q Would you agree that in recent years, the
- 25 majority of additional nameplate capacity on FPL's

- 1 system has come from solar additions?
- 2 A Yes, I would agree with that.
- 3 Q And if you go to the tab solar plants count by
- 4 year. In 2024, FPL added 30 solar plants?
- 5 A That is correct.
- 6 Q And that would be about 2,235 megawatts of
- 7 nameplate capacity?
- 8 A Subject to check.
- 9 Q So and do you -- you can take this subject to
- 10 check, but prior to 2024, FPL had about 4,803 megawatts
- of nameplate solar capacity?
- 12 A Subject to check.
- 13 Q And in 2025, do you know if FPL is adding
- 14 another 12 solar sites with a nameplate capacity of
- 15 **894** megawatts?
- 16 A I would agree with that subject to check.
- 17 Q And you can also take this subject to check,
- so that would be a total of 7,932 megawatts of nameplate
- 19 solar capacity on the grid this year?
- 20 A Yes.
- 21 Q And would you agree that that's almost
- 40 percent more solar nameplate capacity since 2023?
- 23 A Subject to check, yes.
- Q Of all the -- I'm switching topics.
- 25 A Okay.

- 1 Q Of all the FPL witnesses testifying in this
- 2 case, who would be the witness most knowledgeable about
- 3 forced outages rates of FPL's thermal power generation?
- 4 A That would be me.
- 5 Q And what is a forced outage?
- 6 A Forced outage is when a unit is removed from
- 7 service in an unplanned nature, you know, a unit could
- 8 trip, a unit could be forced off unexpectedly.
- 9 Q And sometimes you will see the abbreviation
- 10 EFOR, are you familiar with that?
- 11 A Yes. That's equivalent forced outage rate.
- 12 Q And what is -- what does the equivalent forced
- 13 outage rate indicate?
- 14 A The equivalent forced outage rate is a rate,
- and it's the amount of time that the unit is asked to
- operate in relationship to the number of hours that it
- 17 does run. So obviously, if a unit ran a few hours and
- 18 it was off for, you know, a shorter term, you could have
- 19 a bigger EFOR. So it's a rate based upon the service
- 20 hours.
- 21 Q And FPL's forced outages rates, how would you
- 22 characterize them?
- 23 A FPL's forced outage rate is outstanding. It's
- 24 best-in-class. Top decile.
- 25 Q And your forced outage rate did jump up a bit

- 1 in 2024, is that right?
- 2 A Yes, it did jump up in 2024. However, we were
- 3 still top decile in our performance in 2024.
- 4 Q And in 2024, do you believe that those were
- 5 one-time issues?
- 6 A If you look back, historically, yes, they are
- 7 one-time issues. All of those events we analyzed very
- 8 thoroughly. We ensure that we have countermeasures
- 9 going forward to ensure that this does not happen again,
- 10 and I am really happy to say that we are having an
- 11 outstanding year in 2025.
- 12 Q And so would you expect your 2026 equivalent
- forced outage rates to look more like 2023 or now, you
- 14 know, standing here, or more like 2024?
- 15 A If you look at our target as we have gone
- 16 forward, our projected target is 2.25 percent, so that
- 17 is the current target that we are having. It's top
- 18 decile or best-in-class.
- 19 Q And you are currently meeting that target?
- 20 A We are slightly below that for 2025.
- 21 Q And what is your -- what is it so far for
- 22 **2025?**
- A Well, approximately 1.9 percent.
- 24 Q You have the red binder in front of you.
- 25 A Okay.

- 1 Q If you could go to tab 356C? C, I'm sorry.
- 2 C, as in Charlie.
- 3 CHAIRMAN LA ROSA: Check if your microphone is
- 4 on. It may have turned off.
- 5 THE WITNESS: Sorry.
- 6 BY MR. MARSHALL:
- 7 Q Do you recognize this document?
- 8 A No, I do not.
- 9 Q 356C? What is --
- 10 A It's titled FPL Fossil Overhaul IRP 2025 to
- 11 2034 Rev 8, 10/8/24.
- 12 Q And so do you know what business unit at FPL
- would be responsible for developing this document?
- 14 A I would assume this was developed by power
- generation through the engineering department.
- 16 Q And so would your department be responsible
- for developing the maintenance schedule of FPL's thermal
- 18 generation units?
- 19 A Yes, my team does develop the outage schedule.
- 20 Q And if you would go to the page maximo, it
- 21 should say maximo input on the bottom.
- 22 A Yes.
- 23 Q And my question is, is this -- do you know if
- 24 this is FPL's maintenance schedule for its thermal
- 25 generation units?

