BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

Petition for rate increase by Tampa Electric Company.
DOCKET NO. 20240026-EI

Petition for approval of 2023 depreciation and dismantlement study, by Tampa Electric Company.
DOCKET NO. 20230139-EI

In re: Petition to implement 2024 generation base rate adjustment provisions in paragraph 4 of the 2021 stipulation and settlement agreement, by Tampa Electric Company.
DOCKET NO. 20230090-EI

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|---|---|
| PROCEEDINGS: | HEARING |
| COMMISSIONERS PARTICIPATING: | CHAIRMAN MIKE LA ROSA<br>COMMISSIONER ART GRAHAM<br>COMMISSIONER GARY F. CLARK<br>COMMISSIONER ANDREW GILES FAY<br>COMMISSIONER GABRIELLA PASSIDOMO |
| DATE: | Tuesday, August 27, 2024 |
| TIME: | Commenced: 8:00 a.m.<br>Concluded: 7:25 p.m. |
| PLACE: | Betty Easley Conference Center<br>Room 148<br>4075 Esplanade Way<br>Tallahassee, Florida |
| TRANSCRIBED BY: | DEBRA R. KRICK<br>Court Reporter and<br>Notary Public in and for<br>the State of Florida at Large |
| APPEARANCES: | (As heretofore noted.) |

I N D E X

EXHIBITS

| NUMBER: | | ID | ADMITTED |
|---|---|---|---|
| 17 | As identified in the CEL | | 604 |
| 236-238 | As identified in the CEL | | 605 |
| 281 | As identified in the CEL | | 605 |
| 438 | As identified in the CEL | | 605 |
| 51 | As identified in the CEL | | 605 |
| 55 | As identified in the CEL | | 605 |
| 640 | As identified in the CEL | | 605 |
| 762 | As identified in the CEL | | 605 |
| 818 | As identified in the CEL | | 606 |

P R O C E E D I N G S

(Transcript follows in sequence from Volume 2.)

CHAIRMAN LA ROSA: All right. As we get settled back in, I think Ms. Wessling was in her line of questioning, and I will turn it back over to you.

MS. WESSLING: Thank you, Mr. Chair.

Whereupon,

KAREN SPARKMAN

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

EXAMINATION continued

BY MS. WESSLING:

**Q Hi again, Ms. Sparkman.**

A Hi.

**Q All right. So I would like to start this next line of questioning talking about bad debt. That's one of the topics that you cover in your testimony, correct?**

A Yes. That's correct.

**Q All right. So if we could first go to page 48 of your direct testimony, which is Case Center No. C2-129. Did that pop up for you?**

A Yes. Thank you.

**Q Great.**

**So without reading it into the record or anything, but lines 10 through 22 are part of your discussion in your testimony about bad debt, among other things, correct, bad debt specifically on line 16?**

A Yes.

**Q And on those lines, 15 and 16, I should say, you specifically say that Tampa Electric expects a downward trend in the bad debt expense beginning in 2024, is that right?**

A Yes. When I prepared that -- the document, that was my understanding. That's correct.

**Q Sure. And this was filed on April 2nd of 2024, right?**

A Yes.

**Q Okay. And I would like to identify OPC Exhibit 56, which I believe is 281 on the CEL.**

**All right. Do you see that exhibit?**

A Yes, I do.

**Q All right. And does it show up on that computer in front of you?**

A Not yet. And I just -- I just want to clarify that in my document that you just had up, I noted that the downward trend should begin in 2024. Begin in 2024.

**Q Got it.**

**And -- so this exhibit that I just pulled up, OPC 56, it's not showing up on the --**

A Not yet.

**Q -- computer in front of you? Okay. Can you see it up on that screen behind the Commissioners?**

A Vaguely, but I -- I have bad -- this bad debt numbers also that I can look -- I can see it now. Yeah.

**Q Oh, okay. Good.**

**All right. So this is Interrogatory No. 26. This is a response to OPC's first set of interrogatories No. 26, and this is the one that you sponsored, correct?**

A Correct.

**Q Okay. And this interrogatory was filed, or answered on April 11th of 2024?**

A That's correct.

**Q All right. So this is shortly after the testimony is filed. And in this exhibit -- well, towards the bottom, this is -- the text here is very, very similar to, if not identical to, the testimony in -- or the section of your testimony we just referenced; would you agree?**

A Yes, I would say it's similar.

**Q Okay. And similarly in this exhibit, about the middle of that paragraph, you say: However, we anticipate a downward tread -- trend in bad debt**

**expense, beginning in 2024; right?**

A Yes. That's correct.

**Q Okay. All right. And looking at MFR C-11, that's one of the MFRs that you cosponsor, is that right?**

A Yes. That's correct.

**Q Okay. And that's going to be Case Center J258.**

**All right. And I know I can't read it up on that screen, but you said you have a copy of that in front of you, Ms. Sparkman?**

A Yes, I have C-11.

**Q Okay. Great.**

**And this MFR details the actual bad debt writeoffs and the bad debt factor used for 2020 through 2023, as well as the budgeted bad debt writeoffs and bad debt factors for 2024 and 2025, is that right?**

A That's correct. Yes.

**Q Okay. And I know we referenced the deposition you gave earlier, but one of the late-filed exhibits to your deposition was created in response to some questions about bad debt that took place during your deposition. Do you remember that?**

A Yes.

**Q Okay. If we could -- I would like to identify**

**OPC 11, please, which is CEL Exhibit 236. Do you see that in front of you?**

A Yes, I do.

**Q Okay. Great.**

**And there is nothing confidential about this exhibit?**

A No.

**Q Okay. And this exhibit indicates that when Tampa Electric filed MFRs, as well as your testimony on April 2nd of 2024, Tampa Electric expected the 2024 bad debt writeoffs to be six million, one hundred -- $6.148 million, is that accurate?**

A That is accurate.

**Q Okay. And the bad debt -- the 2024 bad debt factor to be 0.224 percent?**

A That's correct.

**Q And at this point in time, as we sit here today, Tampa Electric expects the 2024 bad debt writeoff to have increased to 9.85 million, is that right?**

A So the number that you are referencing is really my own personal reforecast that I use to help me gauge different levers in the business, and so that's not the number that we -- that we use. That's a number that, for me, changes every single month depending on, you know, the bad debt trends.

And, you know, when I think about bad debt, I look at it from a broader scope. I don't -- I don't look at it from the dollar perspective. I think with bad debt, it's important that you look at the percentage to revenue. And so for us, we are generally trending between two-tenths and four-tenths of one percent. And so, you know, right now, our bad debt percent factor is at three-tenths of one percent, and the national average is at seven-tenths of one percent, while we are at three-tenths of one percent.

**Q All right. So the question that I asked was whether or not Tampa Electric now expects the 2024 bad debt writeoff to be 9.85. That number, 9.85 million, that's the number that's included in this late filed exhibit, correct?**

A That is the number that is listed as my own personal reforecast, but it is not the number that was included in C-11.

**Q And, again, you are the Vice-President of Customer Experience for Tampa Electric, correct?**

A Yes, I am.

**Q And you are the witness responsible for the bad debt issue in this rate case?**

A I am responsible for bad debt.

**Q And this late-filed exhibit was dated 20 days**

**ago, is that correct?**

A Yes. And I would offer that if today you ask me to refresh the bad debt number, I would give you a lower number than that, because now we have July actuals, and the bad debt number that I would offer from my own personal refresh is lower than the number you have just noted.

**Q But this exhibit says 9.855 million as of August 2nd -- August 6th of 2024.**

A That is the date that it was prepared, but it was not as of August 6th. It was a previous date, and it's a moment in time.

**Q All right. This document also states that the 2024 -- well, strike that. Let me rephrase that question.**

**The $9.855 million number is approximately 60 percent higher than the number that was originally included on MFR C-11, would you agree?**

A I will just assume your math is correct, yes.

**Q Okay.**

A And I would offer, though, even at the 9.8 million, that is still three-tenths of one percent, which the national average is at seven-tenths of one percent. So we are well, well, well below the national average.

**Q And that national average information that you are referencing, that's not included in your direct testimony?**

A It is not.

**Q And there is no exhibit to that effect, test year testimony?**

A It is not. It's a Chartwell benchmarking.

**Q Okay. And were you present earlier for Mr. Collins' testimony, or have you been listening?**

A Yes, I have been listening.

**Q Okay. And you are probably familiar, but within his testimony, he references that the requested rate increase for residential bills compared to 2024 is approximately 12 percent. Do you recall that?**

A I don't recall that exact verbiage, but I will assume it's accurate.

**Q Okay. So the number that's in this exhibit that we are discussing right now, this 9.855 million, you said, subject to check, you agree that that's a 60-percent increase on what was originally filed, correct?**

A Yes. At that point in time, yes, that's correct --

**Q Okay.**

A -- the three-tenths of one percent.

**Q And per Mr. Collins' testimony, residential bills are expected to increase approximately 12 percent compared to 2024, correct?**

A Yes.

**Q However, within C-11, the original C-11, Tampa Electric expects that bad debt is going to decrease in 2025, is that accurate?**

A Yes. I am still very confident in the 2025 figure.

You know, there is a lot of components that go into bad debt. In 2022, there was a good amount of LIHEAP federal assistance that was provided to those customers that needed it. And then in 2023, that federal assistance was cut in half. And that was a direct correlation to the increase in bad debt in 2023.

However, you know, we recognize and empathize that there is a small pocket of customers that are struggling with paying their bills, and we have really robust customer assistance options that we use even in the absence of federal assistance dollars. We have our Share Program that we use for those customers that are struggling to pay their bills.

**Q And Tampa Electric was aware that that federal assistance was gone as of July of 2023, correct?**

A I don't know that I was aware of that.

MS. WESSLING: I would -- this is an exhibit, it's already in evidence. It's exhibit -- let me double check here. Well, actually, I don't think this one is in evidence.

This -- I would like to identify OPC 213, which is -- I apologize, I don't know the hearing exhibit number for that one, but it's OPC 213.

BY MS. WESSLING:

**Q And do you have that red binder up there? Actually, I don't see it.**

A No.

**Q One second.**

A It was up here, but it's no longer up here.

MS. HELTON: And that would be Exhibit 438 on the CEL.

MS. WESSLING: I was just going to -- (Inaudible) -- the witness a copy of this exhibit.

CHAIRMAN LA ROSA: Yeah. Yes. That's okay.

MS. WESSLING: And we will go get that binder so we have that again.

BY. MS. WESSLING:

**Q All right. So, Ms. Sparkman, this is a confidential document, so let's just keep that in mind.**

**Were you at the July 2023 board meeting for Tampa Electric?**

A I would have to look at my calendar, but likely --

**Q Okay.**

A -- yes.

**Q All right. And there is a sentence in the middle -- in the paragraph that begins with the word "unfortunately". The last -- the second to last sentence begins with the word "these". Do you see that?**

A These? Yes.

**Q Okay. If you could just read that one sentence to yourself first, and then let me know if that's something that can be read aloud.**

A Yes.

**Q So all right. So that -- is that something that can be read aloud?**

A Yes.

