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BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In re: DOCKET NO. 20250011-EI
Petition for rate increase by
Florida Power & Light Company.

VOLUME 5
PAGES 925 - 1193

PROCEEDINGS: HEARING
COMMISSIONERS
PARTICIPATING: CHAIRMAN MIKE LA ROSA
COMMISSIONER GARY F. CLARK
COMMISSIONER ANDREW GILES FAY
COMMISSIONER GABRIELLA PASSIDOMO SMITH

DATE: Wednesday, October 8, 2025

TIME: Commenced: 9:00 a.m.
Concluded: 6:10 p.m.

PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: DEBRA R. KRICK
Court Reporter

PREMIER REPORTING
TALLAHASSEE, FLORIDA
(850) 894-0828

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2	NUMBER:	ID	ADMITTED
3	61-63	As identified in the CEL	956
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18	1497	As identified in the CEL	957
19	1527-1528	As identified in the CEL	957
20	2-28	As identified in the CEL	958
21	627	As identified in the CEL	1188
22	631	As identified in the CEL	1188
23	761	As identified in the CEL	1188
24	779	As identified in the CEL	1188
25			

1	EXHIBITS CONTINUED		
2	NUMBER:		ID ADMITTED
3	783	As identified in the CEL	1188
4	964	As identified in the CEL	1188
5	1062-1064	As identified in the CEL	1188
6	1122-1123	As identified in the CEL	1188
7	1133	As identified in the CEL	1188
8	1136-1138	As identified in the CEL	1188
9	1161	As identified in the CEL	1188
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1 P R O C E E D I N G S

2 (Transcript follows in sequence from Volume
3 4.)

4 CHAIRMAN LA ROSA: All right. If we want to
5 start finding our seats we will get started here in
6 a few seconds.

7 MR. BURNETT: Mr. Chairman, may I please, just
8 I think this will be helpful.

9 CHAIRMAN LA ROSA: Sure.

10 MR. BURNETT: I just got finished talking with
11 counsel, and they intend to ask more questions from
12 a confidential document.

13 CHAIRMAN LA ROSA: All right.

14 MR. BURNETT: It's a vendor document, and the
15 only reason we are keeping it confidential is to
16 protect their intellectual property. So I think it
17 would be helpful Ms. Nichols is free to talk about
18 anything on that document on the public record that
19 doesn't disclose particularized datasets or
20 recommendations of how things correlate together.
21 I think she will know that immediately when she
22 sees it, so it should help this move along, but
23 she's free to talk a lot about a whole lot of that
24 stuff in that document that really doesn't get to
25 their IP --

1 CHAIRMAN LA ROSA: Okay.

2 MR. BURNETT: -- so I just wanted to say that
3 on the record to try to help.

4 CHAIRMAN LA ROSA: Thank you. I appreciate
5 you providing clarity.

6 So let's go ahead and pick up and maybe you go
7 that direction, maybe you don't. We will find out.
8 FEL, you are in questions. Ms. Nichols is
9 obviously still hear in the witness, and, of
10 course, still sworn under oath. I will let you
11 guys to continue.

12 MR. LUEBKEMANN: Thank you, Mr. Chairman. And
13 I would like to thank the company again for working
14 with us on trying to streamline.

15 CHAIRMAN LA ROSA: Awesome. Great. Thank
16 you.

17 Whereupon,

18 DAWN NICHOLS

19 was recalled as a witness, having been previously duly
20 sworn to speak the truth, the whole truth, and nothing
21 but the truth, was examined and testified as follows:

22 EXAMINATION continued

23 BY MR. LUEBKEMANN:

24 Q Okay. Ms. Nichols, if we could go back to OPC
25 2C. This is all in the big red binder, but OPC printed

1 it with only one slide per page, so it will be much
2 easier for us to read. And if we could look at the
3 second slide of that, the first presentation that starts
4 on page one, if you would look at slide two of that.
5 And this slide is about the overall objective of this
6 set of research that was commissioned?

7 CHAIRMAN LA ROSA: Yeah, Ms. Nichols, your
8 microphone may be off. And, Jordan, what tab are
9 we on?

10 MR. LUEBKEMANN: I am sorry, what was that?

11 CHAIRMAN LA ROSA: Are you pointing to a tab?

12 MR. LUEBKEMANN: This is Bates stamp 6272. It
13 is slide two of what is marked OPC 2, and that
14 is --

15 CHAIRMAN LA ROSA: I just want it make sure we
16 are in the right spot. I have got the --

17 MR. LUEBKEMANN: Gotcha. And I am sorry, I
18 don't have a CEL number for that. I am trying to
19 refer to OPC's version of this so we don't
20 introduce --

21 MS. HELTON: It's 487.

22 MR. LUEBKEMANN: Thank you.

23 CHAIRMAN LA ROSA: Great.

24 BY MR. LUEBKEMANN:

25 Q Okay. So we are on Bates stamp 6272 of

1 **Exhibit 487. And the question again is: Does this page**
2 **summarize the purpose of this commissioned report?**

3 A Yes, it does.

4 Q **And given that the purpose is something that**
5 **FPL would have been commissioning to this consultant, is**
6 **that something that you can share what is said on this**
7 **page?**

8 A Right. So we wanted to find out what matters
9 to our customers, understand how customers define value
10 from an electric company and find the right language to
11 demonstrate that value that FPL delivers.

12 Q **And can I -- can you read the title of this**
13 **slide?**

14 A Overall project objective.

15 Q **Okay. And then can you read the next sentence**
16 **that begins with the letter A?**

17 A Oh, at the highest level support is successful
18 regulatory rate review.

19 Q **And would you be able to opine what successful**
20 **means in this context?**

21 A Successful outcomes for our customers and for
22 our company, you know, best combination of reliability,
23 resiliency and the lowest bills possible.

24 Q **On slide nine, which is Bates 6279, you had**
25 **some questions on this one earlier.**

1 **Just as a general matter, could a direction --**
2 **looking between the 2019 result and the 2023 result,**
3 **could you state the direction that that flowed?**

4 A Yes. We -- from 2019 to 2023, net promoter
5 score was down two points, and the FPL provides great
6 value was also down about 10, 13 points.

7 **Q Thank you.**

8 **And does the next page, slide 10, explain**
9 **the -- does it explain a basis for what might be driving**
10 **that difference?**

11 A Yeah, no, as I mentioned, a lot has happened
12 for our customers since 2019 in terms of general
13 inflation, cost for services broadly, and that sentiment
14 is discussed here.

15 **Q You mentioned cost. Would it be fair to say**
16 **that this slide is chiefly concerned with costs as**
17 **driving that difference?**

18 A It does say cost concerns are helping drive
19 this change, yes.

20 **Q And if we could go to slide 21, and that's**
21 **Bates 6291?**

22 A Yes.

23 **Q Are you able to share any of the information**
24 **on this page?**

25 MS. MONCADA: Yes, she is.

1 THE WITNESS: Okay. What information would
2 you like me to share?

3 BY MR. LUEBKEMANN:

4 Q Could you read the heading?

5 A One message always resonates independent of
6 cost.

7 Q And I think it's going to a box in the upper
8 right corner. Are you able to read's in that?

9 A The Florida effect, addressing Florida storm
10 preparation will strengthen almost any message.

11 Q And there is an icon to the left of that that,
12 to me, looks like a hurricane. Do you agree that that's
13 its purpose?

14 A That's the icon that that vendor chose to put
15 into this, yes.

16 Q Could we pull up Case Center number E, as in
17 echo, 61762? And this is a nonconfidential that was not
18 produced as part of your workpapers, but is this from
19 the same -- if not -- I don't actually think it's in
20 this slide deck, but is this -- would this have been
21 prepared, as best as you can tell, as part of the same
22 project?

23 A It is part of the deck. Yep.

24 Q Okay. And that -- really what I am trying to
25 get at there is the Florida effect on the slide on the

1 **screen is the same as the idea that's contained in this**
2 **page, the confidential page we are looking at?**

3 A Yeah, so it shows that what matters to our
4 customers is investing in smart technology to help
5 manage our storms, you know, that could be blue sky
6 storms. It doesn't necessarily mean hurricanes.

7 MR. LUEBKEMANN: It might not feel like it,
8 but we are moving much faster through these now.

9 CHAIRMAN LA ROSA: All right. Excellent.

10 BY MR. LUEBKEMANN:

11 **Q If we go to slide 28, at Bates 6298, would you**
12 **be able to read the title of this slide?**

13 A Is this the affordability? Rates remain top
14 priority?

15 **Q Could you, at a high level, characterize what**
16 **is on this slide?**

17 A Yeah. So when we asked customers to
18 understand, prioritize what matters to them in terms of
19 cost, affordability, they identified ways that we can
20 keep winning. And in this identification, it talks
21 about FPL focusing on operational efficiencies to drive
22 down costs at FPL. And we are doing that. We are one
23 of the most efficient utilities in the nation.

24 They also said a way that we could keep
25 winning is keeping FPL rates well below the national

1 average in other states, which we are doing. We are
2 22 percent below the national average. We are the
3 lowest amongst all IOUs, and we are the lowest against
4 all the IOUs in Florida, and we are the lowest among
5 other utilities in the state of Florida.

6 It also talked about providing tips and tools
7 to help customers lower their bill as ways that we can
8 keep winning to keep costs low, and we are doing that.
9 We have increased our weatherization program by 50
10 percent. We have amplified our communication around
11 energy efficiency with phone banks and community banks.
12 So I think this is really demonstrating the ways that we
13 can continue to keep costs -- how customers understand
14 cost and that's relatable to them and what matters to
15 them, too, to keep the rates low and keep it affordable.

16 **Q And would it be fair to characterize that the**
17 **overall message of that page as being that rates and the**
18 **affordability of them is of the highest concern to FPL's**
19 **customers?**

20 A It's a concern for FPL customers, and it's a
21 concern for FPL as well, yes.

22 **Q Thank you.**

23 **Could we go to slide 49? And this will be at**
24 **Bates 6319.**

25 A Did you say Bates 6319?

1 **Q Yes.**

2 A Okay.

3 **Q And are you able to verbalize any of the**
4 **information on this page?**

5 A Unprompted, not many customers site negative
6 news stories.

7 **Q And if you look on the right, there is a**
8 **summation of what some of those stories might be about.**
9 **Are you able to share that?**

10 A You mean an example of what a customer
11 mentioned? Sure. About FPL monopolizing areas and
12 overcharging customers.

13 **Q Is the general tenor of these stories in the**
14 **quotations about cost?**

15 A Yeah. This -- yeah, cost is on their mind. I
16 mean, it shows here. As I mentioned, cost is on our
17 mind as well, and we work really hard to keep the bills
18 as low as possible, and the rate request demonstrates
19 that for our customers.

20 The best thing that we can do for our
21 customers is to keep our bills low, and we are doing
22 everything possible to do that.

23 And the second best thing to do for our
24 customers is to make sure that we have the right
25 programs and services in place to help them when they

1 need help, and our team is designed for them to help
2 them with anything that they need.

3 **Q That is all I have on this slide show. There**
4 **is one other one that I would like to turn to that I**
5 **think is in this same document.**

6 **Could you turn to Bates No. 6337? This will**
7 **be slide nine of what should be the next presentation.**

8 A Thanks. I am there.

9 **Q Okay. And are you able to verbalize any of**
10 **the information on this slide?**

11 A Sure. Is there a particular area you want me
12 to verbalize?

13 **Q Could you read -- I am most interested in the**
14 **heading title and then the information and graphic on**
15 **the left third of the main slide?**

16 A So baseline one and three support a
17 hypothetical modest rate increase.

18 **Q And then could you read the sentence beginning**
19 **with O?**

20 A The sentence that begins with? Sorry.

21 **Q The upper left corner of the main?**

22 A Overall?

23 **Q Yes.**

24 A Overall, only 33 percent of customers either
25 somewhat support or strongly support a rate increase to

1 maintain and improve their electric service.

2 **Q And there is one more --**

3 A 45 percent either somewhat oppose or strongly
4 oppose it.

5 **Q Okay. Do you recall earlier we talked about**
6 **the report summarizing what was said at the customer**
7 **service hearings?**

8 A Uh-huh.

9 **Q Would this -- would the data that you just**
10 **read from this page tend to agree or disagree with what**
11 **was found in that report about the favorability of the**
12 **rate increase?**

13 A You know, there was fairly strong support of
14 the rate increase, and you can kind of see that in this
15 on the right-hand side. And I think, you know, for the
16 areas that have been with us the longest, have been --
17 weathered the storms with us, and have seen the work
18 that we have done to help get the lights back on
19 quickly, you see that there is stronger support. For
20 customers that haven't really, you know, we had just
21 begun the relationship, you see that there is a little
22 bit less.

23 And I would say overall, if you ask any
24 customer on any given product, nobody wants any
25 increase, right. But what we are trying to do is make

1 sure that our increase is the lowest that it possibly
2 can be and still be able to serve safe and reliable
3 power for our customers. And I think we have done that
4 very well in this rate request.

5 **Q That's all I have for this one. You can put**
6 **that aside.**

7 **If we could go to Exhibit 335 at page E7. And**
8 **this shows customer deposits by month from 2021 through**
9 **2024?**

10 A Yes, it does.

11 **Q Fair to say, with the exception of maybe one**
12 **month in February 2021, that the deposits have gone up**
13 **month over month throughout this time period?**

14 A Throughout 2021?

15 **Q From 2021 through 2024.**

16 A Yes. A little bit of context on that.
17 This -- between the time periods of '21 through '23, we
18 were recovering from the COVID 19 pandemic. During that
19 period of time, we had given back deposits earlier than,
20 you know, we usually give deposits back after 23 months
21 of prompt pay. We gave it back in 12 months. We had
22 some bill credits. So largely, this increase is really
23 getting back on track to our normal deposit policies and
24 the guidelines as set forth by the PSC.

25 **Q And in those, your normal deposit policy would**

1 be based on two months usage?

2 A Yes, two months use over a 12-month average,
3 yes.

4 Q And so would the increase over time in these
5 base rates reflect -- I am sorry, strike that.

6 Would the increase over time with customer
7 deposits being that they are based on two months of
8 usage, would that reflect the increasing base rates over
9 this time, in part?

10 A So deposits are driven by customer growth,
11 customer usage, revenues, yes.

12 Q Okay. And are you aware of FPL having
13 conducted any analysis of how much of this growth would
14 be attributable to growth in number of customers versus
15 growth in usage or growth in the base rates associated
16 with that usage?

17 A No, I don't have that information.

18 Q Okay. Some questions now on disconnections.
19 If we could go to Exhibit 947, and this is at page
20 F10-1294. And this is seeking information about the
21 timeline over which customers would pay their bill in a
22 typical month?

23 A Yes.

24 Q And if we could go to the next page. I just
25 want to make sure that I am understanding the chart

1 **correctly. So this example month is December 2024?**

2 A It hasn't shown on my screen yet.

3 **Q I think in row eight?**

4 A Oh, you mean just scroll down. Okay.

5 Okay. Sorry, what was your question?

6 **Q Just the month that was used here is for**

7 **December of 2024?**

8 A Yes.

9 **Q And if day one is the day that the bill is**
10 **issued, what day on this chart would represent when the**
11 **bill is due?**

12 A 21.

13 **Q Okay. And do the payments on this chart**
14 **contemplate only complete payments or a partial payment?**

15 A I don't know the answer to that.

16 **Q Okay. Could we go to Exhibit 1497? This will**
17 **be 04-670. And this UAR is what you were speaking with**
18 **Ms. Wessling about earlier, uncollectible accounts**
19 **receivable?**

20 A Yes.

21 **Q And the title of this document, and I will**
22 **represent to you, ends in MOPR backup. Do you know what**
23 **MOPR stands for?**

24 A Monthly operating report.

25 **Q And in this document could we go to Bates -- I**

1 am sorry, Case Center number 04-1281? In this email
2 exchange, there is some discussion about disconnections
3 suspension days. Is this referring to FPL's internal
4 policy about suspending disconnections on days above a
5 certain temperature?

6 A Yeah, weather suspension policy, correct.

7 Q And that the current policy is that FPL will
8 not disconnect customers on days when the temperature is
9 forecast to be above 95 degrees?

10 A Or whether there is a heat advisory or below
11 32. Yes.

12 Q On the next page here, there is a discussion
13 of mitigation. Do you see the first complete sentence
14 on this page, some mitigation strategies? Do you know
15 what mitigation would be referring to in this context?

16 A Mitigation to UAR.

17 Q And the first implemented strategy here is to
18 prioritize non-disconnect for non-pay work on suspension
19 days and to focus on disconnections when suspensions are
20 lifted, did I read that right?

21 A Right. So what you are trying to do is
22 prioritize those that have been perhaps suspended the
23 longest so that you are trying to get through the
24 collections process. It's always a balance.

25 Disconnection is our last resort, and we are

1 working with customers to try to avoid disconnection,
2 and understanding that when disconnection does need to
3 happen, it's because at the end, you know, all customers
4 bear the costs for an unpaid bill.

5 Q And if we could go still in this document to
6 04-1406. Are you able to get that big enough to read?

7 A Yeah, I got it. Thank you.

8 Q You see at the top of this chart disconnects
9 for nonpayment, and then in parenthesis, it says, CNP.
10 Would that be customer nonpayment? What does that stand
11 for?

12 A Cut nonpayment.

13 Q Cut nonpayment, okay. And so this is showing
14 the total number of customer disconnections for
15 nonpayment in that CNP volume?

16 A For December.

17 Q Yeah, sorry. And if we scroll down a little
18 bit, there is two charts on this page. The top one
19 would be just the month of December and the bottom one
20 would be year-end December, so it would be one year of
21 data?

22 A That's correct.

23 Q Okay. That's all I have for this document.

24 If we could go to Exhibit 937 at Case Center
25 page F10-358. And this is looking for customer usage

1 **information, and in response, FPL provided four**
2 **attachments?**

3 A Yeah, I am familiar with this.

4 Q I would like to get those attachments into the
5 record, so if we could just authenticate them and move
6 on, I won't take up any time here.

7 MS. MONCADA: No need for further
8 authentication. We produced it in discovery. I
9 recall these. As long as it's the corrected
10 version of the answer, we can move forward.

11 MR. LUEBKEMANN: Okay. Thank you very much.
12 So that would include this document, and then there
13 are attachments one, three and four, which are
14 Exhibits 938, 939 and 940 corrected for attachment
15 4.

16 BY MR. LUEBKEMANN:

17 Q If we could go to Exhibit 942? I am sorry, I
18 realize I didn't give you a number. It's F10-1283.

19 MS. MONCADA: Same for this, Mr. Luebkeermann.

20 MR. LUEBKEMANN: Okay. In the interest of
21 time, if I also gave you Exhibits 944 and 946?

22 MS. MONCADA: I'm going to take your word that
23 you have uploaded them in the way that we produced
24 them, and if there were any corrections made to the
25 interrogatories or to the attachments, that you --

1 that those -- the corrected versions are the ones
2 you are including, then, yes.

3 MR. LUEBKEMANN: Okay. Yes. Thank you.

4 BY MR. LUEBKEMANN:

5 **Q We are getting close.**

6 A Okay.

7 **Q I appreciate the spirit of collaboration.**

8 **If we could go to Exhibit 891, and this is**
9 **Case Center number F10-69. And this is asking for**
10 **information on the time for reconnection in days of**
11 **customers who are disconnected for nonpayment between**
12 **January 2021 and May of 2025?**

13 A Yes.

14 **Q If you go to the next page, and you are able**
15 **to make that readable?**

16 A I can.

17 **Q Okay.**

18 A Thank you.

19 **Q So column E has that average time to**
20 **reconnection. Do you recall how that was calculated?**

21 A Let me see.

22 **Q There might be a note at the bottom of the**
23 **chart.**

24 A There is. So the note is reconnect entry,
25 information is not recorded until the end of the day.

1 And the same day it's zero, next day is a one. And
2 these are -- results are below, one, people are
3 reconnecting within a couple of hours on average.

4 Q Yeah, that's where I am trying to go. If the
5 result were to say 1.0, we would assume that to mean
6 roughly 24 hours for reconnection?

7 A One -- yeah, one day --

8 Q Yeah.

9 A -- over a day.

10 Q And a value of less than one would mean the
11 average reconnection is taking place in less than a day?

12 A Yes.

13 Q Did you hear any of Mr. Jarro's testimony
14 yesterday?

15 A I did hear portions of it, yes.

16 Q Did you hear any of the portion about SAIDI
17 performance?

18 A I did.

19 Q And that would be the number of minutes that
20 someone would be without power over the course of a year
21 excepting major storms?

22 A Uh-huh.

23 Q And for 2024, FPL's SAIDI was about
24 42-and-a-half minutes?

25 A Okay. Yes.

1 **Q Do you -- would it be fair to say that a SAIDI**
2 **of 42-and-a-half minutes would be shorter than the**
3 **length of time represented in column E?**

4 MS. MONCADA: Objection. She does not testify
5 at all regarding SAIDI, or anything have to do with
6 the power delivery business unit in general.

7 MR. BURNETT: And, Mr. Chairman, I would
8 further stipulate that 41 minutes is, in fact, less
9 than 24 hours, if there was any ambiguity to that,
10 that we felt like we needed to establish that on
11 the record.

12 MR. LUEBKEMANN: Well, to be fair, FPL is not
13 posting more than 24 hours in that column, but --
14 thank you.

15 BY MR. LUEBKEMANN:

16 **Q You would agree that 42 minutes would be less**
17 **than, for instance, a quarter of a day?**

18 A Yes.

19 **Q So would it be fair to say at that FPL**
20 **customers are more likely to experience a longer outage**
21 **due to inability to pay bills -- or for nonpayment of**
22 **bills than for a reliability based interruption?**

23 MS. MONCADA: She's not the witness on
24 reliability based interruptions, Your Honor.

25 MR. LUEBKEMANN: I can move on.

1 CHAIRMAN LA ROSA: Thank you.

2 BY MR. LUEBKEMANN:

3 Q Okay. We are on the home stretch. I have
4 just got some questions for you about FPL's DSM
5 performance.

6 A Okay.

7 Q When I say DSM, that's demand-side management?

8 A Yes.

9 Q Or basically energy efficiency?

10 A Yes.

11 Q And FPL is subject to FEECA, the Florida
12 Energy Efficiency and Conservation Act?

13 A Yes.

14 Q And that act requires FPL to come before the
15 Commission every five years to establish finding goals
16 for energy efficiency?

17 A Goals and then plans to achieve them, yes.

18 Q And you anticipated where I was going.

19 So then FPL implements those goals through
20 programs that it designs and oversees?

21 A Through cost-effective programs, yes.

22 Q And those goals measure both peak reductions
23 and total energy saved?

24 A Yes.

25 Q So you would have a summer peak, a winter peak

1 **and a gigawatt hour of energy savings each year?**

2 A Yes. There is six goals. Summer, winter
3 megawatt, and then gigawatt hours for residential and
4 business.

5 **Q And then is there also one for residential and**
6 **business combined?**

7 MR. BURNETT: Mr. Chairman, I am sorry, from
8 the FAIR order, we know that FEECA performance is
9 actually something the Commission should fairly
10 consider in the rate case. We are having a primer
11 in how that docket works, and that's just not
12 relevant to anything we are doing here.

13 CHAIRMAN LA ROSA: Are you --

14 MR. LUEBKEMANN: I'm trying to establish the
15 number of goals.

16 BY MR. LUEBKEMANN:

17 **Q If I represent to you that there are nine**
18 **goals for each year between summer peak, winter peak and**
19 **total energy saved on one side of the matrix, and then**
20 **residential, commercial/industrial and combined on the**
21 **other?**

22 A There is six goals, but we do -- we do also
23 show the combined with residential and business.

24 **Q Could we go to Exhibit 979 on Case Center page**
25 **F10-2573? And is this the 2024 report on demand-side**

1 management for FPL that was filed in March of this year?

2 A It is.

3 Q Could we go to page one of the actual report?

4 There we go.

5 Would this chart show the, what I would call
6 nine goals of residential, business and combined over
7 those three -- the two peaks and the annual energy
8 savings?

9 A Our goals, and then our performance against
10 those goals, yes.

11 Q All right. And would the variance -- percent
12 variance column represent how far above or below that
13 particular goal FPL did in a year?

14 MR. BURNETT: Mr. Chairman, I am sorry, I'm
15 probably testing your patience, but the document
16 says what it says. It clearly says percentage
17 variance. There is just no need to waste this
18 commission's time and the resources that you are
19 putting forward to read documents that clearly say
20 what they say, sir.

21 CHAIRMAN LA ROSA: I understand, and similar
22 to what I said earlier, if you are prefacing a
23 question, I will accept it. But if we are just
24 stating what's on the documents in front of us, I
25 feel like we are just reading what's there. It's

1 fine to reference it, but --

2 MR. LUEBKEMANN: So this document does not
3 state, yes, this goal was met or it was not met.
4 This is a predicate question that I am just trying
5 to establish what that percent variance column
6 means.

7 CHAIRMAN LA ROSA: Okay.

8 MR. LUEBKEMANN: And I will move on quickly
9 here. Yeah, I just want to confirm.

10 CHAIRMAN LA ROSA: Okay. Let's do that.

11 MR. LUEBKEMANN: Thank you, Mr. Chair.

12 BY MR. LUEBKEMANN:

13 **Q So would a negative value in the percent**
14 **variance column mean that FPL did not achieve that goal?**

15 **A Correct.**

16 **Q Without going through each year line by line,**
17 **did FPL fail every single summer and winter peak**
18 **reduction goal for its residential customers over this**
19 **time period?**

20 MS. MONCADA: Mr. Chairman, that -- we have
21 established now that the negative in the variance
22 column means they didn't meet -- where we did not
23 meet the goal. And then by implication, where
24 there is not a negative, it means we did meet the
25 goal. With that, we stipulate to the results on

1 the page.

2 MR. LUEBKEMANN: I will accept it.

3 CHAIRMAN LA ROSA: Okay.

4 BY MR. LUEBKEMANN:

5 **Q Are you familiar with the CIAC/CDR programs?**

6 A Yes.

7 **Q And that's a demand-side management program**
8 **available to high usage business customers?**

9 A Yes.

10 **Q And the function of that program is that those**
11 **customers will receive credits for agreeing to be**
12 **interruptible?**

13 A That's right.

14 **Q Do those customers receive those credits**
15 **independent of whether they are actually interrupted?**

16 A They receive those credits independent if they
17 are interrupted or not, yes.

18 **Q Are you familiar with the last time that a**
19 **CAIAC or CDR was -- FPL exercised its ability to**
20 **interrupt one of those customers?**

21 A That would probably be better answered by
22 Witness Whitley.

23 **Q But you don't affirmatively know?**

24 A I don't know.

25 **Q Your rebuttal testimony responds to Witness**

1 **Marcelin, is that fair to say?**

2 A Yes.

3 **Q And in developing that testimony, you reviewed**
4 **his testimony in this case?**

5 A I did.

6 **Q I understand your testimony is his findings**
7 **need additional context, but I want to confirm. You**
8 **don't dispute his factual findings on energy efficiency?**

9 A I don't dispute his factual findings. I just
10 don't think it tells the full story.

11 **Q And specifically, your rebuttal testimony did**
12 **not refute Mr. Marcelin's finding that in 2023, the**
13 **national average for energy savings as a percent of**
14 **retail sales was over 10 times that which FPL achieved?**

15 A Yeah, I don't dispute his -- the facts that he
16 produced. I think it just doesn't tell the whole story.
17 It doesn't paint a complete picture.

18 We run one of the most efficient fleets in the
19 industry, and to not include the efficiency of that
20 utility and understanding that the opportunities have
21 cost-effective energy savings programs for a utility
22 that is very efficient is limited.

23 I think it's also very difficult to compare
24 against other utilities that are in different states
25 that have different state policies related to energy

1 efficiency, as well as not understanding -- or not
2 including the efficiency of the utility itself.

3 **Q That is all of my questions. I appreciate**
4 **your patience. I appreciate everybody else who has**
5 **worked with me, and we will turn it back over.**

6 **CHAIRMAN LA ROSA: Great. Thank you.**

7 THE WITNESS: Thank you.

8 CHAIRMAN LA ROSA: Go to FIPUG.

9 MS. PUTNAL: No questions.

10 CHAIRMAN LA ROSA: All right. Walmart?

11 MS. EATON: No questions. Thank you.

12 CHAIRMAN LA ROSA: FEIA?

13 MR. MAY: No questions.

14 CHAIRMAN LA ROSA: Staff?

15 MR. STILLER: No questions.

16 CHAIRMAN LA ROSA: Commissioners, do we have
17 any questions?

18 All right. Seeing none, back to you, FPL, for
19 redirect.

20 MS. MONCADA: No redirect for -- oh, I am
21 sorry, did someone change their mind?

22 CHAIRMAN LA ROSA: No.

23 MS. MONCADA: No redirect for this witness.

24 CHAIRMAN LA ROSA: Okay. Let's go ahead and
25 excuse the witness. Thank you very much.

1 MS. MONCADA: Mr. Chairman, if we could please
2 have -- FPL would ask for Exhibits 61 through 63 to
3 be entered into the record.

4 CHAIRMAN LA ROSA: Okay. Seeing -- any
5 objection? Seeing none, so moved.

6 (Whereupon, Exhibit Nos. 61-63 were received
7 into evidence.)

8 MS. WESSLING: Yes, and OPC would also ask
9 that Exhibits 853, 854, 535, 488, 489, 503, 525 and
10 487 be admitted.

11 CHAIRMAN LA ROSA: Objections to those?

12 MS. MONCADA: No objections.

13 CHAIRMAN LA ROSA: Okay. So moved.

14 (Whereupon, Exhibit Nos. 487-489, 503, 525,
15 535 & 853-854 were received into evidence.)

16 CHAIRMAN LA ROSA: FEL?

17 MR. LUEBKEMANN: Thank you, Mr. Chair. I am
18 going to read slow.

19 CHAIRMAN LA ROSA: All good.

20 MR. LUEBKEMANN: FEL would move -- FPL -- or
21 FEL would move Exhibit 887 through 891, 937 through
22 940, 942, 944, 946, 947, 979, 1058, 1497, 1527 and
23 1528.

24 CHAIRMAN LA ROSA: Objections to any of those?

25 MS. MONCADA: No objections.

1 CHAIRMAN LA ROSA: Okay. So moved.

2 (Whereupon, Exhibit Nos. 887-891, 937-940,
3 942, 944, 946, 947, 979, 1058, 1497, 1527 & 1528 were
4 received into evidence.)

5 CHAIRMAN LA ROSA: Any other parties?
6 Staff, anything to move?

7 MS. HELTON: I am sorry, Mr. Chairman, I
8 didn't hear Mr. Luebkekmann's last number. Was it
9 1528?

10 MR. LUEBKEMANN: Yes.

11 MR. STILLER: And also, Mr. Chair, listed on
12 the exhibit list as Nos. 2 through 28 are the
13 MFR -- the MFRs and the supporting schedules as
14 corrected and supplemented. They have not been
15 moved into the record yet, but they were referenced
16 in some of the earlier cross. So if there is no
17 objection from the other parties, this might be an
18 appropriate time to move in Exhibits 2 through 28.

19 MS. MONCADA: That sounds very efficient.
20 Yes.

21 MS. WESSLING: No objection.

22 CHAIRMAN LA ROSA: No objection?

23 MR. LUEBKEMANN: None from FEL.

24 CHAIRMAN LA ROSA: Okay. All right. Let's go
25 ahead and do that, so moved, so 2 through 28, the

1 MFRs.

2 (Whereupon, Exhibit Nos. 2-28 were received
3 into evidence.)

4 CHAIRMAN LA ROSA: All right. You are
5 excused.

6 THE WITNESS: Thanks.

7 CHAIRMAN LA ROSA: Thank you.

8 (Witness excused.)

9 CHAIRMAN LA ROSA: All right. Let's -- I will
10 give it back to FPL to call your next witness.

11 MS. MONCADA: Thank you, Mr. Chairman. FPL
12 calls Andrew Whitley.

13 CHAIRMAN LA ROSA: Mr. Whitley, when you are
14 all set, just if you don't mind standing and
15 raising your right hand?

16 Whereupon,

17 ANDREW W. WHITLEY

18 was called as a witness, having been first duly sworn to
19 speak the truth, the whole truth, and nothing but the
20 truth, was examined and testified as follows:

21 CHAIRMAN LA ROSA: Feel free to get settled
22 in, and I will toss it over to the company once you
23 are ready.

24 EXAMINATION

25 BY MR. BAKER:

1 **Q** Okay. Mr. Whitley, you have been just sworn
2 **in, correct?**

3 A That is correct. Correct.

4 **Q** Would you please state your name and business
5 **address for the record?**

6 A Yes. My name is Andrew W. Whitley. I am
7 the -- I work at 700 Universe Boulevard in Juno Beach,
8 Florida, 33408.

9 **Q** By whom are you employed and in what capacity?

10 A I am employed by Florida Power & Light Company
11 as Engineering Manager of the Integrated Resource
12 Planning department.

13 **Q** And have you prepared and caused to be filed
14 **41 pages of prepared direct testimony in this**
15 **proceeding?**

16 A I have.

17 **Q** And July 1st of 2025, you filed an errata to
18 **correct your direct testimony. Beyond that filed**
19 **errata, do you have any further changes or revisions to**
20 **your prepared direct testimony?**

21 A No, I do not.

22 **Q** And so with that filed errata, if I asked you
23 **the same questions contained in your direct testimony**
24 **today, would your answers be the same?**

25 A Yes, they would.

1 MR. BAKER: Mr. Chairman, I would ask that Mr.
2 Whitley's prepared direct testimony be inserted
3 into the record as though read.

4 CHAIRMAN LA ROSA: So moved.

5 (Whereupon, prefiled direct testimony of
6 Andrew W. Whitley was inserted.)

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BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 20250011-EI
FLORIDA POWER & LIGHT COMPANY
DIRECT TESTIMONY OF ANDREW W. WHITLEY

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 Andrew W. Whitley. My business address is 700 Universe Blvd., Juno
4 Beach, Florida 33408.

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
7 Engineering Manager in the Integrated Resource Planning (“IRP”) department of
8 FPL’s Finance Business Unit.

9 **Q. Please describe your duties and responsibilities in that position.**

10 A. In my current position, I am responsible for the management and coordination of
11 economic analyses that identify and evaluate resource alternatives to meet FPL’s
12 resource needs and maintain system reliability. The analyses I oversee are designed to
13 determine the magnitude and timing of resource needs for FPL’s system and are used
14 to develop the Company’s integrated resource plan.

15 **Q. Please describe your educational background and professional experience.**

16 A. I graduated from Lehigh University in 2004 with a Bachelor of Science in Mechanical
17 Engineering. I joined FPL in 2004 as part of the Power Delivery team, undertaking
18 various engineering duties related to initiating new service to FPL customers and
19 maintaining the reliability of customers’ existing services. In 2007, I joined the team
20 now known as the IRP group. Since that time, I have been involved in and supported
21 a variety of resource planning projects for FPL, including FPL’s Ten Year Site Plans
22 (“TYSP”), solar base rate adjustments, need determination proceedings for new power
23 plants under the Florida Power Plant Siting Act (including the Okeechobee Clean

1 Energy Center in 2015 and the Dania Beach Clean Energy Center in 2018), base rate
2 proceedings, and the Demand-Side Management (“DSM”) Goals proceedings. I
3 became the Manager of the IRP group in 2022 and have served as the project leader for
4 FPL’s TYSPs since 2022.

5 **Q. Are you sponsoring any exhibits in this case?**

6 A. Yes. I am sponsoring the following exhibits:

- 7 • Exhibit AWW-1 Summary of FPL Resource Adequacy Study (Prepared by E3)
- 8 • Exhibit AWW-2 Load Forecasts Used in the Current Analyses
- 9 • Exhibit AWW-3 Fuel Cost Forecasts Used in the Current Analyses
- 10 • Exhibit AWW-4 CO₂ Compliance Cost Forecast Used in the Current Analyses
- 11 • Exhibit AWW-5 Economic Analysis Results for the Combined 2026 and 2027
12 Solar and Battery Additions
- 13 • Exhibit AWW-6 Economic Analysis Results for the Combined 2028 and 2029
14 Solar and Battery Additions
- 15 • Exhibit AWW-7 With Programs and Without Programs Resource Plans for
16 CDR and CILC Incentive Payment Analysis
- 17 • Exhibit AWW-8 Analysis of the Current and Proposed Monthly Incentive
18 Levels for the CDR & CILC Programs.

19 **Q. Are you sponsoring or co-sponsoring any Minimum Filing Requirements in this**
20 **case?**

21 A. No.

1 **Q. What is the purpose of your testimony?**

2 A. The purpose of my testimony is to describe the resource planning process undertaken
3 by FPL to identify optimal resource additions for the 2026-2029 period. Specifically,
4 I identify FPL's system needs and detail how the battery storage and photovoltaic
5 ("PV") solar resource options identified through the Company's resource planning
6 process most cost-effectively promote the dependability and reliability of FPL's
7 system. My testimony also describes how recent and ongoing changes in FPL's
8 generation resource portfolio support the transition of FPL's production cost of service
9 methodology from a 12 coincident peak ("CP") and 1/13th methodology to a 12 CP and
10 25% methodology as detailed in the testimony of FPL witness DuBose. I also support
11 the 3-gigawatt ("GW") maximum established under FPL's proposed Large Load
12 Contract Service-1 ("LLCS-1") tariff, which is detailed in the testimony of FPL witness
13 Cohen. Lastly, my testimony establishes the appropriate new monthly incentive
14 payment levels for two of FPL's largest DSM programs: the Commercial/Industrial
15 Demand Reduction ("CDR") and Commercial/Industrial Load Control ("CILC")
16 programs.

17 **Q. Please summarize your testimony.**

18 FPL employs a comprehensive system planning analysis to identify reliable, timely,
19 and cost-effective system additions that meet FPL's unique system needs and ensure
20 sufficient capacity and energy are available to serve all FPL customers for every hour
21 of the year. FPL undertook such an analysis in identifying utility-scale battery storage
22 and PV solar additions that are proposed to enter service between 2026 and 2029.