- 1 A Yes. This looks like our, you know, there is
- 2 probably 70 or 80 outages in a year, but, yeah, subject
- 3 to check, yes, this looks like the outage.
- 4 Q If we go to the page that says factors at the
- 5 bottom?
- 6 A Do you have a page number?
- 7 Q It's page one of what says factors at the
- 8 bottom.
- 9 A Yes, I am there.
- 10 Q And do you see a table that says equivalent
- 11 forced outage factor predicted?
- 12 A Not on page one, no.
- 13 Q That says factors at the bottom, and then it
- says page one on the little right hander corner?
- 15 A Mine says equivalent forced outage hours
- 16 actual. Page two has predicted.
- Q Okay. Your page two, the factors at the
- 18 bottom, the table on the right title says equivalent
- 19 forced outage factor predicted?
- 20 A Yes, I see it. It's on the second page,
- 21 backside of page one. Yes.
- 22 Q I am trying to figure out if we are looking at
- the same thing, and it doesn't sound like we are.
- A My pages are double-sided.
- 25 Q Yes, mine are too, and so --

- 1 CHAIRMAN LA ROSA: Just maybe refresh the tab,
- or just mention the tab again that you are at.
- 3 BY MR. MARSHALL:
- 4 Q We are in -- I think we are in the right tab.
- 5 I think we are just talking past each other on -- so on
- 6 the back of that, yes, it does say factors at the -- on
- 7 the backside of the page with three tables?
- 8 A They are all labeled page one so...
- 9 Q Okay. There should be -- there should be --
- 10 A I am good.
- 11 Q -- a title at the bottom of the page.
- 12 A Yeah.
- 13 Q All right. What is the title at the bottom of
- 14 the page that you are looking at?
- 15 A I have one that said hours. I have one that
- 16 said factors.
- 17 Q So we are looking for the one that says
- 18 factors.
- 19 A Okay.
- 20 Q It's factors, page one?
- 21 A Yes. That's factors page two.
- Q I think factors page one might be opposite it,
- or there might be an error in the book we created and we
- 24 will have to correct that. Do you see factors, page
- 25 one?

- 1 A Yes.
- 2 Q Okay. And is the table on the right side of
- 3 that equivalent forced outage factor predicted?
- 4 A Yes, I see that.
- 5 Q Okay. And my question is, is are these FPL's
- 6 predicted equivalent forced outage factors for its
- 7 thermal fleet?
- 8 A Yes. I had mentioned, I have not seen this
- 9 document before, so I cannot comment on if this is the
- 10 actual data.
- 11 Q Do you know what would be a better source for
- 12 that data than this document?
- 13 A No. As I said, I am not familiar with any of
- 14 these documents, so...
- 2 So if we go to the prior page, so this would
- be historical at the bottom, page one, and I am going to
- 17 try to avoid verbalizing any confidential information,
- is that with the three tables?
- 19 A Yes.
- 20 Q Do you see the table named equivalent forced
- 21 outage hours actuals?
- 22 A Yes, far right.
- 23 Q It should be on the left?
- 24 A Excuse me, in the -- yep, I see it.
- 25 Q And my question is: Do you know if that

- 1 accurately reflects FPL's equivalent forced outage hours
- for its thermal fleet in those time periods?
- 3 A I have never seen this document, so I really
- 4 can't comment.
- 5 Q Okay. Just based on your expertise, do you
- 6 have numbers in mind for some of these units that are
- 7 different than what's presented on this page?
- 8 A I would have to know the service hours and,
- 9 you know, as we talked about, it's a rate in the
- 10 calculation, so I really would prefer not to speculate
- 11 on that.
- MR. MARSHALL: If I could just have one
- 13 second?
- 14 CHAIRMAN LA ROSA: Sure.
- MR. MARSHALL: Thank you, Mr. Chairman.
- 16 BY MR. MARSHALL:
- 17 Q If we could go to, in Case Center, master
- 18 number F10-2188? And my question for you is do you know
- if this document accurately reflects FPL's forced
- 20 outages rates for its thermal units?
- 21 A Yes.
- 22 Q Does FPL have a target forced outage rate for
- 23 **2026?**
- 24 A Yes, 2.25 percent.
- 25 Q It's that same target?