**Q Okay. Would you mind reading that, please?**

A These higher bills are occurring at a time when much of the financial assistance monies available following COVID have disappeared, putting pressure on customers' ability to pay, increasing the risk of bad debt, and increasing the noise surrounding rates and bills. We will discuss this in more detail during the meeting.

**Q Okay. Thank you very much.**

**All right. And now I would like to discuss the exhibit that is already in evidence. This is Exhibit 245 on the Comprehensive Exhibit List, which is -- was originally identified as OPC 20. And I will get you a copy. Just one second.**

**All right. Ms. Sparkman, are you familiar with this particular document?**

A I am sorry, remind me which one you are looking at, because he just handed the book. I don't know where I am supposed to go.

**Q Okay. So those folders, you can put aside.**

A Okay.

**Q And within the binder, there is some tabs. If you look for OPC 20.**

A Okay. Thank you.

What's the date on this exhibit?

**Q That's a good question. I don't -- I am not sure, but are you -- does it look familiar to you at all? And take as much time as you need to take a look.**

A Not -- not particularly.

**Q Okay. That's all right.**

A Do you know what date it was presented?

**Q I am sorry, what was that?**

A Do you know what the approximate timeline is?

**Q I believe it would have been around June of**

**2024. I believe that's what Mr. Collins stated, but --**

A Okay.

**Q -- if you don't remember, I am not asking you to --**

A So at the time that this meeting occurred in June of 2024, I was actually at our customer hearings, so I would not have been present for this meeting.

**Q Okay. Fair enough.**

**If you could turn to what's labeled as Bates page three.**

A Of the same document?

**Q Yes, of that same document.**

A Okay.

**Q There is a little three in the lower left corner. Do you see that page?**

A Yes.

**Q Okay. And Mr. Rehwinkel already asked Mr. Collins some questions about this, but as far as it relates to you specifically, there is four boxes on this page, and I am pretty sure that the box that I want to discuss, which is the upper left box, that Mr. Collins already read this particular language into the record.**

**But first, if you could just read that to yourself, and let me know whether or not you agree with the statements that are contained in that box.**

A I think I would agree in principle. Just generally, I would agree --

**Q Okay.**

A -- it's correct.

**Q All right. So it's your position that bad debt is an indication of customers, for whatever reason, opting not to pay their bill promptly?**

A Repeat that for me again.

**Q It's your position that bad debt is an indication of customers, for whatever reason, opting not to pay -- to pay their bill promptly?**

A For whatever reason, I -- I guess that's generally true. Yes. Bad debt would be an indication that a customer didn't -- didn't pay their bill.

**Q Promptly?**

A Promptly, yes.

**Q And not being able to afford to pay their bill is one of the potential reasons why a customer may not pay their bill promptly, would you agree?**

A I -- I would agree, and I would add to that that I have been in the energy business for 24 years almost, all in customer service in progressively responsible roles, and I don't ever recall a time where there wasn't a pocket of customers that were struggling to pay bills. That's always been the situation in my

entire career, that there is always a small percentage of customers that are struggling to pay their bills.

And that is why we have such a robust customer assistance program, and a team of professionals that is there to help our customers with payment arrangements, long-term installment plans, helping them find assistance other than federal assistance, for that very reason, to help those customers that have expressed an inability to pay.

**Q You referenced just -- it's just a particular group of customers who struggle to pay their bills. Let me ask you, would you agree that if bills go up in 2025, 2026 and 2027, as requested by Tampa Electric, the number of those customers is going to increase?**

A I'm -- I don't agree. On what -- on what basis or, like, what are the facts that would corroborate that?

**Q If there are customers right now who struggle to pay their bills because of the current rate, you would agree there is a certain number of customers who fall into that category?**

A Sure. In my entire 24 years, there have been customers that have struggled to pay their bills.

**Q And if bills go up in 2025, 2026 and 2027, you don't agree that the number of customers who will**

**struggle to pay their bills will also increase?**

A I don't agree that I should make an assertion on customer behavior. I -- bills are going up in 20 -- next year, and maybe the year after that. And, you know, as a customer, and how I prioritize my own household, I am not going to struggle to pay my bill.

So I think it's really about customers and their households, and how they are prioritizing their responsibilities in their households. And so I don't know that I can make such a statement just based on bills going up.

**Q And you were present at the customer service hearings, as we already addressed?**

A Yes.

**Q And some of the things that you heard customers say they had to prioritize were things like not running their air conditioning, correct?**

A Yes. I recall one customer saying that. Yes.

**Q And not paying for their child to be able to play sports?**

A Yes, there was a customer that said that. Yes.

**Q There were customers who complained about having to choose between paying for their medicine and paying their electric bill?**

A There was a customer, too, that said that. Yes.

**Q There were customers who complained about being able to feed their family or pay their electric bill?**

A Yes. And in my 24 years in energy, I can tell you that every single year, we have experience with customers that have those same scenarios. And that is, again, why it's important to have a robust customer assistance plan to help those customers that have expressed an inability to pay, for those exact reasons you mentioned.

**Q You also just said that it's a matter of prioritizing bills for those customers?**

A It's a matter of prioritizing your household. Yes.

**Q So if those customers just rearrange their priorities, they would be able to afford their -- pay everything?**

A I don't know. I --

**Q Okay. Nothing further.**

A That's just such a broad statement.

CHAIRMAN LA ROSA: I'm sorry, you said --

MS. WESSLING: Nothing further.

CHAIRMAN LA ROSA: Okay. All right. Let's

move to Florida Rising/LULAC.

MR. LUEBKEMANN: Thank you, Mr. Chairman.

I am honored to have had many of the same ideas as my colleague, Ms. Wessling, so I am going to take a moment to try to make sure I am not retreading old ground.

CHAIRMAN LA ROSA: Sure.

THE WITNESS: Am I keeping the red book out? Am I keeping the red book out? Keep it out?

CHAIRMAN LA ROSA: If you do end up having questions, let's just make sure that the witness has your set of folders.

MR. LUEBKEMANN: Yeah.

EXAMINATION

BY MR. LUEBKEMANN:

**Q Ms. Sparkman, do you have a copy of the confidential exhibits that were handed out yesterday?**

A I am not sure. If you could tell me what -- I -- I didn't get any from yesterday, so if you could hand them out to me, that would be helpful.

**Q Coming right up.**

A Oh, no worries. Thank you. In the binder? In the folders? Okay. There are some folders in here.

**Q Yeah. See if you have got one that says 321C on it.**

A 321C? Let me look. Yes.

**Q Great. And we are not going there just yet. I just want to make sure you have got everything.**

A Okay.

**Q Okay. So good afternoon, Ms. Sparkman.**

A Good afternoon.

**Q Good to see you again.**

A Likewise.

**Q In your opening, you noted that TECO's customers demand more than just reliable service?**

A Yes.

**Q And you enumerated trust and convenience as some of the things that they demand?**

A Yes.

**Q And I couldn't help but notice, you did not mention affordability on that list, correct?**

A I did not mention affordability, because, to me, affordability and price is part of that balance. And so, you know, customers expect us to manage their rates reasonably in the long-term, and price and affordability is just part of that component of what customers care about. Yes.

**Q Sure. But you specified reliability, trust and convenience, and you did not specify affordability?**

A I did not, because, like I stated earlier, is

that there is a small pocket of customers that have presented the inability to pay their bill. And for those customers, we work very, very closely with them to help find solutions.

**Q Okay. Thank you.**

MR. LUEBKEMANN: I am trying not to duplicate questions here. Hold with me for a second.

CHAIRMAN LA ROSA: Sure. No problem.

BY MR. LUEBKEMANN:

**Q Okay. If we could turn to MFR C-14. This is going to be master number J261. Just let me know when you are ready.**

A I am ready.

**Q Okay. Are you one of the sponsors for this MFR?**

A Yes.

**Q And what does this MFR show?**

A I believe that it shows subaccount number 909 and 913, which is sales advertising expense and general advertising expense.

**Q And for the historical year 2023, which will be on the next page, J262, TECO's total jurisdictional advertising expenses were 1.51 million?**

A And for what year was that? I am sorry.

**Q That's historical year '23.**

A Let's see. Just a moment, please. Okay.

**Q Okay. Could you confirm that the total jurisdictional advertising expenses were 1.15 -- 1.51 million for 2023?**

A So -- I am sorry, just to be clear, are you looking at -- what page are you on?

**Q This is -- this will be Bates 41, or master J262, and I'm looking in line 14, column 3. And I should specify. When I say Bates, it's the TECO pagination of that MFR's page 41.**

A Yeah. So I was just looking at the breakdown of those subheadings.

So 909 is customer education. I am not sure why it's -- the reason you are seeing confusion is because it's titled sales advertising expense, and 909 is customer education.

**Q So I -- if you -- if you scroll down to what is labeled line 14.**

A Yes.

**Q The title for that is total advertising expenses?**

A Yes.

**Q Okay. And the jurisdictional total, which is column 3 --**

A Yes.

**Q -- is 1.510 million?**

A Yes.

**Q Okay.**

A And so that figure, though, is for 2023.

**Q Correct. Yeah. I am just getting our baseline from the historical year.**

A Okay.

**Q But you confirmed that is the amount?**

A Yes.

**Q All right. If we could go back to the test year, '25, page four. And that same amount of total jurisdictional advertising expenses for the test year is 3.75 -- 3.759 million?**

A Yes, that's correct. And so part of that increase is due to customer education, so things like rate case communications, energy efficiency communications, conservation related communication. So all of the communication that is needed to meet the customers' needs and expectations around communications.

**Q But to confirm, you said that is an increase?**

A It is an increase. Yes.

**Q And subject to check, it's an increase of about two-and-a-half times?**

A So part of that -- only part of it is an increase on customer education. The other part of it

was an amount -- 1.4 million actually shifted over from another A&G as it looks like this is the function that best aligned with those dollars. And so part of it was a shift, and part of it is an increase due to customer communications. Yes.

**Q But if I could redirect you to my question. If you just compare those two numbers, it's an increase of about two-and-a-half times over those two years?**

A Yes.

**Q Thank you.**

**In your testimony at page 50, which is master number C2131. You testify here, at lines three to six: The competitive nature of the Tampa market, with its rapid growth and limited number of advertising space on billboards and television, poses a significant challenge for our business.**

**Did I read that right?**

A Yes. I am still zooming out. One moment, please. What line are you reading?

**Q It should be lines three through six.**

A That's correct.

**Q And TECO is a regulated monopoly utility?**

A TECO is a regulated utility.

**Q So short of moving away, TECO customers don't have any choice about relying on TECO for electricity?**

A I guess they have the choice as to whether they want to move to Tampa or not. That's the choice. Yes.

**Q Fair enough.**

**In your testimony on page 39, you state that TECO's customer experience strategy continues to evolve to align with the changing expectations and needs of our customers --**

A That is correct.

**Q -- is that right?**

A That is correct.

**Q And you elaborate on that -- on that effect -- or to the effect that that includes adopting a more personalized approach to service using data analytics to gain insights into customer preferences, and using technology to enhance interaction and service delivery?**

A Yes, that is correct.