1 As FPL's system continues to incorporate additional cost-effective solar generation,
2 the Company is continuing to adapt its resource planning to ensure that customers'
3 reliability needs are met through available, dispatchable resources that provide value
4 to customers. Just as FPL's system has advanced and modernized over time, resource
5 adequacy must also be modernized to consider conditions that affect the delivery of
6 power in times of greatest need. To that end, FPL performed a comprehensive,
7 stochastic loss of load probability ("LOLP") analysis to ensure that FPL's proposed
8 system additions optimally address system needs for each hour of the year. The results
9 of the stochastic LOLP analysis, which are detailed in my testimony, demonstrate that
10 FPL has a need for resources to be added throughout years 2026 to 2029. Specifically,
11 FPL must meet a 32,322 MW firm capacity need by 2027 in order to maintain its LOLP
12 requirement in that year, and that reliability requirement increases to 34,102 MW in
13 2030, representing an increase of 1,780 MW over that timeframe.

14

15 The economic analyses presented through my testimony show that PV solar additions,
16 combined with battery storage installations, most cost-effectively address the reliability
17 needs identified through the stochastic analysis and generate significant customer
18 savings. My testimony demonstrates that the deployment of 2,086 megawatts ("MW")
19 of PV solar facilities in 2026 and 2027, along with 2,239 MW of battery storage
20 installations over that same time period, is expected to create \$1,942 million in
21 cumulative present value revenue requirement ("CPVRR") savings for FPL's
22 customers. The combination of solar and battery storage provides complementary
23 benefits for FPL's system, incorporating FPL's most cost-effective generation resource

1 and, concurrently, allowing for continued reliable operation of the electric system
2 during times when solar facilities are not generating. Together, these resources are less
3 costly than new natural gas fired generation and, unlike natural gas generation, can be
4 added in the near term to address FPL's current reliability needs.

5
6 Not only are solar and battery storage optimal resources for the 2026 and 2027
7 timeframe, they continue to be the best resource options to address FPL's reliability
8 needs in the latter years of FPL's four-year plan. FPL's proposed 3,278 MW of solar
9 installations and 1,192 MW of battery installations in 2028 and 2029 are expected to
10 create \$2,213 million in CPVRR savings for customers, making them optimal resources
11 as compared to other alternatives. These resources will continue the trend of providing
12 fuel-free generation from solar combined with the flexibility and capacity from battery
13 storage and will ensure FPL's bulk electric system is powered by reliable, cost-effective
14 generation.

15
16 With the continued deployment of cost-effective solar, FPL's net system peak
17 continues to push further into the evening hours. This means that FPL's incremental
18 generation resource needs are moving to a time of the day when FPL's solar generation
19 is producing less output. This transformation in our generation fleet supports the
20 transition to a 12 CP and 25% methodology as described in the testimony of FPL
21 witness DuBose, as this methodology best reflects the realities of FPL's system and its
22 incremental generation needs during peak hours.

23

1 Just as FPL's grid and resource supply continue to evolve, so does the nature of the
2 customers who are being added to the system, requiring the Company to refine certain
3 features of service and cost assignment. One such feature is the LLCS-1 tariff
4 described in the testimony of FPL witness Cohen. Participation in this tariff, which is
5 tailored to large load customers entering FPL's service area, must be capped in order
6 to ensure that FPL has the generation supply resources needed to safely, reliably, and
7 adequately serve all of its customers. The limitation of 3 GW for this service during
8 the term of our proposed four-year plan, which my testimony supports, is a reasonable
9 limitation given the resources that FPL could potentially add in the near-term to meet
10 the needs of new customers with large electric loads.

11

12 The nature of FPL's system also affects the operational value and cost-effectiveness of
13 FPL's CDR and CILC programs. Currently, the incentive levels for these programs do
14 not align with the operational value that they provide to FPL and its general body of
15 customers. As such, FPL proposes to lower the monthly incentive payment for the
16 CDR program from its current level of \$8.76/kW to \$6.22/kW. FPL's CILC rate will
17 be adjusted accordingly, as addressed by FPL witness Cohen. The revised incentive
18 levels will ensure that the programs are still attractive to participants and do not burden
19 non-participants with higher program costs than are needed to sustain the program.

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II. RESOURCE ADDITIONS

Q. What generation resource additions associated with FPL’s rate request is your testimony supporting?

A. My testimony supports the prudence of FPL’s addition of utility-scale battery storage and solar generation proposed for years 2026 and 2027, as well as FPL’s need for further additions of these resources in years 2028 and 2029. These additions, which were specifically identified through FPL’s resource planning process as optimal and needed resources, will allow FPL to meet its capacity and energy requirements with reliable generation sources and are forecasted to generate billions of dollars in total savings for FPL’s customers compared to other alternatives.

A. Resource Planning – Process Overview

Q. How does FPL determine its future demand and energy needs and how best to meet those needs?

A. There are three main goals of FPL’s resource planning process:

1. Identify the timing of FPL’s resource needs. The timing of future resource needs is largely determined by reliability standards, including planning reserve margin, generation-only reserve margin, and LOLP.
2. Identify the magnitude of these resource needs, *i.e.*, how many MW of capacity are needed to satisfy all reliability criteria.
3. Identify the type of resources, either supply-side or demand-side, that can meet the capacity needs while adding other resources that improve system economics. On an economic basis, this selection is determined by the option

1 that is projected to result in the lowest electric rates for FPL's customers while
2 satisfying FPL's reliability standards.

3 **Q. Please provide an overview of FPL's resource planning process.**

4 A. FPL's resource planning process can be summarized by the following four tasks:

5 • Task 1: Determine the magnitude and timing of FPL's new resource needs to
6 maintain a reliable system.

7 • Task 2: Identify the resource options and resource plans that are available to
8 meet the determined magnitude and timing of FPL's resource needs (*i.e.*,
9 identify the available competing options and resource plans).

10 • Task 3: Evaluate the competing resource options and resource plans based on
11 system economics and non-economic factors.

12 • Task 4: Select a resource plan to meet the identified need.

13 **Q. What are the reliability standards the Company uses to design its resource
14 portfolio and determine the need for additional resources?**

15 A. FPL uses three specific reliability criteria in projecting its future resource needs. The
16 first criterion is a minimum total planning reserve margin ("PRM") of 20% for both
17 summer and winter peak hours. The minimum 20% total PRM criterion was approved
18 by the Commission in Order No. PSC-99-2507-S-EU issued in Docket No. 981890-
19 EU.

20

21 The second reliability criterion used by FPL is an LOLP criterion. LOLP is a projection
22 of how well an electric utility system may be able to meet its firm demand (*i.e.*, a
23 measure of how often firm load may exceed available resources). In contrast to a

1 reserve margin approach that looks at the one summer peak hour and the one winter
2 peak hour, the LOLP approach looks at the peak hourly demand for each day of the
3 year. The LOLP approach takes into consideration the probability of individual
4 generators being out-of-service due to scheduled maintenance or forced outages, the
5 variability of load, the variability of production from intermittent generation resources,
6 and the availability of duration-limited resources, such as battery storage and demand
7 response programs. An LOLP analysis models each of these variables to generate a
8 multitude of scenarios and the associated probability of a generation shortfall in these
9 scenarios can be calculated. LOLP is typically expressed in terms of “numbers of times
10 per year” that the system firm demand cannot be served. FPL’s LOLP criterion is a
11 maximum of 0.1 days per year, or one day in ten years. This LOLP criterion is
12 commonly used throughout the electric utility industry and is consistent with North
13 American Electric Reliability Corporation reliability planning standards.

14

15 The third reliability criterion used by FPL is a minimum generation-only reserve
16 margin (“GRM”) of 10%. The issue of having a sufficient generation component of
17 the projected total reserve margin has been discussed annually in FPL’s TYSP since
18 2011, and the GRM was adopted by FPL as a reliability criterion beginning in 2014.
19 The GRM must be applied only after evaluating the amount of DSM in a resource plan.

20 **Q. Has FPL expanded its reliability analysis to account for features that are specific**
21 **to FPL’s evolving system?**

22 A. Yes. FPL’s system has evolved over time such that the reliability analyses of the past
23 do not sufficiently detect resource adequacy risks associated with FPL’s generation

1 profile. As I referenced earlier, FPL's incorporation of cost-effective solar has
2 increased to the extent that the peak hour of the year – *i.e.*, the hour of greatest demand
3 on the system – is no longer the most critical hour for determining reliability need.
4 Now, the most critical time for capacity on FPL's system is at peak net demand, which
5 occurs between 5:00 p.m. and 8:00 p.m., when solar facilities are providing less
6 generation output. For these hours, as well as all other hours throughout the year, FPL
7 needs additional, more modernized modeling analysis to determine its resource
8 adequacy and identify where its greatest resource needs lie. Thus, for its 2025 resource
9 planning, FPL added a stochastic LOLP analysis tailored to its system to identify
10 (1) hourly periods of the year where there is increased likelihood for a loss of load, and
11 (2) available resources that can remediate the potential for that loss.

12 **Q. How does stochastic LOLP modeling work?**

13 A. Stochastic LOLP modeling incorporates vast amounts of data to develop a granular
14 view of a utility's system adequacy in hour-by-hour segments. This modeling
15 incorporates significantly more data in assessing system reliability than a traditional
16 LOLP analysis, providing a substantially wider range of load and generation conditions
17 across numerous scenarios. Through this analysis, a utility can more effectively
18 determine the sufficiency of its hourly generation supply throughout the year, which,
19 in turn, allows it to identify any needed system additions.

20 **Q. How does the stochastic LOLP analysis differ from the reliability analyses FPL
21 has previously used to identify resource needs?**

22 A. The stochastic LOLP analysis incorporates a tremendous volume of system-specific
23 data to develop a probabilistic hourly load and supply projection and identify the

1 system's reliability needs. A traditional PRM analysis, however, provides a simplified
2 look at system operation, examining only the peak demand hour at two times of the
3 year – once in the winter and once in the summer – without considering the unique
4 generation attributes of the utility's fleet. The PRM analysis therefore leaves an
5 analytical shortcoming, particularly for systems that incorporate substantial renewable
6 generation. For example, as FPL's solar generation portfolio has increased, the hours
7 of the day with the least reserves are more likely to be found in the evening as the sun
8 begins to set and solar generation decreases, which a PRM analysis does not fully
9 reflect. In addition, the traditional PRM analysis also fails to capture the interactive
10 effects of non-dispatchable generation and load, which have become increasingly
11 challenging to predict and model. The stochastic LOLP analysis, on the other hand,
12 accounts for and models these factors, assessing resource availability at every hour of
13 the year and identifying the periods when reserves are most depleted, wherever they
14 may fall.

15
16 The stochastic modeling also presents a more sophisticated analysis than FPL's prior
17 LOLP analyses. A traditional LOLP analysis models expected generation
18 unavailability based upon historic forced outage rates, resulting in a cumulative
19 probability matrix of potential unit outages. The stochastic LOLP analysis, however,
20 simulates a random selection of plant outages, which better reflects the unpredictable
21 nature of unavailable generation as observed in normal system operations.
22 Additionally, a traditional LOLP analysis models an expected solar generation profile,
23 whereas the stochastic LOLP analysis produces a reliability assessment that captures

1 the natural variability in solar production due to weather conditions. The stochastic
2 LOLP model also better captures the synergistic interactions between load and non-
3 dispatchable generation because it models the variability of each input separately.

4 **Q. Did FPL engage an outside consultant to assist in developing FPL’s stochastic**
5 **LOLP analysis?**

6 A. Yes. To assist with determining the hourly reliability needs specific to its system, FPL
7 engaged Energy and Environmental Economics, Inc. (“E3”), a consulting firm with
8 experience advising state agencies, regulators, system operators and utilities on energy
9 policies. E3 provided advanced stochastic LOLP modeling that accounted for
10 variability in, among other things, generating resource availability, generating resource
11 output, and system load. The modeling also included an hourly assessment of FPL’s
12 system reliability. The scope of E3’s analysis assessed the marginal reliability benefits
13 of resources with disparate generating characteristics, such as thermal generation, solar,
14 battery storage, and demand response.

15 **Q. How were the inputs to the stochastic LOLP model developed?**

16 A. E3 coordinated with FPL and used hourly temperature data from representative weather
17 stations to develop hourly load profiles using a machine learning algorithm trained on
18 actual load and temperatures from 2003 to 2023. E3 also used historic satellite data to
19 simulate hourly solar generation at each of its current and future solar generating sites
20 for the 1980 to 2023 period, as well as actual historical generating unit availability data
21 to calculate an expected forced outage rate and a mean time to repair for every
22 generating unit in the FPL fleet. The model used these inputs to randomly select which
23 units may experience an outage at any given time within the simulations.

1 **Q. What were the results of the stochastic LOLP analysis and how did FPL**
2 **incorporate these results into its 2025 resource planning?**

3 A. The stochastic analysis revealed that LOLP vulnerabilities will arise if FPL's resource
4 planning is not modified. As shown in Exhibit AWW-1, FPL needs 32,322 MW of
5 firm capacity to be available in 2027 in order to maintain an LOLP of 0.1 days-per-
6 year in that year – and the required reliability need to reach the same 0.1 threshold
7 increases to 34,102 MW in 2030, representing an increase of 1,780 MW. The
8 stochastic analysis shows that not adding sufficient generation resources during the
9 2026 through 2029 time period to address the identified needs would cause FPL's
10 LOLP to not meet the 0.1 days-per-year threshold and could potentially result in
11 scenarios where FPL is unable to provide its customers with electricity, a circumstance
12 that FPL's resource planning must address and avoid.

13
14 To address the resource need demonstrated through the stochastic analysis, FPL's
15 resource planning process identified resources to timely address the need, while
16 maintaining all reliability criteria, and tested the cost-effectiveness of the available
17 resource options.

18 **Q. What forecasts and assumptions did FPL use in its 2025 resource planning**
19 **process?**

20 A. Every year, FPL updates its forecasts as part of its resource planning process and in
21 support of filing its yearly TYSP, including considerations of supply-side efficiencies.
22 In its 2025 resource planning work, which supports the resource additions identified in
23 my testimony, FPL is using the following forecasts:

- 1 1. A forecast of projected hourly load, dated November 8, 2024, which is provided
- 2 with my testimony as Exhibit AWW-2;
- 3 2. A forecast of fuel prices (natural gas, coal, and oil), dated September 3, 2024,
- 4 which is provided with my testimony as Exhibit AWW-3; and
- 5 3. A forecast of carbon dioxide (“CO₂”) compliance costs, dated September 28,
- 6 2022, which is provided with my testimony as Exhibit AWW-4.

7

8 FPL’s 2025 resource planning also reflects unit retirements that affect the Company’s

9 projected resource needs, including the retirement of Gulf Clean Energy Center Units

10 4 and 5 by the end of 2029.

11 **Q. What is FPL’s process for selecting new resources to meet identified system**

12 **needs?**

13 FPL’s resource selection process is guided by the AURORA planning model and

14 incorporates the stochastic LOLP modeling results I detailed earlier. The AURORA

15 model utilizes sophisticated programming to conduct an extensive evaluation of

16 potential resource plans that can meet the Company’s reliability requirements. FPL

17 has presented the Commission with outputs from this model in numerous prior

18 proceedings, and it is being used to develop FPL’s 2025 TYSP.

1 To develop a resource plan that is specific to FPL’s needs, the AURORA model
2 incorporates a number of forecasts and operating assumptions into its analysis
3 including the following:

- 4 • The minimum 20% total Reserve Margin reliability criterion described earlier;
- 5 • Any additional resource needs from FPL’s other reliability criteria;
- 6 • Forecasts for peak load, energy, fuel prices, and environmental compliance
7 costs;
- 8 • Projections of future incremental DSM demand and energy additions, based on
9 FPL’s proposed DSM Plan, which will be filed by March 18, 2025;
- 10 • The existing capabilities of the units on FPL’s systems, and any planned
11 changes to those units; and
- 12 • Projections of fixed and variable costs, and the operating characteristics of a
13 variety of generation options to meet FPL’s resource needs in the future.

14
15 FPL ran the AURORA model with these assumptions to identify and test the cost-
16 effectiveness of resource additions for inclusion in this proceeding as well as the 2025
17 TYSP.

18
19 I reviewed the underlying assumptions and modeling methodology, and they are
20 reasonable and consistent with how FPL has conducted forecasts for prior investments
21 that have been approved by the Commission.

1 **Q. How does FPL forecast DSM and energy efficiency in its resource planning**
2 **analysis?**

3 A. FPL's resource planning assumes 100% achievement of its DSM and energy efficiency
4 goals, which are approved by the Commission consistent with the Florida Energy
5 Efficiency and Conservation Act ("FEECA"). Specifically, FPL accounts for the
6 following projected DSM impacts as "line-item reductions" to the forecasts: (1) the
7 impacts of incremental energy efficiency that have been implemented after the 2024
8 summer peaks have occurred, (2) projected impacts from incremental energy efficiency
9 and load management, and (3) the impacts from previous signups in FPL's load
10 management programs that will continue through 2034. Modeling DSM in this way
11 reflects the full benefit associated with FPL's Commission-approved DSM programs.

12 **Q. How have FPL's prior DSM efforts affected its system?**

13 A. The Company's DSM efforts through the end of 2024 have resulted in a cumulative
14 summer peak reduction of 5,695 MW at the generator and an estimated cumulative
15 energy savings of 102,684 GWh at the generator. Without these reductions FPL would
16 have required the equivalent of approximately 68 new 100 MW generating units to
17 meet its peak load.

18 **Q. How does FPL determine the cost-effectiveness of its potential resource options?**

19 A. FPL assesses the CPVRR of potential resource options to make this determination.
20 CPVRR is a metric focused on total system economics and rate impacts and allows for
21 a comparative evaluation of the cost-effectiveness of various resource options. FPL
22 assesses the CPVRR of competing resource alternatives by comparing the alternatives'
23 abilities to economically meet an identical system load. This enables FPL to rank

1 potential alternatives according to their respective impacts on both electricity rates and
2 system revenue requirements. The CPVRR analysis therefore informs and furthers
3 FPL's objective of minimizing the Company's projected levelized system average
4 electric rate (*i.e.*, a Rate Impact Measure or "RIM" methodology), which is a tangible
5 benefit to customers.

6 **Q. How many potential resource plans did the AURORA model evaluate for FPL's**
7 **system?**

8 A. After incorporating FPL's input parameters, AURORA evaluated hundreds of possible
9 resource plans that met FPL's future resource needs using only generation or supply
10 options. These resource plans included consideration of all potentially implementable
11 generation resources, including solar, battery storage, and fossil options. The model
12 identified utility-scale battery storage and solar resources as optimal additions based
13 on their CPVRR relative to other resources and their ability to address input parameters
14 specified for the model run.

15 **Q. How did FPL review the AURORA outputs in light of the stochastic LOLP**
16 **analysis findings?**

17 A. FPL tested the resource additions identified by AURORA to determine the most cost-
18 effective resources that could address FPL's reliability needs as identified through the
19 stochastic LOLP analysis. This testing procedure was a necessary and additive
20 component of the resource planning process, as the AURORA model identifies
21 resource options on the basis of the Company's minimum reserve margin requirement,
22 which is only analyzed at the system's summer and winter peaks (*i.e.*, two peak hours
23 per year).

1 **Q. What resource additions did FPL identify that most cost-effectively address the**
2 **reliability needs identified through the stochastic LOLP analysis?**

3 A. FPL's resource planning identified the following installations as the most cost-effective
4 to meet FPL's resource needs in the 2026 through 2029 timeframe:

- 5 • 1,419.5 MW of battery storage and 894 MW_{AC} of solar in 2026;
- 6 • 819.5 MW of battery storage and 1,192 MW_{AC} of solar in 2027;
- 7 • 596 MW of battery storage and 1,490 MW_{AC} of solar in 2028; and
- 8 • 596 MW of battery storage and 1,788 MW_{AC} of solar in 2029.

9

10 These proposed additions represent a greater than 50% reduction in planned solar for
11 2026 and 2027 as compared to FPL's 2024 TYSP, in favor of the reliable firm capacity
12 provided by utility-scale battery storage, which more than doubles relative to the
13 battery storage additions identified for 2026 and 2027 in FPL's 2024 TYSP. Years
14 2028 and 2029 represent similar decelerations of solar deployment in favor of
15 additional MW of battery storage capacity as compared to the 2024 TYSP.

16 **Q. Is it your assessment that these are the optimal system additions for FPL in years**
17 **2026 through 2029?**

18 A. Yes. These are the most cost-effective system additions to meet FPL's reliability needs
19 identified through the stochastic LOLP analysis and ensure sufficient capacity and
20 generation production for every hour of the year. Consistent with my CPVRR analyses,
21 which are described in my testimony below, these system additions meet FPL's
22 resource needs and are also projected to save customers several billions of dollars over
23 the life of the assets.

1 **Q. Could purchasing power as needed be a reliable solution to address the resource**
2 **needs identified by FPL’s LOLP modeling?**

3 A. No. Having consulted with FPL’s Energy Marketing and Trading business unit,
4 purchasing power to address these needs would not be a viable solution. Purchasing
5 power, either in the near- or long-term, would require that capacity be consistently
6 available at the times FPL most requires it. However, the availability of power
7 purchases would be extremely limited during any situation with higher-than-normal
8 loads in Florida. Additionally, long-term power supply agreements often require power
9 deliveries to be scheduled a day ahead or contain other scheduling limitations that
10 would compromise FPL’s ability to flexibly meet hour-to-hour supply needs. Further,
11 the supply of wholesale power available in the Florida market is limited and may
12 become increasingly more so as utilities in the Southeast continue to anticipate (and
13 potentially recognize) significant load growth. Therefore, to rely on as-needed
14 purchases during times of system constraint would jeopardize FPL’s power supply
15 availability, a circumstance that FPL must plan to avoid.

16 **Q. Is it your assessment that the battery storage and solar additions you identified**
17 **are prudent compared to adding natural gas-fired generation?**

18 A. Yes. The addition of solar generation and battery storage is more cost-effective than
19 constructing new natural gas generation. As demonstrated in my CPVRR analyses
20 presented below, using natural gas-fired generation to address FPL’s reliability needs
21 would increase costs for FPL customers by billions of dollars compared to the utility-
22 scale battery storage and solar resources I identified.

1 **Q. Aside from being more costly, are there other reasons why adding natural gas-**
2 **fired generation is not a suitable substitute for the solar and battery storage**
3 **additions you identified?**

4 A. Yes. The potential to construct and bring natural gas generation to operation in the
5 near term is severely limited. Combustion turbines (“CTs”) cannot be quickly
6 implemented and require multiple years to construct and reach operation. Moreover,
7 gas supply available to FPL is limited, and the additional infrastructure required to
8 increase the availability of gas supply takes time and cost to develop. This makes CTs
9 unsuitable for addressing reliability needs in the near term.

10

11 Additionally, the components needed to construct new CTs have become increasingly
12 difficult to timely obtain. Overseas demand and recent supply-chain issues have
13 pushed the earliest realistic in-service date for CTs to late 2029 or early 2030. These
14 in-service dates would lead to CTs being unable to meet FPL’s resource needs in the
15 2026-2029 timeframe.

16

17

B. FPL’s Planned Resource Additions (2026)

18 **Q. Please provide an overview of FPL’s current battery storage and solar portfolio.**

19 A. At this time, FPL has 469 MW of utility-scale, grid connected battery storage installed
20 on its system at three separate locations and is currently constructing 522 MW of new
21 battery storage adjacent to seven existing solar energy centers. As for FPL’s solar fleet,
22 FPL had a total of approximately 7,038 MW_{AC} (nameplate) of utility-owned solar
23 generation as of the end of 2024, all of which are PV facilities. FPL also has 894

1 MW_{AC} of solar generation in various stages of development that are expected to enter
2 service in 2025, including those that are a part of the solar base rate adjustments
3 approved in FPL's last base rate proceeding. These solar projects are spread throughout
4 FPL's system, providing energy derived from cost-effective renewable solar resources
5 throughout FPL's service area.

6 **Q. How has the addition of the solar facilities you mentioned contributed to FPL's**
7 **system?**

8 A. Solar contributes to FPL's system, and has benefitted FPL's customers, in the following
9 ways:

- 10 1. Solar provides a portion of its nameplate capacity as firm capacity during the
11 times of FPL's system peaks.
- 12 2. Solar provides fuel-free (and emission-free) energy that reduces the fuel portion
13 of customer bills. From 2021 through 2024, FPL customers have saved
14 approximately \$942 million in avoided fuel expenses from solar installed on
15 FPL's system.
- 16 3. Since 2023, solar production from new sites has also been eligible for a
17 Production Tax Credit that reduces the cost of solar and is passed on directly to
18 FPL's customers.

19 All three of these factors have led to solar being an economic resource option for FPL
20 and continue to drive the cost-effectiveness of solar in FPL's resource plans.

1 **Q. What is FPL's resource need for 2026?**

2 A. As identified in the stochastic LOLP analysis, FPL needs 1,663 MW of additional firm
3 capacity to meet its LOLP requirement in 2027. To meet this need FPL must add firm
4 capacity in 2026 so that it is positioned to meet the identified 2027 reliability need.

5 **Q. What resources does FPL plan to add in 2026 to address this need?**

6 A. FPL is proposing to add 1,419.5 MW of battery storage and 12 74.5 MW solar sites
7 (894 MW) in 2026. Installation of these system additions is supported by FPL's
8 resource planning analysis, undertaken in accordance with the process I described
9 earlier. FPL witness Oliver provides additional details concerning each of these
10 proposed solar additions, as well as those in 2027.

11 **Q. How do these additions address the need identified in the stochastic LOLP
12 analysis?**

13 A. In short, the MWs provided by the 2026 additions allow FPL to address the reliability
14 need identified through the stochastic LOLP analysis by 2027, while also maintaining
15 FPL's adherence to all other reliability criteria. Adding these resources, along with
16 additional resources in the first half of 2027, will bring FPL's projected LOLP under
17 the 0.1 days-per-year standard for 2027.

18

19 The 2026 additions also provide two specific system needs identified through the
20 stochastic LOLP analysis: (1) the additional need for stable, dispatchable capacity; and
21 (2) the need for FPL to maintain sufficient generation to meet FPL's increasingly higher
22 load. The proposed battery storage additions will have the ability to quickly discharge
23 energy to FPL's system to address hourly operational requirements, which enhances

1 the reliability of FPL's system. The facilities will also provide year-round capacity to
2 promote system reliability regardless of the time of day or the weather conditions and
3 enable low-cost energy to be stored and delivered when needed. In that way, the
4 storage additions will serve as key resources that allow FPL to increase system
5 reliability and flexibility by cost-effectively addressing times of peak energy
6 consumption, which ordinarily occur in the evenings.

7

8 The solar additions, combined with the battery storage, allow FPL to maintain
9 sufficient generation resources to reliably meet the needs of an increasing customer
10 base and higher loads. In addition to FPL's peak demand growing, FPL's net energy
11 load (*i.e.*, the amount of energy on the system throughout the year) is also growing.
12 FPL's proposed solar additions help meet this increased energy need with energy that
13 is produced cost-effectively and uses no fuel, thereby putting downward pressure on
14 customer rates over the long-term.

15

16 The 2026 additions can also be sited, constructed, and operational within a much
17 shorter timeframe than other generation resources, such as CTs as I discussed above.

18 **Q. Are there additional considerations that support the inclusion of 1,419.5 MW of**
19 **battery storage in 2026?**

20 A. Yes. The continued deployment of low-cost solar generation, which generates
21 electricity during daytime hours, is complemented by storage in order to continue to
22 push low-cost power to the grid when needed. With FPL's typical net system peak

1 (after accounting for solar generation) occurring in the evening time, storage capacity
2 enables FPL to dispatch lower-cost electricity during these net peak times.

3

4 Also, FPL's combined-cycle fleet most often undergoes maintenance during the
5 shoulder months, which have been susceptible to high load conditions. The stable
6 capacity provided by battery storage helps to address higher loads and unexpected
7 events, which in turn promotes system reliability.

8

9 Battery storage also provides variable cost savings via energy arbitrage – *i.e.*, charging
10 when energy is the cheapest and discharging to avoid more expensive generation.
11 Energy arbitrage becomes even more pronounced when a system has large amounts of
12 solar, as is the case with FPL. Solar drives down the price of energy during the day,
13 and batteries can discharge in the early evening to avoid more expensive generation
14 starting or ramping up, increasing generation resource cost-effectiveness to the benefit
15 of customers.

16 **Q. Is the addition of the 2026 battery storage and solar facilities cost-effective?**

17 A. Yes, as detailed in my CPVRR analysis below and attached to my testimony in Exhibit
18 AWW-5, these additions, along with the proposed 2027 additions, are projected to save
19 customers nearly \$2 billion over the lives of the assets.

20

1 **C. FPL's Planned Resource Additions (2027)**

2 **Q. What is FPL's resource need for 2027?**

3 A. As identified in the stochastic LOLP analysis, FPL's total firm MW requirement
4 increases by 626 MW from 2027 to 2028, and it must make additions in the beginning
5 half of 2027 to address the identified 273 MW need for 2027 shown in Exhibit
6 AWW-1.

7 **Q. Please detail FPL's proposed resource additions in 2027 to address this need.**

8 A. FPL's analysis supports the construction of 16 74.5 MW solar sites (1,192 MW) and
9 another 819.5 MW of battery storage throughout 2027. Adding these resources (along
10 with the 2026 additions) will allow FPL to meet its 0.1 days per year LOLP criterion
11 throughout 2027.

12 **Q. How do the 2027 additions address the need identified in the stochastic LOLP**
13 **analysis?**

14 A. These additions address the resource need identified for 2027 in the same manner I
15 described for the 2026 additions above; that is, by providing the stable, dispatchable
16 capacity and energy needed generation to meet FPL's identified system need. FPL's
17 addition of 1,192 MW of new solar generation and 819.5 MW of battery storage in
18 2027 allow FPL to maintain a 0.1 days-per-year LOLP throughout 2027. Additionally,
19 even with the 2027 additions, FPL must add additional firm capacity in the first half of
20 2028 to address a 19 MW shortfall identified for 2028.

1 **Q. Are FPL's 2026 and 2027 resource additions supported by a CPVRR analysis?**

2 A. Yes. FPL tested the cost-effectiveness of its 2026 and 2027 solar and battery storage
3 additions to ensure they are the most cost-effective options to address the Company's
4 identified reliability needs.

5 **Q. What was the result of that CPVRR analysis?**

6 A. The combination of FPL's planned 2026 and 2027 solar and battery storage additions
7 result in \$1,942 million CPVRR savings for FPL's customers, as compared to an
8 alternative plan that excludes the additions. This analysis demonstrates that the
9 facilities provide substantial savings for FPL's customers while addressing FPL's
10 identified reliability needs. Exhibit AWW-5 provides the results of the CPVRR
11 analysis.

12

13

D. FPL's 2028 and 2029 Resource Needs

14 **Q. What is FPL's resource need for 2028 and 2029?**

15 A. As identified in the stochastic LOLP analysis, FPL's need for additional firm capacity
16 continues to increase in years 2028 through 2030. Between 2028 and 2029 FPL's total
17 reliability need increases from 32,948 MW to 33,544 MW, an increase of 596 MW.
18 Between 2029 and 2030, FPL's total reliability need increases from 33,544 MW to
19 34,102 MW, an increase of 558 MW. The stochastic LOLP analysis shows that without
20 added resources in 2028 and 2029 to address this increasing growth, FPL will fall short
21 of its 0.1 days-per-year LOLP standard.

1 **Q. Has FPL identified which resources best address these needs?**

2 A. Yes. Based on FPL's analysis the most cost-effective resources to meet those needs
3 are 1,490 MW of solar in 2028 and 1,788 MW of solar in 2029, as well as 596 MW of
4 battery storage in each of those years. These additions will allow FPL to maintain its
5 0.1 LOLP standard in both 2028 and 2029. As with 2027, FPL must add resources
6 earlier in 2028 and 2029 to address MW shortfalls in those years of 19 MW and
7 104 MW, respectively. Additionally, as shown in Exhibit AWW-1, even with the
8 proposed 2028 and 2029 additions, FPL will still have a reliability need in 2030 and
9 beyond, which will have to be addressed in order to maintain an LOLP of 0.1 days-per-
10 year.

11 **Q. What is driving FPL's projected system needs in 2028 and 2029, and how do the
12 identified resources meet those needs?**

13 A. FPL's system is projected to continue growing throughout the 2028-2029 time period,
14 such that energy from new cost-effective solar will be needed while capacity from
15 battery storage will ensure that power can be reliably delivered to customers every hour
16 of the year. As FPL's system continues to grow and leverage cost-effective solar
17 generation, the requirement to maintain sufficient and readily dispatchable generation
18 becomes increasingly necessary, as shown in the stochastic LOLP analysis.

19
20 As with FPL's 2026 and 2027 additions, the resources identified for 2028 and 2029 are
21 projected to address the capacity need identified in the stochastic LOLP analysis and
22 ensure that FPL's other reliability criteria are met. Additionally, these resources can
23 be constructed and operational in time to meet the identified needs.

1 **Q. Are the Company's identified resource additions in 2028 and 2029 forecasted to**
2 **be cost-effective?**

3 A. Yes. Not only do the 2028 and 2029 additions contribute to FPL's ability to provide
4 reliable power to customers over every hour of the year, they are also cost-effective
5 compared to adding gas-fired CTs.

6 **Q. What are the projected CPVRR savings of a resource plan with the 2028 and 2029**
7 **additions as compared to a resource plan without these additions?**

8 A. As demonstrated in Exhibit AWW-6, the projected CPVRR benefit to FPL's customers
9 of adding the 2028 and 2029 additions compared to a plan that only adds CTs to address
10 peak reserve margin needs is \$2,213 million.

11 **Q. Is FPL requesting approval for cost recovery associated with the 2028 and 2029**
12 **additions you have identified?**

13 No, not in this proceeding. My testimony provides FPL's projected needs based on
14 FPL's current resource planning. As discussed by FPL witnesses Bores, Laney, and
15 Oliver, FPL's four-year plan proposes a Solar and Battery Base Rate Adjustment
16 mechanism pursuant to which FPL would seek recovery for solar and battery storage
17 facilities installed in 2028 and 2029 upon a showing of a resource or economic need
18 based on updated information.

1 **III. UPDATE TO COST OF SERVICE METHODOLOGY**

2 **Q. What production cost-of-service methodology is FPL proposing to use in this**
3 **proceeding?**

4 A. As detailed in the testimony of FPL witness DuBose, FPL is proposing to use a 12 CP
5 and 25% allocation method for production plant to better align cost allocations among
6 customer classes with changes to FPL’s portfolio of generation resources.

7 **Q. What are the changes to FPL’s generation portfolio that support the revised cost**
8 **of service methodology?**

9 A. As I detailed earlier in my testimony, FPL has installed a significant amount of cost-
10 effective solar generation and plans to continue expanding its development of solar
11 resources. This expansion is pushing FPL’s critical time of peak to later in the evening,
12 which is when incremental dispatchable generation is needed.

13
14 With FPL’s implementation of more solar generation, FPL has begun using a “net peak
15 load” methodology to assign firm capacity values to solar added to its system. This
16 methodology takes the hourly shape of FPL’s load forecast, then subtracts the projected
17 hourly solar generation from the load. The resulting shape shows FPL’s “net peak
18 load” and represents the load that incremental generation additions must meet. As
19 discussed previously, as more solar generation is added to FPL’s system, the time of
20 the net peak shifts further into the evening – therefore, incremental solar additions have
21 an incrementally lower firm capacity value as their generation declines in the peak
22 evening hours. Despite this decline in firm capacity value for solar, solar generation

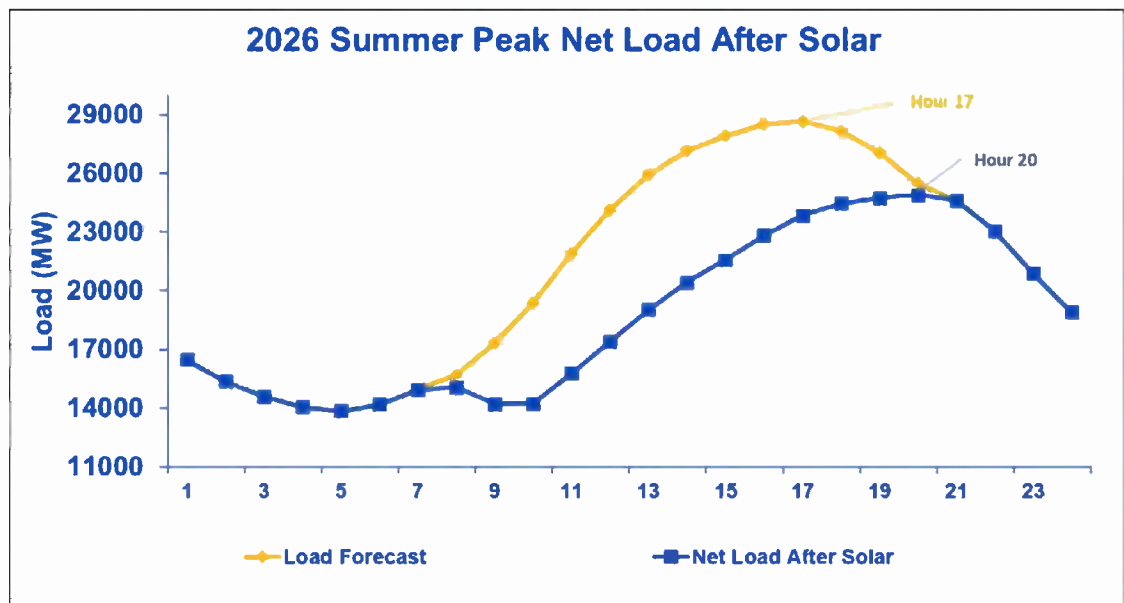
1 continues to be the most cost-effective resource for FPL’s system, based on the energy
 2 needs that it serves throughout the day.