- 1 A Correct.
- 2 Q And that would also be true for 2027?
- 3 A Yes. That's correct.
- 4 Q And has FPL been -- since they are meeting
- 5 that target this year, have they been -- have they beat
- 6 that target in previous years?
- 7 A Yes, we have, and there is some years we
- 8 haven't.
- 9 Q And your battery forced outage rate, that's
- 10 1.13 percent, is that right?
- 11 A Do you have a document with that or --
- 12 Q I will just represent to you that it is in
- 13 your workpapers. I have tried to look through Case
- 14 Center to find it and have not been able to, but maybe
- 15 you can take that subject to check, that it's 1.13
- 16 percent?
- 17 A For which year?
- 18 Q As an average over the last several years.
- 19 A Subject to check.
- 20 Q And do you expect your battery forced outages
- 21 rates generally to stay the same as you bring more
- 22 batteries on-line, or what is your expectation in
- 23 regards to those forced outages rates?
- 24 A One of the things as we bring on new
- 25 technology, we continue to see challenges. You know,

- 1 certainly our expectation there, but however, with any
- 2 new technology that comes in, there are challenges that
- 3 may increase that forced outage rate beyond what we are
- 4 expecting. It's not uncommon when we see that when we
- 5 bring on new advanced combined cycle and other units.
- 6 So, yes, but the potential with new technology always
- 7 could make that higher.
- 8 Q Switching topics slightly. You are also the
- 9 FPL witness testifying for the operations of FPL's
- 10 existing solar fleet, is that right?
- 11 A That is correct.
- 12 Q And would you agree that the first solar power
- 13 plants -- sorry, first solar power plants to generate
- 14 energy in the morning will generally be in the east?
- 15 A Generally, yes.
- 16 Q And the last ones still generating power in
- the evening will generally be in the west?
- 18 A Yes.
- 19 O And that's because the sun rises in the east
- and sets in the west?
- 21 A Yes.
- Q Of all the FPL witnesses testifying here, who
- 23 would know the most about the maintenance schedules of
- 24 FPL's thermal generation fleet?
- 25 A That would be me.

- 1 Q Is it fair to say that you designed the
- 2 maintenance schedule to make sure capacity is available
- during the months with the highest peaks?
- 4 A Yes.
- 5 Q And I believe in your testimony, at page 14,
- 6 line 22, you testified that there is 21 outages planned
- 7 **for 2027?**
- 8 A What page was that?
- 9 **Q 14.**
- 10 A How many did you say for --
- 11 Q 21 for 2027.
- 12 A Yes. Correct.
- Q And that's -- that's a bit higher, is it not,
- 14 compared to some of the other years?
- 15 A Yeah, you will see the number of outages
- industrial kind of go up and down depending upon the
- 17 operating hours on the combustion turbines, which is the
- 18 key driver. So there may be more, you know, on some
- 19 years than others.
- 20 Q So, for example, I think it's -- 2028, there
- 21 are 16 outages planned?
- 22 A Yes, these are major outages that we are
- 23 talking about.
- Q All right. If we could go to master number
- 25 E89275. This is part of Exhibit 390. It's a

- demonstrative. Do you have the document?
- 2 A Yes, I do.
- 3 Q And does this contain FPL's historical
- 4 maintenance and planned outages for 2010 through 2024?
- 5 A Yes, I would -- this, you know, is a number of
- 6 outages there, so subject to check, but yes.
- 7 Q And you can take this subject to check, but
- 8 generally looking at, for example, the, you know, late
- 9 September early October timeframe, there are some
- outages on, historically on FPL's system, but not a lot,
- 11 would you agree with that, such that, you know, they are
- 12 generally in the ballpark of either hundreds or, you
- know, in the, you know, between 1,000-1,500 megawatt
- 14 range between -- so looking specifically if you look at
- 15 October 1st of every year, that would sort of be the
- 16 ballpark of the range of outages?
- 17 A Generally, the outage season starts shortly
- 18 after September and it goes through December 20th, so
- 19 that's generally the outage window. So they could fall
- 20 anywhere within that window.
- 21 Q And I guess -- but, you know, October 1st can
- 22 still be a -- can be -- it can get hot on October 1st,
- 23 right?
- 24 A Yes, it can.
- 25 Q And my point is, is that FPL, if you look and