So customers -- you know, the digital world is a basic expectation for customers. So the tools that they are using to access our website, customers depend on us to provide them with an easy way to navigate through our systems. And so when a customer is logging into the portal to pay their bill, or to look at their energy usage, they want to do it in an easy, convenient, quick way, and they expect that from us. It's a basic

expectation.

**Q Sure.**

**And I don't want to stomp on your testimony, but I do want to call our attention back to the Prehearing Order, which directs you to give a yes or no answer first. I will try to make sure you get a chance to elaborate, and certainly, you will get redirect from --**

A Yes.

**Q -- your counsel. Okay.**

**To -- in order to implement these ideas, you talk about basically three buckets of spends for the customer experience, is that correct?**

A Yes.

**Q And those buckets would be customer digitalization, operational efficiency and optional customer programs?**

A Yes.

**Q And my colleague, Ms. Wessling, already went through you -- went with you some -- some of the -- went over those spends with you?**

A Yes, basic, yes.

**Q I am not going to ask you those questions. We are going to skip ahead a little.**

**Okay. Could we turn to what is marked as --**

**it's Comprehensive Exhibit 640, or FLL-180, and this is master numbers 3.3-5864.**

**And, Ms. Sparkman, do you recognize this document?**

A Yes.

**Q This was produced in response to a request about things that were used to develop your work papers and testimony?**

A Yes.

**Q And this document contains the projects and subprojects that roll up into the customer experience spends that TECO has included for the 2025 test year?**

A Yes.

**Q For 2025, the customer digitalization bucket is dominated by spends of 3.35 million for CE. I am going to assume CE is customer experience here?**

A Yes.

**Q So it's a spend of 3.35 million for customer experience strategy digitalization 2025?**

A Yes.

**Q And then another million dollars for website and portal automation 2025?**

A Yes.

**Q And then under the optional customer programs, there is a spend of 1.5 million for residential EV**

**charging?**

A Yes.

**Q Okay. We are -- if we could now turn to FLL-302. That's going to be master number 3.6-2542.**

MR. LUEBKEMANN: I might have a number wrong there. Good. I did have the number right.

BY MR. LUEBKEMANN:

**Q Do you recognize this document?**

A Yes.

**Q This is a presentation that you made to the Capital Camp?**

A Yes, in 2022. Yes.

**Q And Capital Camp, I just want to make sure I understand correctly. It's a -- it's a meeting with senior leadership within TECO that recommends whether to move forward or not with major capital projects?**

A Yes. It's a meeting where we discuss and prioritize capital projects according to what's best for our customers.

**Q Okay. If we go to master number 25434 in this document. This page shows the total new capital that's proposed for 2023 spending on customer experience projects?**

A Yes.

**Q And I know it's kind of small, but does that**

**total to 10.2 million?**

A On the 2023 proposed? Yes.

**Q Yeah. Okay.**

**And one of the new projects is CRB enhancements, meter to cash?**

A Yes, I see it.

**Q Could you just explain what CRB stands for here?**

A Customer relationship billing. And so it's the system that we use for all of our customer data.

**Q Thank you.**

**If we go ahead several pages to 25444. The heading for this slide is PV Automation.**

A Just a moment while I get there, please. Yes.

**Q And just to confirm, the PV automation project here, the photovoltaics that it's meant to streamline, is that referring to customer-owned rooftop solar?**

A Yes. And at -- and at the time, that was -- that was a project that we were looking at.

And so I think it's important to note that -- and we didn't have Capital Camp this past year, but, you know, whenever you are bringing projects to Capital Camp, you -- it's, you know, a moment in time. And, you know, there are times that you are learning more, or you are reprioritizing your projects differently. And so

some of those projects might be reprioritized differently when you -- you know, when the time comes to get them done.

**Q Okay. Going back to customer expectations, a theme that we have talked about at some length today. To evaluate the changing expectations and needs of its customers, TECO relies on surveys, both those done in-house and also by third-parties like J.D. Power?**

A Yes.

**Q Would it be fair to characterize the customer experience projects that are included in rate base for test year 2025 as, at least in part, implementing the things that comes out of the surveys that TECO does?**

A I would say in part, yes.

**Q Okay. If we could go back to -- let's see how it has been introduced. So this is introduced as OPC's 13, so Exhibit 238 -- I'm sorry. Strike that. OPC 12, Comprehensive Exhibit 237. And this is the LFE-3 from your deposition.**

**And you have got two blowups now. So you have got the big one that you got from OPC that has pages two and three. And I believe you have also been handed another one that has the entire document. That should be to your right there.**

A Which one do you want me to look at?

**Q We can start with the two and three, because it's actually a little bit bigger than the one that I made.**

A Okay.

**Q You can use the OPC version to begin with.**

A This -- this one? Okay.

**Q I am going to try to avoid questions that you have already been asked on this. Subject to just one, getting it out of the way.**

**You confirmed earlier with Ms. Wessling that 86 percent of respondents -- I am looking at the bottom question on page two -- 86 percent of respondents said that they were not willing to pay any additional cost for digital service options?**

A Yes. And I think that -- if I may elaborate. The reason why it's so high is because customers expect that digital options are already part of how they do business every day.

Again, digital options are a basic expectation, and so their -- customers expect that we are already thinking about digital options, and we are already providing them with the digital options and tools that they need to have available to navigate through our systems.

**Q But the question that was asked to customers**

**there is simply: Would you be willing to pay a little more, a lot more, or no additional cost for TECO, Tampa Electric, to invest more in any of the following? Then it gives that list.**

A Yes, I see that.

**Q Okay. So it doesn't -- it doesn't have any further context about what level of digital implementation is already on the system?**

A No, it doesn't. But I will also point out that this is just one question, one subset of customers.

And also, if you look in the top left-hand corner, the average age of these survey participants is 58. And so, again, that is just one pocket and one subset of customers for this particular question.

**Q But it's the one that we have, so I am going to ask you a few more questions on it.**

A Certainly.

**Q Thank you.**

**The next line down, 84 percent of respondents said they would not be willing to pay any more to receive information on topics that I care about. Am I reading that correctly?**

A Yes, I am acknowledging -- do you want me to just acknowledge that that's what the line says? Yes.

**Q Okay. 81 percent said they would not be**

**willing to pay anything additional for electric vehicle purchases or charging infrastructure?**

A Yes, that's what it says.

**Q 79 percent said they would not be willing to pay anything additional for improved customer service?**

A Yes.

**Q 78 percent said they would not be willing to pay anything additional for customer outreach and support?**

A That's correct.

**Q Okay. Earlier, I think you had an exchange with Ms. Wessling about reliability, and how customers are always going to want more reliability, right?**

A I believe I stated that customers have expressed the desire for near perfect power. Yes.

**Q Okay. I don't want to mischaracterize your testimony.**

**Would you agree that if there were no additional cost, customers would want 100 percent reliability all of the time?**

A If -- sure, if there was no additional cost.

**Q Would you agree, if there was no additional cost, customers might want more options for digital service, or other apps, all sorts of things to improve the customer's experience?**

A I mean, maybe. I don't know. I don't -- I am not sure how to answer that, because I -- it depends on the customer's preference, so I -- and what's important to that subset of customers.

**Q Sure. But as a general principle, if customers could have more and better service with zero additional cost, do you think they would want that?**

A Generally, I would say yes.

**Q Okay. But this question here is getting at the fact that there is an additional or marginal cost to these kinds of improvements, is that right?**

A Yes.

**Q Okay.**

A I am sorry, if I could just add one thing.

**Q Sure.**

A I would not consider these to be improvements, though, because as I look at the list, safety of its service, safety of its employees, that's not a -- an additional option, or additional service, as you characterized it.

**Q Perhaps we are -- we are just reading them differently. The way that I read this question: Would you be willing to pay a little more, a lot more, et cetera, for TECO to invest more into any of the following, to me, suggests an incremental amount from**

**what TECO is already doing. Is that a fair characterization of the question?**

A Yes.

**Q Okay. And looking at the top question on that page, which is on page two, this is: Please select up to three causes you feel are important for TECO support.**

A Yes, I see that.

**Q And the three highest responses, what are those?**

A They are: Senior citizens, low-income customers and solar.

**Q Okay. And senior citizens was -- senior citizens and low-income customers were both a majority of respondents?**

A Yes.

**Q And then there is a -- there is a section at the very bottom, you see that, it says: Other answers include?**

A Yes.

**Q So do I understand correctly that there might have been, like, a fill-in-the-box or kind of narrative response there?**

A I would assume so. I don't recall the specifics of this one survey, but I would assume yes.

**Q Okay. Fair enough.**

**And the answers included there for other answers were, affordable energy, renewable energy, climate change and the environment?**

A Yes.

**Q Okay. Among all of the causes that respondents felt it was important for Tampa Electric to support, is there anything that says industrial customers?**

A No, but I don't ever recall a customer saying the word "industrial customers". That's not generally a term we would --

**Q Big business corporation -- we can -- we can go through --**

A Yeah.

**Q -- synonyms, but --**

A Yeah. We just -- I don't -- customers wouldn't use that term.

**Q Okay. You understand the concept --**

A Yes.

**Q -- I'm referring to?**

A Yes. Uh-huh.

**Q And that does not appear?**

A I don't see that on here. No.

**Q We can get off this one for now.**

**Going back to your testimony, this is actually**

**going to be, I believe, what is now marked Exhibit 17, so your exhibit, KKS-1. And looking at document six -- actually, I apologize, document two. This is going to be C2139.**

**Okay. This shows TECO's residential overall customer satisfaction over the years between 2015 and now, is that right -- or 2015 and 2023?**

A Yes.

**Q And over the last four years of data on these charts, TECO's residential overall customer satisfaction has declined?**

A Yes. I would say minimally, yes.

**Q But it has declined each of those years?**

A Yes.

**Q If we turn to document six of this exhibit.**

**During this period of declining customer satisfaction, TECO spent roughly $35 million between 2022 and 2024 on customer experience projects?**

A Yes.

**Q You had a conversation with Ms. Wessling earlier about bad debt.**

A Yes.

**Q And you acknowledged that TECO's customers have faced difficulties in paying their bills?**

A I acknowledge that there is a small subset of

customers that have indicated an inability to pay. Yes.

**Q Give me a moment.**

**And do you attribute -- I believe you attributed this increase in bad debt to the effects of COVID-19, inflationary pressures and the expiration of federal assistance dollars, generally characterization -- generally characterized correctly?**

A Yes. I think I would agree that there is a -- there is multiple reasons why bad debt has increased a bit, but there is always bad debt in the business. And as I indicated earlier, our bad debt is currently at three-tenths of one percent, and stays between two-tenths and four-tenths of one percent, while the national average is at seven-tenths of one percent.

**Q Sure. And I am not trying to get you to agree with me on what my reasonings are. I want to make sure I am correctly characterizing from your testimony.**

**You testified that this increase, you attribute to the effects of COVID-19, the expiration of federal assistance dollars and inflationary pressure, does that correctly --**

A Yes. Yes.