3

4 As shown in Figure 1 below, FPL’s system peak in 2026, excluding solar generation,
 5 occurs at hour-ending 5:00 p.m. in the summer. However, after accounting for the
 6 projected output from FPL’s incremental solar additions through 2026, FPL’s net load
 7 peak shifts to hour-ending 8:00 p.m.

8

FIGURE 1



9

10 These changes in FPL’s system move the effective system peak later into the evening,
 11 and the types of customers and customer activities that cause the need for incremental
 12 generation during these times are different. These changing system dynamics and the
 13 changing times of FPL’s net load peak support the Company’s change in production
 14 cost-of-service methodology, as detailed by FPL witness DuBose.

15

1 **IV. LARGE LOAD CONTRACT SERVICE**

2 **Q. What tariff changes is FPL proposing to address the impacts of future large load**
3 **customers?**

4 A. As explained in the testimony of FPL witness Cohen, FPL is proposing new rate
5 schedules for future customers with a projected new or incremental load of 25 MW or
6 more and a projected load factor of 85% or more. Those rate schedules, LLCS-1 and
7 Large Load Contract Service-2 (“LLCS-2”), are designed to proactively address the
8 potential scenario that future customers of this size request service within the FPL
9 service area and, if so, to ensure that the general body of customers is protected from
10 the higher costs to serve such large load customers. In order to serve a customer of this
11 magnitude, FPL would need to make significant investments in new incremental
12 generation capacity that, but for the customer’s request for service, would not otherwise
13 be incurred or needed to serve the general body of customers.

14 **Q. Why is the maximum of 3 GW of demand appropriate for LLCS-1?**

15 A. As explained by FPL witness Cohen, rate schedule LLCS-1 will be available to serve
16 a combined total of 3 GW of demand in three specific regions of the Company’s service
17 area. These regions were selected based on their proximity to FPL’s transmission
18 facilities and areas suitable for the incremental generation capacity necessary to serve
19 up to a combined total load of 3 GW. In these regions FPL would be able to
20 accommodate up to approximately 1 GW of new demand without significant network
21 upgrades – thereby minimizing overall costs incurred – while still meeting all of FPL’s
22 reliability criteria. Additionally, the 3 GW maximum for rate schedule LLCS-1 is
23 appropriate because it corresponds to the amount of generation that FPL forecasts it

1 can reasonably and safely ramp up and deploy on its system starting in 2028 to serve
2 up to 1 GW of new demand in each of the selected regions. The 3 GW maximum
3 demand for schedule LLCS-1 therefore mitigates the potential for reliability issues and
4 costly new system investment, and better ensures that FPL can safely dispatch system
5 resources efficiently to meet the high load factor demand of these potential new large
6 load customers.

8 V. INCENTIVE PAYMENT LEVELS FOR CDR & CILC

9 Q. Please describe the CDR and CILC programs.

10 A. The CDR and CILC programs are FPL's largest DSM programs for commercial and
11 industrial customers. Voluntary participants in these programs agree to allow FPL to
12 remotely lower a portion of the participant's served electric load as needed (for
13 example, during a period of high electrical demand on FPL's system) in exchange for
14 the participant receiving a reduction in their monthly bill.

15
16 The two programs have a combined demand reduction capability of slightly more than
17 900 MW¹. The CDR program is open to new participants. The CILC program was
18 officially closed to new participants in the year 2000 and was essentially replaced by
19 the CDR program, which offers a similar load management program to commercial and
20 industrial customers.

¹ This value is the maximum summer peak value, calculated at the generator.

1 **Q. What are the current incentive payment levels for the two programs?**

2 A. The incentive payments are administered differently for each program. For the CDR
3 program, the incentive is administered as a \$/kW credit on the monthly bill. The current
4 CDR program monthly incentive is \$8.76/kW. For the CILC program, the incentive is
5 administered as a percentage reduction of the base bill as discussed in the testimony of
6 FPL witness Cohen.

7 **Q. How were the current incentive payment levels of the two programs set?**

8 A. The current incentive payment levels were set pursuant to FPL's 2021 base rate
9 settlement agreement approved by Order No. PSC-2021-0446-S-EI. Paragraph 4(e) of
10 that agreement set incentive payments for the CDR and CILC programs at the then-
11 current level until, at least, "the effective date of new FPL base rates implemented
12 pursuant to a general base rate proceeding." The Commission affirmed that a general
13 base rate proceeding is the appropriate proceeding for setting incentive payments for
14 these programs for FPL with the Commission's approval of stipulations in Order No.
15 PSC-2024-0505-FOF-EG.

16 **Q. How does the current CDR rate compare with the rate that was in effect when
17 most participants joined the program?**

18 A. Approximately 75% of the existing CDR participants joined the program during 2000
19 to 2012. During this time period, the monthly incentive was initially \$4.75/kW then
20 decreased to \$4.68/kW, representing just over 50% of its current amount.

1 **Q. Is FPL proposing to change the monthly incentive payments for both programs in**
2 **this proceeding?**

3 A. Yes. FPL is proposing to change the incentives to align them with the value they
4 provide to customers. My testimony discusses the proposed changes in incentive
5 payments in terms of a \$/kW payment format. The CILC program's incentive payment
6 is a percentage reduction of the base bill. FPL witness Cohen discusses how rates are
7 designed for CILC customers, and those rates are shown in Exhibit TCC-6.

8 **Q. How large a factor are the incentive payments in relation to the overall costs of**
9 **the programs?**

10 A. The programs have three cost components: (i) administrative costs, (ii) unrecovered
11 revenue requirements, and (iii) monthly incentive payments. Using the CDR program
12 as an example, the monthly incentive payments account for approximately 99% of the
13 projected total CPVRR cost of the CDR program. Consequently, the monthly incentive
14 payment is the primary "driver" of program costs.

15 **Q. How does FPL evaluate the economic value of the CDR and CILC programs?**

16 A. FPL analyzes the cost-effectiveness of each of its DSM programs, including the CDR
17 and CILC programs, using three cost-effectiveness screening tests: (i) the RIM test,
18 (ii) the Total Resource Cost ("TRC") test, and (iii) the Participant test.

19

20 For programs such as CDR, the RIM test is the cost-effectiveness test used to set an
21 appropriate incentive level. The TRC test does not incorporate incentives into its
22 calculation of costs, and therefore does not change as the value of incentive payments
23 change. The Participant test measures the benefit to the participant against any

1 incremental costs the participant in a program incurs. For CDR, the participant does
2 not incur any direct incremental costs to participate, resulting in an infinite cost-benefit
3 ratio. For these reasons, FPL relies on the RIM test to analyze the appropriate incentive
4 level for CDR in terms of economic value.

5 **Q. How does FPL determine the full value of the CDR and CILC programs?**

6 A. To make this determination, FPL evaluates the economics of two comparative resource
7 plans developed using the AURORA optimization model. One resource plan, the
8 “With Programs” plan, assumes the inclusion of all of the approximately 900 MW of
9 demand reduction capability from existing CDR and CILC participants and the
10 approximately 6 MW per year of projected new CDR participants. However, for
11 purposes of the analysis, the projected monthly incentive payments for both existing
12 and new participants are zeroed out. As a result, the “With Programs” resource plan
13 accounts for all of the demand reduction benefits of the CDR and CILC programs but
14 assumes no incentive payment costs.

15
16 The second resource plan, the “Without Programs” plan, assumes that all the existing
17 CDR and CILC MW, all projected new CDR sign-ups, and all incentive payments for
18 both programs are removed from the resource plan starting in January 2026.² The
19 AURORA model then selected the most cost-effective generation resources to replace
20 the loss of 900+ MW of demand reduction capability.

² Note that the use of the January 2026 “exit” date assumption means all existing participants in the CDR and CILC programs would exit the programs with less than one year’s notice (which ignores the 5-year exit notice terms for both programs). Because of this assumed sudden loss of 900+ MW of demand reduction capability, replacement capacity needs to be added relatively quickly. As a result, the January 2026 exit assumption maximizes the projected value of the two programs for purposes of this analysis.

1 The projected CPVRR costs of the two resource plans were then compared. The
2 projected CPVRR cost of the Without Programs resource plan, \$100,390 million, is
3 higher than the projected CPVRR cost of the With Programs resource plan,
4 \$99,322 million, because the Without Programs resource plan must add new resources
5 to make up for the loss of the 900+ MW of demand reduction capability offered by the
6 CDR and CILC programs. The two resource plans, and the projected CPVRR costs for
7 each plan, are presented in Exhibit AWW-7.

8

9 The \$1,069 million ($\$100,390 - \$99,322 = \$1,069$) CPVRR differential represents the
10 projected benefits of the CDR and CILC programs through 2071. It also represents –
11 after accounting for the administrative costs of the CDR and CILC programs – the
12 amount of CPVRR cost that can be paid in the form of monthly incentive payments to
13 CDR and CILC participants in the With Programs resource plan before both resource
14 plans will have an identical CPVRR cost (assuming that there will be no future changes
15 to the current projections of CDR and CILC benefits or program administrative costs).

16 **Q. What other considerations were taken into account when developing the proposed**
17 **new monthly incentive payment for the two programs?**

18 A. Three other considerations were taken into account in establishing the proposed
19 incentive payment levels for the programs. The first consideration for any DSM
20 program, including these two programs, is that the maximum incentive level that should
21 be considered is one that results in program costs exactly equaling program benefits
22 (*i.e.*, a RIM benefit-to-cost ratio of 1.00). Such a result means that program participants
23 will benefit from the program and that the utility's general body of customers should

1 be indifferent regarding whether the program is offered because electric rates are
2 unchanged compared to what they would be if the DSM program had not been offered
3 and the best generation alternative had been chosen instead.

4

5 The second consideration is that, all else equal, it is preferable for a DSM program's
6 RIM benefit-to-cost ratio to be greater than 1.00. In such a case, all customers benefit
7 from the DSM program, not just the program participants. This consideration
8 recognizes that paying the maximum incentive for a DSM program does not maximize
9 the benefit to the general body of customers – it merely ensures that the general body
10 is indifferent.

11

12 The third consideration is how the demand response is credited in terms of capacity in
13 FPL's system. Based on the stochastic LOLP analysis, demand response is limited to
14 a certain percentage of its capacity, which, over time, degrades its potential to serve
15 FPL's increasing load. Therefore, the further beyond 1.00 the RIM ratio is, the more
16 assurance there is that the credit given to CDR customers does not outweigh its benefits
17 to the general body of customers.

18 **Q. Taking these considerations into account, how did FPL determine the appropriate**
19 **incentive level for these programs?**

20 A. First, cost-effectiveness calculations were performed for the current CDR monthly
21 incentive level of \$8.76/kW (Scenario 1). These calculations are presented in Exhibit
22 AWW-8. The left-hand side of Exhibit AWW-8 presents seven assumptions used in
23 the calculations. Assumption (1) is the CPVRR difference between the With Programs

1 resource plan and the Without Programs resource plan that appears in Exhibit AWW-
2 7, which is \$1,069 million. Assumption (2) is the projected CPVRR administrative
3 cost of the combined CDR and CILC programs, which equates to \$10 million.
4 Assumption (3) is the current monthly incentive level for CDR of \$8.76/kW.
5 Assumptions (4) through (7) present other inputs used in calculations.

6
7 The right-hand side of Exhibit AWW-8 presents a table that shows the results of
8 calculations for two scenarios. In Scenario 1, the projected RIM benefit-to-cost ratio
9 for the 900+ MW of CDR and CILC with the current monthly incentive level of
10 \$8.76/kW is shown: 1.06. This result shows that the program and its current incentive
11 level is beneficial for participants but, with a RIM ratio of near 1.00, leaves the general
12 body near the point at which they are indifferent to the program.

13
14 For that reason, and based on the three evaluative considerations discussed above, FPL
15 determined that it was appropriate to lower the monthly CDR incentive level to
16 \$6.22/kW. Scenario 2 in Exhibit AWW-8 shows the same calculations for the
17 programs with the revised monthly incentive level, as well as the resulting RIM benefit-
18 to-cost ratio of 1.49. This higher benefit-to-cost ratio provides a reasonable level of
19 assurance that the programs will remain cost-effective for all customers for the
20 expected 4-to-5-year period until the incentive levels are next reviewed. This value
21 also ensures that CDR is still beneficial to participants and does not burden non-
22 participants with higher program costs than are required for maintenance of the
23 program. Moreover, as stated in the testimony of FPL witness Cohen, the annual

1 savings associated with the reduction in the credit for CILC and CDR customers is
2 approximately \$22 million in 2026 and 2027.

3 **Q. How does the proposed monthly incentive level compare to the incentive level that**
4 **existed at the time most of the CDR participants joined the program?**

5 A. As I referenced above, approximately 75% of the existing CDR participants joined the
6 program during 2000 to 2012, when the monthly incentive was initially \$4.75/kW then
7 decreased to \$4.68/kW. The proposed new CDR monthly incentive level of \$6.22/kW
8 is nearly 31% higher than the incentive level that was in place when the majority of
9 CDR participants joined the program.

10

11 Therefore, this proposed new incentive level will be sufficient to help ensure the cost-
12 effectiveness of the CDR and CILC programs for a 4- to 5-year period, achieve future
13 CDR program participation needed to meet FPL's approved DSM Goals, retain existing
14 CDR and CILC participants, and ensure that non-participants are not bearing
15 unnecessary program costs.

16 **Q. Does this conclude your direct testimony?**

17 A. Yes.

ERRATA SHEET

WITNESS: ANDREW W. WHITLEY
DIRECT TESTIMONY DATED FEBRUARY 28, 2025

Page	Line	Change
6	20	Change "\$1,942" to "2,211"
7	10	Change "\$2,213" to "\$2,056"
26	19	Change "nearly" to "over"
28	7	Change "\$1,942" to "2,211"
30	10	Change "\$2,213" to "\$2,056"

Exhibit No.	Page No.	Change
AWW-5	1 of 1	Replace originally filed Exhibit AWW-5 with attached Exhibit AWW-5 Errata
AWW-6	1 of 1	Replace originally filed Exhibit AWW-6 with attached Exhibit AWW-6 Errata

1 BY MR. BAKER:

2 Q Mr. Whitley, do you have exhibits that were
3 identified as AWW-1 through AWW-1 attached to your
4 prepared direct testimony?

5 A Yes, I do.

6 Q Were these prepared under your direction or
7 supervision?

8 A Yes, they were.

9 Q And the errata you filed on July 1st of 2025,
10 included a revised version of Exhibits AWW-5 and AWW-6.
11 Do you have any further revisions to your prepared
12 exhibits?

13 A No, I do not.

14 MR. BAKER: Mr. Chairman, I would note that
15 these exhibits have been pre-identified in staff's
16 Comprehensive Exhibit List as Exhibits 64 through
17 71.

18 BY MR. BAKER:

19 Q And, Mr. Whitley, have you prepared and caused
20 to be filed 47 pages of prepared rebuttal testimony in
21 this proceeding?

22 A Yes, I have.

23 Q And do you have any changes or revisions to
24 your rebuttal testimony?

25 A Yes, I have one change. On page 15, line 22

1 of my rebuttal testimony, the number 1,829 megawatts
2 should be changed to 1,764 megawatts.

3 **Q And with that change, if I asked you the same**
4 **questions contained in your rebuttal testimony today,**
5 **would your answers be the same?**

6 A Yes.

7 MR. BAKER: And, Mr. Chairman, I would ask
8 that Mr. Whitley's prepared rebuttal testimony be
9 inserted into the record as though read.

10 CHAIRMAN LA ROSA: So moved.

11 (Whereupon, prefiled rebuttal testimony of
12 Andrew W. Whitley was inserted.)

13

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BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 20250011-EI
FLORIDA POWER & LIGHT COMPANY
REBUTTAL TESTIMONY OF ANDREW W. WHITLEY

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 Andrew W. Whitley. My business address is Florida Power & Light
4 Company (“FPL” or “the Company”), 700 Universe Blvd., Juno Beach, Florida 33408.

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 AWW-9 – Initial Northwest Florida Battery Evaluation

10 Q. What is the purpose of your rebuttal testimony?

11 A. The purpose of my rebuttal testimony is to address the following four topics raised in
12 intervenor testimony: (1) the validity of the stochastic loss-of-load probability
13 (“LOLP”) methodology in deriving FPL’s resource plan; (2) FPL’s system planning
14 and proposed resource additions, along with FPL’s 522 megawatt (“MW”) Northwest
15 Florida battery storage sites currently under construction; (3) the monthly incentive
16 payment levels for FPL’s Commercial/Industrial Demand Reduction (“CDR”) and
17 Commercial/Industrial Load Control (“CILC”) programs; and (4) FPL’s proposed
18 Large Load Contract Service (“LLCS”) tariffs. With regard to FPL’s system planning
19 and resource additions, I, along with FPL witness Arne Olson of Energy and
20 Environmental Economics, Inc. (“E3”), rebut the testimonies of Office of Public
21 Counsel (“OPC”) witness James R. Dauphinais, Florida Rising/League of United Latin
22 American Citizens of Florida/Environmental Confederation of Southwest Florida
23 (together “FEL”) witness Karl R. Rábago, and Florida Retail Federation (“FRF”)

1 witness Tony Georgis. With regard to the CDR and CILC programs, I respond to the
2 testimonies of FEL witness MacKenzie Marcelin, Walmart witness Lisa V. Perry, FRF
3 witness Georgis, and Florida Industrial Power Users Group (“FIPUG”) witness
4 Jonathan Ly. Finally, with regard to LLCS, I respond to the testimony of Florida
5 Energy for Innovation Association (“FEIA”) witness Mohamed Ahmed.

6 **Q. Please provide a summary of your rebuttal testimony.**

7 A. The testimonies provided by the intervenors misapprehend various aspects and
8 characteristics of FPL’s system, which, in turn, leads intervenors to resource planning
9 conclusions that are contrary to the interests of customers and the reliability of FPL’s
10 system. Much of the intervenors’ protests against FPL’s proposed resource additions
11 has to do with FPL’s implementation of a more sophisticated methodology calculating
12 FPL’s system LOLP to determine system risks through a stochastic study. This
13 methodology, as detailed in my direct testimony, and as further explained in the rebuttal
14 testimony of FPL witness Olson, evaluates FPL’s system resource adequacy for each
15 hour of the year, as opposed to the traditional methodology of determining resource
16 adequacy based on system peaks occurring during the year. Were FPL to rely on its
17 old methodologies and discount more modernized tools for system planning, FPL
18 would be blind to potential system risks and, on account of that blindness, leave FPL
19 unable to sufficiently address those risks.

20

21 While several intervenors oppose FPL’s application of a stochastic methodology to
22 guide the resource adequacy determination, not every intervening party shares such
23 opposition. OPC witness Dauphinais acknowledges in his testimony that, based on the

1 characteristics of FPL’s system, the Company should begin to utilize stochastic LOLP
2 analysis. While my testimony challenges and rebuts many of the resource planning
3 contentions made by OPC witness Dauphinais, FPL acknowledges and appreciates
4 OPC’s carefulness in not countering the use of this planning methodology, which will
5 help to enhance resource adequacy for FPL’s customers into the future.

6

7 A specific area where I do rebut OPC witness Dauphinais and other intervenor
8 witnesses is regarding solar additions. Intervenors perplexingly advocate for the
9 complete elimination of any further photovoltaic (“PV”) solar generation additions. To
10 be clear, solar is FPL’s most cost-effective generating resource, and it has saved FPL
11 customers over \$942 million in fuel cost alone over the last 5 years. Not only that, but
12 solar generation is the only energy resource capable of being sited and constructed
13 within the 2026-2029 timeframe to provide energy to FPL’s growing customer base. It
14 is also worth noting that, were FPL to not adopt the stochastic LOLP analysis, solar
15 would still be identified as the optimal resource selection under FPL’s traditional
16 generation planning criteria, but in larger quantities than FPL is proposing.

17

18 Intervenors’ misunderstanding of FPL’s system is also apparent from their
19 recommendations concerning the value of CDR/CILC credits. Intervenor positions on
20 the appropriate value of the CDR/CILC credits vary significantly, ranging from
21 elimination of the credits entirely to a 40.7% increase in the current value of the credit.
22 What is common throughout the intervenor testimony on this issue, however, is an
23 inaccurate assessment of the value of the CDR/CILC programs for meeting the resource

1 needs of FPL's system. The varied positions of intervenors under-value or over-value
2 the benefit of the programs to FPL based largely on the interests of their clients, which,
3 in turn, leads to widely varied views on how the credits should be valued. FPL's
4 proposed credit, for which I provide analysis and support in my direct testimony,
5 remains the most reasonable level for the credit, and appropriately balances the needs
6 of the system and the interests of participating and non-participating customers.

7

8 Regarding FPL's proposed LLCS tariffs, I respond to several of the inaccurate
9 statements made by FEIA witness Ahmed in his testimony. Notably, I dispute witness
10 Ahmed's inaccurate portrayal of the planning involved in setting the Incremental
11 Generation Charge ("IGC") in the LLCS tariffs, his use of levelized cost of electricity
12 in projecting costs for incremental generation, his overly optimistic viewpoint on the
13 system benefits of increased data center loads, and his incorrect assumptions regarding
14 batteries serving incremental capacity needs.

15

16

II. THE STOCHASTIC LOLP STUDY

17 **Q. What is your response to the intervenors who question the validity of the**
18 **stochastic LOLP methodology in deriving FPL's resource plan?**

19 A. The stochastic methodology for determining LOLP provides advanced system planning
20 insight and risk assessment that, were it not for the methodology, would leave reliability
21 risks on FPL's system unidentified. Identification of these risks, through a data-
22 intensive study methodology that develops a probabilistic hourly load and supply
23 projection, should not be regarded as an optional resource planning exercise, and the

1 results should not be discounted. For this reason, among others, the stochastic
2 methodology has been achieving broader and more widespread industry recognition.
3 As detailed in the rebuttal testimony of FPL witness Olson, application of the stochastic
4 methodology for calculating LOLP has become increasingly common in the United
5 States, and is proving more and more to be a valuable tool in ensuring a reliable supply
6 of generation.

7
8 It should be noted that, while FEL witness Rábago and FRF witness Georgis attempt
9 to cast doubt on the use of the stochastic methodology, OPC witness Dauphinais does
10 not contest the value of adopting the stochastic methodology for FPL's system. In fact,
11 witness Dauphinais acknowledges the merit in applying it, given the nature of FPL's
12 system. As FPL's generation resource profile continues to evolve and FPL's demand
13 and energy needs continue to grow, FPL should not be waiting for reliability events
14 before adopting resource adequacy analyses that will allow the Company to identify
15 the generation risks that are most pertinent to its system. By definition, these analyses
16 are for planning, not reacting. As reflected in the rebuttal testimony of FPL witness
17 Olson, a utility has an affirmative obligation, upon learning that it may be facing a
18 reliability issue, to act upon that knowledge immediately and to implement cost-
19 effective solutions as quickly as is practicable.

20

1 *A. Need for the Stochastic LOLP Analysis*

2 **Q. Several intervenors note the operational reserve concerns experienced by FPL**
3 **that gave rise to the need for a stochastic LOLP analysis. Can you please describe**
4 **the concerns being referenced?**

5 A. Yes, I can. Broadly, the operational reserve concerns relate to the level of operating
6 reserves held by FPL to manage times of system constraint. FPL first identified
7 operational needs concerning the level of its reserves in the spring of 2023. Throughout
8 March and April of that year, FPL's system experienced higher than normal
9 temperatures, which remained elevated throughout the evening when FPL's solar
10 output began to decrease. That circumstance, combined with the continuing need to
11 accommodate system growth, led FPL to evaluate the need to maintain an adequate
12 amount of operating reserves that could be called on quickly to meet load in a
13 contingency scenario. FPL continued to evaluate its operational reserve levels
14 throughout 2023 and 2024. While doing so, FPL continued to experience reserve
15 challenges in those years, and nearly missed having to declare an Energy Emergency
16 Alert ("EEA") in August 2024.

17 **Q. FRF witness Georgis contends that FPL has been over-aggressive in adding solar**
18 **PV resources to its system in recent years. Do you agree?**

19 A. No. Witness Georgis' contention that PV solar installations have been implemented in
20 an "over-aggressive" manner completely discounts the value of the low-cost energy
21 supply solar has provided to FPL's customers. Since 2021, FPL's customers have
22 saved \$942 million in fuel costs as a result of these solar installations. Had FPL shied
23 away from implementing this low-cost resource, customers would have paid that

1 \$942 million. Not only have these facilities saved customers fuel cost, FPL has been
2 demonstrably successful in reliably delivering the power produced by FPL's generating
3 fleet (including solar), as is detailed in FPL witness De Varona's direct testimony.

4
5 Solar has continuously proven to be a cost-effective generation resource for FPL's
6 customers. All of the solar added since 2021 has been shown to be cost-effective for
7 FPL's customers, including the 2024 and 2025 Solar Base Rate Adjustment additions
8 approved by the Commission. And, not only has solar been a cost-effective resource
9 in prior years, it remains so today. In fact, if FPL were to place reliance on its prior
10 resource planning modeling methodologies (*i.e.*, without a stochastic LOLP analysis),
11 solar would be the sole resource option selected to address FPL's resource needs until
12 2029 and would be selected in a larger quantity than FPL is proposing. This is
13 demonstrated in Table 1, which is presented later in my rebuttal testimony.

14
15 The fact is, solar continues to be a cost-effective resource option for customers that
16 provides a significant amount of energy for FPL's system, despite lower firm capacity
17 values and a shifting of net peak demand to the evening. Were FPL to adopt the
18 recommendations of witnesses Dauphinais and Georgis to halt FPL's solar
19 installations, the result would be an increase in customer rates over the long term, with
20 customers experiencing increased volatility in fuel pricing over the short term.

1 **Q. OPC witness Dauphinais alleges that FPL did not detect in advance any**
2 **operational challenges using traditional operational and planning modeling tools.**
3 **Is that true?**

4 A. No, this is incorrect. As I mentioned above, and as shown in FPL’s response to OPC’s
5 Sixteenth Request for Production of Documents, No. 138, FPL identified a need to
6 address shortfalls in operational reserves as early as spring of 2023. In recognition of
7 this need, FPL incorporated a projected 300 MW per year of batteries into its 2024 Ten
8 Year Site Plan.

9 **Q. FEL witness Rábago refers to the stochastic LOLP as “dubious”. What is your**
10 **response?**

11 A. The assertion by witness Rábago that the stochastic LOLP methodology is “dubious”
12 shows an apparent lack of system planning awareness on his part and represents an
13 unfounded rejection of a now common methodology for system reliability analysis.
14 FPL witness Olson provides further detail in support of the methodology, noting that a
15 majority of utilities and organizations throughout North America have adopted
16 stochastic LOLP analyses.

17

18 Also, witness Rábago and the Commission should not be comforted by the fact that
19 FPL’s traditional reliability criteria have been successful in the past. The North
20 American Electric Reliability Corporation (“NERC”) itself acknowledges that these
21 planning standards must be revised and updated stating in a July 2024 report, titled
22 “Evolving Planning Criteria for a Sustainable Power Grid” as follows:

23 LOLE does not adequately account for the growing risk, over all
24 hours, arising from increased variability and uncertainty caused by

1 the evolving resource mix and increasing demand levels. A recent
2 Energy Systems Integration Group (ESIG) survey of electric
3 industry professionals... asked whether industry should consider a
4 new resource criterion. Data from the survey overwhelmingly
5 indicated that industry should consider a new approach—beyond the
6 LOLE criterion alone—to resource adequacy modeling that reflects
7 the reliability needs of the rapidly evolving grid. Survey results
8 indicated that there is not just one solution, and supplemental criteria
9 are needed that consider the size, frequency, timing, and duration of
10 energy shortfalls.

11 The stochastic LOLP modeling performed for this case is intended to serve as the
12 modeling tool to directly address the risks associated with FPL’s evolving resource mix
13 and increasing demand levels.

14 **Q. Do you agree with FEL witness Rábago that the stochastic LOLP analysis is not**
15 **suitable as a reliability-related foundation for the battery investments FPL is**
16 **proposing?**

17 A. No, I disagree. Despite support for stochastic modeling from utilities and organizations
18 around the U.S., witness Rábago asserts that “It is also not clear what value is added
19 by spending customer dollars on SLOLP modeling when the 20% planning reserve
20 margin has served to ensure that FPL continues to meet or exceed system reliability
21 objectives.” Adherence to this perspective would keep FPL using past resource
22 planning criteria until such a time as it experiences a reliability failure. Prudent
23 resource planning must seek to avoid such a failure. As FPL’s resource plan evolves
24 to ensure it provides customers with reliable, cost-effective forms of energy, its
25 planning must also evolve. Witness Rábago’s mindset appears to be firmly rooted in
26 the past and following his recommendations would leave FPL’s customers exposed to
27 system reliability risk.

1 **Q. OPC witness Dauphinais claims that if the stochastic methodology is adopted, it**
2 **would “cause” a large perfect capacity step increase in FPL’s Summer 2027**
3 **capacity need versus FPL’s capacity need for Summer 2027 under its traditional**
4 **20% Planning Reserve Margin (“PRM”) resource adequacy criterion. Do you**
5 **agree with this characterization?**

6 A. No. The purpose of the stochastic methodology is to more clearly decipher and
7 delineate system generation supply needs across all operating periods; it does not
8 “cause” an increase in need. For FPL’s system, the stochastic methodology is a needed
9 improvement over traditional LOLP modeling in that it allows identification of
10 potential risk scenarios to a utility system at each hour of the year. Additionally, as I
11 mentioned in my direct testimony, a traditional PRM analysis provides a simplified
12 look at system operation, examining only the peak demand hour at two times of the
13 year – once in the winter and once in the summer – without considering the unique
14 generation attributes of the utility’s fleet. The stochastic LOLP analysis therefore
15 addresses an analytical shortcoming that the PRM analysis leaves unaddressed.

16

17 ***B. Production of the Stochastic LOLP Analysis***

18 **Q. Intervenors insinuate that FPL took a passive role in the production of the**
19 **stochastic LOLP analysis. Is that accurate?**

20 A. No. The stochastic analysis was an iterative, data-intensive effort involving me and
21 my team, FPL’s Power Delivery team, and E3. I, along with the rest of the FPL team,
22 supplied numerous inputs to E3 to enable E3 to model results. Our team was also
23 involved in weekly meetings with E3 to discuss and review inputs, assumptions, and

1 preliminary results from E3's analysis. These discussions and reviews continued
2 throughout the analysis period until E3's final work product was available in February
3 2025. There was no part of the modeling process where FPL was uninvolved in
4 supporting and reviewing the analysis.

5 **Q. Was FPL's stochastic LOLP analysis rushed as witness Dauphinais contends?**

6 A. No. The stochastic LOLP study began in October 2024 and concluded in February
7 2025, making it an approximately four-month process. FPL's typical annual resource
8 planning update, conducted for the purpose of its annual Ten-Year Site Plan, occurs
9 each year over a similar time frame. Had FPL engaged E3 to perform a stochastic
10 LOLP study earlier than October 2024, the study would have needed to be refreshed
11 and reperformed in the latter months of 2024 in order to utilize the updated 2025
12 planning cycle assumptions.

13 **Q. FEL witness Rábago contends that the stochastic LOLP study was commissioned
14 to support resource planning decisions already made. Is that accurate?**

15 A. No. The adoption of the stochastic LOLP methodology was added in order to assess
16 system need and verify that FPL's identified resource additions would allow the
17 Company to maintain a resource adequate system going forward. While FPL had been
18 conducting review of its operational reserve needs throughout 2023 and 2024, and
19 adjusting its resource planning to address those needs, FPL's ultimate resource
20 selections for its 2025 planning could not be confirmed without having LOLP
21 stochastically modeled. By engaging E3 to initially evaluate operational reserve needs
22 and, later, analyze FPL's resource adequacy, FPL was able to develop and finalize a
23 resource plan to provide both reliability and cost-effectiveness for its customers.

1 **Q. What is your response to OPC witness Dauphinais' complaint that stakeholders**
2 **were not given an opportunity to provide any input into E3's stochastic LOLP**
3 **analysis utilized by FPL?**

4 A. The outcome of the stochastic LOLP analysis, and its identification of system resource
5 need, was not dependent on stakeholder coordination. However, FPL has presented the
6 results of the study publicly in this case for the review of the Commission and affected
7 stakeholders. FPL has also presented its proposed resource additions in its Ten-Year
8 Site Plan for the Commission's review, which is ongoing.

9

10 *C. Results of the Stochastic LOLP Analysis*

11 **Q. OPC witness Dauphinais estimates that FPL's 2026 and 2027 solar and battery**
12 **storage additions would produce a perfect capacity surplus of 204 MW rather**
13 **than a deficit of 273 MW in 2027. What is your response?**

14 A. While FPL witness Olson rebuts OPC witness Dauphinais' analysis, I would add that
15 witness Dauphinais' estimations disregard two important points in relation to the in-
16 service dates of FPL's proposed projects. First, his calculation assumes that all of
17 FPL's 2027 additions would be available near the start of the year. FPL's resource
18 plan, however, sequences the installation of its 2027 additions throughout the year,
19 which impacts how they affect resource adequacy needs. Second, witness Dauphinais
20 does not consider that FPL has ongoing capacity needs in immediate future years, as
21 shown on pages 23-26 of Exhibit AWW-1. Because of this increasing and ongoing
22 capacity need, lessening or forgoing FPL's proposed solar and battery additions in 2026

1 and 2027 would cause FPL to have a generation shortfall in 2028 and 2029, and would
2 create resource adequacy issues for FPL in the future.

3 **Q. Witness Dauphinais estimates a perfect capacity deficit of only 89 MW without**
4 **FPL’s 2026 and 2027 solar additions and insists this deficit is sufficiently close to**
5 **a loss of load expectation of 0.1 to be considered resource adequate. What is your**
6 **response?**

7 A. I have three principal qualms with witness Dauphinais’ contention. First, eliminating
8 solar additions would deprive FPL’s customers of the tremendous benefits this
9 generating resource provides, as I described earlier in my testimony. Second, the
10 recommendation to remove solar from the proposed resources would remove from
11 FPL’s near-term resource plan the only energy-producing resource that is available for
12 FPL to construct prior to 2030, the earliest date at which natural gas generation, which
13 is costlier than PV solar on a CPVRR basis, can be sited and constructed. Third,
14 “sufficiently close” to meeting a reliability criterion still means that the standard is not
15 met. I would submit that FPL should not be planning its system such that it misses
16 widely recognized reliability planning criteria, even by a small degree.

17 **Q. OPC witness Dauphinais recommends that FPL identify the current stochastic**
18 **LOLP for its system as well as the expected stochastic LOLP for its system in 2026.**
19 **Should such a recommendation be adopted?**

20 A. For the benefit of witness Dauphinais and the Commission, FPL instructed E3 to
21 calculate a stochastic LOLP for 2026. That analysis, presented in the rebuttal testimony
22 of FPL witness Olson, shows a firm capacity shortfall of ~~1,829~~ ^{1,764} MW in 2026,

1 reinforcing the necessity of adding FPL’s proposed 1,419.5 MW of battery storage and
2 894 MW of solar in 2026.

3 **Q. What is your response to witness Dauphinais’ claim that, if the LOLP analysis**
4 **were accurate, then FPL should be experiencing NERC EEAs on its system?**

5 A. Witness Dauphinais’ assertion that FPL would already be experiencing some level of
6 EEAs is based on the fallacy that an electric system would have staggered levels of
7 being unable to serve load. In other words, “warning signs” would show up before an
8 electric system is unable to serve load. As FPL witness Olson points out, however,
9 there are recent occasions wherein U.S. electrical systems have been unable to serve
10 load, despite not having any EEA events in years immediately prior. Not only that, as
11 witness Dauphinais references in his testimony, FPL came close to declaring an EEA
12 in August of 2024.

13
14 For the avoidance of doubt, the objective of engaging in a resource adequacy study
15 such as the one performed by E3 is to identify resource adequacy issues *before* they
16 occur, not to wait until they occur before taking measures to mitigate those issues. This
17 is among the reasons FPL has already begun construction of battery facilities in its
18 Northwest Florida region, as I detail later in my testimony. Most importantly,
19 identifying areas of concern for resource adequacy in the future allows FPL to be
20 proactive and find the most cost-effective method of addressing those issues, as
21 opposed to being reactive and scrambling to find an immediate stopgap solution at cost
22 to customers.

1 **Q. Witness Dauphinais recommends that the capacity need identified by FPL's**
2 **stochastic LOLP analysis in this proceeding be limited in its application to FPL's**
3 **2026 and 2027 projected test years. What is your response?**

4 A. This recommendation fails to recognize that FPL's planned resource additions, while
5 meeting near-term need, also contribute to FPL's ability to maintain a reliable system
6 beyond 2027. Limiting application of the stochastic LOLP to years 2026 and 2027
7 would limit FPL's resource planning responsiveness to the increasing need for capacity
8 to reliably serve its customers. As shown in Exhibit AWW-1, the need to add capacity
9 to meet FPL's LOLP requirements does not end in 2027 – there are continually
10 increasing needs in 2028, 2029, 2030 and through 2035. This continuing need
11 highlights the importance of having consistent, stochastically analyzed capacity
12 additions during this time period. Having the ability to timely add capacity to meet
13 these needs in a cost-effective manner is critical to ensuring a reliable generation supply
14 to serve FPL's customers.

15 **Q. Did you review the recommendations of OPC witness Dauphinais pertaining to**
16 **actions FPL should take in future proceedings where it proposes to use stochastic**
17 **LOLP analysis to justify resource additions?**

18 A. Yes. Witness Dauphinais recommended the four following actions in such a scenario:
19

- First, provide all FPL stakeholders a reasonable opportunity, prior to and during

20

- the analysis, to provide input with respect to the assumptions being utilized in

21

- the analysis;

- 1 • Second, coordinate with the other utilities jurisdictional to the Commission to
2 help ensure a consistent approach is used for stochastic LOLP analysis in
3 Florida;
- 4 • Third, have the analysis subject to review from an independent third-party not
5 affiliated with either FPL or the contractor who performed the analysis on
6 behalf of FPL; and
- 7 • Fourth, provide direct testimony from an expert witness who either performed,
8 or directly supervised the performance of, the analysis.