- qo through here on the October 1st dates, we are never
- 2 going to find a outage between 2010 and 2024 where FPL
- 3 planned five gigawatts of capacity out for maintenance?
- 4 A I would have to go through that and look. I,
- 5 you know, I would have to do that analysis. However,
- 6 there is planned outages, there is maintenance outages,
- 7 there is forced outages. There is many different types
- 8 of outages that could take generation out well beyond
- 9 just what's planned, so...
- 10 Q Right. I am focused on the planned and
- 11 maintenance outages, not the forced outages for this
- 12 question, and we can go through and I have got my math
- on the megawatts for each one if we want, and the units
- 14 out, and --
- 15 A Is it common we take 5,000 megawatts out in
- 16 October 1st? No.
- 17 Q And that's not FPL's plan going forward, is
- 18 it?
- 19 A I am not aware that we would take that much
- 20 generation out on a planned basis. But again, this
- 21 includes fossil. I don't know if you have got the
- 22 nuclear plant that's in there, so that's still part of
- 23 the overall assets that we would have would be the
- 24 nuclear sides.
- 25 Q Follow-up question, not just common, but to

- 1 your knowledge, has FPL ever scheduled five gigawatts of
- 2 capacity out on October 1st?
- 3 A I am not aware of that in recent -- no, I am
- 4 not saying that there hasn't been 5,000 megawatts off on
- 5 October 1st, but on a planned basis, I am not sure.
- 6 Q And would you agree that FPL tries to stager
- 7 some of their maintenance outages to keep additional
- 8 capacity on-line?
- 9 A Yes, there is still, you know, a plan where we
- 10 go through the outage season and we will stager the
- 11 outages. That's correct.
- 12 Q And if we could go to, in the big red binder,
- this will be tab 356F.
- 14 A Okay.
- 15 Q Do you recognize this document?
- 16 A The text is quite small, but yes. It looks
- 17 like the outage schedule.
- 18 Q And there is a number of discrepancies between
- 19 differences in outages between this schedule and the
- other one that we were looking at earlier in the other
- 21 confidential document, and as the, you know, as the
- 22 person who knows most about the maintenance schedule,
- which one of these is most accurate, if you know?
- MR. COX: Chairman La Rosa, again, objection.
- It appears that counsel is testifying now, and he

1	has been asking Mr. Broad about documents. Mr.
2	Broad said he wasn't familiar where they came from
3	and what their origin was, and now he is comparing
4	it again, and appears to be just testimony at this
5	point, so we would object.
6	MR. MARSHALL: I am trying to avoid
7	verbalizing confidential information by doing a,
8	you know, date and unit comparison.
9	CHAIRMAN LA ROSA: Can you try again, but I
10	would kind of refer that the witness did say he was
11	not familiar.
12	MR. MARSHALL: Right. I mean, the issue I am
13	struggling with this is that the witness who
14	testified he is the most familiar with the
15	maintenance schedule, and figuring out which
16	maintenance schedule is correct is important for a
17	number of reasons.
18	CHAIRMAN LA ROSA: Sure.
19	MR. MARSHALL: And so that's where we are
20	trying maybe we use an example date without
21	verbalizing any confidential information to try to
22	see if the witness is familiar with which of those
23	is
24	CHAIRMAN LA ROSA: Okay. Let's try that.
25	BY MR. MARSHALL:

- 1 Q And maybe it would be helpful to look at the
- 2 prior tab, which is 356-E, which would be sorted by
- 3 date, and looking at October 1st, 2027.
- 4 A There is over 100 outages here. I have a very
- 5 large team that works on these. There is no way off the
- 6 top of my head I can tell you, you know, confer with
- 7 this. This is the first time I have seen that. I would
- 8 have to study it. I mean --
- 9 Q Let me ask it this way, then: Is FPL planning
- 10 to -- you know, we talked about the historical practice
- of how maintenance scheduling has been done, for
- 12 example, on October 1st. Is a major change planned in
- 13 how to do that that now, you know, that you will be
- 14 planning a lot more outages in early October than you
- 15 have historically?
- 16 A I am not sure I follow you on the October. We
- 17 generally will take outages in the, you know, towards
- 18 the beginning of September, generally after Labor Day
- 19 weekend, all the way up through December 20th. Whatever
- 20 the load curve, whatever we can coordinate through
- 21 system planning, how many megawatts we can take, we will
- 22 schedule that. There is nothing magic about October 1st
- on how any of these outages line up.
- And as I said, there is over a hundred of them
- 25 a year, so I really couldn't, with any certainty, tell