**Q -- reflect your testimony?**

A Yes.

**Q Conversely, your testimony does not attribute**

**the increase in bad debt over those years to the effects of the settlement agreement from TECO's last rate case in 2021, is that right?**

A That's correct.

**Q You will be happy to know we are skipping a lot of questions here.**

**Okay. If we could turn to 3.1-2885. This is Exhibit 551, or FLL-91.**

**Do you recognize this document?**

A Yes.

**Q And is this an interrogatory for which you sponsored the answer?**

A Yes.

**Q And this document shows the number of customers whose debt was written off as uncollectible from 2020 to 2024, year-to-date?**

A Yes.

**Q And it shows that in 2020, there were 24,732 customers whose debts were written off?**

A Yes.

**Q And the same number for 2021, was 24,738?**

A Yes.

**Q In 2022 -- or in 2023, it was 30,269?**

A Yes.

**Q And I left out 2022, but that one is 30,269 --**

**I'm sorry. That was 30,269. 2023 is 33,167?**

A Yes.

**Q I apologize. Thank you.**

**So the number has gone up for every year that we have full data?**

A Yes, it has gone up a little bit.

**Q And while the number -- and the number from 2024 is year-to-date. And the year-to-date that it was as of was June 10?**

A Yes.

**Q Or fair to say, it was no later --**

A Close.

**Q -- than June 10?**

A Yeah. It was probably through the end of May.

**Q Okay. So in that case, the year-to-date would represent five months of this year?**

A Yes.

**Q And if it goes only through May, would you agree that the period of TECO's highest energy usage had not been reflected in the year-to-date?**

A I would agree with that statement. Yes.

**Q Then that would fall typically in the summer months, between June and September?**

A Yes.

**Q Okay. If we go back to your late-filed 3, and**

**now we can look at the big one.**

A Okay.

**Q This is master number 3.1-1226. We are going to go to page one, which is 1227.**

**Is there any chance you are able to read this? I tried my best with our printer. This is even the big version.**

A Uh-huh.

**Q And if --**

A Yes, I will do my very best.

MR. LUEBKEMANN: And, Mr. Schultz, I believe that there is a way that you should be able to pop it out and zoom in.

THE WITNESS: Yeah, I think I can read it if I hold it very still.

BY MR. LUEBKEMANN:

**Q Well, it is my testimony that your eyes are way ahead of mine.**

**The survey on this page is capturing responses -- the question on this page is capturing responses from a 2023 -- July 2023 survey?**

A Yes.

**Q That's in the blue box, regarding payment arrangements?**

A Yes.

**Q And --**

A I'm sorry. Payment assistance, is that -- am I on the wrong one?

**Q Payment arrangements. I am on --**

A Oh, here, the title. Yes.

**Q Yes. Sorry.**

**And so looking at the first question. Tell me if I'm reading this correctly: How important is it for companies to offer payment assistance options to their customers?**

**Is that what that question says?**

A Yes.

**Q And the respondents from TECO's system that answered the survey, 56 percent said it was extremely important?**

A That's what that says. Yes.

**Q And another 28 percent said it was very important?**

A Yes.

**Q And that's my questions on that one.**

MS. HELTON: And Mr. Chairman, could I just confirm? So that was FLL-49, or CEL Exhibit 509?

MR. LUEBKEMANN: Yes. And I -- and I should specify, I have been trying to keep up with where OPC has introduced the same document. So that

actually should be comprehen -- it -- I assume that we would rather not introduce the same document multiple times.

CHAIRMAN LA ROSA: Correct.

MS. HELTON: Yes.

MR. LUEBKEMANN: So let's call that Exhibit 237, which was introduced as OPC 12.

CHAIRMAN LA ROSA: Okay. Is that fair?

MR. LUEBKEMANN: Is that correct? Yeah, this --

CHAIRMAN LA ROSA: Mary Anne, is that correct?

MS. HELTON: I think so. Yes, sir. Thank you.

CHAIRMAN LA ROSA: Okay.

MS. HELTON: I just was trying to keep up with which exhibits we are using.

CHAIRMAN LA ROSA: Perfect.

MR. LUEBKEMANN: I appreciate that. And I am trying to keep you all happy.

CHAIRMAN LA ROSA: Yeah. Thank you.

BY MR. LUEBKEMANN:

**Q Okay. So the bottom question on this page, the question asks: Which of the following do you think would be beneficial ways for Tampa Electric to provide assistance?**

A Yes.

**Q And in response to that question: 65 percent indicated that one way that TECO could provide assistance would be to help provide info on assistance agencies that might be able to help?**

A That's what that says. Yes.

**Q Okay. And, in fact, TECO customers have received a lot of federal aid assistance in the past several years?**

A They've received amounts. I am -- I -- what are you basing the a lot on? That's a general term, so I can confirm the amounts that they have received.

**Q That's fair. Subject to check, about 12 million, 24 million and 12 million over '21 to '23?**

A Yeah, roughly. So about 22 million, 11 million, 11 million.

**Q Okay. But to your knowledge, that federal -- the specific source of those federal assistance dollars is no longer available to TECO customers? Should I rephrase that?**

A Yes.

**Q That was referring specifically to aid that had been made available in light of the coronavirus pandemic.**

A So what I noted is that the federal assistance

dollars were cut nearly in half when looking at 2022 dollars to 2023.

**Q Sure. And from 2023 to 2024, to your knowledge, what -- where have those dollars gone?**

A It looks like '23 and '24 are about the same.

**Q Okay. 58 percent of respondents to this question also indicated that providing information on energy efficiency programs and rebates would be helpful?**

A Yes.

**Q And I will note that we appreciate TECO's efforts on that effect.**

**The question also collected customer comments? And I am looking at the yellow box on the bottom.**

A Yes.

**Q Are you able to make out what any of those lines say?**

A Yes.

**Q Okay. Could you read the second from the top?**

A The second from the top says: So many people are struggling with payments for everything. Anything you can do to assist would be worthwhile.

**Q And could you read the last bullet point?**

A Too many people live paycheck to paycheck. Electricity is an essential need. Any assistance should be offered that is available.

**Q Great. If we could turn to page four of this document. And these answers are from a 2021 survey?**

A Yes.

**Q And when asked in this survey how important it was for TECO to provide assistance programs to -- programs for low-income residents, 41 percent answered that it was extremely important, and 25 percent answered that it was very important?**

A I am sorry. I am trying to follow you. I might not be on the right page. It looks like I -- which question are you reading?

**Q So I am looking at page four, and I am looking at what is going to be the middle question.**

A The middle. Okay, I am there.

**Q Okay. And that question reads: How important is it that Tampa Electric does each of the following?**

A Yes.

**Q And highlighted in the green bar in the middle of the possible responses is assistance programs for low-income residents?**

A Yes.

**Q And the answers there were 41 percent saying it was extremely important, 25 percent saying very important?**

A Yes.

**Q Okay. And then if we go all the way to the end of that, the columns there, six percent of customers said that it was not at all important?**

A Yes.

**Q So 94 percent of respondents said -- attached some level of importance to providing assistance programs to low-income residents?**

A Yes, which is great, because that's exactly what we do when we partner with our customers on customer assistance.

**Q If we could go to page five. This page begins a section that is going to be comparing -- it's going to be looking at a J.D. Power electric residential study from Q3 of 2023?**

A Yes.

**Q Rather, I will represent that this is the first page of several pages that are all looking at different parts of that study.**

A Okay.

**Q And in this -- on this page, which will be true for the others, it's ranking 12 utilities that make up the J.D. Power South Large Segment --**

A Yes.

**Q -- of which TECO is a member?**

**And on this -- on -- if we scroll ahead to**

**page seven. The results presented on this page are in relation to the question of whether the utility supports economic development of local community, correct?**

A Yes.

**Q And on this chart, TECO is ranked as 10 out of 12 for this region?**

A Yes, which speaks to the importance of ensuring that we are communicating with our customers what we are doing in the community. And when we don't communicate effectively, customers don't remember the things that we do in the community when it's time for them to fill out the J.D. Power survey.

**Q If we could go to page nine. This is rating -- this is ranking the same utilities on their assistance programs?**

A Yes.

**Q And TECO is ranked 11 out of 12 for the large south segment?**

A Yes. And, again, we are one of the few utilities in the nation that doesn't have a -- any type of a discount program, or a senior low-income program. I -- this is the third utility company that I have worked in in my career, and the previous two that I worked for had a low-income discount and a senior discount. And many of the utility companies in the

nation do, and we are one of the few that don't.

**Q To confirm, there is no low-income discount program contemplated in TECO's rate case petition?**

A There is a senior.

**Q Correct, but not a low-income?**

A Not low-income. There is -- there is a senior low-income discount, not just low-income.

**Q Good correction.**

**And if we go to page 14, finally back into readable territory.**

A Yes. Thank you.

**Q And also getting close to the end of this document.**

**This slide is from an internal presentation. Secondary research bill per 1,000 kilowatt hour rate comparison was done in July 2024. This is the page before. I just want to make sure I am setting up -- sorry, I am on page 13, this page before --**

A Yes.

**Q -- I just want to make sure I am contextualizing what we are looking at.**

A Yes.

**Q Okay, so then staying on this page 14.**

**Could you read the first bullet on this page beginning with context?**

A Yes: Context, Tampa Electric ranked third highest nationally in average customer bill in 2023, primarily due to high consumption.

**Q And if you know, in 2023, did TECO have the third highest electricity usage among studied utilities?**

A So it sounds like, what I just read, in 2023, due to high consumption -- because, again, if you recall, the summer of 2023 was a very, very, very hot summer, and so consumption was absolutely hotter as customers were looking to keep their homes cool and using electricity. So if I am just going by the bullet, that's what it says, that Tampa Electric ranked third highest nationally in average customer bill in 2023, primarily due to high consumption.

**Q Sure. 2023 was a killer. I think we can all agree with that.**

**You would agree that it was also a very hot summer for Georgia?**

A I don't know. I didn't go to Georgia in 2023, so I am not certain.

**Q Did you travel anywhere last summer in the US?**

A Not to Georgia.

**Q That's fair. I won't limit it to Georgia.**

**If I were to represent to you that last year's very hot summer affected more than Tampa's territory,**

**would you agree with that?**

A Yes.

**Q And so you say that it was ranked third highest nationally on average customer bill primarily due to high consumption. Really, the question I am trying to get out here is, do you have any indication of how the consumption on TECO's system compared in terms of kilowatt hours per customer to other systems across the country that were also undergoing the same very hot summer?**

A I don't know.

**Q Would you agree that the volumetric portion of a customer's bill is a function of both their kilowatt hour usage and also the rate at which that kilowatt hour usage is charged?**

A Yes.

**Q Okay. Now, I would like to turn to a confidential exhibit. This is FLL-321C.**

**Okay. And, Ms. Sparkman, this exhibit, you had a conversation with your counsel about the status of what we can verbalize in this exhibit?**

A I did not.