9 **Q. Should any of these four recommendations be adopted?**

10 A. No. As to OPC witness Dauphinais' first recommendation, having a process where
11 stakeholders of innumerably varied interests – and potentially no resource planning
12 expertise – provide their own viewpoints on stochastic LOLP modeling inputs and
13 assumptions, at multiple points in the resource planning process, would create an
14 impossibly burdensome procedure, and one that would likely not lead to satisfactory
15 results. Further, among the potential stakeholders, FPL alone retains the obligation and
16 bears the responsibility to provide reliable electric service.

17

18 Witness Dauphinais' second recommendation would have the same infirmities as his
19 first. Specifically, if FPL were required to coordinate with other jurisdictional investor-
20 owned utilities on LOLP methodology prior to seeking approval of resource additions,
21 there would be a risk of interrupting the resource planning process if a wholly uniform
22 approach could not be timely agreed upon.

23

1 Witness Dauphinais' third recommendation creates an added layer of administrative
2 effort that would be of marginal value. Companies, such as E3, that perform stochastic
3 LOLP analyses stake their reputations on providing accurate, verifiable results, and a
4 reputable provider should have a strong ability, and incentive, to self-audit model
5 results, and the utilities relying on those analyses bear the consequence of the decisions
6 made therefrom. Having an audit of stochastic LOLP results by an independent
7 consultant would add a significant administrative undertaking to the resource planning
8 process, requiring an independent review prior to the results being presented as part of
9 a request in a litigated proceeding (at which point they would be re-reviewed by any
10 affected party in the proceeding). Also, an additional third party would need to be
11 contractually bound to some party and may not have had the benefit of the iterative
12 steps underlying the stochastic LOLP analysis performed. In addition, the cost of a
13 second LOLP analysis would likely be borne by customers, and, as I mentioned would
14 likely be of only marginal value.

15
16 The fourth recommendation is a legal recommendation that, as a non-lawyer, I cannot
17 opine upon. However, I would note that requiring additional witness testimony would
18 likely increase the costs required to litigate a case – particularly where there is another
19 informed witness who can competently cover the subject matter – and those costs must
20 be paid.

1 **Q. Witness Dauphinais indicates in his testimony that FPL did not provide all of the**
2 **workpapers for its stochastic LOLP analysis in a timely fashion. What is your**
3 **response?**

4 A. Under my oversight, FPL timely provided hundreds of workpaper files in support of
5 my direct testimony and exhibits, including the input files FPL provided to E3 along
6 with E3's result files contained in subfolders. In its initial production, FPL provided
7 39 E3 results subfolders, which included output information on a variety of model runs
8 performed by E3 that fed into the stochastic LOLP analysis. FPL later realized that six
9 subfolders had unintentionally been omitted from the production. Upon realizing this,
10 FPL updated its initial response and distributed the six subfolders to the parties on June
11 2, 2025.

12

13 ***D. Stochastic Analysis and Resource Additions***

14 **Q. What is your response to OPC witness Dauphinais' contention that FPL has not**
15 **shown a need for all of its 2026 and 2027 proposed solar energy center and battery**
16 **storage facility additions to meet its stochastic LOLP for Summer 2027?**

17 A. The analysis provided in Exhibit AWW-1 clearly demonstrates that FPL has a need for
18 all of its 2026 and 2027 solar and battery additions. This point is further emphasized
19 in the rebuttal testimony of FPL witness Olson, whose testimony shows that FPL's
20 proposed resource additions will only narrowly allow FPL to maintain resource
21 adequacy on a going-forward basis. It is important to note that FPL's resource adequate
22 position is premised on the installation of resource additions in the beginning portion
23 of years 2027-2029 in order to maintain resource adequacy for those years. In short,

1 FPL is not adding additional resources that are supplemental to its need, which is a
2 point the stochastic analysis clearly demonstrates.

3 **Q. What is your response to witness Dauphinais' questioning of why the amount of**
4 **FPL's battery storage and PV solar resource totals do not align with those shown**
5 **on FPL witness Laney's workpapers?**

6 A. Page 22 of Exhibit AWW-1 shows FPL's current resources at the beginning of each
7 year, as opposed to the April dates reflected in FPL witness Laney's workpapers.
8 Exhibit AWW-1 is a resource adequacy document, measuring FPL's resource
9 adequacy by analyzing the need for resources prior to the addition of resources
10 throughout the year, and should not be understood to be a document from which FPL's
11 proposed revenue requirements were derived.

12 **Q. Witness Dauphinais identifies seven reasons why he believes the stochastic LOLP**
13 **analysis might be overly conservative. Have you reviewed those?**

14 A. Yes, I have. Witness Dauphinais' belief is premised on the following factors and
15 contentions: (1) analysis suggests FPL is currently significantly short of capacity; (2)
16 FPL has not provided any evidence that there is currently a resource adequacy
17 problem; (3) NERC/SERC do not identify issues through 2028; (4) LOLP analysis
18 appears rushed; (5) Assumes FPL is an electrical island; (6) workpapers not produced
19 in timely manner; and (7) stakeholders were not involved in the process.

20 **Q. Are any of these factors or contentions valid?**

21 A. No. As to the first two contentions raised, FPL has recognized an immediate need for
22 available firm capacity on its system, even prior to E3's engagement, which is why it
23 has accelerated battery storage in its 2024 and 2025 resource planning. Also, the fact

1 that FPL has not experienced a reliability issue on account of generation supply does
2 not mean that the stochastic LOLP analysis is “overly conservative,” a point which is
3 further addressed by FPL witness Olson. In addition, having conducted a stochastic
4 LOLP analysis for 2026, the analysis reveals that FPL is justified in further accelerating
5 battery storage and delaying solar build relative to its 2024 resource planning.

6

7 As to the third concern raised, NERC’s analysis should not be considered a substitute
8 for FPL-specific resource adequacy determinations for the reasons discussed in the
9 rebuttal testimony of FPL witness Olson. Doing so would leave FPL unaware of
10 reliability risks and resource needs specific to its system.

11

12 As to the fourth concern raised, FPL, with the assistance of E3, has conducted a
13 thorough resource adequacy analysis over the span of four months. That is not
14 indicative of a “rushed” analysis that would lead to an “overly conservative” result.
15 Further detail on the care taken in ensuring accurate results is provided by FPL witness
16 Olson.

17

18 As to the fifth concern raised, FPL’s longstanding practice of modeling its system as
19 electrically isolated is appropriate given its geographic placement and the realities of
20 operating its system. FPL’s service area encompasses the entire Florida peninsula, with
21 approximately 40% of its load served at the tip of this geographic peninsula. Also,
22 events that drive resource adequacy issues (*e.g.*, significant heat or cold weather events)
23 for FPL are likely to have a similar impact on neighboring utilities, limiting the amount

1 of assistance these utilities could provide to FPL, whether that assistance is on a firm
2 or non-firm basis. Moreover, as detailed by FPL witness Olson, it is not uncommon
3 for a utility to model itself as electrically isolated, and doing so does not indicate an
4 “overly conservative” analysis.

5
6 I addressed the sixth concern raised by OPC witness Dauphinais earlier in my
7 testimony. In short, OPC, along with the other parties admitted to the case, have had
8 access to volumes of output files since March 31, 2025, and several more since June 2,
9 2025. It is not apparent at all how this can lead to the conclusion that the LOLP study
10 was “overly conservative.”

11
12 As to the seventh concern raised, stakeholders have received ample opportunity to
13 review and provide feedback on the stochastic LOLP analysis FPL first presented with
14 my direct testimony on February 28, 2025. Again, it is not apparent how this would
15 lead to the conclusion that the results of the study are “overly conservative.”

16 **Q. FEL witness Rábago points out several supposed deficiencies in the E3 study**
17 **related to solar production and demand response. Have you reviewed those?**

18 A. Yes, with regard to solar production and demand response, witness Rábago claims the
19 following with regard to the study:

- 20 1) FPL’s projected solar output is lower than FPL’s historical values;
21 2) FPL’s projected solar has output before sunrise in December;
22 3) FPL “questionably” derates rooftop PV; and
23 4) FPL improperly derates demand response.

1 **Q. Were the results of the study compromised by any of these claimed deficiencies?**

2 A. No, not at all. I should note at the outset that witness Rábago does not provide any
3 specific detail regarding the supposed deficiencies, other than pointing to FPL's
4 discovery responses without any context. Regarding the first supposed deficiency, FPL
5 provided E3 with the same P50 solar outputs that FPL uses in its ordinary resource
6 planning. These solar profiles were then stochastically varied as part of E3's analysis,
7 which in some cases showed lower than projected output, and in other cases higher.
8 This stochastic variation of solar is a fundamental aspect of E3's study and instances
9 where solar output varies from a P50 expectation are critical to a stochastic analysis.

10

11 With regard to the second point, witness Rábago is mistaken that the profiles show
12 production at a time prior to sunrise (*i.e.*, at 7:00 a.m.). These P50 solar profiles, that
13 witness Rábago appears to be referencing, show solar output from 7 a.m. to 8 a.m. in
14 the month of December, which accurately reflects solar production experienced on
15 FPL's system.

16

17 For the third point, E3's methodology examines the contribution of all solar, including
18 projected rooftop PV. The effective load carrying capability of rooftop PV is subject
19 to the same limitations as utility-scale PV in the stochastic study. As such, it has the
20 same deration for capacity that it provides to FPL's system.

21

1 For the fourth point, E3’s study also examined how the constraints around operation of
2 demand response affect its load-carrying capability. This was appropriately measured
3 in the analysis and accurately reflected the contribution of these resources.

4

5 **III. FPL’S RESOURCE SELECTION**

6 **A. Analysis Supporting Resource Additions**

7 **Q. OPC witness Dauphinais contends that FPL has not demonstrated that its**
8 **combination of 2026 and 2027 solar generation and battery storage resources is**
9 **the most cost-effective way of meeting its capacity need. What is your response?**

10 A. FPL’s proposed resource additions for 2026 and 2027 are the most cost-effective way
11 of achieving resource adequacy. As I discussed in my direct testimony, prior to late
12 2029, FPL can only construct PV solar and battery storage facilities to meet its near-
13 term capacity needs, which are demonstrated in Exhibit AWW-1. FPL is proposing to
14 add battery storage in amounts that are sufficient to address its identified firm capacity
15 need in each year. These additions allow FPL *only to meet* its generation planning
16 reliability criteria in the near term. As shown by the capacity shortfalls in Exhibit
17 AWW-1 (page 20), new facilities must be constructed in the beginning portion of years
18 2027-2030 to remain resource adequate. Said another way, FPL is constructing nearly
19 the least amount of battery storage required to reach its firm capacity needs and remain
20 resource adequate.

21

22 Alongside FPL’s battery storage additions in 2026 and 2027 are PV solar additions,
23 which represent FPL’s most cost-effective generation option. Solar is so cost-effective

1 that under FPL’s prior resource planning methodologies, no battery storage would be
 2 selected until 2029; and, instead, 894 MW of solar would be added in 2026, 1,192 MW
 3 in 2027, and 2,235 MW in 2028. For comparative purposes, Table 1 below shows
 4 FPL’s proposed resource additions for 2026-2029 compared to those that would have
 5 been selected under its prior planning methodologies.

6 **Table 1**

Year	FPL 2025 Resource Plan	FPL Resource Plan - No Stochastic LOLP
2026	522 MW Battery NWFL 894 MW Solar 1,419.5 MW Battery	522 MW Battery NWFL 894 MW Solar
2027	1,192 MW Solar 819.5 MW Battery	1,192 MW Solar
2028*	1,490 MW Solar 596 MW Battery	2,235 MW Solar
2029	1,788 MW Solar 596 MW Battery	2,235 MW Solar 224 MW Battery

7 * Excludes effect of Vandolah Generating Facility, discussed later in my testimony.

8
 9 Acceptance of the plan that does not incorporate FPL’s proposed 2026 and 2027 battery
 10 storage, however, would leave FPL without sufficient capacity and in a resource
 11 inadequate position based on stochastic LOLP analysis. For that reason, FPL has not
 12 proposed it and is instead proposing to accelerate installation of the firm capacity
 13 provided by battery storage.

14
 15 FPL has also demonstrated the cost-effectiveness of its proposed additions through a
 16 CPVRR analysis contained in my Exhibits AWW-5 and AWW-6. Witness
 17 Dauphinais’ contention that FPL has not demonstrated the cost-effectiveness of these

1 resources completely ignores the results of these exhibits, which show billions of
2 dollars in CPVRR savings for FPL’s customers by adding these resources.

3 **Q. Witness Dauphinais insinuates that FPL should have provided economic analyses**
4 **for its 2026 proposed facilities and 2027 facilities separately, as well as its proposed**
5 **2026 and 2027 battery storage facilities without the addition of any of the proposed**
6 **2026 and 2027 solar facilities. What is your response?**

7 A. Witness Dauphinais’ allusion to analysis being missing is based on the faulty premise
8 that FPL is targeting individual years of resource need. FPL has identified a continual
9 resource need over the next five years and beyond (as shown in Exhibit AWW-1), and
10 the 2026 and 2027 additions address these needs as an overall “package.” In regard to
11 evaluating solar and battery facilities separately, FPL is adding these facilities together
12 to provide the most cost-effective and reliable system for FPL’s customers. FPL’s solar
13 additions provide energy and continue to drive down fuel costs that are passed on to
14 FPL’s customers, while the battery additions add firm capacity throughout the year to
15 ensure system resource adequacy in the most cost-effective manner, as shown in
16 Exhibits AWW-5 and AWW-6.

17 **Q. What is your response to OPC witness Dauphinais’ contention that FPL’s**
18 **“perfect” capacity need for summer 2027 can be fully satisfied with FPL’s 2026**
19 **and 2027 battery storage facilities alone and there is no need for its solar**
20 **additions?**

21 A. Although the marginal level of “firm” or “perfect” capacity from solar facilities is
22 diminishing on FPL’s system, solar is still a cost-effective generating resource that can
23 be added in the near-term to help satisfy energy needs. These solar additions have

1 continually been identified as optimal resource additions in the 2023 Ten Year Site
2 Plan, the 2024 Ten Year Site Plan, and the resource plan derived through FPL's prior
3 resource planning process provided in Table 1 above. All of these plans considered the
4 diminishing effect of firm capacity from solar and, nonetheless, were still identified as
5 the optimal resource selections.

6 **Q. OPC witness Dauphinais indicates that for FPL's solar additions to be found**
7 **prudent, reasonable and cost effective, FPL needs to demonstrate a "robust"**
8 **economic case for them. What is your response?**

9 A. I question what more "robust" analysis could be required beyond what I have
10 previously provided in Exhibit AWW-5, which demonstrates FPL's proposed resources
11 for 2026 and 2027 will produce over \$2 billion in CPVRR savings for customers. This
12 economic analysis was assembled using the same inputs and evaluative methodologies
13 as have been provided in multiple prior CPVRR analyses presented to the Commission.
14 In short, the combination of FPL's solar and battery additions in 2026 and 2027 provide
15 significant savings to customers while ensuring resource adequacy.

16 **Q. How do you respond to FRF witness Georgis' recommendation that FPL curtail**
17 **its solar PV investments in years 2026 and 2027, along with the solar that may be**
18 **included in FPL's proposed solar and battery base rate adjustment ("SOBRA")?**

19 A. As I mentioned earlier, were witness Georgis' recommendation to halt FPL's solar
20 installations be adopted, the result would be an increase in customer rates over the long
21 term, with customers experiencing increased volatility in fuel pricing over the short
22 term. Additionally, as for 2028 and 2029, these projects will only be constructed upon

1 the showing of an economic or resource need, as discussed in the direct and rebuttal
2 testimonies of FPL witness Bores.

3 **Q. OPC witness Dauphinais argues that any economic analysis justifying projects**
4 **should: (i) exclude off-system sales margins (including any Production Tax**
5 **Credits (“PTC”)); (ii) achieve a CPVRR benefit to cost ratio of at least 1.15; and**
6 **(iii) provide the projected CPVRR benefit to customers no later than half-way**
7 **through the life of the investment and no longer than 10 years after the investment**
8 **enters service, as additional restrictions should be applied to “elective” projects.**
9 **What is your response?**

10 A. Witness Dauphinais’ suggestions are arbitrary restrictions that should not be
11 considered, nor have they ever been considered or required by this Commission, in a
12 cost-effectiveness analysis. Regarding the exclusion of the effect of off-system sales,
13 FPL already does this in its analysis. In fact, this suggestion seems to be counter to
14 witness Dauphinais’ arguments that FPL is incorrectly modeling its system as
15 electrically isolated.

16
17 Witness Dauphinais’ other arguments regarding the benefit to cost ratio and breakeven
18 time of the CPVRR analysis are based on arbitrary standards that the Midcontinent
19 Independent System Operator (“MISO”) uses when evaluating cost-effectiveness of
20 “elective” projects. There are several reasons why this particular proposal from witness
21 Dauphinais should be rejected. First, MISO is an Independent System Operator
22 (“ISO”), not an electric utility. Therefore, its decision-making concerning new
23 generating resources accounts for circumstances that are unique to an ISO, such as

1 separate operating utilities and competitive generation. Second, FPL’s proposed solar
2 projects are not “elective.” These projects provide energy to FPL’s system and greatly
3 reduce system costs to customers. Finally, Dauphinais’ arguments that the benefits for
4 these projects should be “front-loaded” to avoid weighting impacts in the later years of
5 analysis are already accounted for in FPL’s analysis. The use of present value allows
6 the impacts of a project in early years to have significantly more weight than those in
7 the latter years of the analysis.

8 **Q. Have there been any recent changes in tax law that have changed FPL’s identified**
9 **resource additions for the 2026-2029 period?**

10 A. No. While FPL continues to assess the impacts of the “One Big Beautiful Bill”
11 (“OBBB”) signed into law on July 4, 2025, FPL currently projects it meets all
12 requirements for its 2026-2029 solar and battery storage projects to maintain projected
13 tax credits.

14

15 **B. AURORA Modeling**

16 **Q. Is OPC witness Dauphinais accurate in saying that OPC is unable to run**
17 **AURORA simulations?**

18 A. While I do not know whether or not other parties have the ability to run the AURORA
19 model, I can indicate that these files have been confidentially provided to the parties
20 consistent with FPL’s discovery obligations in this case. Also, FPL indicated with its
21 response to OPC’s First Request for Production of Documents, No. 15, where the
22 confidential AURORA files were provided, that “Upon request, FPL can detail and
23 demonstrate, under appropriate confidentiality protections, how the confidential

1 AURORA files were used in deriving FPL’s proposed resource additions.” To date,
2 no parties have requested this offered demonstration.

3 **Q. Is OPC witness Dauphinais correct in his assertion that FPL’s current AURORA**
4 **modeling may be unable to identify all the costs FPL incurs for its existing and**
5 **future solar generation investments?**

6 A. No. FPL’s modeling in AURORA includes all applicable costs associated with solar.
7 Witness Dauphinais provides no detailed context of what other “solar costs” should be
8 included, but FPL’s analyses all factor in the capital and O&M costs of solar units, the
9 variable cost benefits that solar provides, and the cost of batteries to meet FPL’s
10 resource adequacy needs.

11 **Q. OPC witness Dauphinais alleges that FPL did not use AURORA to determine the**
12 **most cost-effective way for it to make solar generation and battery storage**
13 **additions in 2026 and 2027 to meet its capacity need in 2027. Is his allegation**
14 **correct?**

15 A. No. There are no more cost-effective “mixes” of solar and battery that would both meet
16 FPL’s near-term resource adequacy needs in 2027 and beyond. FPL’s AURORA
17 modeling has shown that adding cost-effective solar in 2026 and 2027 that drives down
18 customer rates while adding batteries in the same timeframe is the optimal solution to
19 meeting the Company’s resource adequacy needs.

1 **Q. FEL witness Rábago contends that the Commission should not authorize any**
2 **capital spending driven by FPL’s stochastic LOLP analysis and should require a**
3 **full cost effectiveness analysis, including evaluation of all generation, storage, and**
4 **demand-side alternatives. What is your response?**

5 A. FPL has already conducted such an analysis for its proposed solar and battery additions
6 and has presented that analysis in this case. Further, FPL also has already incorporated
7 into its 2025 planning all demand-side options reflected in FPL’s Commission-
8 approved 2024 DSM Goals, which were established as part of a settlement that was
9 agreed to by the parties on whose behalf witness Rábago is testifying. In terms of
10 including all generation options in the analysis, FPL already incorporated all available
11 resources into its AURORA modeling for this case. The fact is, PV solar and battery
12 storage have consistently been the most cost-effective resource options for the past
13 several years and continue to be so during this planning cycle. And, as I mentioned
14 earlier, solar and batteries are the only new generation options that can come online
15 before 2030. In summary, the study that witness Rábago is requesting has already been
16 performed.

17

18

C. Vandolah

19 **Q. Please detail Project Commodore, as it is referenced in the testimony of OPC**
20 **witness Dauphinais.**

21 A. Project Commodore refers to FPL’s now-public pursuit of the acquisition of the
22 Vandolah Generating Facility (“Vandolah”), a natural gas/oil-fired electric generation
23 facility in Wauchula, Florida with a summer net capacity of approximately 660 MW.

1 Vandolah is currently interconnected only to the transmission facilities of Duke Energy
2 Florida (“DEF”), and all of the Vandolah site’s capacity and energy are fully and
3 exclusively committed for sale to DEF under a long-term tolling agreement that
4 remains in effect through May 31, 2027.

5 **Q. Has FPL entered into an agreement to acquire Vandolah?**

6 A. Yes. On April 9, 2025, FPL entered into a purchase and sale agreement to acquire
7 Vandolah, the first step toward deployment of the facility for use in serving FPL’s
8 customers.

9 **Q. When is the Vandolah transaction anticipated to close?**

10 A. The transaction is not expected to close until June 1, 2027, following the expiration of
11 the DEF tolling agreement. The closing of the agreement is conditioned on approval
12 from the Federal Energy Regulatory Commission (“FERC”).

13 **Q. OPC witness Dauphinais indicates in his testimony that FPL’s acquisition of
14 Vandolah, previously referred to as Project Commodore, could change FPL’s
15 resource needs. Would the acquisition of Vandolah change FPL’s proposed
16 resource additions in the 2026 through 2027 timeframe?**

17 A. No. The capacity provided by Vandolah will be available to FPL by no earlier than
18 June 2027, assuming contingencies and approvals are met and the transaction closes.
19 Given this timing and the uncertainty on FERC approval, FPL’s need for its proposed
20 solar and battery storage additions in 2026 and 2027 have not changed. To ensure a
21 reliable generation supply throughout 2027, FPL must have its planned additions in
22 2026 and 2027 and cannot rely on the hope that the Vandolah transaction will close on
23 the anticipated timeline.

1 **Q. Would acquisition of Vandolah change FPL’s anticipated resource needs after**
2 **2027?**

3 A. Yes. The capacity provided by Vandolah will displace 400 MW of four-hour batteries
4 scheduled to enter service in 2028 and 475 MW of gas combustion turbines scheduled
5 to enter service in 2032, unless there is additional demand to serve that would
6 necessitate installation of this capacity based on an additional resource need.

7

8 **IV. 2025 NORTHWEST FLORIDA BATTERY STORAGE**

9 **Q. Both FEL witness Rábago and OPC witness Dauphinais reference FPL’s 2025**
10 **Northwest Florida (“NWFL”) battery storage facilities in their testimonies. Can**
11 **you please describe these battery storage facilities?**

12 A. The NWFL battery storage facilities are 522 MW of battery storage units currently
13 under construction in FPL’s NWFL region. They are scheduled to enter service by
14 December 2025. There are two principal purposes for these additions. First, the NWFL
15 battery facilities provide needed capacity for that region to address times of winter
16 peaks in the near-term. Were these facilities to not be installed in 2025, FPL’s system
17 would be left susceptible to capacity shortfalls in the Northwest region as early as the
18 winter months of 2025-2026. Second, the facilities also serve as a long-term capacity
19 solution for FPL’s customers, providing both regional capacity in the NWFL region as
20 well as capacity for FPL’s system as a whole. As an additional benefit, these facilities
21 are being sited at existing solar sites, which will reduce solar curtailment in the NWFL
22 region and provide variable cost savings via energy arbitrage.

1 **Q. Are the 522 MW of NWFL battery facilities cost-effective for FPL's customers?**

2 A. Yes. FPL initially identified a need for winter capacity specific to the NWFL region
3 in 2023 and began to evaluate several resource options to meet this need. These options
4 included battery sites and gas-fired combustion turbines. Of all the resource options
5 evaluated, adding battery storage was the most cost-effective for customers, and the
6 decision to proceed with the project was made in March 2024. The cost-effectiveness
7 (CPVRR) analysis upon which the go-forward decision was based is included with my
8 rebuttal testimony as Exhibit AWW-9. The CPVRR analysis shown in Exhibit AWW-
9 9 was assembled under my direction and completed in late 2023. It has been previously
10 provided in discovery in FPL's response to OPC's Seventeenth Request for Production
11 of Documents, No. 142.

12 **Q. Were the 2025 NWFL battery facilities rushed to construction, as FEL witness**
13 **Rábago contends?**

14 A. No. As I referenced earlier, FPL identified a need for additional capacity based on
15 actual winter loads in the Northwest region in 2023 and began evaluating potential
16 solutions following that time. After FPL had sufficiently evaluated options to address
17 the NWFL capacity need, the decision was made to go forward with the most cost-
18 effective solution, which are the 2025 NWFL battery storage facilities currently under
19 construction.

1 **Q. FEL witness Rábago also claims that FPL is using the NWFL battery facilities to**
2 **address interim needs until the North Florida Resiliency Connection (“NFRC”)**
3 **transmission line is more available in January 2027. Is his claim correct?**

4 A. Not entirely. While the 2025 NWFL battery storage facilities do help to address an
5 elevated capacity need prior to the completion of transmission line upgrades by other
6 utilities that will alleviate constraint on the NFRC transfers, that is only part of the
7 project’s purpose. As I mentioned, the NWFL battery project is intended to both meet
8 a short-term need for capacity (while other utilities complete their remaining work
9 related to the NFRC project transfers) and provide a long-term capacity solution for the
10 NWFL region and FPL’s system as a whole. To be clear, just because the project helps
11 to address a near-term need, that does not diminish the value that the project provides
12 over the longer term in meeting FPL’s continuing capacity needs. In fact, FPL’s
13 demonstration of a need for 1,419.5 MW of battery storage capacity in 2026 to maintain
14 its LOLP standard assumes installation of the NWFL battery facilities, and further
15 reflects the need for their capacity. The absence of the 522 MW of battery storage
16 capacity from FPL’s system would elevate FPL’s system need for firm capacity in both
17 the near- and long-term.

18 **Q. Witness Rábago contends that power purchase agreements (“PPAs”) are meeting**
19 **FPL’s interim need for capacity. Is FPL able to rely on PPAs to meet near-term**
20 **capacity needs?**

21 A. No. Using PPAs as an interim solution would leave FPL capacity resource constrained
22 on a continuing basis. Moreover, unlike PPAs, the NWFL batteries will provide
23 capacity to FPL’s system and defer future resource additions over their life.

1 Additionally, as I mentioned above, the batteries will also reduce solar curtailment in
2 the NWFL region and provide variable cost savings via energy arbitrage – neither of
3 which would occur if FPL were to choose a short-sighted interim solution that leverages
4 PPAs.

5 **Q. Do you agree with witness Rábago’s contention that three-hour batteries are less**
6 **supportive than four-hour batteries in meeting a winter reliability need?**

7 A. No. Regardless of a battery’s capability to serve longer duration loads, a three-hour
8 battery is sufficient to serve the period of time in winter when load is largest (typically
9 around 7:00 a.m. to 8:00 a.m.). While maintaining the same MW hour capacity as the
10 four-hour batteries, these three-hour batteries give the Company more flexibility to
11 meet higher demands of load at a lower cost than a four-hour battery option. This is
12 particularly beneficial in NWFL where these 3-hour batteries have more inverters,
13 which allows more power to be delivered quickly to the grid. If there are sustained
14 loads for a longer period of time, existing generation can be utilized to meet that load.

15

16

V. CDR/CILC

17 **Q. Please summarize the assertions of intervenor witnesses concerning the value of**
18 **the CDR and CILC programs.**

19 A. Intervenor witnesses have widely varied views of the value that the CDR and CILC
20 programs provide for FPL’s system. At one end, FEL witness Marcelin argues that the
21 programs barely provide any system value at all and that the credits associated with the
22 programs should be eliminated. On the other hand, FRF witness Georgis and FIPUG
23 witness Ly argue that, given the value the programs provide, the credits are currently

1 undervalued at \$8.76/kW, and recommend increasing the credit to \$10.07/kW and
2 \$12.32/kW, respectively. Walmart witness Perry also weighs in on the value of the
3 programs, recommending that the CDR program credit be left at the current level.

4 **Q. How do you interpret these contrary views of the intervenor witnesses?**

5 A. My understanding based on my reading of the testimonies is that on one hand there is
6 a perception that the programs, due to their limited historical use, are merely causing
7 an unnecessary expense to be incurred by customers who cannot or do not participate
8 in the programs. The contrary view is that the programs, though not often called upon,
9 provide a flexible, dependable capacity resource that can be reliably called on by FPL
10 when needed.

11 **Q. Do you believe FPL's proposal fairly represents the appropriate balance of these**
12 **interests?**

13 A. Yes, I do. With my direct testimony, I provided an analysis that assessed the continued
14 value of the programs and how they should be credited based on the value they provide
15 to customers and the system. My recommended credit level of \$6.22/kW, which is
16 supported by a cost-effectiveness analysis that takes into account the system
17 contribution of the programs, is an appropriate level that reflects the value the programs
18 provide without requiring unnecessary contributions from customers who do not
19 participate in the programs. Further details in support of my position are provided in
20 the following subsections of this testimony.

1 **A. Value of CDR and CILC Programs to FPL**

2 **Q. Do you agree with FRF witness Georgis' contention that the value of the**
3 **CDR/CILC programs is heightened due to the limited capacity resource**
4 **alternatives that are available to FPL?**

5 A. No. FPL fully accounts for the value of these programs in both the near-term and long-
6 term by comparing FPL's resource needs and system costs of a plan without these
7 programs to a plan with these programs. This evaluation takes into consideration the
8 availability of replacement resources, as well as the effect those replacement resources
9 would have on the system. While witness Georgis is correct that FPL has limited
10 capacity resource alternatives available, that constraint is already factored into the
11 analysis and is *favorable* for the value of the programs. In fact, the analysis grants a
12 favorable assumption that all CDR and CILC MWs will go away starting January 2026,
13 and capacity will need to be added immediately to meet this need. This assumption
14 forces capacity additions earlier in the resource plan as shown in Exhibit AWW-7,
15 leading to higher costs in the plan without the programs and correspondingly attributing
16 more value to the programs.

17 **Q. How do you respond to witness Georgis' contention that the reliability value of**
18 **the programs' interruptible load will increase as FPL incorporates more**
19 **intermittent supply resources?**

20 A. Again, FPL's analysis of the value of CDR and CILC includes projections for the future
21 price of capacity, which is demonstrated in Exhibits AWW-7 and AWW-8. These
22 exhibits also already factor in FPL's planned resources, including additional
23 intermittent supply resources. The inclusion of these variables in FPL's analysis of the

1 value of the programs shows that FPL’s analysis directly addressed the considerations
2 raised by witness Georgis and did not undervalue the programs.

3 **Q. Do you agree with witness Georgis that the proposed reduced incentive for CILC
4 and CDR understates the value provided by those customers?**

5 A. No. As I mentioned previously, FPL’s analysis accurately and appropriately included
6 the necessary assumptions and inputs to determine the value of the programs to FPL.
7 In addition, the proposed incentive is still larger than the incentive when 75% of
8 customers originally enrolled in the program.

9

10 **B. FPL’s CDR and CILC Analysis**

11 **Q. FIPUG witness Ly contends that FPL’s analysis should not have modeled FPL on
12 a standalone basis for the CDR/CILC analysis. What is your response?**

13 A. For resource planning analysis, FPL has consistently modeled its system as a stand-
14 alone system. This is similarly true for its analyses of resource options, whether those
15 are supply-side or demand-side options. Modeling FPL’s system in this way ensures
16 that the analysis will not be skewed by an unreasonable assumption that neighboring
17 utilities and systems could potentially have excess power during times of extreme need.
18 FPL has no control over its neighboring utilities and therefore cannot ensure that these
19 entities would have sufficient resources.

20

21 Additionally, the analysis supporting Exhibit AWW-7 was designed to measure the
22 benefits to FPL’s system of having CDR and CILC MW available – it did not model
23 the operational effects of dispatching any form of load control. Therefore, modeling

1 FPL as a stand-alone system had no bearing on the calculated benefits of these
2 programs.

3 **Q. Do you agree with witness Ly's assertion that reliance on internal resources is**
4 **contrary to the Commission's rules regarding load management and would defeat**
5 **the purpose of having integrated electric utility systems?**

6 A. No. I disagree with witness Ly that FPL can simply rely on other utilities to assist FPL
7 with its resource adequacy issues. As I explained in my direct testimony, the supply of
8 wholesale power available in the Florida market is limited and may become
9 increasingly more so as utilities in the Southeast continue to anticipate (and potentially
10 recognize) significant load growth. Given the potential lack of availability of external
11 resources, each utility must plan to ensure its own resource adequacy.

12 **Q. FIPUG witness Ly contends that FPL should not have assumed load control**
13 **periods of six hours in its analysis and that doing so resulted in an assumption that**
14 **the programs provided a lower percentage of the total program capacity. Is the**
15 **six-hour assumption appropriate?**

16 A. Yes. FPL's assumption of a six-hour limit of load control dispatch is consistent with
17 the terms of the tariffed agreements for the CDR and CILC programs. It should also
18 be noted that for the calculations in Exhibit AWW-7, FPL assumed 100% of the
19 capacity for CDR and CILC in determining future resource needs. This assumption
20 was favorable for the capacity benefits of the programs, as it excluded the six-hour
21 dispatch limitation.

1 **Q. How do you respond to witness Ly’s contention that FPL did not consider the**
2 **effect of customers switching from non-firm to firm service due to the credit**
3 **reduction?**

4 A. Customers switching from non-firm to firm (*i.e.*, dropping out of CDR/CILC) was a
5 consideration in FPL’s analysis, which is why FPL: (1) proposed setting the incentive
6 level at a level higher than what it was when customers first entered the program; and
7 (2) assumed that dispatch of the load control will abide by the terms set forth in the
8 CDR/CILC tariff agreements, and not dispatch CDR and CILC under conditions
9 reserved for extreme or emergency conditions. Intervenors have painted the picture of
10 CDR/CILC being a form of “perfect capacity” that can be dispatched with few
11 restrictions, but simultaneously disregard the likelihood that customers will be prone
12 to exit the programs if FPL continually calls upon them for load control. The
13 intervenors’ picture is not in touch with the reality of the voluntary nature of these
14 programs.

15 **Q. To derive his recommendation for the CDR/CILC credit, FRF witness Georgis**
16 **determines the value of capacity by incorporating SERC-SE capacity cost**
17 **forecasts. Is such an approach sound?**

18 A. No. FPL’s analysis supporting its recommended CDR/CILC incentive is based on an
19 FPL-specific projection of future new generation costs and incorporates how
20 replacement generation options affect FPL’s system. Using a representative capacity
21 cost and growth rate from a generalized area is a broad and imprecise method of
22 analyzing future generation costs and should be rejected. Likewise, witness Georgis’

1 recommendation that historical capacity prices be considered is also irrelevant –
2 avoiding past capacity has absolutely no impact on future customer rates.

3

4 *C. Appropriate CDR/CILC Credit Level*

5 **Q. Walmart witness Perry insists that lessening the credits is shortsighted and**
6 **jeopardizes the benefits provided by the program. What is your response?**

7 A. FPL’s grid needs flexible, responsive resources that can be dispatched daily, if needed.
8 The CDR and CILC programs lack that capability – if they were to be dispatched
9 regularly, that would likely incite customers to drop out of the program, further
10 compromising the ability to call upon those resources in the future. The intervenor
11 witnesses present contradictory positions on this issue; namely, that a modest decrease
12 in incentive level will undermine participation, but dispatching load control on a regular
13 basis will not. FPL’s proposed incentive, however, is targeted at maintaining
14 participation in the programs and providing participants with value that is reflective of
15 their benefit to the system.

16 **Q. How do you respond to FRF witness Georgis’ recommendation that the**
17 **CILC/CDR credits be increased by 10% to \$10.07/kW, or at a minimum to a 1.0**
18 **RIM ratio?**

19 A. Based on FPL’s analysis using specific data from FPL’s system, setting the CDR/CILC
20 credit incentive higher than \$9.24/kW would result in a subsidy among participants in
21 the program and FPL’s general body of customers. Any recommendation to set the
22 incentive higher than this level should be rejected outright.

1 **Q. How do you respond to FIPUG witness Ly’s recommendation that the CILC/CDR**
2 **incentive level be increased in an amount equivalent to the increase in FPL’s**
3 **production plant in service since its last rate case?**

4 A. The capacity prices of generation already installed on FPL’s system have no bearing
5 on the future rates of customers. FPL’s method of calculating CILC/CDR incentive
6 levels correctly examines future capacity and its effect on FPL’s system and how the
7 CILC and CDR programs help to avoid this capacity need.

8

9 **VI. LARGE LOAD CONTRACT SERVICE**

10 **Q. What is your response to FEIA witness Ahmed’s conclusion that FPL has not**
11 **provided relevant technical studies to substantiate its proposed battery storage**
12 **solution as the most cost-effective option for meeting data center energy demands?**

13 A. FPL’s planning over the past several years has continually shown battery storage to be
14 the most cost-effective capacity option to meet its resource needs, whether these
15 resource needs are driven by its existing load growth or by the addition of data center
16 load. FPL’s generation studies around the load growth in its LLCs tariffs was provided
17 in discovery in the non-confidential response to FEL’s Tenth Request for Production
18 of Documents, No. 82.