- 1 you that these are the exact dates.
- 2 Q I am going to try do this without verbalizing
- 3 any confidential information. If you look at October
- 4 1st, 2026, you see the one on CEL 356E, there is a
- 5 number of units listed for that date?
- 6 A Which date was that?
- 7 Q October 1st, 2026.
- 8 A Yes.
- 9 Q And if we could go to master number E767?
- MR. COX: Mr. Marshall, is that there a tab
- for that one you are referring us to, is that -- or
- is it just on the screen?
- 13 BY MR. MARSHALL:
- 14 Q Yeah, I am going to try to do it to avoid a
- direct I am trying not to say anything confidential, so
- 16 there is not a specific tab, but the -- there is a unit
- 17 that's listed on -- well, first of all, let me ask about
- 18 this document.
- This contains some of the -- well, this Excel
- 20 document, what is it?
- 21 A CT parts purchased for HUD gas path for major
- 22 inspection outage.
- 23 Q And it includes other, you know, repair
- 24 projections and parts for other fossil units as well?
- 25 A This is all combustion turbine parts.

- 1 Q All combustion turbines, yes, okay.
- 2 And I guess my question is, is there -- would
- you expect to see spending on a unit here if it's going
- 4 to be out for a long outage in 2026?
- 5 A Yes. When you look at combustion turbines,
- 6 they are wear parts, they are taken out for repair, and
- 7 the repair cycle is anywhere from nine to 18 months. So
- 8 a new set goes in refurbished, the old one goes out,
- 9 it's being repaired. It's part of the spare parts
- 10 inventory. Yes, I would expect that units will have a
- 11 continuous spend for parts. It's not just at the time
- 12 that we incur the outage.
- 13 O Does one of the units that was listed on that
- on the confidential page for a extended outage reflect
- zero spending in 2026 in this document?
- 16 A Where do you see that?
- 17 Q I am trying not to verbalize the confidential
- 18 information. So I think you have to compare the units
- 19 that are listed for outage on October 1st with the units
- that correspond with those units on this document and
- look at for spending in 2026 with those units.
- MR. BURNETT: Commissioners, I am sorry, I
- don't know if Chairman La Rosa passed the gavel,
- Commissioner. We are struggling mightily here to
- come to the ultimate point, I suppose, that one

1	document says one thing and one document says
2	another.
3	I will stipulate for this whole case if it's
4	helpful, that any document we produced in discovery
5	says what it says unless we filed an errata,
6	it's we mean and stand by the numbers in there.
7	It is very easy, if Mr. Marshall wants to
8	compare X to Y, he can do that in the documents
9	that exist. No objection to him putting it into
10	evidence, and he can make those comparisons in his
11	brief or whatever.
12	I will also stipulate that math is math,
13	percentages are percentages, and all of our
14	interrogatories say what they say, all our
15	documents say what they say, if it's helpful,
16	because we are just spending an inordinate amount
17	of time doing things that could be done by
18	comparing sworn testimony that's already provided
19	in the interrogatories and the like.
20	I appreciate your indulgence to note this on
21	the record, because again, if anybody is talking
22	about delay in that second week, it is delay
23	brought around by their own inefficiency.
24	COMMISSIONER CLARK: Mr. Marshall, you have an
25	opportunity, they will stipulate.