**Q I represent to you that Ms. Ponder told me that she had conferred with you about what we talked about?**

A Oh, not specific to this page. I am sorry.
**Q Oh, sorry. This --**
A Yes. Yes.
**Q Okay.**
A Apologies. I misunderstood.
**Q So I am going to -- I am going to trust you to verbalize things, and you can call us off if we get into anywhere we shouldn't be.**
A Yes.
**Q Okay. But it's my understanding that everything should be okay to verbalize.**
A If I may check?
**Q Please.**
A Yes. The items that are -- I am responsible for, I can speak to on here. Yes.
**Q And everything in this exhibit is items that you are responsible for -- or this -- sorry, this excerpt?**
A Yeah.
**Q FLL-321 is larger than the excerpt that is printed and available to you here. We are only going to talk about these pages.**
A Yes. So you have items in the folder that are not items that are under my purview.
**Q I apologize. I realized, we printed this and**

**it actually includes other things. The section that we are going to go through stops at 80 -- I believe at 8091. I am sorry, at 8093. So if there is anything beyond 8093, we will not be asking questions about it here.**

A So this one piece of paper is 92 and 93?

**Q No. I am sorry. The range that we are going to potentially cover in this line of questioning is from 8086, which is the front page, to 8093. I just wanted to confirm, we -- when we printed this, there is a larger exhibit. I wanted to make sure that there is not --**

A I see.

**Q -- other pages mixed in.**

A Okay. Just a moment, please, because they are not in order. Okay.

MR. MOYLE: Just a question of clarification here, back to our other point about, you know, objecting. I mean, it sounds like what you are going to do is take a couple of exhibits, or a couple of documents from this and use those as an exhibit but not the rest of it. So how do you clean that up? I mean, are we going to do that --

MR. LUEBKEMANN: We have intro -- we plan to move this entire exhibit into evidence. This is an

excerpt -- I am sorry, it's already been moved in?

MR. MOYLE: Okay.

MR. LUEBKEMANN: This is FLL-321C, which was moved in after Mr. Collins. This is just an excerpt for everyone's ease.

BY MR. LUEBKEMANN:

**Q Okay. Are you ready to proceed?**

A I think so. Yes. If you could just direct me where you would like for me to look.

**Q Surely. I would be happy to.**

**Could we turn to Bates stamp 8087? This will be the second page of the document.**

A Yes.

**Q Could you read the second bullet point?**

A Yes.

**Q And actually -- yeah, you can read the whole thing.**

A The second bullet point on 8087 reads: Compared to 2022 results, Tampa Electric's overall customer satisfaction decreased by 27 points to a 2023 final score of 735, placing us in the second quartile nationally. The decline is largely attributed to price satisfaction, higher average bills, higher awareness of rate increases, et cetera. We remain committed to transparent communications, which includes educating

customers about the factors influencing utility prices and energy saving best practices to help customers reduce their bills.

**Q Thank you.**

**And could you read the second from final bullet point?**

A As agencies struggle to secure funding, we continue to see an increase in bad debt expense, which has a direct correlation to increasing rates and decreases in federal funding. Bad debt expense increased almost five million compared to 2022.

**Q And that's that connection between bad debt and federal assistance and rates that we were talking about earlier?**

A That's correct. So in 2022, there was approximately $22 million in federal assistance. And the very next year, that fell to 11 million and some change.

**Q In fact, if we could turn to 8093, and go ahead and get the correct numbers in the record?**

A Yes.

**Q Could you just read the amounts of agency funding in those last points there?**

A Certainly. So in December of 2021, it was approximately 12.9 million. In December of -- or the

year of 2022, it was 22.5 million, and in 2023, 12.2 million.

**Q And those figures specifically represent the sums of federal assistance that flowed through customers to TECO?**

A Yes.

**Q Going back a few pages to 8088.**

A Okay.

**Q The first heading, not the main title, but the first subheading on this page is value campaign goal?**

A Yes.

**Q And under that heading, you indicate that one of TECO's values is an emphasis on affordability?**

A Yes. That's part of that campaign goal.

**Q You also refer to affordability or affordable energy several times throughout your testimony. As we sit here today, do you have a definition of affordability?**

A You know, I don't have a specific definition. I don't know that there is one on affordability. I, you know, believe affordability is a wide range of things.

You know, as a -- as a servant leader in the organization, that grants me the privilege of really focusing on those things that are important to our customers. And I would say that price and affordability

is one of the things, you know, along with reliability, and safety, and how we show up in our community.

And I think, you know, what's important to our customers related to affordability is keeping rates reasonable in the long-term. You know, they want to know that we are looking out for their best interests in the long-term, and that we are thinking many, many years ahead. And so, you know, when I think about affordability, that's really what comes to mind.

**Q I want to make sure I understood that correctly. You are saying customers are most -- TECO customers are most concerned about affordability in the long-term?**

A I am saying that customers in general, as related to affordability, they want us to keep rates reasonable in the long-term, meaning not just for one year or two years. We need to be looking ahead, and thinking about making prudent and cost-effective investments; ensuring that our reliability results in next to perfect power; ensuring that resiliency is where it needs to be.

And, yes, as I said earlier, there is a small pocket of customers that views affordability in the definition of how they are paying their bill, or their inability to pay their bill. And for that bucket of

customers, that is exactly why we have such a robust customer assistance program. And we have put things in place to ensure that we are walking alongside our customers, so that our customers are able to have energy and electricity in their homes.

**Q Could you point me to any document in the record, any survey that supports the proposition that TECO's customers are more concerned about long-term rates than near-term rates?**

A I can't point to a document. No.

**Q Okay. If we could go to the next page.**

**This graph charts electrical residential overall customer satisfaction from 2015 to 2023?**

A Yes.

**Q And it's very nearly the same as the one in your Exhibit KSS-1?**

A Yes.

**Q The difference is that this also includes a narrative explanation of the customer sentiment?**

A Yes.

**Q Could you read the -- both bullet points for that?**

A Sure: In 2023, Tampa Electric scored better than the industry average for overall satisfaction for all six drivers. Price satisfaction, for example,

higher average bills, higher awareness of rate increases, was the primary driver of the industry declines experienced in 2023.

**Q Thank you.**

**And on the side, there is a second chart that shows the industry rank, segment rank and Florida rank over the --**

A Yes.

**Q -- same years.**

**The industry rank evaluates roughly 150 large utilities nationally?**

A Yes, roughly.

**Q It varies -- it seems to fluctuate from year to year based on the criteria, but --**

A Yes.

**Q -- generally that number?**

**And the segment rank refers to the large south from the J.D. Power survey?**

A Yes.

**Q Is that the same group?**

A Yes.

**Q Okay. And the Florida rank is within Florida?**

A Yes.

**Q Between the quarter one '22 and quarter two '23 surveys, TECO's industry rank fell by 17 places from**

**26 -- 29 to 46?**

A Yes. It looks like we were in second quartile in 2023. That's correct.

**Q Okay. And then on the next page, 8090, we have the same chart here, but for the business side; is that fair?**

A Yes.

**Q And looking at this one, the most recent two surveys on this, I understand from our conversation earlier this summer that the surveys don't happen at the exact same time for different customer classes, right?**

A That's correct. Yes.

**Q But for the most two recent surveys on this page, those are the second quarter of 2022 and the third quarter of 2023?**

A That's correct.

**Q So similarly, a five-quarter segment like the last one? I can rephrase that, if that makes more sense.**

**Going from Q1 '22 to Q2 '23 would be five quarters? That's the residential one.**

A So on the residential one?

**Q Yeah.**

A Yes, there is four waves.

**Q Okay. And so then here, looking from Q2 '22**

**to Q3 '23, the industry rank for TECO fell just two places, from 36 to 38?**

A Yes, through 2023, and then you don't have it here, but in 2024, the overall electric business customer satisfaction, we are -- we are were back in the -- in the top quartile.

**Q Congratulations.**

**Looking at specifically what's on this page, you would agree that the business customer satisfaction flipped by a smaller amount in the residential satisfaction?**

A It's a apples-to-oranges comparison.

**Q And why do you say so?**

A Because it's different -- there is different questions that are asked, different considerations, and so I wouldn't compare business and residential satisfaction with each other.

**Q Well, the two charts that I am looking at here, one says, electric resident overall customer satisfaction, and the other one says, electric business overall customer satisfaction; is that right?**

A Yes.

**Q So it seems to me, rolled up at this level, you are presenting the cumulative impressions of that class in terms of their overall satisfaction?**

A Yes, of each class individually.

**Q Okay. And so, again, looking at the numbers on these pages, the business customer satisfaction declined by a smaller amount than the residential customer satisfaction for the period that we have?**

A Again, I don't compare business and residential. It's not a fair comparison. I wouldn't be comfortable comparing the two. It's a different subset of customers.

**Q Sure, it's a different subset of customers, but in terms of talking about what is categorized as their overall customer satisfaction on these pages.**

A Right, but there is a different number of -- you know, one measures 76, one measures 77. On the residential side, there is more that are being measured. I -- I am not comfortable making the comparison between the two. Again, it's apples to oranges.

**Q Okay. We will move on.**

**On the next page, 8091, it states that the extreme summer weather and other factors led to higher than usual bills for the summer of 2023?**

A Yes.

**Q And that paragraph goes on to state that this caused many customers to experience financial difficulties as they looked for ways to balance their**

**energy spend with other priorities?**

A Yes.

**Q And this refers to the choices that many TECO customers have had to make between paying their TECO bill and other priorities, like food, medicine, rent?**

A I don't know what competing priorities every household has. I would imagine they are a little different.

**Q I know that you were there because I saw you, but just to confirm for the record, you were able to attend all of the customer service hearings that TECO had this summer?**

A Yes. Absolutely. I was at every single one of them.

**Q So you are familiar with the testimony of numerous customers --**

A Yes.

**Q -- numerous TECO customers that high TECO bills have forced exactly the kinds of decisions I was just characterizing, about whether essentials like food and medicine or their TECO bill would have to be prioritized?**

A Yes, there were a couple of customers out of our 844,000 customers that came to the customer hearings. And out of the ones that came and spoke,

there were, I recall, one or two that had that testament. Yes.

**Q Well, it was -- it was more than a couple customers that came to the hearings, is that right?**

A There were 53 that spoke.

**Q And actually staying on the -- we can be done with this document now.**

**Staying on the customers that spoke at the hearing, Ms. Wessling asked you a few questions about their support or opposition to TECO's proposed rate increase. You recall those -- that question?**

A Specific to the customers that came to the hearing?

**Q Yeah. Specifically, of all of the customers that testified at the hearing, is it fair to say that only one was in support of TECO's petition?**

A I think it's fair to say that there were various issues that were discussed. I don't -- you know, I don't know -- I don't recall that all of them were against the rate increase, because I think there were -- there was a customer that talked about environmental. There was a customer that talked about their AMI service, if I am remembering correctly.

**Q I believe I understood your earlier answer to Ms. Wessling's question that all but one customer that**

**had testified had been in opposition to TECO's petition. Is that no longer your testimony?**

A I believe she asked the question differently than what you had just asked, but what I answered earlier was correct.