19 **Q. Is FEIA witness Ahmed correct that, excluding hydrogen, battery storage is the**
20 **highest cost energy resource available in today’s market on a Levelized Cost of**
21 **Energy (“LCOE”) basis?**

22 A. Witness Ahmed’s suggestion that batteries are the highest cost resource is incorrect and
23 shows several very evident resource planning oversights on his part. First, the LCOE

1 is a fundamentally flawed approach to use when determining the cost-effectiveness of
2 future resource options. LCOE offers a simplistic view of the cost of generation options
3 – simply put, it effectively assumes that a generator is operating by itself without being
4 connected to a utility system. Therefore, all the system effects on both fixed and
5 variable costs are not considered in an LCOE calculation. Second, he provides no
6 comparison of how much more “expensive” batteries are. Even if one were to accept
7 LCOE, witness Ahmed provides no context concerning how it compares to other
8 resource options. Third, he disregards the fact that other resource options (like
9 combustion turbines) would not even be available. Lastly, recent updates to Lazard’s
10 LCOE projections – upon which witness Ahmed relies – show significant decreases in
11 the cost of battery storage systems. So, even using an inappropriate metric like
12 LCOE/levelized cost of storage would show that battery storage systems are a cost-
13 competitive option for serving resource needs.

14 **Q. Is FPL’s proposal to deploy 6.1 GW of battery energy storage systems to serve 3.0**
15 **GW of data center load reasonable?**

16 A. Yes. FPL’s proposed additional battery resources are designed to meet FPL’s
17 reliability criteria for its entire system, even with additional load from data centers
18 being added. The amount of batteries needed to do this is consistent with FPL’s
19 planning processes, but will ultimately be dependent on the final amount of large load
20 added to the system over the four-year period.

21
22 FPL’s “battery-to-load” ratio is based on extensive planning efforts that calculate the
23 amount of firm capacity. The large amounts of load potential from data centers would

1 lead to large amounts of batteries being added – as these batteries are added to the
2 system, the amount of firm capacity from each incremental battery decreases.

3 **Q. Is FPL proposing 2-hour batteries, as FEIA witness Ahmed alleges?**

4 A. No. FPL’s battery storage resource options all have a 4-hour duration.

5 **Q. What is your response to FEIA witness Ahmed’s contention that FPL has not**
6 **demonstrated that short-duration batteries are suitable for serving high-load,**
7 **high-availability customers?**

8 A. FPL’s usage of batteries to determine the IGC for LLCS is based on its established
9 resource planning principles to determine resource needs for its entire system, which
10 are intended to ensure that FPL can reliably serve its customers with a cost-effective
11 generation supply. Application of these principles leads to the selection of battery
12 storage resources – which most cost-effectively provide stable dispatchable capacity –
13 to meet incremental system capacity needs created through the addition of a high-load,
14 high-availability customer.

15 **Q. What is your response to FEIA witness Ahmed’s contention that, if tax incentives**
16 **disappear, the financial justification for battery solutions would no longer be**
17 **supportable?**

18 A. FPL’s planning assumptions are made on the basis of current tax law and its application
19 of investment tax credits (“ITC”) to batteries. The OBBB, and its treatment of tax
20 credits, now represents the current law. Based on FPL’s review of the OBBB’s impact,
21 FPL currently projects that its 2026-2029 solar and battery additions will maintain their
22 projected tax credits. Therefore, FPL’s pricing for batteries to serve potential data
23 center load is anticipated to maintain the previously projected tax benefits.

1 **Q. What is your response to FEIA witness Ahmed’s claim that the load profile of data**
2 **centers can offer FPL additional benefits to the dispatch of its generation**
3 **resources?**

4 A. FPL considered the impact of data center load on the dispatch of its fossil fleet, and
5 incorporated these effects into its calculation of the IGC. With regard to FEIA witness
6 Ahmed’s claim that data centers offer additional justification for extending FPL’s
7 nuclear fleet, FPL currently projects that its nuclear fleet will run at its maximum
8 available capacity without the addition of data center load. Therefore, there are no
9 additional “benefits” to FPL’s nuclear units from data center load.

10 **Q. Does this conclude your rebuttal testimony?**

11 A. Yes.

1 BY MR. BAKER:

2 Q Mr. Whitley, do you have the exhibit that was
3 identified as AWW-9 attached to your prepared rebuttal
4 testimony?

5 A Yes, I do.

6 Q And was this exhibit prepared under your
7 direction and supervision?

8 A Yes.

9 MR. BAKER: Mr. Chairman, I would note that
10 this exhibit has been pre-identified in staff's
11 Comprehensive Exhibit List as Exhibit 290.

12 CHAIRMAN LA ROSA: Okay.

13 BY MR. BAKER:

14 Q Mr. Whitley, would you please summarize the
15 topics addressed in your direct and rebuttal
16 testimonies?

17 A Sure.

18 Good afternoon, Chairman and Commissioners.
19 My direct and rebuttal testimonies address FPL's need
20 for solar and battery storage resource additions in the
21 2026 through 2029 timeframe.

22 My testimonies also address the effects of
23 FPL's changing portfolio of resources, the generation
24 related aspects of proposed large load contract service
25 tariffs, and the incentive payment levels for FPL's

1 commercial/industrial demand reduction and
2 commercial/industrial load control program incentives.

3 **Q Thank you, Mr. Whitley.**

4 MR. BAKER: Mr. Chairman, I tender the witness
5 for cross-examination.

6 CHAIRMAN LA ROSA: Great. Thank you.

7 OPC, you are recognized.

8 MS. WESSLING: Thank you, Mr. Chair.

9 EXAMINATION

10 BY MS. WESSLING:

11 **Q And good afternoon, Mr. Whitley.**

12 A Good afternoon.

13 **Q All right. So you were the engineering
14 manager for the Integrated Resource Planning department
15 of FPL's finance business unit, correct?**

16 A Yes. That's correct.

17 **Q And Mr. Scott Bores is your supervisor?**

18 A Yes.

19 **Q And you have held your current position for
20 approximately three years, but you have worked for FPL
21 in various positions since 2004?**

22 A That is correct.

23 **Q And FPL is the only place you have ever worked
24 since graduating from college in 2004, correct?**

25 A Yes.

1 **Q** And you moved to the Integrated Resource
2 **Planning group at FPL in 2027?**

3 **A** 2007.

4 **Q** **Sorry. 2007.**

5 All right. And you have been involved in some
6 **way with every single FPL Ten-Year Site Plan since 2007,**
7 **correct?**

8 **A** I would agree, in some way, shape or form, I
9 have had some involvement in the ten-year site plan, or
10 in analyses that were part of the ten-year site plan
11 since I joined the Integrated Resource Planning group.

12 **Q** And since -- or starting with FPL's 2022
13 **Ten-Year Site Plan, you have been the main person**
14 **responsible for the production of FPL's Ten-Year Site**
15 **Plan, correct?**

16 **A** Yes, that's correct.

17 **Q** All right. And at this time, I would like to
18 **mark for identification both the 2024 and 2025 Ten-Year**
19 **Site Plans. The 2024 Ten-Year Site Plan is CEL Exhibit**
20 **779, and the 2025 Ten-Year Site Plan is CEL Exhibit 783.**
21 **And I am going to have a few questions about both of**
22 **those as we go through, but just to get those marked**
23 **now.**

24 All right. So the first topic I want to ask
25 **you a few questions about is reliability criteria. It's**

1 my understanding that FPL uses three different specific
2 reliability criteria in projecting future resource
3 needs, is that right?

4 A Yes. That's correct.

5 Q And the three criteria are 20 percent total
6 planning reserve margin criteria for both summer and
7 winter peak hours, the loss of load probability criteria
8 and a minimum generation only reserve margin of 10
9 percent criteria, did I get that right?

10 A Yes. I would say both the 20-percent and
11 10-percent generation only reserve margin are minimum
12 crits.

13 Q Okay. And most of my next questions are going
14 to focus on the second criteria, the loss of load
15 probability criteria. And this criteria is essentially
16 a target of having less than one loss of load event day
17 in 10 years, is that right?

18 A That's approximately correct. It's a
19 long-term planning criteria designed to measure the
20 overall chance of having a loss of load event in a
21 electric utility system.

22 Q But having one event day in 10 years is
23 sometimes referred to as having a .1 event days per
24 year, is that right?

25 A Yes, I will accept that.

1 **Q** Okay. And just hypothetically, if FPL were
2 to, or any utility, were to fall a bit short of the
3 capacity necessary to meet its demand, that means that
4 the loss of load probability is a bit greater than the
5 one cumulative loss of load event in 10 years, correct?

6 **A** I would say -- not entirely. I would say if
7 FPL, or any utility, did not have enough capacity to
8 serve its load at any single point in time, that would
9 qualify as a loss of load event.

10 **Q** And the number would be reflected as something
11 greater than .1, correct?

12 **A** That would have to be aggregated throughout
13 the year on a probabilistic basis to determine the
14 overall long-term loss of load probability.

15 **Q** I am just trying, at a high level, to
16 understand. So there is the .1 loss of load event day
17 criteria, that's the way it's commonly referred to
18 throughout the industry, right?

19 **A** Yes.

20 **Q** Okay, and if there is a number that's above
21 .1, let's say .2, that means that the probability of a
22 loss of load event is greater than one day in 10 years,
23 is that accurate?

24 **A** Yes. That would be accurate.

25 **Q** And if the number is below .1, so say .05,

1 that means that the probability of a loss of load event
2 day in 10 years is less than one in 10 years?

3 A Yes. That's correct.

4 Q Okay. I just want to understand the
5 relationship of a number greater than .1 or less than
6 .1, so thank you.

7 And FPL has traditionally used a particular
8 software program known as TIGER to conduct loss of load
9 probability analyses, correct?

10 A Yes. FPL has been using that program for as
11 long as I have been with the department, and much longer
12 than that.

13 Q Okay. And traditionally, when FPL has used
14 TIGER to conduct these analyses, FPL has limited the
15 TIGER software to looking at the peak demand hour in
16 each of the 365 or 366 days in a year, is that right?

17 A That's mostly correct. It looks at the peak
18 hour of every day, and assumes that there wouldn't be
19 any other loss of load events if the utility system
20 being analyzed was able to meet that peak load in each
21 individual day.

22 Q And you are unaware of any time in the last 20
23 years when TIGER identified a need for firm capacity for
24 summer or winter that was greater than the amount of
25 firm capacity needed for FPL to meet the 20-percent

1 **planning reserve margin criteria, correct?**

2 A Yes. That's correct. The 20-percent reserve
3 margin has driven our needs primarily.

4 Q **And on page 11 of the your direct testimony,**
5 **which I believe is Case Center page C17-2252. Go to**
6 **line 22, please.**

7 So starting on this line, could you read the
8 **first sentence beginning on line 22, please?**

9 A I assume you mean the first sentence, plus
10 the --

11 Q **After yes, the second sentence. Let's go to**
12 **the second.**

13 A Plus the second, okay, yeah. It said: Yes,
14 FPL's system has evolved over time such that the
15 reliability analyses of the past do not sufficiently
16 detect resource adequacy risks associated with FPL's
17 generation profile. Then the rest of that Q&A, I go
18 into further detail on that subject.

19 Q **All right. And so I just want to clarify a**
20 **few things here. When you say that FPL's system has**
21 **evolved, you would agree that it has evolved due to**
22 **intentional decisions made by FPL?**

23 A No. I would say that FPL's system has evolved
24 due to a number of factors, including its growing load,
25 the resources that are most cost-effective to serve that

1 load, and the ability of FPL to dispatch the system
2 based on that -- its current resource profile.

3 **Q Well, FPL has made the decisions to add each**
4 **and every generation resources that it currently has in**
5 **its generation mix, correct?**

6 A I would say FPL has identified the resource
7 needs based -- that go into its plan, and has identified
8 the most cost-effective resource options to meet those
9 needs.

10 **Q And then added those generation resources to**
11 **the generation mix?**

12 A Yes, it would then add those to its plan. We
13 would add those to its plan and use that in our planning
14 going forward.

15 **Q And the Commission does not tell FPL what**
16 **generation resources that it must add to its generation**
17 **mix, correct?**

18 A No. The Commission does not indicate a
19 particular time of resource, but all of the resources
20 identified at FPL were brought forward to the Commission
21 for approval to be added into the plan.

22 **Q And no other entity outside of FPL decides**
23 **what generation resources FPL will add to its generation**
24 **mix?**

25 A No, there is no other entity that does that.

1 **Q** Okay. And FPL's customers don't have a say in
2 what generation resources, other than perhaps in the
3 context of a rate case, FPL customers do not decide what
4 generation additions should be added to FPL's fleet,
5 would you agree?

6 **A** No, I don't agree entirely. FPL does have a
7 SolarTogether program which allows customers to invest
8 effectively in our solar facilities.

9 **Q** Other than the SolarTogether program, would
10 you agree with my question?

11 **A** Yes, I would.

12 **Q** Okay. And in this same portion of your
13 testimony that we were just looking at, this is where
14 you introduced the Commission to FPL's switch to using a
15 stochastic loss of load analysis instead of the
16 traditional loss of load analysis, is that right?

17 **A** Yes. That's correct, in this Q&A, and then
18 several of the other following Q&As.

19 **Q** All right. And I believe beginning on page
20 12, line one, within this paragraph, your answer cites
21 FPL's incorporation of cost-effective solar as the
22 reason for this switch?

23 **A** No. We don't identify the addition of solar
24 specifically as the reason for the switch. We identify,
25 as I have referenced throughout here, that the addition

1 of cost-effective solar has changed FPL's overall
2 system, changing when the most critical times of need
3 are and expanding those. So overall, the addition of
4 solar in the system that the solar is being added to is
5 determining the switch to expand and evolve FPL's
6 planning practices.

7 **Q FPL contracted with a company known as E3 to**
8 **conduct this stochastic analysis on FPL's behalf,**
9 **correct?**

10 A Yes. That's correct.

11 **Q And FPL is using this new stochastic analysis**
12 **for both rate case and ten-year site plan purposes,**
13 **correct?**

14 A Yes. FPL filed it in the rate case, and FPL's
15 most recent site plan includes the additions that were
16 necessitated by this expanded methodology.

17 **Q And if we could mark CEL Exhibit 637. I**
18 **believe this was admitted yesterday or the day before**
19 **during Mr. Olson's cross-examination, but if we could**
20 **bring up Case Center page F2-1311. And if you could**
21 **scroll down to the first page -- or the second page,**
22 **okay.**

23 **All right. Do you see this on your computer**
24 **monitor there?**

25 A Still.

1 **Q It's not showing up?**

2 A I should be able to scroll.

3 **Q Okay.**

4 A There we go. Okay. I am there.

5 **Q All right. And are you familiar with this**
6 **document?**

7 A Yes. This is the proposal that E3 had to
8 address some of its future planning concerns.

9 **Q Okay. And just looking at the first line, as**
10 **a predicate question, the first line says that Florida**
11 **Power & Light Company is experiencing a dramatic**
12 **increase in solar energy penetration. Do you see that?**

13 A Yes.

14 **Q Okay. Now, this dramatic increase in solar**
15 **energy penetration, this isn't something that's just**
16 **happening to FPL, right? I mean, this was intentional?**

17 A Again, I think it's intentional in that the
18 solar has been incredibly cost-effective for our
19 customers, and that is why we have been adding it to our
20 system.

21 **Q And this paragraph goes on to list various**
22 **problems that FPL has been experiencing as a result of**
23 **this level of solar penetration, do you agree?**

24 A I agree it describes it as challenges. But,
25 again, this is a result of FPL's overall system and some

1 of the challenges and concerns that we have had for our
2 system going forward.

3 **Q This also says that these challenges will grow**
4 **in the coming years as the penetration of solar**
5 **increases. Do you see that?**

6 A Yes.

7 **Q All right. And you admit that FPL's addition**
8 **of the amount of solar that it has added over the last**
9 **few years has contributed to operational concerns,**
10 **correct?**

11 A I would say, FPL -- I would say, yes, in the
12 sense that the FPL system continues to evolve and has a
13 high degree of solar penetration. But, again, all of
14 this was cost-effective solar that produced benefits for
15 our customers.

16 **Q And FPL is deliberately choosing to add 72**
17 **additional solar facilities to its generation fleet over**
18 **the next four years, correct?**

19 A I disagree with the premise of deliberately
20 choosing. We are basing those additions based on the
21 cost-effectiveness of that solar and addressing future
22 energy needs. That is why we are going to continue
23 adding -- or planning to continue adding solar in the
24 future.

25 **Q Is anyone other than -- is anyone telling FPL**

1 **to add 72 solar facilities to its system over the next**
2 **four years?**

3 A No. We are basing our future generation
4 resources similar to how we have always planned future
5 generation resources, in that we identify reliability
6 needs, cost-effective methods of generation and add
7 those generation options as needed based on the
8 cost-effectiveness of those resources.

9 Q **And this proposal is dated -- if you could**
10 **scroll up just a little bit -- October 14th of 2024,**
11 **correct?**

12 A Yes.

13 Q **And ultimately, FPL did accept this proposal?**

14 A I will agree that -- I don't know the final
15 details of the proposal, but I will agree that FPL did
16 have E3 perform a study for it.

17 Q **Okay. Fair enough.**

18 **And so at some point after October 14th of**
19 **2024, E3 began conducting this analysis?**

20 A Yes. That's correct.

21 Q **Okay. And E3 provided the final results of**
22 **this analysis to FPL at some point before FPL filed its**
23 **case, its rate case, on February 28th of 2025, correct?**

24 A Yes. Final results were in roughly the first
25 quarter of 2025. E3 had provided preliminary results

1 throughout their process as they developed their model.

2 **Q So subject to check, between October 14th of**
3 **2024, and February 28th of 2025, that's about**
4 **four-and-a-half months. So at most, there was a total**
5 **of four-and-a-half months between E3 submitting its**
6 **proposal to conduct this analysis and when it was**
7 **finalized, would agree with that?**

8 A Yes, I would agree with that general timeline.

9 **Q And you would agree that FPL's customers are**
10 **affected by the outcome of FPL's resource planning**
11 **decisions, correct?**

12 A Yes. That's why, again, we always choose
13 to -- choose the most cost-effective resources to
14 maintain our reliability.

15 **Q You would also agree that FPL's Ten-Year Site**
16 **Plan docket and this docket are the first time that the**
17 **Commission has been presented with a stochastic loss of**
18 **load analysis?**

19 A I agree that this is the first time this has
20 been presented. I would just point out the ten-year
21 site plan is not a docketed matter.

22 **Q And FPL did not seek any customer or**
23 **Commission input before deciding to switch from a**
24 **traditional loss of load probability analysis to a**
25 **stochastic loss of load probability analysis, correct?**

1 A No. During this timeframe, we did not. We
2 developed this in conjunction with E3, and chose to
3 present this as support for our analysis showing that we
4 did need additional resources in this timeframe.

5 **Q And FPL did not consider any alternatives to**
6 **the traditional loss of load probability analysis other**
7 **than a stochastic loss of load probability analysis,**
8 **correct?**

9 A No. That's incorrect. As early as 2023, FPL
10 began examining the overall affects that we have
11 identified, or E3 has identified and highlighted in
12 this. Based on those, we have looked at the
13 requirements for operational reserves on our system, and
14 in our 2024 site plan, we submitted that an additional
15 300 megawatts of batteries per year were going to be
16 planned and added to our system in order to address
17 those concerns. So that was a precursor, I would say,
18 to the stochastic loss of load probability metric.

19 **Q Can we please go to CEL Exhibit 631? And**
20 **that's Case Center page F2-2936.**

21 **Are you familiar with this interrogatory?**

22 A Yes, I am.

23 **Q All right. And did you cosponsor or sponsor**
24 **this interrogatory?**

25 A Yes, I did.

1 Q All right. And this interrogatory asked:
2 What alternatives did FPL consider before adopting the
3 SLOLP methodology. Please identify each and explain why
4 it was not collect selected, correct?

5 A Yes. That's correct.

6 Q And the response states that FPL did not
7 consider any alternatives to a stochastic loss of load
8 modeling as it addresses multiple aspects of system risk
9 while using an industry accepted metric for reliability,
10 correct?

11 A Yes, it does.

12 Q Okay. And FPL did not make any effort to
13 determine if any other company could conduct the same
14 analysis as E3 at a lower cost, correct?

15 A No. FPL had looked at other vendors
16 initially. We had looked at those, I would say,
17 throughout several years. But ultimately, we had chosen
18 E3 to conduct this analysis as we had conducted them to
19 provide an evaluation of our operational reserve
20 requirements.

21 MS. WESSLING: If I could just have one
22 moment, Your Honor?

23 All right. I think we need to pass out these
24 binders. Would it be a good time for a five-minute
25 bathroom break while we do that, or would you like

1 us to pass them around and just keep going?

2 CHAIRMAN LA ROSA: Let's go ahead and pass
3 them out --

4 MS. WESSLING: Okay.

5 CHAIRMAN LA ROSA: -- and we will keep going.
6 Thank you.

7 BY MS. WESSLING:

8 Q All right. Mr. Whitley, you were deposed on
9 May 7th of this year, correct?

10 A Yes.

11 Q And at your deposition, just like today, you
12 took an oath to tell the truth? Okay. I am sorry, you
13 have to verbalize answers for the court reporter.

14 A Oh, yes. I'm sorry.

15 Q Okay. And on -- at that deposition, you were
16 asked whether or not FPL sought out proposals from any
17 other company to perform the stochastic loss of load
18 probably analysis, correct?

19 A Yes.

20 Q And looking at page 45, line seven of your
21 May 7th, 2025 deposition -- actually, we will start with
22 line four. The question was asked: You can't say,
23 though, that E3 was the lowest cost option since you
24 didn't seek out any other proposals, is that fair to
25 say?

1 And then beginning line seven, you state: No,
2 I don't know if they were the lowest cost option. I
3 don't know any -- I don't know any of the other costs or
4 any of the capabilities of any of the other options
5 available to us, correct?

6 A What page was that again?

7 Q Page 45 of your May 7th, 2025, deposition,
8 starting on page -- or line four through 10. Is that
9 what it says?

10 A Yes, that's what says. That's correct. Yes,
11 and that answer was in response to E3 being selected by
12 us to already perform an evaluation of our operational
13 reserves. So beyond that point, we did not consider any
14 other options other than E3 as we already had prepared
15 our model with them, and we had previously looked at --
16 we always continuously look at upgrading our future
17 planning methodologies throughout every year that I have
18 been at FPL's planning department.

19 Q So I understand that FPL already had a
20 relationship with E3, but my question is: FPL did not
21 make any effort to determine if any other company could
22 conduct the same analysis at a lower cost, correct?

23 A That's correct. Again, for the reasons I
24 stated, FP -- E3 had already been contracted to evaluate
25 our operational reserves requirement, and already had a

1 great amount of data that would be needed to perform
2 this analysis.

3 **Q And there are other companies who perform**
4 **stochastic loss of load probability analyses, correct?**

5 A Yes. There are other vendors and contractors,
6 consultants who can do that.

7 **Q Okay. And you would agree that the results of**
8 **stochastic analyses are only as good as the inputs and**
9 **assumptions that the model is programmed with, correct?**

10 A Correct, they are both -- they are very
11 important to the overall results of the analysis.

12 **Q And we can put that binder aside for now.**

13 **All right. And talking about the inputs and**
14 **assumptions, you would agree that the inputs and**
15 **assumptions used in any modeling analysis, including**
16 **stochastic modeling, can have a major impact on the**
17 **results?**

18 A Yes. The inputs are very important.

19 **Q Okay. And FPL provided all of the inputs and**
20 **assumptions that E3 used in its stochastic analyses,**
21 **correct?**

22 A Yes. FPL provided inputs and assumptions
23 consistent with what were available at the time.

24 **Q And E3 only used the inputs and assumptions**
25 **provided by FPL in conducting those stochastic analyses?**

1 A I would agree the inputs are, yeah, provided
2 by FPL, and to the extent of my knowledge, E3 used all
3 of those inputs.

4 **Q And they only used those inputs?**

5 A I believe there was testimony from Witness
6 Olson regarding the forced outage rate of projected
7 batteries. E3 had additional information about that
8 forced outage rate, and did use that as an input
9 assumption.

10 **Q With FPL's permission?**

11 A Yes.

12 **Q And FPL used the ultimates are of E3's**
13 **analysis to decide whether to add generation resources**
14 **to FPL's system, correct?**

15 A No, that's not entirely correct. As I stated
16 early earlier in our timeline, since 2003, FPL has been
17 evaluating the potential for future resource needs
18 beyond -- above and beyond what our 20 percent reserve
19 margin might indicate. Based on those preliminary
20 evaluations, FPL has a resource plan that could address
21 those potential needs, and based on E3's input, they ran
22 a stochastic loss of load probability based on those
23 resource additions to confirm that those resource
24 addition was help FPL's future resource needs.

25 **Q So would FPL have added resources regardless**

1 **of what E3's stochastic analyses had produced?**

2 A No. That's incorrect. If E3's loss of load
3 probability analysis had indicated that those resources
4 could not meet the need, if there was not enough
5 resources to meet the need, or if there was, you know,
6 require those resource, FPL could alter its resource
7 additions as needed.

8 **Q E3 did not make any recommendations to FPL**
9 **about which generation resources FPL should add to its**
10 **system, correct?**

11 A Yes. That's correct. E3 identified what our
12 future resource needs would be both with and without its
13 proposed resource additions.

14 **Q FPL decided which generation resources to add**
15 **based off of E3's analysis, correct?**

16 A No, FPL did not decide the type of generation
17 resources. It knew overall what the cost-effectiveness
18 of certain resources were, such as solar and batteries.
19 Again, those are the most cost-effective options. E3
20 identified resource needs that could be met by those
21 resource additions.

22 **Q E3 did not recommend that FPL add those**
23 **resources, though, correct?**

24 A That's correct. E3 did not recommend a
25 specific type of resource to add.

1 Q Okay. Because regarding resource selection,
2 FPL uses a software known as AURORA to guide its
3 generation resource selection, correct?

4 A Yes.

5 Q And unlike how FPL hired E3 to run the
6 stochastic analysis, FPL runs the AURORA software
7 in-house, correct?

8 A Yes. That's correct.

9 Q And so there again, FPL controls which inputs
10 and assumptions are used in the AURORA modeling?

11 A Yes, FPL seeks out inputs and assumptions from
12 across the company to ensure that it provides an
13 accurate presentation of our system in the future.

14 Q And just like the inputs and assumptions used
15 in stochastic modeling, the inputs and assumptions used
16 in AURORA modeling can have a big impact on the results
17 of the AURORA modeling, correct?

18 A Yes. That's correct.

19 Q All right. And prior to deciding to add the
20 2026 through 2029 resource additions that are included
21 in this requested rate increase, FPL did not seek any
22 consumer or Commission input into which inputs and
23 assumptions should be used in FPL's AURORA modeling,
24 correct?

25 A No, I couldn't agree entirely. Part of the

1 cost-effectiveness of resources was provided in the
2 past, dating back to our past rate case, dating back to
3 our previous SoBRA filings, all of which were presented
4 to the Commission for approval, and all of which fed
5 into FPL's planning in the 2025 cycle.

6 **Q All right. So if we could bring that binder**
7 **back up, please. If you could go to your, again, May**
8 **7th, 2025, deposition, on page 55. Just let me know**
9 **when you are there.**

10 A I am there.

11 **Q All right. So could you read the question and**
12 **answer starting on line 11 through line 19?**

13 A Yes. It says: And what input, if any, did
14 Florida Power & Light seek from any stakeholders in this
15 matter other than Florida Power & Light with regard to
16 the inputs and assumptions that were chosen to be
17 applied in FPL's AURORA analysis?

18 And my answer said: Again, FPL developed
19 assumptions based on its system, so it did not seek
20 external input on those. And again, all those
21 assumptions, inputs and outputs have been provided as a
22 part of this case.

23 **Q Thank you. We can set that aside again.**

24 **And FPL prohibited the AURORA model from**
25 **selecting any other generation resource other than solar**

1 **or battery for the 2026 through 2029 time period,**
2 **correct?**

3 A Yes. That's correct. FPL had identified that
4 there would not be any other resource options that were
5 able to be added during that timeframe.

6 **Q And the same load forecast inputs and**
7 **assumptions that were used in both E3's stochastic**
8 **analysis and FPL's AURORA analysis?**

9 A I would say yes, with the clarification that
10 the load forecasts for the AURORA analysis was a P50
11 load forecast, and how we always plan our system,
12 whereas, that same load forecast was then stochastically
13 modified by E3 to fully reflect the possible changes in
14 load that can occur over time.

15 **Q And FPL included approximately 700 megawatts**
16 **of forecasted -- just one moment. Do you --**

17 MS. WESSLING: If I could just have one
18 moment --

19 CHAIRMAN LA ROSA: Sure.

20 MS. WESSLING: -- to confer with counsel?

21 BY MS. WESSLING:

22 **Q All right. FPL included approximately 700**
23 **megawatts of forecasted data center load prior to 2031**
24 **in its AURORA modeling, correct?**

25 A Yes. That's correct.

1 **Q** Okay. All right. Regarding loss of load
2 **probabilities, using FPL's traditional loss of load**
3 **probability analysis for 2025, FPL's loss of load**
4 **probability is below .1, correct?**

5 A Yes, based on our traditional methodology, it
6 does not account for the stochastic methods of varying
7 load, solar and generation output.

8 **Q** All right. And this means that under the
9 **traditional loss of load probability way of looking at**
10 **things, that as it stands today, FPL has more than**
11 **enough generation resources in 2025 to have fewer than**
12 **one loss of load event in 10 years, correct?**

13 A I would say yes, as our traditional methods
14 indicate that our loss of load would be under 0.1, then
15 it would have enough resources based on that metric.

16 **Q** And FPL to date has not directed E3 to conduct
17 **a 2025 stochastic analysis, correct?**

18 A No, it has not.

19 **Q** And you responded to Staff's Interrogatory No.
20 **44, correct?**

21 A Yes, I did.

22 **Q** All right. And we will start with the
23 **original response, which is staff's CEL Exhibit 425, I**
24 **believe. If we could pull that up, which I think is**
25 **Case Center number E91003.**

1 And this response was both corrected and
2 supplemented a few times throughout the course of
3 things, but you were involved with each response,
4 correct?

5 A Yes.

6 Q All right. And we are going to go through
7 each version, so we can be clear about context and
8 everything. We will just start with the original
9 response.

10 Subject to check, this was provided on
11 April 9th of 2025?

12 A Subject to check, yes, I will accept that.

13 Q Okay. And then on May 2nd, 2025, FPL filed a
14 supplemental response to this interrogatory following an
15 informal meeting called by Commission staff, is that
16 right?

17 A Yes, that's my recollection. Yes.

18 Q All right. And the supplemental response is
19 within this same exhibit, but on Case Center page 91022,
20 if we if you could go there?

21 All right. And within this response, you
22 indicate that in a case where none of the 2026 or 2027
23 resource additions were added, that FPL would still
24 satisfy both the traditional and stochastic 2026 loss of
25 load probability metric of one loss of -- one loss of

1 load event day -- sorry, I am going to start over there
2 because I messed it up there a little bit and it's very
3 complicated.

4 In this supplemental response, you indicated
5 that in a case where none of the 2026 or 2027 resource
6 additions were added, that FPL would still satisfy both
7 the traditional and stochastic 2026 loss of load
8 probability metrics, correct?

9 A Could you point to the --

10 Q Could we scroll down? I think it's in one of
11 the tables. Is there a way to zoom in there? All
12 right. And if you could scroll to the right and just
13 make sure this is the supplemental response.

14 A Yes. In column one of this, on initial
15 evaluation of that plan, without any of the 2026 through
16 2029 additions, I interpreted this as a sort of a
17 long-term look that does not need additional resources
18 to meet a loss of load probability criteria using
19 stochastic methods.

20 Upon further evaluation, we realized that
21 there wasn't any evaluation that was conducted,
22 especially in the near-term, in the 2025 or 2026
23 timeframe, and that was the reason for submitting a
24 corrected response to this interrogatory.

25 Q And subject to check, that corrected

1 **supplemental response was submitted on May 8th, does**
2 **that sound right?**

3 A Subject to check, yes, that sounds about
4 right.

5 Q Okay. And that response can be seen on Case
6 Center page E91029. If we could scroll down to the
7 first chart below this? There we go. And if we could
8 zoom in. And if you need to use the mouse to zoom in on
9 the monitor in front of you, or if you see it from here.

10 This corrected supplemental response reflects
11 the change that you just described, is that accurate?

12 A Yes. That's correct.

13 Q Okay. And FPL has not produced a traditional
14 loss of load probability analysis for 2026, correct?

15 A No. That's incorrect. I believe as a data
16 request for the ten-year site plan, FPL typically
17 provides a loss of load probability projection for the
18 ten-year period. In that data request, FPL used its
19 traditional loss of load probability calculation in
20 order to provide that to the Commission.

21 Q That was not in this docket, though, correct?

22 A I can not recall if that was provided as part
23 of discovery or not. That was provided as part the
24 ten-year site plan response, but I can't recall if it
25 was provided in discovery in this docket.

1 **Q** Okay. And in rebuttal -- in your rebuttal
2 **testimony, it's clear that FPL did direct E3 to**
3 **determine a stochastic loss of load probability analysis**
4 **as of January 1st of 2026, correct?**

5 A Yes. It was for the entire year of 2026. It
6 wasn't indicative of January 1st, but it was for the
7 year 2026.

8 **Q** And that stochastic analysis for the year of
9 **2026 does not include FPL's planned solar and battery**
10 **resource additions for 2026, correct?**

11 A Correct. It does not include FPL's 522
12 megawatts of batteries that are coming in at the end of
13 2025.

14 **Q** And that stochastic analysis was presented in
15 **the form of an exhibit to Mr. Olson's testimony,**
16 **correct?**

17 A Yes. That's correct.

18 **Q** I believe it was AO-3, page one of two?

19 A Subject to check, yes. I don't recall exactly
20 which exhibit number it was.

21 **Q** And initially, that stochastic loss of load
22 **probability analysis was listed as 0.92?**

23 A Yes, it was in later updated and corrected to
24 another number.

25 **Q** **0.76?**

1 A Yes.

2 Q And that errata was filed after the discovery
3 deadline in this case, correct?

4 A I am not aware of exactly when it was filed.
5 Subject to check, I would accept that it was filed later
6 than the initial rebuttal testimony.

7 Q Would you accept subject to check that it was
8 submitted after the discovery deadline?

9 A Subject to check, yes, I could accept that.

10 Q And you mentioned this a few times, but FPL
11 does believe solar to be a cost-effective generation
12 resource, correct?

13 A I am sorry, does believe?

14 Q Yes.

15 A Yes. FPL has shown through -- I would say it
16 doesn't just believe. FPL has shown through its
17 modeling over the past several years that solar is a
18 cost-effective resource.

19 Q And that's one of the reasons why FPL has
20 added a lot of solar to its system?

21 A Yes, so our customers can experience the
22 benefits of that solar as it is cost-effective.

23 Q And as of December 31st of 2024, FPL had 96
24 solar facilities on its system, correct?

25 A Subject to check. I don't know that number

1 exactly off my head, but it was around 100 at that time,
2 so that seems about how many solar facilities FPL had.

3 **Q Okay. However, the addition of that much**
4 **solar ultimately created operational concerns for FPL,**
5 **correct?**

6 A Again, I would clarify that. I would say, no,
7 it wasn't just that solar that created it. It is FPL's
8 system as a whole. The electric utility system as a
9 whole has to be examined to see what the uncertainties
10 and potential reliability issues are. Solar was part of
11 that system, and so we were required to look at future
12 dispatchable generation to potentially address some of
13 that uncertainty in the solar and in our system in
14 general.

15 **Q So you do not agree that adding that much**
16 **solar ultimately created operational concerns for FPL?**

17 A Again, I would say if I have to answer yes or
18 no, I would say no, with the clarifications I said.
19 There are several different factors that go into it, one
20 of which is solar. And overall, we look at a holistic
21 view of our system to address potential reliability
22 needs.

23 **Q If you could pull out your deposition binder**
24 **again, please, and go to page 36 of your May 7th**
25 **deposition?**

1 A Yes, I am there.

2 Q All right. If you could read from page 36
3 line 25 through page 37 line six, please?

4 A Yes. So the addition of solar over those last
5 few years contributed to the operational concerns FPL
6 had, do I have that right?

7 The answer is: Yes, the solar shifted how our
8 system was. We were adding solar because it was a
9 cost-effective resource and it did contribute to
10 operational concerns that we needed to examine going
11 forward.

12 Q Thank you. You can set that aside.

13 And in this case -- well, I will wait until
14 you are done.

15 In this case, FPL is asking for solar base
16 rate adjustment mechanisms that would allow FPL to raise
17 base rates in both 2028 and 2029 based on a showing of
18 either economic need or a resource need. Do I have that
19 right?

20 A Yes. That's effectively what we have
21 identified for our 2028 and 2029 SoBRA facilities.

22 Q And by economic need, you mean a showing that
23 the 2028 or 2029 solar is cost-effective, right?

24 A Yes. I think we would include the addition of
25 battery storage facilities in those 2028 and 2029

1 additions as well to ensure that those are also needed
2 from a resource perspective.

3 **Q Well, the SoBRA mechanisms allow for a showing**
4 **of either economic need or resource need, correct?**

5 A Correct. It accounts for both. We would
6 show, you know, the need for those solar and battery
7 facilities on either of those needs going forward.

8 **Q So there could be an instance where there is**
9 **not a resource adequacy need, but if it's -- if there is**
10 **an economic need, meaning it's cost-effective, then FPL**
11 **would intend to add those to the system?**

12 A Yes. That would mostly be with FPL's solar
13 facilities as they would be more likely to provide
14 economic benefit to FPL's customers.