1	MR. MARSHALL: Well, I don't think the
2	stipulation takes care of it, because, you know,
3	what we are dealing with here is testimony of two
4	very different documents that both both are
5	irreconcilably different as to as we saw and
6	established in an exhibit that was provided this
7	morning between the maintenance schedules with
8	thousands of megawatts and difference in capacity
9	available at different times, which is really
10	important for understanding whether the reliability
11	of FPL's system.
12	I mean, if FPL really is planning to have
13	you know, that's the thing, is that they are
14	irreconcilably different documents.
15	COMMISSIONER CLARK: I understand your point.
16	I see exactly where you are coming from. They are
17	stipulating there are discrepancies and the math is
18	the math, and they are going to give it to you.
19	Are you going to make some deduction or conclusion
20	from this that's going to be something different
21	than the data actually shows?
22	MR. MARSHALL: Well, I am trying to ask the
23	witness since he is the witness that knows the most
24	about FPL's maintenance, is which one is the better
25	document to reflect FPL's planned maintenance

- 1 schedule.
- 2 COMMISSIONER CLARK: And if he can answer that
- question, that might get us where we need to go
- 4 quick.
- 5 The stipulation -- I mean, the offer of
- stipulation, that's on you. That's your call to
- 7 make. If you want to continue with your line of
- questioning, that's your right to do so.
- 9 MR. MARSHALL: Thank you, Commissioner.
- 10 BY MR. MARSHALL:
- 11 Q I think we are just going to try to ask the
- 12 question as to -- and it sounds like you just don't know
- 13 which of these maintenance schedules is reflective of
- 14 FPL's planned maintenance schedule?
- 15 A What I would say is what we provided is, to
- 16 the best of my knowledge, what the maintenance schedule
- 17 is. If there is a discrepancy in there, I haven't, you
- 18 know, followed or researched it. I can't comment on
- 19 that.
- 20 Q And so I just want to be clear, you don't know
- 21 which maintenance schedule of the ones we have looked at
- 22 is correct?
- 23 A Alls I can tell you is what was provided. I
- 24 am assuming that's accurate. I cannot explain the
- 25 differences in following, you know, I would have to go

- 1 back and do some research on that. I'm --
- MR. COX: Chairman, La Rosa, I would just like
- 3 to enter an objection, asked and answered. He has
- 4 been asked this four or five times and given the
- 5 same answer.
- 6 CHAIRMAN LA ROSA: Yeah, and I heard -- I
- 7 apologize, I stepped away, but I did hear part of
- 8 the debate and discussion. I think, clearly, the
- 9 witness doesn't -- isn't familiar with the
- document, so --
- MR. MARSHALL: We are going to, I think, need
- to move on to looking at some of the additional
- confidential documents in here just to -- and we
- can make the arguments in brief as to what's more
- reflective of the pending as in these documents.
- 16 BY MR. MARSHALL:
- 17 Q If you could go to, in the big red binder, CEL
- 18 359A. Are you familiar with this document?
- 19 A Yes, 20 -- 2026 CT reliability annual.
- 20 Q And without disclosing any confidential
- 21 information, can you describe the kind of information
- 22 that is contained in this document?
- 23 A It's an overall description of the major work
- that's done with an annual outage. The annual outages
- are anywhere from seven to 10 days, which is different

- 1 than, you know, the major outages that we are talking
- 2 about.
- 3 Q And you can actually see the unit numbers
- 4 involved in -- you can derive what units are -- is there
- 5 somewhere on this document that you can derive the unit
- 6 that's involved?
- 7 A Yes, it's under the description.
- 8 Q All right. If we could go to the next tab,
- 9 359B. And are you familiar with this document?
- 10 A I have never seen the document.
- 11 Q All right. Do you know what it is?
- 12 A It's a document from Integrated Resource
- 13 Planning, you know, I would assume Witness Whitley would
- 14 have more in-depth knowledge of it.
- 15 **Q** Which --
- 16 A It's number one planned outage days 2024,
- 17 confidential.
- 18 Q No. No. That's the wrong document. Sorry.
- 19 **Tab 359B?**
- 20 A D?
- Q B, B as in boy.
- 22 A Yes. Again, this is peaker outages.
- Q And again, you can -- there is a way to
- 24 determine which units are involved on this document?
- 25 A Yes, there are.

1 Q And this one contains peaker outages for 2026? 2 Α Correct. 3 Go to 359C, which should be the next tab. Q 4 Yes, I am there. Α 5 Q And do you recognize this document? 6 Α Yes. 7 And can you describe generally what kind of Q 8 information it contains without disclosing confidential 9 information? 10 Α It's a list of the GE7HA CT majors. 11 Q And this would be for 2026? 12 Α Is that's correct. 13 And again, you can derive the units that are 0 14 involved under the description category? 15 Α Yes. 16 0 Go to 359D. Do you recognize this document? 17 Yes, I do. Α 18 Can you describe what kind of information it 0 19 contains without disclosing confidential information? 20 Α Yeah, it's BUSI hot gas path. 21 And that is also for 2026? Q 22 Correct. Α

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done when the unit was out for maintenance?