**Q Okay. Yeah, I don't want to put words in your mouth, so could you -- could you help me tease out the difference?**

A Could you ask the question again?

**Q What I am really trying to get at here is, if you look at all of the customers that testified, I think that there was pretty overwhelming lack of support for TECO's petition. There was one customer that we identified in the earlier conversation that wholeheartedly supported TECO's petition. Does that sound familiar?**

A Yes.

**Q Do you recall whether that one customer that supported TECO's petition was a long-time employee of TECO?**

A I believe that it was an ex-employee of TECO.

**Q Subject to check, this is -- this would be the retired manager for ethics and compliance?**

A Subject to check, yes.

**Q Okay. Also on the subject of the service**

**hearings, would you agree that there were more attendees, more speakers at the service hearing in person than there were in the virtual ones?**

A Yes.

**Q Substantially more?**

A Yes.

**Q I have just a couple last follow-ups here. Referring to the discussion about the EV programs and the optional programs that you had with Ms. Wessling earlier, as we have already established, TECO is a monopoly utility provider in its territory?**

A Yes.

**Q Just a foundational question, not a trick. So customers don't have a choice of where they get their electricity if they live in TECO's territory, it's coming from TECO?**

A Unless they have -- I mean, unless they, I guess, have solar power.

**Q Fair enough. Short of defecting from the grid --**

A Yes.

**Q -- if they are going to get electricity, it's from TECO?**

A Yes.

**Q Customers with electric vehicles in TECO's**

**territory do have an option in the private market to charge in otherwise existing infrastructure?**

A Yes.

**Q Rather, would you agree that there is a private market for EV infrastructure?**

A Yes.

**Q Okay. And a last point on affordability. I want to go back to something you said about the -- about affordability.**

**You mentioned that, in terms of affordability, you know, with rates -- with the bills going up, rates and the, you know, attendant bills, you won't struggle to pay your bill, you said that earlier?**

A I used myself as an example of an actual customer, according to what is important to me and my household. But I can't speak to what is important to other customers in their households.

**Q Do you have a sense of the average median in -- or, rather, the median income in Tampa?**

A I don't.

MR. LUEBKEMANN: Thank you very much. That's all my questions.

CHAIRMAN LA ROSA: Thank you.

Let's move to FIPUG.

MR. MOYLE: Thank you, Mr. Chairman. I have a

few questions that will probably take us close to our break time, so I will go ahead and plow through.

EXAMINATION

BY MR. MOYLE:

**Q Good afternoon.**

A Good afternoon.

**Q I want to follow up on something that Mr. Collins talked about when he was on the stand with respect to the improvements that customers have seen with the smart grid development, and there was a chart that had the average time going from 70 minutes to 30 minutes, and it was a better SAIDI review. Is that something -- are you responsible for the call centers that people use when they have an outage because of a storm, or otherwise?**

A I am responsible for the call centers and the representatives that take the calls, if a customer is reaching a live person when they are reporting an outage, yes.

**Q Okay. So the storms and a hurricane, and all that, that's hand -- that's not a separate system, that's handled as part and parcel of what you do and provide?**

A There is -- yes. If I can elaborate a little

bit, though. A customer can report an outage without reaching a live person. In fact, that's their preferred method.

**Q Right. And that's part of the new grid modernization smart grid, that you can go on-line and provide the information -- I mean, he was talking about the grid being intelligent, and could just -- rather than having to wait on the call, it could send a message internally to TECO to say, this is down, and you don't need people to call to tell you that, and that resulted in a significant savings of time from the average response. Is that currently in place, or no?**

A So that's a question for Witness Whitworth. I am not familiar with the grid reliability aspect of things.

**Q If someone's electricity goes out now, how do you typically find out that it's out?**

A A customer calls us, and they either use the automated system to report their outage; they can text out to a certain number to let us know; or they can reach a customer service professional, and the customer service professional can input the outage information into the system.

**Q Okay. So as we sit here today, Tampa Electric has no ability to self-determine that someone is out,**

**and is dependent and reliant upon customers to contact the company to say, I'm out, you need to come fix it?**

A Again, that would not be a question for me. I am not familiar with the technology that is currently available or not available in the field.

**Q Okay. I have a few questions that relates to your optional customer programs that you referenced on page 11 of your testimony.**

A Yes.

**Q I don't -- you can go there if you want, but what is the genesis of the optional customer programs? Why did you guys put this in place?**

A So these are just optional programs that we put in place to ensure that we are delivering innovative functionality that our customers are interested in subscribing to at some point.

**Q So you use an example of renewable energy options. What are those?**

A I am sorry, could you point to me in the testimony where --

**Q Sure, page 11 --**

A -- so I can read along with you?

**Q -- line 13.**

A Okay. Just a moment, please.

Okay. So that talks to the optional customer

programs that I have listed in one of the earlier documents that was shown, things like the CNI rooftop solar; the fleet EV charging that I was asked about earlier; the residential EV charging. So all of those programs that are either currently in motion or will be in motion.

**Q So you referenced the commercial and industrial rooftop solar. How does that work? Do you pay for the solar that goes on, or -- I mean, just give me a narrative, if you would, of that program that you are responsible for.**

A Yeah. So that program isn't in play yet, but we do have a handful of commercial customers that are interested in that program.

And so how that works, and I think more importantly, how it benefits all ratepayers, is that our asset sits on the customer's roof. And so the energy that's produced then is fed back into the grid. And so the benefit to the commercial and industrial customer is they are able to claim RECs towards their sustainability goals, and then the energy that is placed back into the grid benefits all rate payers.

**Q So if I was a customer that had commercial space and I was very interested in being able to tell people that I am using renewable energy, would I be able**

**to have that energy flow directly into my building or, no, it would flow onto the grid?**

A You know, I don't know that I have all those intricate details, so I --

**Q Okay. And I noted that in your -- in the budget document that you referenced, I think the total spend was $200,000. It sounds like the program is just starting or --**

A Yes. Yes. We are still in the -- we are in the -- still in the design phase, so we don't have an actual customer that has signed up for it quite yet.

**Q Okay. And then on line 14, you go on further, and you talk about -- I will just read it and save time: Facilitate the integration and optimization of customer-owned distributed energy, paren, solar, electric vehicles and battery storage.**

**Does that program involve you working with customers to allow them to do battery storage on their side of the fence, behind the meter?**

A Yes. I would say that's the high level vision of that program. But, again, that's a program that is still being designed. We are still going through the design, doing, and thinking, and talking to customers to try to understand what are they interested in, what are they willing to pay for, et cetera?

**Q Do you know if this program would be modeled similar to the renewable program, where it becomes an asset that you have control over?**

A Yes.

**Q And you would pay for the asset and -- just like the solar program?**

A It is my understanding that the development of a potential share battery storage program would include us being in control of the asset. Yes.

**Q Do you know how much money in this rate case you are asking for both of these programs, approximately? I'm not going to hold you it.**

A So I am sorry, could you repeat the -- which programs do you want me to speak to?

**Q The renewable energy -- the commercial and industrial renewable energy one is one you have referenced.**

A You are talking about what I just spoke about, the battery storage?

**Q Yeah. I am look -- battery storage is different than the renewable energy, as I understand it, correct?**

A So the renewable energy, as I talked about the options, was -- is just a broad terminology to encompass a number of different programs. And so there is a

number of optional customer programs that we are currently working on.

**Q Is this list that's in your testimony complete?**

A There is a separate attachment -- or I am sorry -- that we have looked at already a few times today that lists out each of the optional customer programs. I can --

**Q I saw it. Thank you.**

**Let me refer you to page 52 of your testimony. And I have noted -- I don't know that you need the testimony necessarily for the questions, but this is where it comes from.**

**You make reference to the low-income energy assistance funds, and that there was a decrease in funding at the state level of those funds; is that right?**

A I made reference that there was a decrease at the federal level of those funds. LIHEAP dollars are federal dollars.

**Q Well, on line 18 of page 52, it references at the state level.**

A There is more than just federal assistance. So there is federal assistance. There is assistance done through various community agencies. So there is a

whole bucket of community assistance. Federal is not the -- federal is the big bucket with the --

**Q Okay. I just want to spend a moment and just understand that, I mean, so that the record is complete and clear.**

**There is federal dollars that can flow to help people with their energy bills, is that right?**

A Yes. There is LIHEAP dollars that are -- every state, I believe, gets some sort of appropriation of LIHEAP federal dollars that helps with heating and cooling for customers.

**Q And that word you are using, life --**

A LIHEAP. LIHEAP. It's the Low-Income Heating and Energy Assistance Program.

**Q Do you know how much is available to Tampa Electric through that federal program?**

A I just know how much has flowed through to our customers each year, and -- which, I think Mr. Jordan asked me about earlier, in '21, '22 and '23. Those are -- those dollars I reference, the 22.5 million in '22, and I think it was 12.9 million in '23, I believe, or some -- don't quote me on the exactness of that amount.

**Q Okay. All right. And then I just want to go back to the reference that you have in your testimony**

**about -- you say: However, Tampa Electric was only able to provide approximately seven percent of our low-income population with low-income energy assistance funds due to a decrease in funding at the state level. Did you track me on that?**

A Yes.

**Q Okay. So can you tell me about the decrease at the state level, and what that --**

A So --

**Q -- state level program was, please?**

A Sure. And it's not a state level program. I think I am just -- I am referencing in the document how the dollars come in.

So there is a bucket of federal dollars that is assigned to the state. So each state gets however many billions of dollars, and I don't recall how much money Florida received.

And so when Florida receives that money, then it gets split out amongst the different agencies that administer the funding for each of the counties. And so there is a certain amount that each of the agencies receives. I don't know what all those amounts are, but that's what I am referring to there.

**Q Okay. And those are nonprofit agencies that you work with. So when someone has an issue, you refer**

**them to the nonprofit, is that how that --**

A Yes.

**Q -- works?**

A That's correct.

**Q It's not a governmental entity?**

A That's correct.

**Q Okay.**

A So the money comes from the government and flows through the not-for-profit agency to be administered.

**Q Finally, I have just a couple of questions about this document that was handed out by one of my colleagues.**

A Yes. Let me go back to it.

MR. MOYLE: And just so the record is clear, I am not sure I got exactly how to identify this correctly.

Jordan, do you know -- can you help identify this document?

THE WITNESS: I have it.

MS. HELTON: Exhibit 237 on the CEL.

CHAIRMAN LA ROSA: Thank you.

Hold on one second.

Commissioner Fay?

COMMISSIONER FAY: Yeah. I just want to make

sure if it's identified, we can pull it up on Case Center. I wisely did not accept a copy of the sheet that I thought was not going to be utilized as much. So are we able to pull it up? Thank you.

MS. WESSLING: And, Commissioner Fay, I think I have additional copies if you did want one.

CHAIRMAN LA ROSA: Go ahead, Jon.

BY MR. MOYLE:

**Q So this document is developed as a result of something you have set up only with residential customers, correct?**

A The -- this document is a group of, yes, Power Panel Engagement Survey participants, customers that have signed up to offer their input and opinions on various surveyable items that we might be asking them about. Yes.