15 **Q All right. And we have touched on the**
16 **ten-year site plans a little bit, but now I have a few**
17 **questions specific to those. If we could go to CEL**
18 **Exhibit 779. This is what I previously identified as**
19 **the 2024 Ten-Year Site Plan, and if we could go to Case**
20 **Center page F2-9207. And actually, if we could go to**
21 **Case Center page F2-9386. I apologize. And zoom in as**
22 **much as possible, please, so that -- as much as possible**
23 **so that the full chart, or the width of the chart, at**
24 **least, is visible. And then if you could scroll up just**
25 **a little bit? Sorry, Brian.**

1 **All right. Mr. Whitley, are you familiar with**
2 **this chart within this 2024 Ten-Year Site Plan?**

3 A Yes. This is Schedule 8 that shows FPL's
4 resource additions broken out by both nameplate capacity
5 and firm summer and winter capacity.

6 Q **And column 10 lists -- it says, Comm.**
7 **In-Service. Does that mean commercial in-service month**
8 **and year?**

9 A Yes.

10 Q **So that's the date that it's expected that**
11 **these sites are going to start sending electrons to the**
12 **grid, correct?**

13 A Yes. That's correct.

14 Q **Okay. And you would agree with me that in the**
15 **2024 Ten-Year Site Plan, FPL planned on adding 30 solar**
16 **facilities in the year 2026, correct?**

17 A Yes. That's correct.

18 Q **And if we could go to Case Center page**
19 **F2-10664 of the 2025 Ten-Year Site Plan, please?**
20 **F2-10664.**

21 **And, Mr. Whitley, is this the complimentary**
22 **chart in the 2025 Ten-Year Site Plan?**

23 A Yes, it is. It's Schedule 8 from the 2025
24 Ten-Year Site Plan.

25 Q **Okay. And in the 2025 Ten-Year Site Plan, FPL**

1 reduced its planned 2026 solar sites from 30 to 12,
2 correct?

3 A Yes. That's correct.

4 Q And if we could perhaps zoom in on this one a
5 little more in detail. All right. And if we could
6 scroll up -- yep, that's fine. Right there.

7 So looking at this page, there is a column for
8 estimated summer firm capacity values of these solar
9 facilities, correct?

10 A Yes. That's column 14.

11 Q Okay. Thank you.

12 And on this page, would you agree that the
13 summer firm capacities range anywhere from three to 22
14 megawatts?

15 A Yes. The firm capacity values of those solars
16 varies based on the shifting of the net peak out later
17 in the evening.

18 Q And by way of a predicate question, the North
19 Orange, Sea Grape and Clover facilities all have an
20 estimated firm summer capacity of four megawatts,
21 correct?

22 A Yes. That's correct.

23 Q Okay. And there is also a column at the -- if
24 you could scroll down to the bottom, excuse me, a row,
25 that's labeled solar degradation. Do you see that?

1 A Yes.

2 **Q And solar degradation refers to the fact that**
3 **solar panels become less and less effective over time**
4 **due to wear, correct?**

5 A Yes. It's a representation of the decreased
6 output of solar as it ages.

7 **Q So as solar panels age, their capacity output**
8 **decreases due to wear, is that fair?**

9 A Yes. Their nameplate capacity would decrease,
10 and the amount of firm capacity that they provide, as
11 shown in column 14, would decrease over time. So that's
12 representative of the degradation on FPL's existing
13 solar at the time in 2026.

14 **Q Okay. And on the solar degradation line for**
15 **2026, it's listed with the number 12 in parenthesis. I**
16 **understand that to mean negative 12, is that right?**

17 A Yes, the overall firm capacity value of FPL's
18 solar fleet decreases by 12 megawatts in 2026.

19 **Q And so if, just looking at the North Orange,**
20 **Sea Grape and Clover facilities that have four megawatts**
21 **each of firm summer capacity, if FPL expects to lose the**
22 **equivalent -- or FPL expects to lose the equivalent of**
23 **those three firm capacities in solar projected in 2026,**
24 **correct?**

25 A I wouldn't necessarily -- I mean would -- you

1 could frame that that way mathematically, yes. You
2 could say that the equivalent of four sites is
3 equivalent to the degradation in solar site. Again, all
4 those solar sites were identified to be cost-effective
5 regardless of the decline in firm capacity value.

6 **Q And the more solar that FPL adds to its**
7 **system, the greater amount of solar degradation there**
8 **will be in each year, correct?**

9 A Yes, the degradation amount will be applied to
10 a greater overall number of solar -- be applied to a
11 greater overall number of megawatts of solar and will
12 increase in the future.

13 **Q And if we scroll down to the next page to the**
14 **2027 block. For 2027, the solar degradation is listed**
15 **at 12. Do you see that?**

16 A Yes.

17 **Q And then for 2028, the solar degradation is**
18 **listed at 13?**

19 A Yes.

20 **Q So that supports your answer to my question**
21 **about whether or not solar degradation amounts will**
22 **increase over time, correct?**

23 A Yes. That's correct.

24 **Q All right. And now switching topics to the**
25 **Vandolah plant.**

1 **Since FPL filed this rate increase request on**
2 **February 28th of this year, FPL entered into a purchase**
3 **and sale agreement for a natural gas power plant called**
4 **the Vandolah Generating Facility, correct?**

5 A I don't know the official, I guess,
6 terminology of purchase and sale agreement. I will
7 agree that FPL has proposed to purchase the Vandolah
8 plant in the future.

9 **Q As it stands now, FPL intends to follow**
10 **through on that purchase, correct?**

11 A FPL intends to follow through on this purchase
12 assuming that it receives FERC approval for that
13 purchase.

14 **Q And this is a 660-megawatt power plant,**
15 **correct?**

16 A Yes.

17 **Q And when you were deposed on May 7th of this**
18 **year, you were asked whether or not FPL had looked at**
19 **purchasing any existing fossil plants as potential**
20 **resource additions. Do you remember that?**

21 A I don't recall the exact time I was asked that
22 question, but we have -- you know, we continuously look
23 at resource options.

24 **Q And I can direct you to the deposition page,**
25 **if you would like, but would you agree that that**

1 question was asked during your May 7th deposition?

2 A Yes, I --

3 Q Do you want to see it?

4 A I am willing to accept I was asked that
5 question. I am not sure exactly what purchase
6 agreements we had entered into at that time.

7 Q And if we could pull up what has, I believe
8 been officially recognized as official recognition
9 Exhibit I, which is also CEL Exhibit 761, which is Case
10 Center page F2-3797?

11 And you mentioned the FERC approval being a
12 requirement for FPL following through on the purchase.
13 This exhibit -- are you familiar with this exhibit?

14 A Yes. This appears to be the application for
15 the purchase of the Vandolah unit.

16 Q And could you -- do you see the date of this
17 application on the cover page?

18 A Yes. It's dated June 10th, 2025.

19 Q And subject to check, intervenor testimony was
20 filed on June 9th of 2025, correct?

21 A Subject to check, that sounds about around
22 when that testimony was filed.

23 Q And within your -- you provided testimony as
24 part of this application, correct?

25 A Yes. That's correct. I do.

1 **Q** And if we could go to Case Center page
2 **F2-3815? And if we could zoom in a little bit on the**
3 **bolded B area? There we go.**

4 Can you read that, Mr. Whitley? Not out loud,
5 **but can you see that?**

6 A Can I see the -- yes, Section B? Yes. That's
7 correct.

8 **Q** And would you agree that your testimony states
9 **that the Vandolah transaction purchase and sale**
10 **agreement was dated April 9th of 2025?**

11 A I disagree that this is my section of the
12 testimony. This is the overall application. I believe
13 my testimony is attached as an appendix to this
14 application.

15 **Q** Okay. Do you disagree that the purchase and
16 **sale agreement was signed on April 9th of 2025?**

17 A I don't disagree that's what that says in the
18 application. Again, I was only involved in the overall
19 cost-effectiveness analysis of the Vandolah plant. I
20 did not develop the purchase and sale agreements that we
21 are looking at now.

22 **Q** Do you agree that because this application was
23 **filed on June 10th of 2025, that no intervenors had an**
24 **opportunity to provide testimony on anything related to**
25 **the FPL's acquisition of Vandolah?**

1 A I would agree that if it was after the June 9
2 filing, then the intervenor testimony would not have
3 incorporated this. That's all I can say regarding that
4 matter.

5 **Q And if this was made public the day after**
6 **intervenor testimony was due, and intervenor testimony**
7 **was not allowed to explore how any of FPL's planned 2026**
8 **through 2029 generation resource additions being**
9 **requested in this case could be offset by the addition**
10 **of the Vandolah power plant, correct?**

11 MR. BURNETT: Mr. Chairman, I am going to
12 object to this line of questioning. It has nothing
13 to do with the substance of this witness'
14 testimony. It's -- as best as I understand it,
15 it's a back door to claim prejudice now that we are
16 in the middle of a hearing. If they had a problem
17 with that, they should have filed something a long
18 time ago.

19 MS. WESSLING: Mr. Whitley's rebuttal
20 testimony also talks about the Vandolah Power Plant
21 and the -- what FPL states the Vandolah Power Plant
22 will offset, or could offset. So this is directly
23 related to how -- or assertions made in his
24 rebuttal testimony, and this is corroborating
25 evidence, and under 120 it's allowed.

1 CHAIRMAN LA ROSA: I go to my advisors.

2 MS. HELTON: Mr. Chairman, it seems to be that
3 this is an appropriate line of questioning by OPC.

4 CHAIRMAN LA ROSA: Then overruled, and you are
5 allowed to proceed.

6 BY MS. WESSLING:

7 **Q Do you need me to repeat the question?**

8 A Yes, that would be helpful. Thank you.

9 **Q So intervenor witnesses were not allowed to**
10 **testify about how the Vandolah acquisition could offset**
11 **any of FPL's requested 2026 through 2029 resource**
12 **additions?**

13 A No, but as was indicated in my rebuttal
14 testimony in this docket did indicate how FPL would
15 offset its future resource needs with Vandolah, and how
16 that related to this case as filed.

17 **Q The only evidence in this case about what**
18 **Vandolah could or could not offset is coming from you**
19 **due to the timing of testimony, correct?**

20 A I am unaware of any other evidence in this
21 case. All I know is what I have filed in my rebuttal
22 testimony.

23 **Q FPL will complete the acquisition of Vandolah**
24 **on June 1st of -- approximately June 1st of 2027,**
25 **correct, if approved by FERC?**

1 A Yes, and that's a big if. If that is
2 approved, then that would be the date that FPL takes
3 ownership of the Vandolah holding company.

4 **Q And FPL has eight 2027 batteries that are**
5 **planned to come into service after June 2027, correct?**

6 A Yes. That's correct. And FPL does not plan
7 on deferring those batteries as it cannot guarantee that
8 the Vandolah application will be approved by FERC, and
9 will need those batteries to provide resources during
10 that timeframe.

11 **Q So FPL is not willing to acknowledge that the**
12 **resource need for some or all of those eight 2027**
13 **batteries could be immediately offset by FPL's Vandolah**
14 **acquisition?**

15 A Again, FPL would be placing its customers at
16 risk for reliability issues were it not to proceed with
17 those batteries based on the uncertainty inherent in the
18 Vandolah purchase.

19 **Q So that's a yes?**

20 A I would say, yes, I identify the potential of
21 future options that could be addressed by Vandolah and
22 could be altered in the future. And, again, FPL will
23 have SoBRA hearings in 2028 and 2029, if that is
24 approved, and FPL will give a chance to reevaluate what
25 resources will be needed in the future should the FPL --

1 or should the Vandolah plant be approved.

2 **Q These eight 2027 batteries, though, are not**
3 **part of the SoBRA mechanisms, correct?**

4 A Yes. That's correct. And as I stated, FPL
5 needs to plan on constructing and placing those
6 batteries in service to address potential resource needs
7 should the Vandolah plant not -- purchase not be
8 approved.

9 **Q And FPL is requesting that base rates for 2027**
10 **be set as though all eight 2027 batteries will go into**
11 **service in 2027, correct?**

12 A That is my understanding, that FPL has -- is
13 attempting to demonstrate a need for those batteries
14 and, therefore, will seek a base rate adjustment for
15 those batteries.

16 **Q Well, they're -- FPL is asking for that**
17 **adjustment now, correct, for 2027?**

18 A For the 2027 batteries, yes, that is included
19 in FPL's rate case application.

20 **Q And if FPL -- if base rates are set for 2027,**
21 **the base rate increase for 2027 are set as though those**
22 **eight 2027 batteries that are due to come on-line after**
23 **June 1st of 2027 are included but then FPL offsets any**
24 **or all of those eight batteries, then customers will be**
25 **paying for batteries in 2027 base rates that are not**

1 going to be in-service?

2 A I am sorry, can you repeat that over again?

3 That was -- there was a lot going on there --

4 Q Sure.

5 A -- I want to make sure I got it all.

6 Q So if FPL in this case, in this docket, is
7 asking for base rate increases for '26 and '27, correct?

8 A Yes.

9 Q And the 2027 revenue requirements include
10 eight batteries that are due to come on-line after;
11 June 1st of 2027 but still in 2027, correct?

12 A Yes. It's the current plan to spread the
13 batteries throughout 2027.

14 Q And if the Vandolah acquisition goes through
15 and is approved, and FPL is able to have Vandolah in its
16 generation mix starting June 1st of 2027, and then that
17 offsets the need for some of those batteries that are
18 due to come in later in 2027, base rates will still
19 be -- customers will still be paying base rates as
20 though FPL added those eight batteries, correct?

21 A Yes. It's my understanding that if we do
22 obtain the Vandolah plant, we will still continue to
23 build the 2027 batteries and will adjustment our adjust
24 our future resource needs as needed based on the
25 acquisition of that plant.

1 Again, those -- FPL can't snap its finger and
2 will those batteries into being. They need to be
3 constructed on a certain timeline. And as I said, there
4 is inherent risk in any purchase agreement that it could
5 not go through. If that Vandolah transaction does not
6 materialize or is not approved by FERC, then FPL would
7 still need those batteries, even the ones after June 1st
8 of 2027, to meet its future resource needs.

9 **Q FPL's customers will be on the hook for that**
10 **risk, not FPL, correct?**

11 A FPL's customers would be, have revenue
12 requirements raised for those batteries, and would also
13 get the reliability benefits of those batteries, as well
14 as see the benefits from the variable cost impact of
15 those batteries.

16 **Q All of your CPVRR analyses in this case assume**
17 **a carbon emission compliance cost starting in 2036,**
18 **correct?**

19 A That's correct. FPL uses a third party
20 consultant to produce a probabilistic assessment of
21 potential future carbon compliance costs.

22 **Q And FPL has concluded this cost since 2008 or**
23 **so as part of its CPVRR analyses, correct?**

24 A Yeah, subject to check. I don't know exactly
25 when we used it, but 2008 is roughly when I recall we

1 first started using that compliance cost.

2 **Q And one of your exhibits, AWW-4, lists what**
3 **you forecast those costs to be from now through 2071,**
4 **correct? We can pull it up if you want. We can --**

5 **A No, I would just -- I would disagree that that**
6 **is what FPL was projecting. That is what the**
7 **third-party that FPL has contracted is projecting, and**
8 **what we uses as a potential for CO2 compliance costs.**

9 **Q If we could go to Case Center page C17-2315,**
10 **please?**

11 **Can you see that exhibit, Mr. Whitley?**

12 **A Yes.**

13 **Q Okay. And so this is the exhibit that, to**
14 **your testimony, that lists the CO2 compliance costs**
15 **forecasts used in the CPVRR analyses, correct?**

16 **A Yes. That's correct.**

17 **Q Okay. And although a third party provider**
18 **conducted this, FPL relied on these numbers and used**
19 **these numbers, and is relying on them to support the**
20 **accuracy of the CPVRR analyses conducted by FPL,**
21 **correct?**

22 **A Yes. I would say we are not relying on them**
23 **to produce CPVRR benefits. We think that it's**
24 **appropriate to include these costs in the evaluation of**
25 **resource options.**

1 I would note that both of the -- my exhibits
2 show that without the effects of this carbon compliance
3 costs, both -- all projects that we have identified
4 would still be cost-effective.

5 **Q And there is no current federal CO2 emission**
6 **compliance cost, correct?**

7 A That's correct. And this probability weighted
8 average accounts for the fact that there is no plans in
9 the near future to do so, but it does account for
10 long-term probable -- probabilistic assessments of
11 future compliance costs.

12 **Q And there is no Florida CO2 emission**
13 **compliance costs, correct?**

14 A Correct.

15 **Q And if we could go to what was marked or**
16 **accepted as official recognition Exhibit F, Case Center**
17 **pages F2-3793, please?**

18 **All right. Are you familiar with this**
19 **particular executive order, Mr. Whitley?**

20 A In general, I am familiar that this executive
21 order has been issued.

22 **Q Okay. If we could look at section 2(a). And**
23 **again, as a predicate, do you agree that this section**
24 **states that it is the policy of the United States to**
25 **rapidly eliminate the market distortions and costs**

1 **imposed on taxpayers by so-called green energy**
2 **subsidies?**

3 A Yes, that is what the text of the executive
4 order states in this.

5 **Q Would you agree with me that the current**
6 **administration is very unlikely to impose such carbon**
7 **emission compliance costs that are listed in AWW-4?**

8 A I would agree that the current administration
9 would not be likely to submit carbon compliance costs,
10 and I would point out that the effect of that is
11 inherent in those projected carbons compliance costs as
12 there is zero percent chance of them happening any time
13 before 2036.

14 **Q And your CPVRR analyses also factor in the**
15 **benefits of production and investment tax credits,**
16 **correct?**

17 A Yes. That's correct.

18 **Q And in your rebuttal testimony, you mention**
19 **that FPL currently projects that it will still qualify**
20 **for all production tax credits through 2026 through**
21 **2029?**

22 A Yes, based on our internal assessments, that
23 is what we project.

24 **Q There is no guarantee of that, though,**
25 **correct?**

1 A I don't know if there is any guarantee or not.
2 Witness Bores could provide a better assessment of FPL's
3 internal view of the likelihood of the continuation of
4 those tax credits.

5 **Q I believe you were the only witness who**
6 **provided rebuttal testimony regarding the impacts of the**
7 **One Big Beautiful Bill, correct?**

8 A Yes, because those impacts do affect or CPVRR
9 analysis. And based on the direction that I have
10 received internally, we do project that the production
11 tax credits will be in effect for all of the rate case
12 additions that we are asking.

13 **Q Neither you nor any FPL witness can tell this**
14 **commission with 100 percent certainty that FPL will**
15 **qualify for every penny of the production tax credits**
16 **that FPL planned on receiving when it filed this case?**

17 A Again, Witness Bores is more in tune with
18 FPL's internal assessments and would be the better
19 witness to answer these questions.

20 **Q My question to you, though, because you are**
21 **the only witness who provided testimony about the One**
22 **Big Beautiful Bill and the production tax credit**
23 **impacts, neither you nor any other FPL witness can tell**
24 **this commission with 100 percent certainty that FPL will**
25 **qualify for every penny of the product tax credits that**

1 **FPL planned on receiving when it filed this case?**

2 MR. BAKER: Mr. Chairman, I object. The
3 witness has heard this exact question and deferred
4 it to another witness who can appropriately answer,
5 Witness Bores. And we would submit that that is
6 the appropriate witness for this question, and he
7 is suited to answer it.

8 CHAIRMAN LA ROSA: Ms. Wessling?

9 MS. WESSLING: Just one moment, if I could
10 have one moment?

11 CHAIRMAN LA ROSA: Sure. Please.

12 Let's do this, let's take a break. We are due
13 for that anyways. That's fair. Let's -- I am
14 going to take a 15-minute break, seeing the time
15 that it is and what we have got left. So let's say
16 3:20. Reconvene at 3:20. Thanks.

17 (Brief recess.)

18 CHAIRMAN LA ROSA: All right. I think we can
19 jump back into it. So, OPC, you were questioning.

20 MS. WESSLING: Yes, thank you.

21 BY MS. WESSLING:

22 **Q All right. Mr. Whitley, we left off where I**
23 **asked you that question about whether you or any other**
24 **witness can tell this commission with 100 percent**
25 **certainty that FPL will qualify for every penny of the**

1 **production tax credits that FPL planned on receiving**
2 **when it filed this case, do you remember me asking that**
3 **question?**

4 A Yes.

5 Q **And I believe you indicated that Mr. Bores**
6 **would be a better witness for that question?**

7 A Yes, I did.

8 Q **Could you point me to anywhere in Mr. Bores**
9 **rebuttal testimony where he discusses production tax**
10 **credits?**

11 A I could not point to anywhere in his
12 testimony. However, I will point to my testimony where
13 I say I receive input from our internal tax team, and I
14 would suggest that Mr. Bores is familiar with that
15 internal tax team and their evaluations and would be
16 able so answer that question accordingly.

17 Q **Mr. Bores did not provide any rebuttal**
18 **testimony about production tax credits, correct?**

19 A To my knowledge, no, he did not. Again, he is
20 able to answer questions, however, about how our
21 internal tax team evaluated those tax credits.

22 Q **And if you could get your red binder out**
23 **again, please. You were deposed a second time on**
24 **July 16th, correct?**

25 A Yes, that's correct.

1 Q If we could go to page 59 of your rebuttal
2 deposition, which I believe the tab is labeled rebuttal
3 Whitley dash CONF period. I don't believe the area I am
4 directing you to is confidential.

5 A Okay. I apologize --

6 Q That's okay.

7 A -- what page is that again?

8 Q Page 59 of your rebuttal deposition. Are you
9 there?

10 A I am there.

11 Q Okay. And on -- starting on-line seven, I
12 asked you: Other than your statement in your testimony
13 that FPL currently projects it will still maintain these
14 tax credits, is there any other proof that FPL has
15 included in either its direct or rebuttal case to
16 support that statement? And you don't provide any other
17 witness as having the ability to answer that question,
18 correct?

19 MR. BURNETT: Mr. Chairman, I am sorry, I am
20 going to object. This is the third time we have
21 asked that. If they don't want to ask Bores, they
22 don't have to. If they want to argue we didn't put
23 on enough evidence it about it, they can do that,
24 but this is seriously the third time this question
25 has been asked.

1 CHAIRMAN LA ROSA: Can -- what's the question?

2 MS. WESSLING: We are challenging the
3 competent substantial nature of the evidence that
4 FPL put on in this case, among other things. And
5 this question proves, or is attempting to show that
6 there is no competent, substantial evidence that
7 FPL believes it will still qualify for the
8 production tax credits that it thought it would
9 qualify when this case was filed. So that's
10 extremely relevant to this case.

11 CHAIRMAN LA ROSA: Okay. And what is the
12 question of the witness?

13 MS. WESSLING: The question is that when he
14 was asked this question at his deposition, at that
15 time, he did not identify any other witness who
16 could opine on whether or not FPL would continue to
17 qualify for the tax credits that it thought it
18 would when it filed this case.

19 CHAIRMAN LA ROSA: I am going to go to my
20 advisors. I think they both laid out where they
21 are coming from.

22 MS. HELTON: Mr. Chairman, it seems to me that
23 OPC is trying to impeach the witness and show that
24 there is maybe an inconsistent statement between
25 his deposition and his testimony today.

1 CHAIRMAN LA ROSA: Okay. So I am going to
2 allow the question, but I don't want to keep on
3 rehashing it. So I just -- if we could just be
4 direct on the question. I mean, you have certainly
5 done a good job of laying it out, but if you can
6 just be direct in the question that you are asking,
7 and the witness can answer the question whether he
8 knows it or not, and you have the choice to --

9 MS. WESSLING: Sure.

10 CHAIRMAN LA ROSA: -- ask the other witnesses
11 that have been suggested.

12 MS. WESSLING: Okay. I will ask another
13 question that I have for this witness as directly
14 as I possibly can.

15 BY MS. WESSLING:

16 **Q When were deposed regarding your rebuttal**
17 **testimony, you confirmed that you were the only witness**
18 **who provided rebuttal testimony regarding the future of**
19 **production tax credits, and whether or not FPL would**
20 **continue to -- believed it would continue to qualify for**
21 **them, correct?**

22 A To clarify, if we go back a page in my
23 deposition --

24 **Q No, my question, though, is a yes or no**
25 **question.**

1 A I would say, no, what I referred to in my
2 deposition is that none of the members of the tax team
3 that I referred to that I received the information on
4 production tax credits from were witnesses in this case.

5 As I have said before, Witness Bores
6 interfaces more directly with those folks in NextEra,
7 and would be able to answer and provide their input on
8 the certainty of the tax credits and how we have
9 incorporated that into our case.

10 **Q So, Mr. Bores could, if asked that question on**
11 **cross-examination, potentially answer that question, but**
12 **nowhere in his rebuttal testimony does he address that,**
13 **correct?**

14 A To my knowledge, no, he does not address it in
15 his rebuttal.

16 **Q Okay. If FPL fails to satisfy the**
17 **requirements for some or all of the production tax**
18 **credits, the loss of the PTCs would decrease the**
19 **cost-effectiveness of FPL's 2026 through 2029 solar**
20 **additions, correct?**

21 A Yes. That's correct. In the unlikely
22 scenario where FPL was unable to qualify, those -- the
23 cost-effectiveness would decrease, as the PTCs are part
24 of that cost-effectiveness evaluation.

25 **Q However, even if they become less**

1 **cost-effective, FPL still intends to build every single**
2 **one of those solar facilities, correct, whether they are**
3 **cost-effective or not?**

4 A FPL would evaluate its -- potentially its
5 SoBRA additions based on any changes to tax law or any
6 interpretations of tax law going forward. Based on the
7 2026 and 2027 evaluation, the effects of the PTCs, even
8 if those are taken out, those projects could still
9 potentially be cost-effective for our customers.

10 **Q And if the cost-effectiveness of these solar**
11 **additions decreases and those solar additions cost more**
12 **than is currently projected, then when FPL asks for**
13 **SoBRA approval, and if the Commission approves those,**
14 **FPL's cumulative base rate increase for this case, for**
15 **this four-year period, could top \$10 billion, correct?**

16 A I am unaware of the total magnitude of that
17 number.

18 MS. WESSLING: One moment. Nothing further at
19 this time. Thank you.

20 CHAIRMAN LA ROSA: Great. Thank you.

21 FEL?

22 MR. MARSHALL: Thank you, Mr. Chairman.

23 EXAMINATION

24 BY MR. MARSHALL:

25 **Q Good afternoon, Mr. Whitley.**

1 A Good afternoon.

2 **Q All right. If we could go to on Case Center**
3 **master number E90410 from CEL Exhibit 407?**

4 **This documents shows the incremental firm**
5 **capacity value of solar coming onto FPL's grid?**

6 A Correct, along with the incremental firm
7 capacity value of battery storage.

8 **Q And in 2025, the incremental solar gets**
9 **30 percent of its nameplate as firm capacity?**

10 A Yes. That's correct. That incremental 894
11 has a incremental firm capacity value of 30 percent as
12 was calculated by FPL.

13 **Q And by 2027, as calculated by FPL, incremental**
14 **solar coming onto the grid is about five percent firm**
15 **capacity?**

16 A Yes. That's correct.

17 **Q Would you agree that that isn't very much firm**
18 **capacity relative to the five nameplate capacity coming**
19 **on to the grid?**

20 A I agree it's a small number for firm capacity.
21 I would say even with that value, that solar is still
22 cost-effective.

23 **Q And we can discuss this a little bit later,**
24 **but the general idea of why that's going down is because**
25 **of the net peak shift?**

1 A Yes. The net peak shift refers to the
2 shifting of our load profile after accounting for the
3 affects of solar going later in the evening, so the new
4 firm peak is now later in the evening when solar has a
5 lower output.

6 **Q Would you agree that the main reason to be**
7 **bringing additional solar onto the grid at that time**
8 **would be the energy value that solar provides?**

9 A Yes, the energy value would lead to many other
10 customer benefits, including fuel savings, including the
11 production tax credits, and future -- other variable
12 cost savings.

13 **Q And those savings go for the benefit of all of**
14 **FPL's customers?**

15 A Yes. As we calculate them, those would
16 benefit all of FPL's customers.

17 **Q And this idea that it's providing energy**
18 **savings, that supports -- your testimony in that regard**
19 **supports the 12 CP and 25 percent AD cost of service**
20 **methodology as detailed by FPL Witness DuBose?**

21 A Yes, I believe so, that, you know, the shift
22 in that peak is what led to that suggestion by Witness
23 DuBose.

24 **Q And you would agree FPL's periods of need are**
25 **no longer confined to the summer and winter peaks?**

1 A Yes. As we have indicated our analysis shows
2 that we will have resource needs throughout the year and
3 need to consider those in our analysis.

4 **Q And you could have periods of need potentially**
5 **occurred throughout the year?**

6 A Yes. Depending on when units are out in
7 maintenance, depending on if loads are higher than
8 predicted, then, yes, those needs could occur in other
9 portions of the year throughout the year.

10 **Q And batteries also do actually cause some fuel**
11 **savings?**

12 A In general, batteries can provide some fuel
13 savings, yes. They also provide some savings on the
14 cost to start up other units. So that's the bulk of the
15 variable cost savings of batteries.

16 **Q And fuel is consumed, of course, as energy is**
17 **needed to be created?**

18 A Yes. I would say, in general, from a -- if
19 the energy is being provided by a fossil fuel source,
20 that fuel is being burned, and then that creates the
21 energy, yes.

22 **Q If we could go to master page C17-2312? It's**
23 **going to be part of your Exhibit AWW-1.**

24 **This is the loss of load probability heat map**
25 **in 2027, is that right?**

1 A Yes. That's correct.

2 **Q And what is a heat map?**

3 A It's an indication of when loss of load events
4 or when unserved energy occurred in E3's evaluation of
5 2027.

6 **Q Would you agree, it shows that the highest
7 months are in April, September and October?**

8 A I would say roughly, based on the color scheme
9 shown here, that there are -- that those would be the
10 highest events. I think other events occur in other
11 months, but those would be the highest or the,
12 quote/unquote, hottest in the heat map there.

13 **Q And would you agree that October is, of all
14 the months, is the hottest?**

15 A Yes, in terms of the heat map there, I would
16 agree. That's what this heat map shows.

17 **Q Switching topics to talk about -- you discuss
18 in both your direct and rebuttal testimonies the CDR and
19 CILC interruptible credits?**

20 A Yes, I do.

21 **Q And the idea of CDR and CILC credits is that
22 they are offered to commercial and industrial customers
23 to reduce basically their peak load during times of
24 system need?**

25 A Roughly, I would say that's true. I would

1 say, to clarify, we provide the incentive because there
2 is value in customers reducing their peak load and
3 therefore reducing the system peak load and our resource
4 needs during the times of greatest need.

5 **Q And that incentive is in the form of a bill**
6 **credit for CDR customers?**

7 A I am not aware exactly how it gets
8 implemented. I think of it in terms of a dollar per kW
9 in terms of how it's allocated to those customers.

10 **Q Fair enough.**

11 **If we could go to master page E60059? It's**
12 **parts of CEL Exhibit 374.**

13 **And if you look at paragraph C, does that**
14 **indicate that customers participating in CDR or CILC**
15 **programs have not had any interruptions in the last 10**
16 **years?**

17 A Yes. That's what it says in the first
18 sentence. It also states that because of the customer
19 participation in this program, FPL has been able to
20 avoid adding additional resources during that time.

21 **Q And you don't project any interruptions for**
22 **CDR or CILC customers in -- for the future?**

23 A No. We don't generally project CDR or CILC
24 usage. It's similar to car insurance. We don't project
25 -- you don't project to get into a crash, but you pay

1 money out for car insurance because it is very valuable
2 in the case that something bad does happen.

3 **Q And as part of your testimony, you did an**
4 **analysis of the cost-effectiveness of those credits on**
5 **the dollar per kW metric?**

6 A Yes, both Exhibits AWW-7 and 8 cover that
7 analysis.

8 **Q And in your analysis evaluating the**
9 **cost-effectiveness of those credits, you assume that all**
10 **900 plus megawatts of the CDR -- that are available to**
11 **FPL through the CDR and CILC program would not be**
12 **available to the system starting January of 2026?**

13 A Yes. We effectively assume they go away
14 immediately. That's, I would say, an advantageous
15 assumption for evaluating the cost-effectiveness of CDR
16 and CILC.

17 **Q And that's because, under that assumption, you**
18 **basically have to try to almost instantaneously have**
19 **replacement capacity?**

20 A Correct. I believe in Exhibit AWW-7, we show
21 is that we are, in 2026, adding additional batteries.

22 **Q And would you agree that most of those**
23 **programs, in fact, have a five-year wait of notification**
24 **to exit the program?**

25 A Yes, I would agree that that's the case. And

1 in, I would say realistically, if -- I don't think that
2 would be realistic, but if we did, in fact, end the CDR
3 and CILC programs, there would probably be a five-year
4 waiting period. Again, we have made an advantageous
5 assumption to the overall cost-effectiveness of those
6 programs.

7 **Q And it's always advantageous assumption to the**
8 **cost-effectiveness because replacement capacity closer**
9 **to the present would tend to come at a higher cost**
10 **because it's, you know, it's calculated on a present**
11 **value basis?**

12 A Yes, in general. Depending on the decline and
13 cost curve of that particular -- of our particular
14 resource options, it could be lower. In general,
15 resource options, all other things being equal, that are
16 closer to this point in time, are -- have a higher CPVRR
17 impact.

18 **Q If we could next go to master E9749, which is**
19 **part of Exhibit 356 on the CEL. I believe this was part**
20 **of your workpapers calculating the cost-effectiveness of**
21 **the CDR and CILC programs for your testimony?**

22 A Yes. This sheet was mainly used to provide an
23 estimate for the administrative costs of the CDR and
24 CILC programs.

25 **Q That does actually show the cost of the**

1 **incentives for those programs in 2023 at the current**
2 **rate?**

3 A Yes. The highlighted row under the column
4 incentives does show that value.

5 **Q And so between the CILC and CDR incentive**
6 **costs, that's almost \$70 million in 2023?**

7 A Yeah, it would appear to add up just under \$70
8 million.

9 **Q And that would be a bit under half of the**
10 **total costs incurred in the ECCR clause?**

11 A Yes, I would agree. It would be -- total
12 costs appears to be around 150 million, so 70 would be
13 roughly half of that.

14 **Q And in 2023, would you agree because that**
15 **there was no interruption in the CDR and CILC program,**
16 **it would not have had any reduction -- there would not**
17 **have been any resulting reduction in energy usage as a**
18 **result of that program in 2023?**

19 A No, there would not be any reduction in energy
20 usage. Again, we designed this program to provide
21 projected benefits for avoiding future resource options.

22 **Q If we can just go to the next page. Does this**
23 **-- this page shows the history of the incentives in the**
24 **CDR and CILC program?**

25 A Yes, it would appear to show that.

1 **Q And from 2000 to 2012, it was between \$4.68 to**
2 **\$4.75 was the range per kW?**

3 A Yes. It started out in the program's
4 inception in 2000 at 4.75, and then remained roughly
5 around that level dropping slightly until 2012.

6 **Q And in 2012, it increased 56 percent as a**
7 **result of a settlement?**

8 A Yes. That's what what's date indicated here.

9 **Q And in your direct testimony and rebuttal**
10 **testimony, you propose decreasing the CDR and CILC**
11 **credit from its current level but to increase its**
12 **cost-effectiveness under the RIM test?**

13 A Yes. In my testimony, I detail why that
14 decrease in dollar per kW is appropriate given the terms
15 of my as-filed testimony and the qualitative factors
16 that went into setting that RIM test at just under 1.5,
17 1.49.

18 **Q And what is the RIM test?**

19 A The RIM test is the rate impact measure test.
20 It's one of the three cost-effectiveness tests
21 recognized by the Commission that's used in the
22 evaluation of DSM measures and programs.

23 **Q Would you agree that if the credit was dropped**
24 **even further than you propose, the cost-effectiveness**
25 **could continue to increase?**

1 A Yes. Mathematically, that would be true. As
2 that incentive goes down, the RIM score, or test would
3 go up and would be more cost-effective than a 1.49.

4 **Q And did E3 find, as part of their analysis,**
5 **that the firm capacity value of the demand response**
6 **programs will drop through the years?**

7 A Yes. That was one of the findings of E3.
8 They did an evaluation of all resource options,
9 including demand response. So they performed that
10 evaluation on all of our demand response megawatts and
11 allocated a firm capacity value to that demand response
12 based on their -- the results of their model.

13 **Q Is that one of the reasons you wanted to make**
14 **the program more cost-effective than it currently is, is**
15 **to ensure that it would remain cost-effectiveness --**
16 **remain cost-effective over the next four-year period?**

17 A I would say, yes, that kind of worked its way
18 in as one of the qualitative factors. Our analysis, and
19 the analysis my group performed in Exhibits AWW-7 and 8
20 did not account for that decrease in firm capacity, so
21 recognizing the potential for that firm capacity to
22 potentially decrease in the future, we incorporated,
23 that was one of the reasons we set a higher RIM ratio in
24 our as-filed testimony.

25 **Q Was one of the -- another favorable assumption**

1 **you made in the cost-effectiveness analysis that 100**
2 **percent of the capacity from the CDR and CIILC programs**
3 **would be available in determining future source needs?**

4 A I am sorry, could you repeat that again? Let
5 me make sure I am --

6 Q **What I am trying to get at is your assumptions**
7 **regarding the value of the CDR and CIILC program in your**
8 **cost-effectiveness evaluation excluded the six-hour**
9 **dispatch limitation?**

10 A I would say, yes, it goes back to the previous
11 question and answer. Exhibit AWW-7 and 8 did not reduce
12 the firm capacity value of CDR in any way that E3
13 identified, so that worked its way in as a qualitative
14 factor in the setting of the RIM score.

15 Q **And with all those favorable assumptions that**
16 **we have discussed, you found that the highest the credit**
17 **could be without resulting in a subsidy to the**
18 **participants at the expense of the general body of**
19 **ratepayer was \$9.24 per kilowatt?**

20 A Yeah, subject to check, that would be the
21 exact RIM -- that would be the exact incentive -- the
22 maximum incentive that could be offered and still have
23 the program be cost-effective.

24 Q **And so, therefore, you believe that any**
25 **recommendation to set the incentive higher than this**

1 **level should be rejected outright?**

2 A Yes, that is what I stated in my testimony
3 based on the context of evaluating that program on its
4 own. That would still be an appropriate way to evaluate
5 that DSM measure without any other considerations.