That is correct.

And these would be something that would be

- 1 Q And again, you can describe the unit that's
- involved under the description category?
- 3 A Yes, you can.
- 4 Q Moving on to 359E. Do you recognize this
- 5 document?
- 6 A Yes, I do.
- 7 Q And can you describe what kind of information
- 8 is contained in this document without disclosing
- 9 confidential information?
- 10 A 2026 steam turbine bow outages.
- 11 Q And can you also derive the units that are
- 12 involved under the description category?
- 13 A Yes, you can.
- Q Go to 359F. Do you recognize this document?
- 15 A Yes.
- 16 Q And can you describe what kind of information
- is contained within it without disclosing confidential
- 18 information?
- 19 A Yes, 2027 GE7 FACT generator majors.
- 20 Q And that would be done during outages?
- 21 A That is correct.
- 22 Q And again, you can derive the unit involved
- 23 under the description?
- 24 A Correct.
- 25 **Q** Go to 359G.

- 1 A Yes.
- 2 Q Can you -- are you familiar with this
- 3 document?
- 4 A Yes, I am.
- 5 Q Can you describe what kind of information is
- 6 contained within it without disclosing confidential
- 7 information?
- 8 A 2027 Siemens CT generator major.
- 9 Q And that would be, again, done during outages?
- 10 A That is correct.
- 11 Q And the units involved can be derived under
- 12 the description category?
- 13 A Yes, it can.
- 14 Q Go to 359H?
- 15 A Yes, recognize it. 2027 steam turbine major
- 16 generator.
- 17 Q And then that would also be done during
- 18 maintenance outages?
- 19 A Correct.
- 20 Q And again, the units involved can be derived
- 21 under the description category?
- 22 A Yes.
- 23 O And are these -- all the documents under 359
- 24 that we have discussed, are they accurate to the best of
- 25 your knowledge?

1 Α At the time of submittal, yes. 2 Are you aware of any major changes since that Q 3 time? 4 Not off the top of my head. 5 Q Thank you, Mr. Broad. I appreciate your 6 patience as we worked through those documents. 7 Obviously, we will be saving some arguments for briefing 8 as to what it all means. I appreciate your time, and 9 that's all my questions. 10 CHAIRMAN LA ROSA: Great. Thank you, let's 11 move to FAIR. 12 MR. SCHEF WRIGHT: We don't have any questions 13 Thank you, Mr. Chairman. for Mr. Broad. 14 CHAIRMAN LA ROSA: Great. Thank you. 15 FIPUG? 16 MS. PUTNAL: No questions. 17 CHAIRMAN LA ROSA: Walmart?

23 CHAIRMAN LA ROSA: All right. I didn't miss 24 anybody, right? Nope. 25 Commissioners, do we have any questions for

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No questions.

CHAIRMAN LA ROSA: And Commission staff?

No questions from staff.

MS. EATON:

MR. STILLER:

CHAIRMAN LA ROSA:

MR. MAY: No questions.

1 the witness? 2 Seeing no questions of the witness. Send it 3 back to FPL for redirect. 4 MR. COX: No redirect. Thank you. 5 CHAIRMAN LA ROSA: All right. Let's go ahead and excuse the witness. 6 7 And exhibits? 8 MR. PONCE: I am sorry, Mr. Chair. I am sorry 9 to interrupt. I would just like to offer an 10 exhibit into evidence before we move on. 11 CHAIRMAN LA ROSA: That's where we are going. 12 MR. PONCE: Oh, I apologize. I jumped the 13 qun. 14 CHAIRMAN LA ROSA: So let's -- well, let's go. 15 You start us off. So what exhibits? 16 This is identified on the staff MR. PONCE: 17 CEL as Exhibit 739. 18 CHAIRMAN LA ROSA: 739, any objections? 19 MR. COX: No objections. 20 CHAIRMAN LA ROSA: None. All right. Show 21 that is entered. 22 (Whereupon Exhibit No. 739 was received into 23 evidence.) 24 CHAIRMAN LA ROSA: Anybody else? FEL?

I think there was only

25

MR. MARSHALL: Yes.