**Q Right. And you were asked a question about industrial, and you said it never comes up. I mean, isn't that part of it, because it's composed of Tampa Electric residential customers in the first sentence under source, August 2023?**

A I am sorry. Where are you at?

**Q See the blue thing right here at --**

A Yes.

**Q -- the very top?**

A So if you could repeat the question.

**Q Just -- if you would just read the first sentence.**

A Yes: Source, August 2023. So the Power Panel is a customer research panel composed of Tampa Electric residential customers who have opted in to provide feedback on an ongoing basis.

**Q And this group meets how often?**

A There is -- they don't meet. They -- we -- when there are survey opportunities, we send out the surveys. And then the -- if the participants of the engagement survey group want to participate in a particular survey, they just participate in the survey. So we -- right now, we have a little over, I believe, 2,000 customers that participate.

**Q Okay. So there is no obligation. It's just hit or miss as to who is participating based on when they get the survey?**

A Sure, based on if -- I would offer based on if it's a topic that they are interested in, or if it's a topic that they think is relevant to them.

**Q Okay. And then there is a couple of things that are highlighted. I was curious whether they are highlighted because they are the highest percent. I mean, it looks that way on page two. It has a page two**

**on it to me, senior citizens, 59 percent, and low-income, 51. And then under the second category, there is a whole bunch of other categories, and they are ranked differently, but they still have some highlighting under those same two categories, is that right?**

A Yes. I didn't do the highlighting, so I am not sure -- certain what the original goal of the highlight was; but it appears that the groupings that are highlighted are around helping low-income customers and helping senior citizens.

**Q Okay. And then I will preface this by telling you I am not an expert in these charts and understanding this, but most times when I am reading something, I am thinking it's 100 percent, and then when you say 59 percent, that would be if you had 100 people, 59 of the people said, you know, I'm -- I think we need to do something for senior citizens. But when you add up these numbers in terms of a total percentage, it comes to something like 265. So I was going to ask you if you could help me understand what the qualitative weight of these numbers is, or just explain how -- what that means.**

A Yeah. So I also am not a qualitative survey expert, and so I don't know. But I would offer that the

question says: Please select up to three causes. So I would imagine that, as they are selecting the three causes, all of the customers are selecting three different causes.

**Q Yeah.**

A But again, I am not a qualitative survey expert, so I don't -- I don't want to answer you incorrectly.

**Q Does it -- do you think that would have been 300 percent if everybody had three and --**

A If they -- if everybody answered all three. Maybe some customers only answered one. Maybe some answered two. I don't -- I don't know.

**Q Do you have any information and understand why -- well, if you would go down, under the first chart, there is a sentence that says: Other answers.**

A Uh-huh. Yes.

**Q Other answers include affordable energy, renewable energy, climate change in the environment, is that right?**

A Yes. That's what that says.

**Q Okay. So those issues are not showing up in the issues with percentages. My assumption is, is that there weren't enough people that said that was important to make it into the chart with numbers, is that fair?**

A So that could be one assumption, or we could have had a box where a customer could have wrote in whatever their topic is that might not have been on the list. But I don't -- I am not, like, so intimately familiar with this particular survey that I can know if there was a box -- a free form box where they could have wrote that in.

**Q Okay.**

A So it could have been either of those assumptions.

**Q Thank you for the time. I appreciate it. I have no further questions.**

A Thank you.

CHAIRMAN LA ROSA: All right. Thank you.

It's 3:05 now. So I would like to take a break, but again, I will give you guys an idea of timing.

So my intentions today are to go to about seven o'clock. So with it being around the three o'clock hour, we will have another break at some point here, maybe around 5:00-ish, but I think the intentions are to go until 7:00, more or less, depending, of course, on where we land with things.

But let's go ahead and take a 10-minute break, and let's reconvene here at around 3:15.

Thanks.

(Brief recess.)

CHAIRMAN LA ROSA: All right. If we can start finding our seats and get back together here.

All right. So just to kind of rehash a little bit where we are at. FIPUG has just finished with their line of questioning. Ms. Sparkman is still here in the witness box, so I am turning this now over to FEA.

CAPTAIN GEORGE: Thank you, Mr. Chairman. I don't have any questions.

CHAIRMAN LA ROSA: Okay.

CAPTAIN GEORGE: Thank you, Ms. Sparkman.

THE WITNESS: Thank you.

CHAIRMAN LA ROSA: Thank you.

Next up is a Sierra Club. Your microphone might be off. Just so you -- there you go.

MS. AMIEL: Sierra Club has no questions. Thank you.

CHAIRMAN LA ROSA: Thank you. Sierra Club has no questions.

Retail Federation. I know they are here. Sorry to make you run.

MR. WRIGHT: I apologize, Mr. Chairman. I have no cross for Ms. Sparkman.

Thank you.

CHAIRMAN LA ROSA: No problem. Thank you.

Walmart.

MS. EATON: Thank you.

EXAMINATION

BY MS. EATON:

**Q I have just a few kind of follow-up questions from some questions that Mr. Moyle was asking you earlier. He had referenced these optional customer programs that I believe you discuss at page 11, lines 10 through 17, of your direct testimony.**

**And in asking you the questions, I am not sure I heard you answer his question about the genesis of those programs, are they -- that you are developing. Was it from customer request for the programs, or did, you know, was it a TECO initiative?**

A So I would offer that it's a mix. I -- you know, we are constantly -- we are constantly serving and talking to our customers to understand the types of programs that they are interested in having and the types of programs that they are willing to pay for, and it's a mix --

**Q Okay.**

A -- and that's --

**Q And I just want to make sure that all the**

**different kinds of programs that you listed on page 11, 10 through 17, those were all programs, you, said were kind of in a design phase. There is -- no customer signed up for any of it yet?**

A That is correct. We are in various stages, mostly design doing. And part of the design doing stage is where we are talking to customers face-to-face to ask particular questions related to these programs.

**Q Okay. And then I think on page 20, lines one through 10 of your direct, you were explaining that TECO's optional customer programs technology investments benefit customers because they improve the company's portfolio of optional programs by providing customers more choice and flexibility in how they use our services. And I want -- can you explain that a little bit more? Just elaborate on what you are talking about there.**

A Could you direct me again, I'm sorry, to the lines --

**Q Sure. I think it was page 20, lines one through 10 of your direct testimony, where you are speaking about -- still speaking about the optional customer programs, but then you speak about the technology investments benefiting customers.**

A Sure. So -- sure. So just briefly, what I am

saying in here is that it's important that we are thinking ahead and we are designing programs that our customers will have use for in the future, and have expressed a desire to need and want for the future. And so what I am saying here is that the programs that we aim to design and, at some point execute, we want those programs to be able to serve a diverse group of our customers so that, in the list of optional customer programs, there is always a program or two that any or all customers would at some point be interested in signing up for.

**Q Sure.**

**And what technology investments were you referencing there?**

A So we have some different technology-related initiatives under our decentralization initiative bucket. I can -- I would be happy to look at the list and see what specific technologies.

**Q Sure. I am just trying to make that connection. It wasn't really clear in the testimony. If you can just provide a little bit more clarification, that would be great.**

A I am sorry. I thought I had -- I thought I had brought a list that spoke to those particular initiatives, but they are the -- it's a -- it's

technology-related initiatives that would fall under optional customer programs, and so let me try to think of one.

So, like, for example -- like, we offer -- I am sorry. My mind is going blank on a particular program.

**Q Sure. That's okay.**

**If there is a place that I could go to find it, could you direct me to it?**

A I don't have that level of detail in the document.

MS. PONDER: Mr. Chairman.

CHAIRMAN LA ROSA: Yeah. Go ahead.

MS. PONDER: I think it was on exhibit that -- I know it's in the CEL. I apologize. I don't have the number, but I know LULAC -- it was the response to the LULAC interrogatory that listed out the optional programs. If I may just walk over the -- do you know what exhibit it is?

CHAIRMAN LA ROSA: Yeah. Yeah. I missed that last part.

MS. PONDER: I was going to walk over my laptop to the witness so she could look at the exhibit on her screen. I am sorry. I don't have the number.

CHAIRMAN LA ROSA: Sure. That's okay, so long as that's where we are questioning off of.

MS. EATON: Yeah. That was --

CHAIRMAN LA ROSA: Okay.

MS. EATON: -- what I think she was referencing in her answer to me.

CHAIRMAN LA ROSA: Okay. All right. I am okay with that, if it's not in front of her, to put that in front of her.

MS. PONDER: Okay. I don't know what the number is.

MR. LUEBKEMANN: Yeah. It's FLL-180.

MS. EATON: Okay. Thank you.

CHAIRMAN LA ROSA: FLL-180.

MR. LUEBKEMANN: Which is CEL 640. And the starting page on the master list is going to be 3.3-5864.

MS. EATON: Thank you.

CHAIRMAN LA ROSA: Okay. I think we have got it pulled up on the screen.

THE WITNESS: Yes. And I -- what I indicated earlier is that I believe you have asked what is in the decentralization initiative bucket, and that is what I don't have the granular detail of the items that are in that bucket. And I apologize. I

didn't bring that. And that's not in the -- we didn't offer the detail in the exhibits.

BY MS. EATON:

**Q Okay. And so that's where the technology investments are located, I guess --**

A Yes.

**Q -- within -- okay.**

**And so just sitting here today, you can't recall what those are?**

A You know, I have a team that is responsible for the creation and ideation of these items, and I truly don't have the granular detail. It just escapes me. I don't have it.

**Q Okay. Thank you.**

**I believe on page 41, line 25, through page 42, line eight, of your direct testimony, you stated that as part of its current petition, TECO plans to continue its optional customer programs; is that correct?**

A Yes.

**Q And as part of the continuation, do you have any more details on what those plans are?**

A So the continue is in reference to us asking for, you know, for dollars to be able to bring some of these -- all of these programs to fruition.

**Q And by the programs, you are speaking of the ones we talked about back on line -- I mean, page 11, where it said: Renewable energy options encourage customer-side efficiency improvements, facilitate integration and optimization of customer-owned distributed energy resources, solar, electric vehicles and battery storage --**

A That's correct.

**Q -- that list?**

A Yes.

**Q Okay. I am just trying to connect the dots --**

A Yes.

**Q -- within the testimony itself.**

**And for the plans that TECO has for its optional customer programs going forward, is it correct, then -- I think this is referenced on page 42, line six of your testimony, that that continuation price tag is $4.9 million for 2025?**

A Yes. That's correct.

**Q And I believe you also said that would be -- these programs would be open to all customers, not just residential or CNI customers, but all customers?**

A Yeah. So I would like to clarify that. I think initially that -- yes, that's what I said. What I -- what I meant to say, and I think I might have

misspoke a tad bit as you repeat that. What I meant to say is that these programs will benefit all customers, because there are programs like, I think I explained earlier, like the residential EV charging program that's not open to commercial customers, and so forth.

**Q Okay. And you said they will benefit all customers. Can you explain that further?**

A Sure. So, you know, the example that I used earlier in relation to the commercial and industrial rooftop solar, where we place our asset on the customer's roof, and then the energy that's produced is sent back out into the grid, and that benefits all customers.