6 Q If we could next go to master page E89289,
7 that's part of Exhibit 391.

8 This contains the present cost of those CDR
9 and CILC credits, or the value of those credits to those
10 rate classes, is that right?

11 A That's what it appears to be. I believe this
12 particular response was drafted by Witness Cohen's team
13 if there is any more in-depth questions into this, she
14 might be a more appropriate witness to answer how those
15 numbers were calculated.

16 Q And if I ask any questions that get into that,
17 just let me know and we can defer that to Witness Cohen,
18 but this would be based on -- the proposed in here would
19 be based on the rate that you recommended in your direct
20 testimony in this case?

21 A Yes. As indicated in the second paragraph
22 there, it's the proposal to reduce by 29 percent, which,
23 subject to check, would result in the \$6.22 per kW I
24 suggested in my direct testimony.

25 Q And does this indicate that that would result

1 **in a drop of about \$22 million?**

2 A That appears to be what the total drop is
3 across all of the rate classes that participate in these
4 programs.

5 **Q And that would be each year, correct?**

6 A To the best of my knowledge, I believe that is
7 each year. Again, it might be better to follow up with
8 Witness Cohen as she was the one responsible for
9 producing these numbers.

10 **Q If we could next go to master E9754? That's**
11 **part of CEL 356.**

12 **This document here is some of the workpapers**
13 **for the exhibits in your testimony?**

14 A Yes. I just -- I want to ensure -- I believe
15 it is, but there was a corrected workpaper filed. I
16 believe this was the initial filing and not the
17 corrected version.

18 **Q We can go to the corrected version. I don't**
19 **think it changes any of my questions, but if we go to**
20 **E10137, is this the corrected version?**

21 A Yes. Yes, it is.

22 **Q And Case 1 on here would be FPL's proposed**
23 **plan for -- as part of its rate case petition, is that**
24 **right?**

25 A Case 1 represents, I will say, a proposed

1 10-year plan based on the 2025 site plan with the one
2 addition in 2032. So it's a close approximation, or an
3 initial approximation of our plan for the 2025 Ten-Year
4 Site Plan.

5 **Q And what I am trying to get at is that the**
6 **generation resources that FPL has asked for recover as**
7 **part of this case are in that 2026 and 2027 years, and**
8 **the SoBRAs are in the 2028 and 2029 as part of Case 1?**

9 A Yes. That is correct.

10 **Q And Case 5 on the right-hand side is the case**
11 **without CDR and CILC credits starting January 1st, 2026?**

12 A Yes. That's correct.

13 **Q And we can go to the documents but, you know,**
14 **for -- it's true -- net present value cumulative basis**
15 **just in 2026 and 2027, customers would actually have**
16 **more savings under Case 5 than Case 1, is that right?**

17 A Yes, they would. Without going into it, I can
18 say that's a result of the ITC normalization for one
19 year, so because there is a greater number overall
20 megawatts of batteries in that year, the overall revenue
21 requirement is reduced by that ITC and, therefore, those
22 savings would be passed along directly to customers.

23 **Q And that is also true actually in the year**
24 **2034?**

25 A Yes. That's correct as well. Again, 2034

1 has -- shows a much larger amount of batteries than Case
2 1 -- rather, sorry, Case 5 versus Case 1, so the same
3 principle on the one-year ITC would apply in that year.

4 **Q If we could next to go master E89340? That's**
5 **part of CEL Exhibit 393.**

6 **Am I reading this correctly that about 75**
7 **percent of the current CDR and CILC participants joined**
8 **the program when the credit was in that earlier range we**
9 **discussed of \$4.68 to \$4.75 per kW?**

10 A Yes. That's correct.

11 **Q And your proposal of \$6.22 per kW in your**
12 **testimony is still nearly a third higher than that?**

13 A Yes. That's correct. Based on the facts of
14 the valuation of the CDR incentive, that is
15 mathematically how much that proposed credit was versus
16 the initial sign-up.

17 **Q And the current level is almost double when**
18 **that approximately 75 percent joined?**

19 A I will disagree on almost double, but it is --
20 it is -- it is high -- much higher than \$4.75. I
21 believe it's around \$8.76 per kW currently.

22 **Q All right. If we could next go to master**
23 **number E90573? That's part of CEL Exhibit 416.**

24 **And these tables provide the available history**
25 **and forecast of summer and winter megawatts available**

1 under the -- FPL's Residential On-Call Program and FPL's
2 Business On-Call CDR/CILC and curtailable programs?

3 A Yes. That's correct.

4 Q Would you agree with me that the megawatts
5 available on the residential side is almost as high as
6 the -- as on the C&I side for load management for
7 summer?

8 A I would agree with some of the projections.
9 Some of the historical numbers, there is probably a
10 wider gap between those two values as there were
11 significant dropouts in our residential load management
12 program.

13 Q But those numbers have been increasing again?

14 A The residential numbers?

15 Q Residential, yeah.

16 A Yes, those have been increasing since those
17 dropouts occurred. They are still less than the total
18 of CI load management megawatts, but are, we will say,
19 within 100 megawatts or so.

20 Q And if you look on the winter side, the
21 residential megawatt is actually greater than the C&I?

22 A Yes. That's not surprising. Part of the
23 Residential On-Call Program involves interruptible strip
24 heating on customer homes. Strip heating is a very kW
25 intensive elements and, therefore, would provide

1 significant winter megawatts.

2 Q And if we could go to master page E9749?

3 And we were on this page earlier, but I am
4 just doing a comparison here between the
5 commercial/industrial load control and demand reduction
6 costs compared to the residential costs. And would you
7 agree with me that the current incentives lead the CILC
8 and CDR program to being almost twice as expensive under
9 the ECCR clause as the residential load management
10 program?

11 A Yeah, subject to check, I would agree those
12 numbers are roughly correct. There is also other
13 significant costs associated with the Residential
14 On-Call Program that are not associated with the CDR and
15 CILC programs.

16 Q And those should all be reflected in the total
17 column, those other costs?

18 A Yes, they would.

19 Q If we could go next to master page E90575?

20 That's part of CEL Exhibit 416.

21 And here, you discuss the, you know, the level
22 at which a CDR credit would exactly result in a RIM
23 ratio of 1.0?

24 A Yes. That's correct.

25 Q If it's below 1.0, that means it would fail

1 **the RIM test?**

2 A Yes. That's correct. It would not be
3 cost-effective according to the RIM test.

4 **Q And what does it mean to not be cost-effective**
5 **according to the RIM test?**

6 A At a high level, it means the overall costs to
7 all of FPL's customers, including the administrative,
8 incentive costs and the unrecovered revenue requirements
9 resulting from the DSM program are higher than the
10 overall benefits that are also provided to all of FPL's
11 customers.

12 **Q Let's scroll down to the next page. And do**
13 **you see the program evaluated incremental CDR?**

14 A Yes.

15 **Q And does incremental mean basically new**
16 **participants above the current participants? What does**
17 **incremental mean in this context?**

18 A The incremental refers to sort of our standard
19 way of evaluating DSM measures and programs, where we
20 just look at from this -- from a certain point in time
21 what the incremental participants are and what effects
22 would have on FPL's system.

23 I think the difference between that and the
24 second row is more in line with the evaluation that was
25 performed in, for example, Exhibits AWW-7 and 8 in this

1 docket.

2 **Q When you say an incremental participant, that**
3 **means a participant that's not currently an existing**
4 **participant?**

5 A It is a -- considered a new participant, I
6 believe, for CDR, but it would only be new
7 participants -- it could potentially be a customer who
8 dropped out of the program and is now resigning up.

9 **Q And at the current incentive level for the**
10 **CDR, is it true that every time you have evaluated the**
11 **cost-effectiveness of incremental CDR credits at the**
12 **current incentive level since 2020, that it has failed**
13 **the RIM test?**

14 A Yes, based on just the incremental evaluation
15 and not the existing and incremental evaluation. I
16 would also note the special case of the 2022 DSM plan
17 and 2023 evaluations were at the tail end of the DSM
18 goals period and only evaluated a lower level of
19 participation, which is why those particular RIM scores
20 stand out as being lower.

21 **Q If we could next go to master page E92483?**
22 **That's as part of CEL Exhibit 440.**

23 **You also ran the calculation for the**
24 **cost-effectiveness of the suggested CDR credit of \$12.32**
25 **per kW?**

1 A Yes. We did that same methodology, plugged
2 that dollar per kW number into Exhibit AWW-8, and
3 resulted in the RIM ratio of 0.76.

4 **Q And just to be clear, this was not**
5 **incremental. This is the incremental and existing just**
6 **like your methodology in your testimony filed in this**
7 **case?**

8 A Yes. That's correct.

9 **Q If you scroll down to the next page, does it**
10 **show that calculation?**

11 A Yes. It compares the evaluation of the
12 existing incentive compared to the proposal of \$12.32
13 per kW.

14 **Q All right. If we could next go to master page**
15 **E90577? That's part of CEL Exhibit 416.**

16 And this interrogatory was asking about how
17 some of FPL's generation capital costs have changed?

18 A Yes. That's correct.

19 **Q If we could go to master F10-19255? This is**
20 **part of CEL Exhibit 1123.**

21 And this is asking for -- I'm trying to create
22 the chain here. This is asking for the documents that
23 support the answer to that interrogatory?

24 A Yes.

25 **Q And we are going to go to the responsive**

1 documents attached, which is in F10-19250, as part of
2 CEL Exhibit 1122.

3 And does this show the cost per kW for various
4 kinds of generation resources on FPL's system from
5 various years?

6 A Yes, I believe it does. If I recall, I did
7 not provide this particular document, but I will accept
8 that it does show the dollar per kW value of those
9 generation resources that have been added over the past
10 several years.

11 Q And that's true for all three resources on
12 here, the combined cycle, the solar and the battery?

13 A Yes. So there is three different types of
14 resources on there, and all of them are shown.

15 Q If we could next go to master E58834 as part
16 of CEL Exhibit 356?

17 This is one of your workpapers to support your
18 calculations in this case?

19 A Yes, it is.

20 Q If you go to megawatt by month. If you -- and
21 I think if you scroll over to the right, this shows --
22 if you look at the C&I load control green table, like,
23 where the CDR there too, it zeros out the CDR and CILC
24 program to calculate some of those benefits and costs?

25 A Yes. This is what we use to feed into the

1 AURORA model that was used to produce the exhibit in
2 AWW-7.

3 Q And if we scroll over to column CC at the top
4 to schedule 3.1. And so I just want to understand, for
5 the 2026, is some C&I load management still displayed
6 because of the Business On-Call Program?

7 A Yes, the Business On-Call Program and the
8 curtailable program, I believe, are still in play in
9 those schedules.

10 Q And the total from the residential load
11 management and business on-call load management in 2026
12 would still be over 1,000 megawatts?

13 A Yes, it would.

14 Q And we can go back to that previous one where
15 it had all the costs, but if you add up the costs of the
16 Residential On-Call Program and the Business On-Call
17 Program, would you accept that, subject to check, that's
18 a little over \$40 million in 2023?

19 A Subject to check, yes, it would be the 2023
20 value.

21 Q And my question is that if you add up the
22 megawatts expected from residential and business
23 on-call, that those megawatts are actually going to be
24 higher than are contributed to by the CDR and CILC
25 programs at lower cost?

1 A I am sorry, are you asking if the, say, the
2 dollar per megawatt value -- are you comparing -- asking
3 to compare the dollar per megawatt value of residential
4 on-call versus.

5 **Q Yeah, just directionally, if you add up the**
6 **megawatts that are contributed by the residential**
7 **on-call and business on-call program, that they are**
8 **greater than the CDR and CILC program and come at a**
9 **lower cost?**

10 A I could agree that the costs overall would be
11 lower. Again, all of these different programs provide
12 value to FPL's system. They are all evaluated either as
13 a part of this rate case proceeding or as a part of the
14 DSM goals proceeding.

15 **Q All right. If we could next go to master page**
16 **E92428, which is part of Exhibit 439 on the CEL?**

17 **And the costs -- well, let me ask it this way:**
18 **What are the dollar values per k -- what do the dollar**
19 **values per kW represent in what we are looking at here?**

20 A Are you referring to the dollar per kW values
21 for 2027 through 2035?

22 **Q Yes.**

23 A Well, what those values represent is taking
24 the marginal ELCC value that was calculated by E3 for
25 each of those years, which are contained in Exhibit

1 AWW-1, and applying that ELCC value and a simple
2 multiplication to the, I believe the current incentive
3 level of \$8.76 per kW.

4 **Q Is it that, or is it based on line two, trying**
5 **to evaluate what can still pass -- what's the maximum**
6 **value that can still have a RIM ratio of 1.01 and doing**
7 **the percent of that, which would be at \$9 24 cents per**
8 **kW?**

9 A Mine apologies. Yes. The starting value
10 would have been the \$9.24 per kW. So that effectively
11 represents -- if that ELCC value is applied, then in a
12 simplistic multiplication calculation, then those values
13 would represent the maximum incentive that could be
14 covered and still pass RIM.

15 **Q And so 2029 is still within the four-year plan**
16 **of this case?**

17 A That's correct.

18 **Q And based on this calculation, any -- am I**
19 **reading this correctly, that any credit above \$4.25 per**
20 **kW would not pass RIM in 2029?**

21 A That's a -- that would be a very high level
22 way to look at it. Adjusting the incentive year to year
23 is not something we would do with the CDR and CILC
24 program, but based on the requested calculation, that is
25 how we calculated that value in this response.

1 **Q** We are going to switch topics here and leave
2 CDR and CILC behind us, and talk about generation
3 resource planning, which Ms. Wessling did quite a bit,
4 so I am going to try not to retread some of that ground.

5 And you would agree that the -- of the
6 generation resource criteria that you discussed earlier,
7 it's the stochastic loss of load probability that's
8 driving the firm capacity generation resource additions
9 in this case?

10 **A** Yes. We were evaluating our system based on
11 that stochastic methodology in evaluating our proposed
12 resources to demonstrate that they can meet the need
13 based on that criterion.

14 **Q** And E3 did not evaluate loss of load
15 probability for 2024 or 2025 on FPL's system?

16 MR. BURNETT: Objection. This is asked and
17 answered by the previous OPC questions.

18 MR. MARSHALL: I can move on.

19 BY MR. MARSHALL:

20 **Q** At the time the case -- this case -- FPL's
21 petition in this case was filed, no stochastic loss of
22 load probability analysis had been conducted for 2026?

23 **A** Yeah. At the time of our direct filing, E3
24 did not evaluate 2026.

25 **Q** If we could go to Exhibit AWW-1, page 20 of 30

1 in your direct testimony?

2 We have been talking about loss of load
3 probabilities in regards to the E3 analysis. Is that
4 the same as the achieved loss of load expectation as
5 represented in that right-hand column?

6 A That's approximately what I refer to it as.
7 There is probably some very slight differences, but loss
8 of load probability is generally how I refer to those
9 numbers that are presented here.

10 Q And the 2027 and later numbers all take into
11 account the solar and battery resource that FPL is
12 planning to add?

13 A To clarify, each of these individual
14 evaluations year by year, for 2027, those include the
15 addition of the 1,400 megawatts of batteries. For 2028
16 and beyond, the resources included are the resources on
17 the system as of January 1st of that year. So for 2028
18 example would not include the solar and battery
19 resources we are planning on adding throughout the year
20 in 2028.

21 Q And so I think that's getting to my next
22 question, is that, you know, these numbers are generally
23 above .1?

24 A Are you referring to the values in, we'll say,
25 the last column?

1 **Q Yes.**

2 A Yes. Yes. All those values would be above
3 .1.

4 **Q And I believe it's your testimony that you**
5 **expect that with the additions that come on-line**
6 **throughout the year, that those numbers will be below**
7 **.1?**

8 A Yes, that is the expectation that the firm
9 capacity additions would lower those numbers below our
10 .1 standard.

11 **Q But there has not been a stochastic loss of**
12 **load probability analysis demonstrating that those**
13 **additions would, in fact -- those additions would, in**
14 **fact, lower those numbers to be below .1?**

15 A No. There has not been an additional
16 stochastic LOLP evaluation performed with those
17 additions. However, you can gauge by your capacity
18 shortfall and the incremental ELCCs that E3 calculated
19 to gauge whether that shortfall will be made whole or
20 will be eliminated by the addition of those resources.

21 **Q And specifically for 2027, the batteries that**
22 **are being added that year are expected to come onto the**
23 **system on April 30th, 2027 and July 31st, 2027?**

24 A Subject to check, I would have to pressure my
25 memory on exactly when the different battery tranches

1 are, but subject to check, I will accept they are coming
2 in in roughly the beginning of the year.

3 **Q And -- you know, so if it is coming on April**
4 **-- the first tranche is coming on April 30th, 2027, that**
5 **wouldn't help with any model loss of load events before**
6 **that day, before they come on-line?**

7 A No. Those batteries would be available for
8 load -- or for capacity, rather, after that date. The
9 solar that will come on throughout the year, would also
10 address that, any loss of load events as well.

11 **Q And it is possible that if all FERC approvals**
12 **and everything goes through, that Vandolah could come**
13 **on-line to assist the system as early as June 1st, 2027,**
14 **would that be the earliest date?**

15 MR. BURNETT: Objection, asked and answered
16 multiple times.

17 MR. MARSHALL: I don't know if we heard if
18 that was the earliest possible date as a question.
19 I don't have a --

20 CHAIRMAN LA ROSA: I agree, so overruled.

21 BY MR. MARSHALL:

22 **Q Would the expectation be that June 1st, 2027,**
23 **would be the earliest potential date it could come**
24 **on-line to FPL's system?**

25 A Yes, with the clarification of that it

1 received FERC approval.

2 **Q If we could next go to master number E89299,**
3 **which is Exhibit 391 on the CEL?**

4 **And does this show the -- how FPL has**
5 **historically calculated -- not how they have done it,**
6 **but does this show loss of load probabilities as FPL has**
7 **historically calculated them?**

8 A Yes. This is the result of the evaluation of
9 traditional loss of load probability that FPL has
10 calculated based on the 2024 site plan. This was
11 provided in a -- initially provided in a data request to
12 Commission staff.

13 **Q And there is an annual assisted column, is**
14 **that right?**

15 A Correct.

16 **Q And what does that mean?**

17 A As you can see in the footnote below, there is
18 approximately the sort of standard evaluation that we
19 have used with traditional loss of load probability, is
20 the ability to receive approximately 175 megawatts of
21 assistance. However, that assistance is not eligible
22 for either January or August. So it assumes that during
23 the times of highest peak, that assistance would not be
24 available, as other utilities that would be providing
25 that assistance would also be experiencing that high

1 load and would be unable to provide that assistance.

2 **Q And the stochastic loss of load probability**
3 **analysis conducted by E3 in this case did not include**
4 **any assistance, is that right?**

5 A Correct. That evaluation evaluated FPL's
6 system as an island, much for the same reasons I just
7 said, that we did not include the 175 in this analysis
8 in January and August. The expectation is during high
9 load events, assistance may not be available to FPL to
10 receive.

11 **Q And would you agree with me that from -- that**
12 **this indicates through 2026 through 2028 that the loss**
13 **of load probability as traditionally calculated at the**
14 **time are well below the .1 standard?**

15 A Yes. Those numbers are below our standard.
16 They are all based on a P50 load forecast with no regard
17 to -- and a P50 solar forecast as well, with no regard
18 to variation of either of those forecasts.

19 **Q We are going to next go to master E91038,**
20 **which is Exhibit 425 on the CEL.**

21 **And we have already discussed this a little**
22 **bit with Ms. Wessling, so I am going to try to avoid**
23 **retreading any ground here, but this is the corrected**
24 **supplemental version of this document?**

25 A Yes. That's correct.

1 **Q** And if you look at resource column three, that
2 is actually the -- is that actually the most economic
3 resource plan of the three plans presented, with a
4 savings on a cumulative present value revenue
5 requirement basis of \$545 million?

6 **A** Yes. That plan does show economic savings as
7 compared to the other plans. As one would expect, most
8 plans with lower levels of reliability is the plan and
9 resource, or the plan in column three has, would be
10 overall cheaper on a CPVRR basis.

11 **Q** I just want it make sure I am understanding
12 the -- what reliability criteria resource plan three
13 meets and which ones it doesn't. And so it does meet --
14 and this indicates that it meets the standard 20 percent
15 reserve margin criteria, is that right?

16 **A** Yes.

17 **Q** And does it also meet the 10 percent
18 generation only reserve margin criteria?

19 **A** Yes. That's correct.

20 **Q** And it does meet the LOLP criteria how FPL
21 used to calculate that?

22 **A** Yes, based on our hold methods using P50 load
23 and P50 solar forecasts with no variation.

24 **Q** And with the stochastic loss of load
25 probability analysis that would be most similar to this

1 **plan would be the one E3 ran for 2027 without the 1,400**
2 **megawatts of additional batteries?**

3 A Yes, that would be -- for 2027, that would be
4 the most, I guess, best approximation of that plan.

5 **Q We are going to be switching topics and**
6 **discuss solar power plants a bit more. You would agree**
7 **that, generally, higher load days tend to be sunnier?**

8 A I don't know if I could agree unilaterally.
9 In general, the sun would drive higher load as it's
10 hotter. FPL has a large service territory, however, and
11 40 percent of it's load is located in Miami-Dade and
12 Broward County, and we have, to my knowledge, three
13 solar sites in there. So there would be a disconnect in
14 the load if that area is sunny and other areas of the --
15 FPL's service territory are cloudy.

16 **Q But FPL does have solar facilities throughout**
17 **the state?**

18 A They are throughout to the state. They are --
19 a lot of them are generally concentrated in areas where
20 there is available land, so there is -- they are
21 throughout the state, but there is some concentration of
22 those solar sites.

23 **Q And do solar facilities have higher output on**
24 **higher insolation days?**

25 A Yes. That's correct. If there is more sun

1 shining than generally, those solar sites will have more
2 output.

3 **Q If you go to master page E59916, which is**
4 **Exhibit 356 on the CEL?**

5 **Are you familiar with these graphs?**

6 A Give me a second. Yes, these graphs -- I
7 believe this presentation was produced by our power
8 delivery department showing the affects of load and
9 solar on a P80 day in April of 2024.

10 **Q And essentially, the solar does -- it starts**
11 **producing less as the sun starts to go down?**

12 A Yes. That's correct.

13 **Q But there still can be -- for example, if you**
14 **look at the 6:00 p.m. assumptions, there could still be**
15 **thousands of megawatts being produced at 6:00 p.m. in**
16 **April?**

17 A Yes. I believe these are forecasted values.
18 So, in general, we do see -- still see some solar
19 generation later on in the evening. However, there
20 could be other factors, like I said, cloud cover or
21 other things, that could lead to a reduction in that
22 solar output during that time.

23 **Q If we could next go to master page E59942?**

24 **And is the graph in the top right a depiction**
25 **of FPLE -- okay, let me ask this first question. Does**

1 **FPLE refer to peninsular FPL territory?**

2 A I believe it would in this scenario. That's
3 usually what we refer to as our peninsular FPL, or
4 legacy FPL service territory.

5 **Q And this shows a actual for 2023 and**
6 **forecasted for 2024 spring solar curve?**

7 A Yes. It shows a comparison of those.

8 **Q And would you agree with me that it shows that**
9 **about 4:00 p.m., the plant would start to all off more**
10 **and is about, maybe about half of its 4:00 p.m. value at**
11 **around 6:00 p.m.?**

12 A Is that in regard to the --

13 **Q Megawatts?**

14 A -- actual or forecasted?

15 **Q Either one.**

16 A I would agree both of them show the -- that
17 general trend. I don't know the specifics of what the
18 solar output was on this particular day that would --
19 for the actuals.

20 **Q Now, as part of the ten-year site plan**
21 **process, you calculate incremental firm capacity values**
22 **for solar plants being added to the grid?**

23 A Yes. That's how we factor that into our
24 resource evaluations.

25 **Q And the firm capacity for the summer values**

1 **for those solar plants is a function of projected output**
2 **during FPL's net peak, or how would you say that?**

3 A I would say that the calculation is based on
4 our projected P50 output for our -- all of our
5 individual existing and also projected solar sites on
6 average for the month of August, because that's when our
7 summer peak typically occurs.

8 So our calculation of firm capacity value
9 accounts for the firm capacity value for all existing
10 solar, and then accounts for the solar output, or
11 projected solar output for incremental solar by
12 adjusting for that net peak demand.

13 Q **And if we could next go to master page**
14 **04-1439, which is going to be Exhibit 1507 on the CEL?**

15 **Is this a extract of the firm capacity value**
16 **solar calculator that you used to calculate those firm**
17 **capacity values as used in the ten-year site plan?**

18 A Yes, this is a portion of it.

19 Q **And there is a, basically a table profile**
20 **entry. Do you see that for August?**

21 A Yes.

22 Q **And is how this works is for that -- for --**
23 **and there is a solar -- name of solar plants and the**
24 **year they come on-line above that, is that right?**

25 A Yes. Those are the solar profiles for each of

1 those existing solar plants for the month of August.

2 **Q And so is how you calculate the expected**
3 **megawatt output at that hour is multiplying the capacity**
4 **times the profile entry factor in that table?**

5 MR. BURNETT: Mr. Chairman, I am sorry, if I
6 could. This either sounds like a discovery
7 deposition that could have been had in the many
8 hours that he was deposed twice in this case, or
9 it's laying foundation. If it's the latter, I go
10 back to what I said yesterday. We are willing to
11 not object to any lack of foundation if he just
12 wants to get to his ultimate question, if that
13 could help.

14 MR. MARSHALL: I don't know that asking the
15 ultimate question at this point would be all that
16 helpful, but, I mean, this is laying foundation.

17 It's certainly relevant to the firm capacities
18 of the solar, which obviously has been a big issue
19 in this case, and, you know, FPL now, you know,
20 with the stochastic loss of load probability
21 analysis, that solar can't be relied on to get to
22 these firm capacity values in the evening causing
23 these loss of load events and, thus, the need to
24 rush in the thousands of megawatts of batteries at
25 the cost of billions of dollars, I think it's

1 perfectly appropriate to explore the firm capacity
2 values that FPL has been giving this commission for
3 years as its reliance for the reliability of its
4 system.

5 MR. BURNETT: I am sorry, that almost sounded
6 like a point in an ultimate question. You know, if
7 they could frame that up, I wouldn't have any
8 problem, but --

9 CHAIRMAN LA ROSA: Yeah, I don't want to take
10 anything off the table for you. I am certainly not
11 trying to do that. Just know that, you know, time
12 is a little bit of the essence. I know you know it
13 seems like it's only Wednesday, I think, but I
14 understand. I understand what you are doing. I
15 understand where you are going. I am not going to
16 tell you to stop, but obviously would like to get
17 to the point if we can with being respectful.

18 MR. MARSHALL: And -- yes. No, I understand
19 that. And if it does sound like a little bit like
20 discovery it's because the solar profiles at issue
21 in this case weren't provided until the end of the
22 discovery period, and so there was no opportunity
23 to compare these firm capacity values to the solar
24 profiles at issue.

25 And so that's -- I mean, it was corrected

1 supplemental response to discovery that was
2 supposed to be due in March that wasn't provided
3 until the end of July, and so that's not on us.
4 That's on FPL.

5 CHAIRMAN LA ROSA: Well, I don't want to open
6 this up for debate, so let's continue and let's
7 kind of see where we go from here.

8 BY MR. MARSHALL:

9 **Q Do I have that correct?**

10 A Could you repeat the initial question?

11 **Q Yes, how you would, under the firm capacity**
12 **value calculator, calculate the megawatts at the hour is**
13 **multiplying the capacity of those solar plants by those**
14 **factors in that profile entry table?**

15 A Yes. If you went down to one of the decimals
16 in there and multiplied it by the corresponding capacity
17 of that solar site, it would give you the megawatt
18 output.

19 **Q And in the evening hours, would you expect**
20 **higher output in the evening hours of June because of**
21 **the later sunset?**

22 A In general, yes. In later hours of June, for
23 these P50 kind of middle of the road solar profile
24 projections, I would anticipate that later sunset to
25 account for that.

1 **Q** And if you go down to that bottom, where it
2 says 2026, is that -- if you add up all the expected
3 solar output from the plants at those specific hours, is
4 that what that line represents?

5 A Subject to check, that looks about what the
6 total megawatt output would be. I believe there would
7 be more solar sites involved just outside of this
8 calculation, but subject to check, I believe that's what
9 those values are.

10 **Q** All right. I am going to try to skip a few
11 questions here, but cut to the chase, is that in
12 comparing to 2023 actual solar production in 2026 at the
13 same time and of the same conditions, you would expect
14 more solar output given the additional solar on FPL's
15 system?

16 A Yes, if there was the exact same conditions as
17 2023, then, yes, an increase in overall capacity would
18 lead to more overall output.

19 **Q** And it's about 40 percent more capacity
20 expected, just ballpark?

21 A Subject to check, that sounds roughly right.

22 **Q** Now, solar profiles were provided to E3 to use
23 in their stochastic modeling of FPL's solar?

24 A Yes. Solar profiles were provided by our
25 NextEra Analytics team. They provided, in addition to

1 the P50 profiles they normally provide to the IRP FPL
2 team, they also provided profiles for solar based on a
3 variety of different weather years.

4 **Q And do you know what time zone those solar**
5 **profiles were provided in for the summer months?**

6 A I don't know exactly what time zone all of
7 this them were provided in. I believe they were
8 provided in the time zone that -- where the solar
9 profile is located.

10 **Q And do you know if they were using, for the**
11 **summer months, Standard Time or Daylights Savings Time?**

12 A Again, I would have to individually check
13 those solar profiles. There is roughly over 100 of
14 them, and there is decades of different solar data. I
15 don't know if they are Central or Standard. My
16 presumption is that they would be provided in the time
17 zone in which the solar site is located.

18 **Q We do have the solar profiles here on a USB,**
19 **but I am just, you know, going to, you know, ask you to**
20 **take it subject to check, but we can get them out and**
21 **open them.**

22 **The solar profiles that were provided don't**
23 **seem to provide any -- cut to my question, is that the**
24 **solar profiles provided don't seem to match the firm**
25 **capacity values provided in the -- calculated here,**

1 **would you accept that?**

2 A Yes, and that's entirely expected. As I said,
3 these are P50 presentations just for the month of August
4 that do not vary weather conditions, and do not vary the
5 amount of insulation on-site; whereas, the profiles
6 provided to E3 by necessity varied that insulation and
7 varied it across a variety of weather conditions, which
8 was one of the entire points of having E3 do that
9 analysis, was to test our system under those variety of
10 conditions to provide a more robust evaluation of system
11 reliability.

12 Q And so the -- I also want to make sure we are
13 keeping our time zones straight. So for August for
14 this, for the values provided, is this in Daylights
15 Savings Time on the SED calculator?

16 A I -- subject to check, I believe it would be.
17 We would adjust the inputs we have for the correct time
18 in August.

19 Q And if the solar profiles never show output in
20 August at 8:00 p.m., can you help me reconcile that with
21 the firm capacity values showing production at 8:00
22 p.m.?

23 A Again, the solar profiles that were provided
24 to E3 are based on decades worth of different insulation
25 values, sometimes trying to estimate solar production on

1 a site that didn't exist at the time and, again,
2 measuring that solar performance in a variety of weather
3 conditions. So it's entirely possible that those solar
4 profiles could show limited to no production for those
5 solar sites during that time.

6 **Q And we can obviously break out the document**
7 **with the historical and actual solar for 2023, but would**
8 **you agree with me that FPL does show solar production at**
9 **8:00 p.m. in August?**

10 A For 2023?

11 **Q For 2023, in its actuals.**

12 A I would agree that, depending on the time,
13 there would be production at 8:00 p.m. for those actuals
14 in 2023. Again, that's only one weather year compared
15 to the several decades of profiles that E3 used in their
16 analysis.

17 **Q And so the solar profiles used in the E3**
18 **analysis, they did not incorporate -- or there was no**
19 **interplay between the solar profiles and the firm**
20 **capacity values that FPL has assumed, is that right,**
21 **or --**

22 A I would say that those profiles were slightly
23 different. Like I mentioned, the profiles that we are
24 looking at on this document here are P50 solar
25 estimates, just on average for the month of August. The

1 profiles used by E3 are, again, are varied over a
2 variety of weather conditions.

3 **Q If they are varied over a wide variety of**
4 **weather conditions, should they be able to produce**
5 **results greater than what's presented on the firm**
6 **capacity value calculator here?**

7 A It's possible that they could. I haven't
8 looked through the several thousand data points on those
9 profiles, but it's possible they could provide higher
10 output during certain times.

11 **Q All right. Can you tell us what you know**
12 **about how those solar profiles that were provided to E3**
13 **were developed?**

14 A From my understanding, our NextEra Analytics
15 team is responsible for producing all of our solar
16 profiles. It's one of the inputs we receive every year.
17 It's my understanding that they looked at the solar
18 sites in a variety of different weather conditions based
19 on past years.

20 Beyond that, I don't know exactly how they
21 developed those outputs, but that's my high level
22 understanding of how they developed them.

23 **Q If we could go to master page E91039? That is**
24 **part of Exhibit 425 on the CEL. And go to 2026 summer**
25 **peak.**

1 **And does this show the expected summer**
2 **capacity contributions in megawatts for each hour of the**
3 **day of the peak day in August -- of the peak day of the**
4 **year, which would be in August?**

5 A Yes, for, I would say traditional thermal
6 resources, it shows the total potential firm capacity at
7 every hour. For solar, it shows the hourly profile that
8 was used for based on the P50 solar output.

9 **Q And is the -- okay. And that P50, that's from**
10 **the -- that calculator we were discussing before as to**
11 **what FPL has used in the past?**

12 A Yes. It should be a simple similar -- use a
13 similar input as that calculator did.

14 **Q All right. If we can go to master page E4140**
15 **as part of CEL exhibit 349?**

16 **FPL has not been violating any NERC**
17 **reliability standards, is that right?**

18 A That's my understanding. This response was
19 produced in conjunction with the power delivery
20 department, so some of these answers might have been
21 better question directed at Witness Jarro.

22 **Q If we could next go to exhibit -- or I am**
23 **sorry, master page F10-21594, which is Exhibit 1231 on**
24 **the CEL?**

25 **And is this part of NERC's long-term**

1 **reliability assessment?**

2 A Yes, this is the NERC long-term reliability
3 assessment that was produced in 2024.

4 **Q And what is NERC?**

5 A NERC stands for the North American Electric
6 Reliability Corporation. They are, for lack of a better
7 term, the governing body when it comes to reliability in
8 North America.

9 **Q And they take a specific look at the Florida
10 Peninsula as part of their assessment?**

11 A No, I would disagree that NERC specifically
12 takes a look. NERC relies on all of its subregions to
13 provide them with data based on an amalgam of all the
14 utilities and members in that region to provide these
15 reports.

16 **Q Okay. And would that be SERC?**

17 A Yes, SERC would roll up through NERC to
18 provide information to these reports.

19 **Q Can you say what SERC stands for?**

20 A The Southeastern Reliability Corporation.

21 **Q All right. If we could then go to master page
22 F10-21447, which is part of Exhibit 1230 on the CEL?**

23 **And did SERC also -- did SERC do a reliability
24 assessment report for its region?**

25 A Yes. This would be the 2025 example of that

1 report.

2 **Q And they use a Monte Carlo analysis like E3 to**
3 **assess reliability?**

4 A They use a loss of load probability program
5 called SERVUM. They do not account for many of the
6 variations that were accounted for similar to E3's
7 program. So it's similar, but it lacks some of the
8 analytical rigor of E3's RECAP model.

9 **Q Okay. And -- but they do consider certain**
10 **things on a Monte Carlo basis, like generator outages,**
11 **resource realizations in terms of energy produced, load**
12 **characteristics, transmission congestion and**
13 **constraints?**

14 A They use some of those. I believe they do not
15 have a large amount of the solar variation contained in
16 their analysis, but they do incorporate some of those
17 variations in their modeling.

18 **Q If we can go to master page F10-21481 within**
19 **this report?**

20 **They do take a specific look at the Florida**
21 **Peninsula subregion?**

22 A Yes. That's correct.

23 **Q And FPL would be responsible for -- I am**
24 **sorry -- FPL would be responsible for serving about**
25 **55 percent of the load in that region?**

1 A Yes, that sounds about right. I believe that
2 was provided in discovery. 55 percent sounds correct.

3 **Q And did they conclude that for 2026, there is**
4 **minimal to no risk in late September evening hours**
5 **around 7:00 p.m. when contribution from solar generation**
6 **is limited?**

7 A Yes. That's correct. And that's anticipated
8 -- that would be anticipated for a couple of reasons.
9 Given this is the 2025 report, the data in this would
10 contain FPL's 2025 projected resource additions. And
11 they would also, I believe, model the system as almost
12 as one single entity, and do not account for the
13 intricacies of, say, individual members or utilities in
14 the SERC region.

15 **Q If we could next go to master page E88961 as**
16 **part of Exhibit 389 on the CEL?**

17 **Does this slide describe an event where there**
18 **was a -- well, I will just ask the question. What does**
19 **this slide describe?**

20 A I believe this slide describes the situation
21 on FPL's system on August 7th of 2024. I did not
22 prepare this slide. This was likely prepared by our
23 power delivery department.

24 **Q And it does indicate that, you know, three**
25 **units the prior night had had forced outages?**

1 A Yes, the second subbullet does say that.

2 Q And due to Hurricane Debby, there was no
3 transfer capability from Northwest Florida to the other
4 parts of FPL's territory, is that right?

5 A Yes. Again, that's what the subbullet says.
6 Again, I did not prepare this slide, so I am not aware
7 of the actual information contained in this.

8 Q But no emergency was declared, and FPL did not
9 have to interrupt any of their customers?

10 A It's my understanding that we did not have to
11 issue a NERC alert in 2024. Again, I am not familiar
12 with the details of the situation, as this information
13 was provided by our system operations team in our power
14 delivery department.

15 Q Assuming Duke had capacity and FPL had a
16 shortfall, you would expect that Duke would sell energy
17 to FPL?

18 A Yes. And, again, the assumption in that
19 question is assuming Duke does have additional capacity
20 in any given situation.