1 one exhibit that we used that was not already 2 admitted, and that is Exhibit 1001 on the CEL. 3 CHAIRMAN LA ROSA: Okay. Any objection? 4 MR. COX: No objections. 5 CHAIRMAN LA ROSA: All right. No objections. Show that as entered then. 6 7 (Whereupon, Exhibit No. 1001 was received into 8 evidence.) 9 And FPL would move the exhibits for MR. COX: 10 Mr. Broad, which were marked in the CEL as Exhibits 11 49 through 55. 12 CHAIRMAN LA ROSA: 49 through 55, any 13 objections with that? Seeing none, okay. 14 (Whereupon, Exhibit No. 49-55 was received 15 into evidence.) 16 CHAIRMAN LA ROSA: Anybody else? 17 All right. The witness is excused if I didn't 18 already say that. So you are good. 19 THE WITNESS: Thank you. 20 (Witness excused.) 21 CHAIRMAN LA ROSA: So it's a little before 22 6:00, I am going to say let's go ahead and wrap up 23 for the day. 24 Do we have our next witness for tomorrow 25 morning teed up and ready?

1 MR. COX: We do. Mr. DeBoer is here. 2 CHAIRMAN LA ROSA: Let me ask OPC and FEL and 3 FAIR, is there -- do you have an estimation on the 4 line of amount of questioning, approximation? 5 MR. MARSHALL: Who is the witness? Ι missed --6 7 If it were today, it would be Mr. MR. COX: 8 If it's tomorrow, it will be Mr. Allis, 9 because he has his day set for that. 10 MR. PONCE: I have at least an hour for Mr. 11 DeBoer. 12 Okay. Oh, Allis? CHAIRMAN LA ROSA: 13 MR. MARSHALL: Our cross for Allis should be 14 I would say 10 minutes ballpark for Mr. 15 Allis. 16 CHAIRMAN LA ROSA: Okav. 17 MR. MARSHALL: And the question was for 18 DeBoer? 19 CHAIRMAN LA ROSA: But Allis is not going to 20 be actually until tomorrow, so... 21 MR. COX: Correct, Mr. Allis is not available 22 until tomorrow. 23 MR. MARSHALL: DeBoer is going to be -- OPC's 24 answer we have, I think it was an hour for DeBoer? 25 MR. PONCE: At least an hour, yes.

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1
                                  Okay. Then let's go ahead
               CHAIRMAN LA ROSA:
2
         and call it for today, and that's fair, and then
 3
         Mr. DeBoer, obviously, is available tomorrow?
               MR. COX:
                        He is.
 4
 5
                                  Okay. All right.
               CHAIRMAN LA ROSA:
                                                      Let's
         start tomorrow at 9:00 a.m. So 9:00 a.m. start,
 6
7
         and we will pick up there.
                                       It sounds like Mr.
8
         Allis has to -- or Allis has to jump in, so
 9
          let's -- we will start with that witness.
10
                         Start with Mr. Allis tomorrow.
               MR. COX:
11
               CHAIRMAN LA ROSA: Okay. Yes.
12
               MR. COX:
                         Thank you.
13
               MR. PONCE:
                           Thank you.
14
               CHAIRMAN LA ROSA: All right. No problem.
15
         Great.
                  Thanks, quys.
16
               (Transcript continues in sequence in Volume
17
    4.)
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21
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1	CERTIFICATE OF REPORTER
2	STATE OF FLORIDA )
3	COUNTY OF LEON )
4	
5	I, DEBRA KRICK, Court Reporter, do hereby
6	certify that the foregoing proceeding was heard at the
7	time and place herein stated.
8	IT IS FURTHER CERTIFIED that I
9	stenographically reported the said proceedings; that the
10	same has been transcribed under my direct supervision;
11	and that this transcript constitutes a true
12	transcription of my notes of said proceedings.
13	I FURTHER CERTIFY that I am not a relative,
14	employee, attorney or counsel of any of the parties, nor
15	am I a relative or employee of any of the parties'
16	attorney or counsel connected with the action, nor am I
17	financially interested in the action.
18	DATED this 19th day of October, 2025.
19	
20	
21	Million R. Land
22	DEBRA R. KRICK
23	NOTARY PUBLIC  COMMISSION #HH575054
24	EXPIRES AUGUST 13, 2028
25	