21 Q In the past, the transmission system has had
22 some ability to accommodate those kinds of energy
23 transfers?

24 A I am not an expert on the transmission system.
25 Witness Jarro would have been able to answer that better

1 than I could.

2 **Q But you have enough knowledge to know that**
3 **there is ability there to transfer energy between the**
4 **utilities?**

5 A Yes, there is generally some ability to
6 transfer energy between utilities when said energy or
7 capacity is available, which it may not be during times
8 of extreme load.

9 **Q All right. If we could next go to master page**
10 **F10-13562, which is part of Exhibit 1064 on the CEL?**

11 **And for 2024, for most months, does this show**
12 **215 megawatts available to FPL external -- to FPL's**
13 **system that's external to the FPL balancing authority**
14 **area?**

15 A Again, I am not familiar with this document.
16 I haven't seen it. Based on the reading of that column
17 heading, that would appear to be what that shows.
18 Again, this was historical information for 2024.

19 **Q Based on your knowledge of the system, does**
20 **that seem right?**

21 MR. BAKER: Mr. Chairman, I mean, the witness
22 has indicated he is not familiar with this
23 document. I don't think that he can be making
24 statements as to the correctness of certain data.

25 CHAIRMAN LA ROSA: He has mentioned that

1 many -- multiple times.

2 MR. MARSHALL: Well, the witness mentioned
3 that he is not familiar with the document, that's
4 why we are trying to figure out if that information
5 is correct in here. Although, maybe this document
6 would be, since it was provided in discovery, maybe
7 this is one of those that we can just --

8 MR. BAKER: Yes, we can bring it in, yes.

9 MR. MARSHALL: Okay.

10 MR. BAKER: Yes, Mr. Marshall.

11 MR. MARSHALL: Okay.

12 BY MR. MARSHALL:

13 **Q All right. Switching topics a bit. FPL did**
14 **provide E3 a maintenance schedule to incorporate into**
15 **their model?**

16 A Yes. That's correct.

17 **Q And you would agree that if you assume more**
18 **planned outages, that it would lead to an increase in**
19 **potential loss of load probability events?**

20 A Yes, it would. And if that's a correct amount
21 to assume, then that would feed into your result and
22 leave you with a accurate projection of the future.

23 **Q If we could go to master page E10144? And**
24 **this was provided in discovery, and you can take this**
25 **subject to check, July 17th, 2025?**

1 A Okay. Yeah, subject to check, I will accept
2 that.

3 **Q And it indicates that certain files that have**
4 **been provided as inputs to E3 should be removed, and**
5 **then corrected files that were provided to E3 as inputs**
6 **into their model were provided?**

7 A Yes. Initially, we provided some of these
8 extra files as part of the E3 analysis, and they were
9 not used, and we did provide additional information on
10 what was used in the E3 analysis.

11 **Q And one of those differences is the**
12 **maintenance schedule, is that right?**

13 A Yes. That's correct.

14 **Q And of the two maintenance schedules that are**
15 **on this page, the FPL fossil OH IRP 2025 to 2034 is a**
16 **more recent maintenance schedule than the one actually**
17 **provided to E3?**

18 A Yes. It's more recent in terms of date. I
19 think both of those maintenance schedules are valid
20 schedules. At the time E3 started the analysis, the
21 maintenance schedule on the right is the most up-to-date
22 information available regarding planned outages.

23 **Q And you believe that the maintenance schedule**
24 **on the left, the FPL fossil OH IRP, that was used in the**
25 **2025 IRP process?**

1 A Yes. That's correct.

2 Q FPL didn't make any changes to its generation
3 resource plan for 2025 through 2029 as a result of the
4 E3 study, right?

5 A No, FPL had an initial resource plan, based
6 on, like I have mentioned, some of the previous analysis
7 it's done since 2023 regarding the need for additional
8 dispatchable resources such as the battery additions in
9 our resource plan. Based on E3's analysis, it confirmed
10 that FPL did, in fact, need those resource additions,
11 and, as such, we included those in this rate case docket
12 and in our 2025 Ten-Year Site Plan.

13 Q If we could next go to the big red binder.
14 The other --

15 A The other red binder?

16 Q The other red binder. If we could go to FEL
17 259C?

18 This is the purchase order for E3 services as
19 of the date of -- that's listed on here?

20 A Yes. That's correct.

21 Q Then if we go to 262C, this was a draft
22 proposal outline for FPL as of late summer 2024?

23 A Yes. That's correct.

24 Q And then that was -- if we go to 263C? There
25 was a new proposal on October 14th, 2024, from E3 to

1 **FPL?**

2 A Yes. That's correct.

3 **Q And this is the first proposal that included**
4 **conducting a stochastic loss of load probability**
5 **analysis from E3 to FPL?**

6 A No. I believe the previous documents that we
7 looked at also included that resource adequacy study.
8 So that was initially part of E3's proposal, and was, I
9 think, updated and perhaps expanded in the October 14th
10 proposal.

11 **Q Well, I mean -- all right. And then it wasn't**
12 **until after this October 14th proposal that that part of**
13 **the E3 work was the started, is that right?**

14 A By part of that work, you mean the resource
15 adequacy study?

16 **Q Yes.**

17 A Yes. That's correct.

18 **Q And then if we go to the next tab, 264C.**
19 **That's an additional proposal by E3 to FPL as of -- the**
20 **date is not confidential, right?**

21 A No, I don't see any reason why the date should
22 be confidential.

23 **Q As of February 7th, 2025?**

24 A Yes. That's correct.

25 **Q And this proposal was accepted by FPL?**

1 A I believe it would be, as we obviously have
2 retained E3 again for this information. I didn't sign
3 any of these documents, or produce any of these
4 documents, but I would agree that E3 did accept this
5 proposal, and FPL did accept it as well.

6 **Q And if we then go to FEL 287C? This is an**
7 **additional consulting services agreement provided later**
8 **to -- between FPL and E3?**

9 A Yes. I would agree that's what this shows.

10 MS. HELTON: Mr. Chairman, just to make sure
11 that we have the record right, and I am
12 understanding the nomenclature correctly, can we
13 match up the numbers that Mr. Marshall just read to
14 the CEL numbers so the record is clear?

15 CHAIRMAN LA ROSA: Yes. Yeah, let's do that,
16 because I was on the wrong tab.

17 MS. HELTON: So I have 259C, that should be
18 1133. 262C, that should be 1136. 263C, that
19 should be 1137. 264C, that should be 1138. And
20 287C, that should be 1161, is that correct?

21 MR. MARSHALL: Yes. Thank you. I appreciate
22 that, and I should have included that in my notes,
23 so I appreciate that.

24 CHAIRMAN LA ROSA: Thank you.

25 MR. MARSHALL: Thank you.

1 BY MR. MARSHALL:

2 Q In your rebuttal testimony, you discuss the E3
3 results and the high loss of load probability in 2026
4 and 2027 without the additional battery resources?

5 A Yes, the -- without the additional battery
6 resources in 2025, 2026, and without the solar resources
7 in 2026 as well.

8 Q And you can put that binder aside.

9 In 2026, the earliest batteries expected to
10 come on-line are -- the first tranche is July 31st,
11 2026, is that right?

12 A Yeah. Subject to check, I believe that is the
13 first tranche.

14 Q And we can go to master page C14-2022B.

15 MR. SCHULTZ: E or B?

16 MR. MARSHALL: B as in boy.

17 BY MR. MARSHALL:

18 Q Would you agree with me that a large number of
19 the E3 submitted loss of load events in 2026 takes place
20 before July 31st.

21 A I haven't -- I would have to take a look at
22 the exact heat map or distribution of those events.
23 Subject to check, I believe they could -- some of them
24 could take place. I believe they take place throughout
25 the year.

1 **Q** And those batteries that come on-line at the
2 end of July represent, you can take this subject to
3 check, a bit under 39 percent of the batteries expected
4 to come on-line in 2026?

5 A Yeah, there is about seven sites of
6 74-and-a-half, subject to check on that math, that would
7 be a portion of those batteries that come on-line in
8 July -- by July.

9 **Q** And those other tranches come on-line at the
10 end of October and November?

11 A Yes. That's the projected in-service date and
12 latest in-service date those could come in.

13 **Q** And FPL does not have a stochastic loss of
14 load probability analysis showing that it's going to
15 meet the 0.1 LOLP standard in 2026?

16 A No. The analysis E3 conducted for 2026 did
17 not include any, as I said, did not include our 2025
18 batteries, did not include any of these 2026 additions,
19 and not any of the 2026 solar as well.

20 **Q** And as you put into your rebuttal testimony
21 and it was corrected live, it's a little under,
22 corrected, 1,800 megawatts shortfall according to the E3
23 analysis for 2026?

24 A Subject to check, yeah, I believe that is the
25 total megawatt value.

1 **Q** All right. Switching to focus on the
2 **Northwest Florida Battery Project for 2025. The**
3 **near-term need for those batteries is to serve Northwest**
4 **Florida until the full transfer capability of the NFRC**
5 **is on-line?**

6 A That's one of the near-term reasons for those
7 batteries. The other near-term is to provide overall
8 capacity to FPL's system, as we have just discussed,
9 needed in 2026 and beyond. Then there is also long-term
10 needs to both serve regional specific capacity in
11 Northwest Florida, as well as long-term needs to provide
12 capacity to all of FPL's system.

13 **Q** And those batteries are three-hour batteries?

14 A Yes. That's correct.

15 **Q** And that means that they can provide their
16 **full capacity for three hours?**

17 A Yes. If you discharge the full 522 megawatts,
18 you will get -- be able to do that for three hours.

19 **Q** And you can discharge a lower amount for a
20 **longer period of time?**

21 A Correct. It's kind of like the spigot on a
22 keg. You can -- you have a maximum amount that can come
23 out, but have a certain total amount of capacity in the
24 battery itself.

25 **Q** In the event of a longer event in Northwest

1 **Florida, the plan would -- than three hours, longer than**
2 **three-hour need, the plan would be to bring on other**
3 **units located in Northwest Florida?**

4 A Yes. Those batteries would be dispatched at
5 the time of highest load during that winter event.
6 During the remainder of that winter event, when that
7 load is lower than other units, FPL Northwest would be
8 dispatched to serve that load.

9 Q If we could go to master page E63714, which is
10 parts of Exhibit 386?

11 And is this a part of a winter event Enzo post
12 analysis?

13 A Yes. It's my understanding of this document
14 this. I believe this, again, would have been produced
15 by our power deliver department.

16 Q And that's -- that was the snowstorm event
17 this past year?

18 A Yes. That's correct.

19 Q And this shows that one of the Gulf eight
20 peakers tripped off-line during that event?

21 A Yes. That's what that first bullet says.

22 Q If we could next go to master page E63716?

23 During the event, did Northwest, the FPL
24 Northwest region have an all-time peak?

25 A Yes, it did. The all-time -- the Northwest

1 Florida region continues to set all-time peaks, and it,
2 again, was reached on this event.

3 **Q And this also indicates that -- is GCEC Gulf**
4 **Clean Energy Center?**

5 A Yes.

6 **Q That unit seven, during the event, was also**
7 **off-line?**

8 A Yes. It says it was off-line since the end of
9 2024, based on the reading of that text.

10 **Q And FPL was still able to meet all of its firm**
11 **load during that event?**

12 A Correct. It was able to still meet all of
13 that load by, you know, with the hard work of our power
14 delivery team to ensure all of our units were in
15 operating conditions and were able to provide load to
16 Northwest Florida.

17 **Q If we could next go to master page E63725**
18 **within this document?**

19 **And does this indicate that despite the NFRC**
20 **constraints, FPL's resources outside of Northwest**
21 **Florida were able to help -- basically import power into**
22 **Northwest Florida?**

23 A I don't know what that middle green text is
24 referring to. I can infer that it means that other
25 imports outside of the NFRC line were capable. I don't

1 know if that could continually be relied upon in order
2 to serve the Northwest Florida region in the event of an
3 extreme winter event.

4 **Q And what I was getting at was the bullet point**
5 **above that, that, you know, where it says: FPL East**
6 **resources were used to serve FPL Northwest load. Am I**
7 **right that the way they would do that is through the**
8 **NFRC?**

9 A I -- that could be one possible way of doing
10 it. Again, as this was produced by power delivery,
11 perhaps Witness Jarro could have given you a better
12 answer as to exactly how that power flowed into the
13 Northwest Florida region, whether it was on the NFRC or
14 otherwise.

15 **Q If we could next go to master page E63732,**
16 **still within this document?**

17 **And does this indicate that during that event,**
18 **also Plant Smith also experienced a CT trip during the**
19 **event?**

20 MR. BAKER: Mr. Chairman, the witness has said
21 on multiple occasions now that he did not put
22 together this particular document that we are
23 looking at, and that it was put together by our
24 power delivery business unit. The witness right
25 now is just looking at lines and speculating as to

1 what they could mean or infer. I don't think it's
2 an appropriate line of questioning.

3 But again, Mr. Marshall, I would offer that we
4 are -- we can accept that the words on this
5 document are as they are, and that we can stipulate
6 to that.

7 MR. MARSHALL: I am still trying to understand
8 the basis of the objection. I mean, the idea here
9 being, of course, that there -- my understanding of
10 this document, I can read the words, but it's
11 important to hear the witness' interpretation, is
12 that, yeah, winter event Enzo was a very
13 challenging all-time peak event with, it looks
14 like, several units off-line in Northwest Florida
15 during the winter, and FPL was still able to meet
16 firm load.

17 So it's important to understand how -- whether
18 the system is resilient or not for the prudence
19 case of the 522-megawatt battery project for
20 Northwest Florida, which the point of Mr. Whitley's
21 testimony is needed for a, you know, in part for a
22 winter event. And we have just had a demonstration
23 of whether FPL was able to meet firm led, and
24 that's what we are trying to get at here.

25 CHAIRMAN LA ROSA: And I think the witness has

1 been consistent in not being familiar with other
2 than what's, you know, put in front of him. So --
3 I mean, can we try to get -- be a little bit more
4 precise in the question that you are asking of him?

5 MR. MARSHALL: Yes, I will try.

6 CHAIRMAN LA ROSA: Thank you.

7 BY MR. MARSHALL:

8 **Q And the -- basically what I am getting at is**
9 **the conclusion here, right, is that new four-hour**
10 **batteries would provide minimal support during this kind**
11 **of winter event?**

12 A Well, the last bullet point says it will
13 provide minimal support for events for load that is
14 elevated for 14 plus hours. Again, as I mentioned
15 earlier, four- or three-hour batteries would still
16 provide support during a winter event. They would
17 provide that support during the time of the highest
18 load, which typically would be in the morning during a
19 winter event. And the rest of the fleet would be called
20 upon to provide capacity for the rest of the day if that
21 winter load was elevated for 14 hours or more.

22 **Q And three-hour batteries would provide less**
23 **support than four-hour batteries?**

24 A Depending on if they are the same amount of
25 megawatts. One of the considerations in the Northwest

1 Florida batteries was, with the three-hour duration, it
2 would allow us to provide a higher level of megawatts at
3 the same cost of four-hour batteries, or a lower cost
4 than four-hour batteries.

5 **Q Assuming the same megawatts, though, a**
6 **three-hour battery would provide less support than a**
7 **four-hour battery?**

8 A It would provide less overall support. It
9 would not be able to provide support for that one
10 additional hour. Again, during that situation, other
11 units would be dispatched to meet the load during that
12 hour.

13 **Q If we could next go to master page E59972,**
14 **which is part of CEL Exhibit 367?**

15 **And this was one of the cost of -- CPVRR**
16 **analyses for the Northwest Florida battery, is that**
17 **right?**

18 A Yes. This was an initial run that was
19 conducted around -- before the time of the 2024 Ten-Year
20 Site Plan was filed.

21 Effectively, this is looking at the CPVRR
22 benefits of the Northwest Florida batteries as compared
23 to other generic battery additions that would have been
24 added to address some of the preliminary operational
25 concerns FPL had identified.

1 **Q** And it also assumes in that Case 1 that
2 **300 megawatts of batteries was the alternative -- or I**
3 **should say that there were 300 megawatts of batteries in**
4 **Case 1 for 2026?**

5 A Yes. Case 1 assumes a case without the
6 specifically sited Northwest Florida batteries, assumes
7 that we would -- FPL would add 300 megawatts every year,
8 including 2026, and then would be forced to add
9 additional battery resources later on in the period in
10 2032 and 2033.

11 **Q** And scrolling to look at the next two pages,
12 **this is the details of the cost breakdown between the**
13 **base case and Case 1?**

14 A Correct.

15 **Q** And if you look at the cumulative net present
16 **value through 2033, Case 1 actually has a lower**
17 **cumulative net present value if you just look through**
18 **2033?**

19 A Case 1 is slightly lower by about 28 million
20 at that point. Again, the additional battery facilities
21 would then provide support past that timeframe, and it
22 would provide additional savings for FPL's customers.

23 **Q** And Case 1 cumulatively, at that time, starts
24 **to add more batteries in 2032 and 2033 with 400**
25 **megawatts of additional batteries in 2032 and 500**

1 **megawatts of additional batteries in 2033?**

2 A Yes. That's correct.

3 **Q And as compared to Case 1, those are the only**
4 **differences except -- I am sorry, as compared to the**
5 **base case, those are the only differences, plus that**
6 **additional -- plus, you know, 222 megawatts of batteries**
7 **less than 2026 as compared to the base case?**

8 A No. That's incorrect. This analysis goes
9 through 2070, so it incorporates the effective capacity
10 additions and any capacity deferrals in both cases going
11 out in those years past 2033. So it would include those
12 battery differences in the first 10 years, and then
13 would account for any capacity deferrals in those future
14 years as well.

15 **Q Would you agree that the accuracy of forecast**
16 **becomes more uncertain the further out in time they are?**

17 A I would agree, but as all -- all of our
18 analyses are analysis of long-lived assets. That is why
19 we go out through 2070. And if the accuracy of
20 predictions of forecasts going out that far diminishes
21 over time, that accuracy is diminished in both of those
22 cases and cancels out.

23 **Q If we could next go to master page E59979,**
24 **which is part of Exhibit 367 on the CEL?**

25 **This document was the basis for Exhibit AWW-9,**

1 is that right?

2 A Yes. That's correct.

3 Q And this is a -- taking a different look at
4 the Northwest Florida batteries from a CPVRR perspective
5 than what we just looked at?

6 A I would instead describe this as a look at the
7 various capacity options that could have been added in
8 the Northwest Florida region, and a comparison of the
9 relative cost-effectiveness of those options.

10 Q And this case is looking at -- Case 1 is
11 looking at adding 250 megawatts of batteries to
12 Northwest Florida versus the other option?

13 A Yes. That's correct. This was an initial
14 assessment looking at a lower level of capacity to be
15 added in that region.

16 Q And by 2030, the base case actually has more
17 batteries in it than Case 1, is that right?

18 A Yes, it would appear it adds more batteries
19 over that timeframe further down the line.

20 Q And if you go to the following pages comparing
21 the breakdown of the cases, would you agree that's not
22 until 2032 that Case 1 on accumulative net present value
23 total cost basis is cheaper than the base case?

24 A I agree that's the break-even point. Again,
25 we have a reason we conduct these analysis for such a

1 long time period, why we conduct the CPVRR analysis over
2 that time period.

3 **Q In the ten-year site plan, the -- and we can**
4 **bring it up, but the firm capacity value for battery**
5 **storage in the summer is less than the nameplate**
6 **capacity?**

7 A Yes. That's correct.

8 **Q And why is that?**

9 A That's a function of the battery duration, and
10 the effect of our system peak after accounting for that
11 battery essentially flattening out the peak.

12 As most of the batteries we have been
13 evaluating have a four-hour duration max, the Northwest
14 Florida batteries have a three-hour duration, but all of
15 these batteries have a fixed duration, and over time, as
16 those batteries are dispatched on the system peak, our
17 system peak is effectively flattened out.

18 So in order to maintain a reduction in -- or
19 in order to maintain capacity over that period of time,
20 you would need either, A, long duration battery; or, B,
21 your battery would be D rated by a certain percentage.
22 So we use a calculation to determine what that decline
23 in firm capacity value is over time related to the
24 amount of batteries that go on FPL's system.

25 **Q If we could next go to master page F10-19431,**

1 which is Exhibit FEL-347, which is Exhibit 1221 on the
2 CEL?

3 This is FPL's 12023 Ten-Year Site Plan?

4 A Yes.

5 Q And we can go to the page if it's helpful, but
6 the Northwest Florida batteries were not included in the
7 2023 Ten-Year Site Plan?

8 A That is correct.

9 Q And there was some battery storage planned on
10 there, but not until 2029?

11 A Subject to check, I used to be able to
12 remember all this stuff offhand, but that seems
13 generally to be the case of the 2023 site plan, as we
14 had batteries later on in the ten-year period.

15 Q If we could next go to master page E58578?

16 And is this a PowerPoint presentation
17 regarding the Northwest Florida battery storage project?

18 A Yes, it is.

19 Q And it indicates that if it missed its
20 expected in-service date, it would require FPL to extend
21 third-party power purchase agreements to provide
22 required winter reserve margin capacity?

23 A Yes. It's a reference to the need in
24 Northwest Florida for capacity. Again, requiring those
25 third-party PPAs was a measure of risk. It wasn't a

1 guarantee that those would be available, and for
2 reliability purpose, it wouldn't be prudent to rely on
3 those going forward, which was the impetus for going
4 forward with the construction of the Northwest Florida
5 batteries.

6 **Q And no cost-effectiveness -- sorry, excuse me.**
7 **No cost-effectiveness analysis was conducted showing**
8 **that the batteries would be more cost-effective than**
9 **those PPAs?**

10 A To my knowledge, there was some preliminary
11 evaluation of those. Again, I think the major
12 determination in the appropriate resource to meet the
13 Northwest Florida need was based on the availability of
14 PPAs versus the availability to construct a resource
15 that has steel on the ground and definitively available
16 at a certain time, and can also exist over 20 years or
17 more.

18 **Q What did those preliminary cost-effectiveness**
19 **analyses indicate?**

20 A To my knowledge, there was some benefit in
21 deferring future additions in the Northwest Florida
22 region. Again, that was all predicated on those PPAs
23 being available to serve that load, which was not a
24 guarantee, and is why we went forward with the
25 construction of the 2025 batteries.

1 **Q** If we could go back to the big red binder real
2 **quick?** This is going to be in tab CEL 367. If we go to
3 **the last page of that document.**

4 **And without verbalizing any confidential**
5 **information, can you just describe the kind of**
6 **information that is contained on this page?**

7 **A** Yes. This is the availability, or potential
8 availability of certain PPAs that could serve the
9 Northwest Florida region. This was conducted by our
10 energy marketing and training group. Again, this just
11 shows overall costs and potential term agreements for
12 those, and size of those PPAs that were available, or
13 potentially available to FPL.

14 **Q** **I am going to switch topics.**

15 **In your testimony in rebuttal testimony, you**
16 **discuss the ratio of batteries to load needed to address**
17 **new capacity from new large loads, is that right?**

18 **A** Yes. That's correct.

19 **Q** If we could go to master page E82559, which is
20 **Exhibit 388 on the CEL? Probably go to the first tab**
21 **would be the most helpful one, resource plans.**

22 **And can you tell me what this document is?**

23 **A** Yes. This is an evaluation of varying
24 resource plans assuming a certain amount of data center
25 load coming in over a period of time. This was, in

1 part, used to develop the projected battery needs for
2 our LLCs tariffs.

3 **Q And in those -- AND what's driving those**
4 **additional it battery needs, would that be maintaining**
5 **the 20-percent reserve margin?**

6 A Yes. In this case, the 20-percent reserve
7 margin was used to develop those additional resource
8 needs going forward in time.

9 **Q And so these -- there were no stochastic loss**
10 **of load probability analyses conducted for adding these**
11 **loads in 2028 and 2029?**

12 A No, there were not. In general, the amount of
13 firm capacity was tailored to meet the firm capacity of
14 the load being added. So in that sense the incremental
15 generation would help serve FPL's load under both our
16 standard reserve margin calculation as well as
17 potentially under our stochastic loss of load
18 probability metric.

19 **Q And am I correct that the loads provided in**
20 **the stochastic loss of load probability analysis for**
21 **2028 and 2029 didn't assume much data center impacts on**
22 **load?**

23 A Those loads were based on our standard 2025
24 Ten-Year Site Plan load forecast, which included I
25 believe some large load coming in after 2028.

1 **Q** **That was in -- that was measured in, like, the**
2 **hundreds of megawatts?**

3 A That was a total of 714 megawatts coming in
4 after 2028. I believe there was a ramp-up period
5 associated with that as well.

6 **Q** **All right. I am sorry to go back to the big**
7 **red book, but if we could go to tab CEL 457?**

8 A I am sorry did you say CEL 457?

9 **Q** **Yes, CEL 457.**

10 A Okay.

11 **Q** **It's going to be the last CEL document before**
12 **the FEL ones start.**

13 **Do you recognize this document?**

14 A No, I do not.

15 **Q** **Okay. This document, without verbalizing**
16 **anything confidential, does not just indicate using**
17 **battery to serve large load -- the large loads of data**
18 **centers, is that right?**

19 A I am not familiar with this document. I don't
20 know what these megawatt values are in reference to.

21 **Q** **Are you aware of the pairing back of the**
22 **incremental generation charge for data center, or for --**
23 **under the LLCS tariff before 2030?**

24 A Yes.

25 **Q** **And under the calculations for that**

1 incremental generation charge, there is now load coming
2 on without initially any accompanying batteries in that
3 first year, is that right?

4 A I don't recall the exact resource plan used to
5 produce that updated value. There could be a year where
6 the load ramp is small enough, and it does not require
7 any additional batteries for that first year.

8 Q By that first year, I am referring to 2028.
9 Is there surplus capacity -- or from your perspective,
10 is there surplus capacity to serve data center load in
11 2028?

12 A At the time, based on our current planning
13 assumptions, and based on the resource plans that we
14 evaluated, there would be. Again, we will have an
15 opportunity to reexamine our resource needs every year,
16 as we do every year and update that based on accurate
17 assumptions of what additional load is going to be in
18 our service territory.

19 Q And so how much surplus capacity are you
20 assuming you have available in 2028 to serve data
21 centers?

22 A That would depend, I think, on how much load
23 is inherent already in the load forecast. As we said,
24 there is roughly 714 megawatts, however much of that is
25 available this 2028 would provide a metric for how much

1 additional capacity is available above and beyond our
2 current resource projections.

3 **Q And what are you basing it on that you have**
4 **additional capacity in 2028? And just to give context**
5 **to my question, I am looking back at those -- at the E3**
6 **stochastic loss of load probability numbers for 2028.**

7 A Yes. Those numbers, as I said, are based on
8 our 2025 load forecast projections, which do include
9 some additional large load potential in 2028. So
10 that -- that's been factored into those analysis
11 already.

12 **Q If we could next go to --**

13 MR. MARSHALL: Well, let me try to shortcut
14 these next questions to see if we can get a
15 stipulation on Exhibits 1062 and 1063 that were
16 provided in discovery and I can skip those
17 questions.

18 MR. BAKER: To be sure I have got the right
19 ones, Bradley, should we navigate to them?

20 MR. MARSHALL: Yeah, we can navigate to them.
21 Yes. The master page F10-13364 provided in
22 response to OPC POD 18-143.

23 MR. BAKER: Certainly, as to this one,
24 F10-13364, we can certainly stipulate to.

25 MR. MARSHALL: We can just go to the next one,

1 then, which is master page F10-13428.

2 MR. BAKER: And likewise here, Mr. Marshall.

3 BY MR. MARSHALL:

4 Q We are almost done with my questions, just a
5 couple more questions to go.

6 All right. If we could next go to master page
7 F10-2156, which is going to be Exhibit 964 on the CEL?

8 And I am happy to go back and provide the
9 master page that this is in response to, but this is a
10 FPL response showing the impact of the assumed carbon
11 prices on the solar and battery additions in the CPVRR
12 analyses?

13 A Correct.

14 Q And that's been used in the CPVRR analyses
15 that were provided in your testimony in this case?

16 A Yes.

17 Q Thank you, Mr. Whitley. That's all my
18 questions.

19 CHAIRMAN LA ROSA: Great. Thank you.

20 FIPUG?

21 MS. PUTNAL: No questions.

22 CHAIRMAN LA ROSA: Walmart?

23 MS. EATON: No questions.

24 CHAIRMAN LA ROSA: FEIA?

25 MR. MAY: No questions.

1 CHAIRMAN LA ROSA: Staff?

2 MR. STILLER: Just a few.

3 EXAMINATION

4 BY MR. STILLER:

5 Q If you could pull up master page number
6 C17-2260?

7 And, Mr. Whitley, this is page 19 from your
8 prefiled direct testimony. And in it, you state that
9 the AURORA chose utility-scale solar because of the
10 CPVRR, which we have discussed here at length this
11 afternoon, and also, quote, their ability to address
12 input parameters specified for the model run. Can you
13 tell us what those input parameters are?

14 A Yes. Those would be just the general system
15 dispatch considerations that are taken into account in
16 the AURORA model. It looks at hundreds of different
17 resource plans based on the inputs we put in, and
18 calculates the overall, the best plan that will meet
19 your given reliability needs based on the input
20 parameters such as the cost for new resource, the
21 decline cost for new resource, and how the -- how
22 that -- those individual resource options affect the
23 overall analysis.

24 Q Okay. And if we could pull up page C17-2315?
25 And this should be Exhibit AWW-4.

1 **Did you prepare this exhibit?**

2 A Yes, I did prepare this exhibit. Again, this
3 is based on a third-party consultant's projection for
4 FPL, but I did prepare it.

5 **Q Did you prepare all the numbers that are on**
6 **that chart?**

7 A Effectively, I prepared it by copying it from
8 the spreadsheet that was provided to me from the
9 third-party consultant.

10 **Q And I see ICF on there. Is that IC -- a**
11 **reference to ICF International?**

12 A I believe they are called ICF International,
13 if you are referring to the consulting firm. I think
14 there is only one ICF.

15 **Q Okay. Thank you.**

16 **And this states that it's 2022 Q4 data. Is**
17 **that fourth quarter 2022?**

18 A Yes. That's correct.

19 **Q Do you know when these numbers were prepared?**

20 A They would have been prepared likely just
21 before the fourth quarter of 2022. Again, we have gone
22 back several times to ICF to see if they have had any
23 significant updates to this forecast over the past
24 several years, and they have not. So we have continued
25 to use the 2022 values.

1 Q Last question. We had a different
2 administration in Washington in 2022, correct?

3 A Yes. That's correct.

4 Q Can that's all my questions. Thank you.

5 CHAIRMAN LA ROSA: Great. Thank you.
6 Commissioners, any questions?

7 Commissioner Passidomo Smith.

8 COMMISSIONER LA ROSA SMITH: Thank you,
9 Mr. Chair. I apologize. I will be really quick.
10 I just want some clarification.

11 Mr. Whitley, on -- FEL is proposing to lower
12 the monthly for interruptible customers to -- I am
13 sorry, I am so tired -- to \$6.22 per kW, and on
14 page 40 of your direct testimony, you state that
15 the revised level will ensure programs are
16 attractive to participants and do not burden the
17 nonparticipants with higher program costs, is that
18 correct?

19 THE WITNESS: Yes. Under the way we evaluated
20 that program for my direct testimony, that's
21 correct.

22 COMMISSIONER PASSIDOMO SMITH: Do you know at
23 what level the cost becomes a burden to
24 nonparticipants?

25 THE WITNESS: Generally, if the RIM ratio is

1 over 1.01, the cost will exceed the benefits.
2 Again, that's how we typically evaluate DSM
3 programs, including CDR and CILC.

4 COMMISSIONER PASSIDOMO SMITH: Okay. That's
5 all I have. Thank you.

6 CHAIRMAN LA ROSA: Thank you.

7 All right. Let's go back to FPL for redirect.

8 MR. BAKER: We have no redirect for Mr.
9 Whitley.

10 CHAIRMAN LA ROSA: Excellent. Are there --
11 anything that needs to be entered into the record?
12 Start with OPC.

13 MS. WESSLING: Yes. Thank you, Mr. Chair.

14 OPC would move into evidence Exhibits 779 and
15 783, which are the 2024 and 2025 Ten-Year Site
16 Plans. Also, I believe this was already entered
17 through Mr. Olson, but Exhibit 627, Exhibit 631,
18 Exhibit 425 if it wasn't already entered
19 previously, and exhibit -- I think that's it.

20 CHAIRMAN LA ROSA: Any objections to those?
21 Seeing none. We have a last minute one.

22 MS. WESSLING: Actually, maybe -- Exhibit 761.
23 I believe that was the official recognition exhibit
24 of the Vandolah application, but to the extent
25 that -- if it's already been admitted, which I

1 believe it has already been officially recognized,
2 we don't need to enter it, but if not, then we
3 would ask to move that in.

4 CHAIRMAN LA ROSA: Any objection? None. All
5 right. So moved.

6 (Whereupon, Exhibit Nos. 627, 631, 761 779 &
7 783 were received into evidence.)

8 CHAIRMAN LA ROSA: FEL?

9 MR. MARSHALL: I have got a list, so I will
10 move slowly.

11 CHAIRMAN LA ROSA: Sure.

12 MR. MARSHALL: I think I have it in numerical
13 order. CEL Exhibits 964, 1062, 1063, 1064, 1122,
14 1123, 1133, 1136, 1137, 1138, 1161, 1221, 1230,
15 1231 and 1507.

16 CHAIRMAN LA ROSA: Any objections to those?
17 Seeing none.

18 (Whereupon, Exhibit Nos. 964, 1062, 1063,
19 1064, 1122, 1123, 1133, 1136, 1137, 1138, 1161, 1221,
20 1230, 1231 and 1507 were received into evidence.)

21 CHAIRMAN LA ROSA: Any other parties?

22 Staff, anything else that needs to be entered?

23 MR. STILLER: No exhibits.

24 CHAIRMAN LA ROSA: Okay.

25 MR. BAKER: And we would move ours, 64 through

1 71 and 290.

2 CHAIRMAN LA ROSA: Okay.

3 MR. BAKER: Thank you.

4 CHAIRMAN LA ROSA: Any objections? All right.
5 Seeing none, so moved.

6 (Whereupon, Exhibit Nos. 64-71 & 290 were
7 received into evidence.)

8 CHAIRMAN LA ROSA: Let's go ahead and excuse
9 the witness. So thank you for your testimony
10 today.

11 THE WITNESS: Thank you.

12 (Witness excused.)

13 MS. HELTON: Mr. Chairman, we have -- I have
14 one housekeeping matter.

15 CHAIRMAN LA ROSA: Sure.

16 MS. HELTON: When the prior witness was on the
17 stand, we admitted Exhibit 1528, but there was no
18 exhibit marked or identified as 1528, so if we
19 could just have the record reflect that and then
20 just skip that number, and when we get to the next
21 number then that would be 1529. I think Mr.
22 Luebkekmann had intended for 1528 to be identified,
23 but it's already in the record. It's an excerpt of
24 a service hearing transcript.

25 CHAIRMAN LA ROSA: Okay.

1 MR. MARSHALL: Yes, that's correct. And so we
2 agree that should be shown as withdrawn.

3 CHAIRMAN LA ROSA: All right. Fair enough,
4 then the record will reflect that.

5 (Whereupon, Exhibit No. 1528 previously
6 admitted in error was withdrawn.)

7 CHAIRMAN LA ROSA: All right. So let's just
8 kind of talk about the schedule. So we are going
9 to move on for today. So we are going to be
10 excused here in a few minutes.

11 Tomorrow, let's start at nine o'clock. I am
12 looking at a witness list, and looking at the days,
13 obviously, we have got left in the week, and then,
14 you know, pretty packed schedule of prescheduled
15 witnesses, we have got a lot next week -- or I am
16 sorry, we have got a lot still remaining for this
17 week. Any idea amongst time for the witnesses that
18 are left?

19 MR. MARSHALL: I am happy to speak for us. I
20 mean, yes, there is still substantial cross, but we
21 are through what we think are the longest crosses,
22 and I feel quite optimistic about how we are doing
23 on the schedule.

24 CHAIRMAN LA ROSA: Okay.

25 MS. WESSLING: I think there is two witnesses

1 that might take, you know, a reasonable amount of
2 time just given the subject matter, but I have
3 already started going through some of my remaining
4 questions for the witnesses I have left, and I am
5 sure my colleagues have as well, so we will, to the
6 extent possible, try to streamline our remaining
7 cross as much as possible. But I agree with
8 Mr. Marshall, that the rest of the witnesses, it's
9 not going to be like it has been. I think we
10 front-loaded with the heaviest crosses.

11 CHAIRMAN LA ROSA: All right. Excellent.

12 All right. Let's go ahead and do -- start at
13 nine o'clock tomorrow. Let's be prepared to go
14 late if we have to, late meaning the eight o'clock
15 hour-ish. If we don't need to, then I won't
16 exercise it, but if we do, I just want to be
17 prepared, and just try and give as much respect as
18 we can to Friday, which we do have a few scheduled
19 witnesses.

20 So if there is no other housekeeping items, I
21 think we can go ahead and adjourn for today.
22 Tomorrow morning similar schedule, nine o'clock,
23 try to break, and then try to do 12 o'clock noon.

24 Thank you to our court reporter. Today was a
25 marathon, so thank you very much. And let's go

1 ahead and adjourn, and I will see you guys
2 tomorrow. Thank y'all.

3 (Transcript continues in sequence in Volume
4 6.)

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CERTIFICATE OF REPORTER


STATE OF FLORIDA)
COUNTY OF LEON)

I, DEBRA KRICK, Court Reporter, do hereby
certify that the foregoing proceeding was heard at the
time and place herein stated.

IT IS FURTHER CERTIFIED that I
stenographically reported the said proceedings; that the
same has been transcribed under my direct supervision;
and that this transcript constitutes a true
transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative,
employee, attorney or counsel of any of the parties, nor
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financially interested in the action.

DATED this 22nd day of October, 2025.


DEBRA R. KRICK
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