**Q And I believe in that example, you had said that that particular customer, the plan would be for that particular customer to get the RECs from the solar?**

A Yes, which they will use towards their sustainability goals.

**Q And would the same be true for any on-site battery that you would place at a customer's site?**

A It's too early to speak of the battery storage, one, because we are, like, in the ideation phase.

**Q You also speak in your direct testimony, starting on page 29, lines seven through nine, about**

**TECO conducting biannual key account management surveys to gather customer feedback with the goal of identifying opportunities for improvement. Do you recall that testimony?**

A Yes.

**Q And does TECO provide opportunities for any of the key account customers to participate in this program -- or the surveys, rather? Sorry about that.**

A I am sorry. Would you repeat the question?

**Q Sure.**

**Does TECO provide opportunities for any of its, I guess, key account customers to provide this feedback as part of TECO's biannual key account management survey?**

A If I understand you correctly, the key account survey goes out to key account customers. And so, absolutely, they have the opportunity to participate twice a year in that survey.

**Q Sure. And that's a different kind of survey from the ones we have talked about --**

A Yes.

**Q -- earlier in your testimony today, is that right?**

A Yes.

**Q Okay. As TECO's Vice-President of Customer**

**Experience, are you familiar with Walmart's specific current renewable energy and sustainability goals?**

A I am not. I have a director that manages that relationship, and I am not intimately familiar. No.

**Q And so that would be a key account manager assigned to our client for the purposes --**

A Yes.

**Q -- of understanding those goals?**

**Have you ever seen those goals before?**

A I am sure that I have. I just -- I -- not -- I can't recollect any specifics.

**Q Okay. Can we pull up Walmart Exhibit 3, which is CEL Exhibit 818?**

A Would that be in my folder anywhere?

**Q I don't think so, but I hope that they can bring it up here.**

MS. EATON: If we could just go to page four of that document, that will have what I'm looking for. Oh, continue on -- page four of the testimony, I guess it was. Yeah. That's it. Got it.

BY MS. EATON:

**Q All right. Can you see that on your screen, or up there on that screen, either one?**

A Yes.

**Q Okay. And I will represent to you that there, in relation to Tampa Electric's recent FEECA goals docket, this was the testimony of Walmart in that particular matter, and there are specific sustainability --**

MS. PONDER: Objection --

BY MS. EATON:

**Q -- goals here --**

MS. PONDER: Excuse me, Chairman.

CHAIRMAN LA ROSA: Go ahead.

MS. PONDER: Relevance.

MS. EATON: To the extent that the goals of a particular customer are relevant to the customer experience, as well as the development of any of the optional customer programs, I would --

CHAIRMAN LA ROSA: I am going to allow the question to continue.

MS. EATON: -- be familiar with it.

BY MS. EATON:

**Q Okay. I am just getting more information about -- I think you said you might have seen it before, is that correct?**

A As I am -- I am not at all remembering. As I am reading it, I am not familiar with it. No.

**Q Sure.**

**And would you -- do you know who the account manager is who is responsible for this client relationship?**

A In my organization, I believe, yes.

**Q Okay. And as part of either the optional customer program, or as part of the biannual or the key account management program, would TECO agree to work with Walmart and its other customers in the optional customer program to achieve these sort of renewable energy and sustainability goals?**

A So what I would say is that I -- this is the first time that I am seeing this document, and so I would just appreciate the opportunity to review it before I answer, you know --

**Q Absolutely.**

A -- any questions related to it.

**Q Certainly.**

**It's very short. It's, like, one paragraph, I think.**

A I do -- I would say, high level, you know, you -- Walmart is an absolute key account customer of ours, and, of course, we would continue to partner and work together on, you know, on mutually important goals to us.

**Q Thank you very much.**

MS. EATON: That's all the questions I have. Thank you.

CHAIRMAN LA ROSA: Staff?

MR. SPARKS: Staff doesn't have any questions for Ms. Sparkman.

Thank you.

CHAIRMAN LA ROSA: Commissioners?

COMMISSIONER CLARK: I do, Mr. Chairman.

CHAIRMAN LA ROSA: Commissioner Clark, you are recognized.

COMMISSIONER CLARK: Thank you, Mr. Chairman.

Just a couple of brief questions about the survey that's been mentioned. We spent a lot of time going through the elements of this -- the power engagement survey, I guess is what you refer to it as. I guess I have some concerns about using this to drive programs. Would you consider this a statistically valid survey?

THE WITNESS: I would. And I would say it's just one -- it's one point, though. It's just one reference point that we would use. This is not the be-all, do-all. This is just one way that we gauge customer interest in programs and services.

COMMISSIONER CLARK: So you are saying this -- the customers surveyed here are a representative

sample of TECO's customers, and the average age was 57, I think, on the respondents?

THE WITNESS: So the average age for this particular survey, the -- in August 2023 -- for example, in August '23, the Power Panel Engagement Survey on price and affordability. So the participants that elected to participate in this particular survey, that is the information related to them. So different surveys have different --

COMMISSIONER CLARK: Sure. But I am asking about statistical -- do you -- can you define statistical validity in a survey? What makes this survey statistically valid?

THE WITNESS: I don't know what makes it statistically valid. No.

COMMISSIONER CLARK: Okay. That's all.

Thank you, Mr. Chairman.

CHAIRMAN LA ROSA: Other questions?

Seeing none, I will send it back to TECO for redirect.

MS. WESSLING: And, Mr. Chairman, just briefly, I did have one question. I don't know if it's more appropriate for me to ask now in follow-up to Chairman -- excuse me -- Commissioner Clark's question, but I am happy to wait until

after Tampa does their redirect as well.

CHAIRMAN LA ROSA: So the question is of the witness?

MS. WESSLING: Yes, just one question. And it specifically has to do with Commissioner Clark's question. It's just a follow-up.

CHAIRMAN LA ROSA: As long as it's a direct follow up to the Commissioner's question.

MS. WESSLING: It is.

FURTHER EXAMINATION

BY MS. WESSLING:

**Q And, Ms. Sparkman, the survey that was just asked about by Commissioner Clark, you said up to 2,000 different Tampa Electric customers are part of that particular group that's surveyed?**

A There is over 2,000 customers that belong to our Power Panel Engagement Survey group of all ages, backgrounds, et cetera.

MS. WESSLING: That's all. Thank you.

CHAIRMAN LA ROSA: Send it back to TECO for redirect.

MS. PONDER: No redirect, Mr. Chairman.

CHAIRMAN LA ROSA: Great. Thank you.

Then let's go ahead and move exhibits into the record, starting with TECO.

MS. PONDER: Tampa Electric would like to move in Exhibit 17 into the record, please.

CHAIRMAN LA ROSA: Okay. Is 17 the only exhibit or --

MS. PONDER: Yes.

CHAIRMAN LA ROSA: Okay. Any objections to 17?

Seeing none, show that 17 is entered into the record.

(Whereupon, Exhibit No. 16 was received into evidence.)

CHAIRMAN LA ROSA: And we've got to get an exhibit number?

MS. HELTON: Already been identified, Mr. Chairman, as 17. So that's --

CHAIRMAN LA ROSA: Perfect.

MS. HELTON: -- a composite exhibit for all of their prefiled exhibits.

CHAIRMAN LA ROSA: Okay. Perfect.

Any other exhibits that need to be moved into the record, Ms. Wessling?

MS. WESSLING: Yes. Thank you.

OPC would ask to move into the record exhibits -- this is Hearing Exhibit 237, 238, 281, 236 and 438.

CHAIRMAN LA ROSA: Is there objections?

MS. PONDER: No objection.

CHAIRMAN LA ROSA: Okay. Seeing none, then show them entered into the record.

(Whereupon, Exhibit Nos. 236-238, 281 & 438 were received into evidence.)

CHAIRMAN LA ROSA: Any other exhibits, Florida Rising?

MR. LUEBKEMANN: Thank you, Mr. Chair.

Florida Rising/LULAC would move Comprehensive Exhibit 55, 51, 640 and 762.

CHAIRMAN LA ROSA: Any objections?

Seeing none, show that entered into the record.

(Whereupon, Exhibit Nos. 51, 55, 640 & 762 were received into evidence.)

CHAIRMAN LA ROSA: Any other exhibits from any of the other parties? Walmart?

You might have turned your microphone off.

MS. EATON: I am sorry.

CHAIRMAN LA ROSA: No problem.

MS. EATON: It's on the comprehensive list as Exhibit 818.

CHAIRMAN LA ROSA: 818.

Objections to 818?

Seeing none, show that entered into the record.

(Whereupon, Exhibit No. 818 was received into evidence.)

CHAIRMAN LA ROSA: Other parties?

Seeing none, I think we are good.

You are excused. Thank you very much.

(Witness excused.)

CHAIRMAN LA ROSA: Send it back to TECO to call your next witness.

MR. MEANS: Thank you, Mr. Chairman.

Tampa Electric calls Carlos Aldazabal.

CHAIRMAN LA ROSA: Mr. Aldazabal, welcome. Before you sit down, do you mind just taking a quick oath?

Whereupon,

CARLOS ALDAZABAL

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

THE WITNESS: I do.

CHAIRMAN LA ROSA: Thank you.

You may have a seat. And get yourself situated, and when you are ready, we will begin. We are ready when you are.

MR. MEANS: Thank you, Mr. Chairman.

EXAMINATION

BY MR. MEANS:

**Q Good afternoon, Mr. Aldazabal. Can you please state your full name for the record?**

A Sure. It's Carlos Aldazabal.

**Q And who is your current employer, and what is your business address?**

A It's Tampa Electric Company. Business address is 702 North Franklin Street, Tampa, Florida, 33602.

**Q And did you prepare and cause to be filed in this docket, on April 2nd, 2024, prepared direct testimony consisting of 72 pages?**

A I did.

**Q And did you also prepare and cause to be filed in this docket, on July 2nd, 2024, prepared rebuttal testimony consisting of 36 pages?**

A I did.

**Q Do you have any additions or corrections to your prepared direct or rebuttal testimony?**

A There is one correction. On page four of the direct testimony, witness Richard Latta should be replaced with witness Jeff Chronister.

**Q Other than that revision, if I were to ask you the questions contained in your prepared direct and**

**rebuttal testimony today, would your answers be the same?**

A Yes, they would.

MR. MEANS: Mr. Chairman, Tampa Electric requests that the prepared direct and rebuttal testimony of Mr. Aldazabal be inserted into the record as though read.

CHAIRMAN LA ROSA: Okay.

(Whereupon, prefiled direct of Carlos Aldazabal testimony was inserted.)

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

**PREPARED DIRECT TESTIMONY**

**OF**

**CARLOS ALDAZABAL**

**Q.** Please state your name, address, occupation, and employer.

**A.** My name is Carlos Aldazabal. My business address is 702 North Franklin Street, Tampa, Florida 33602. I am employed by Tampa Electric Company ("Tampa Electric" or the "company") as Vice President Energy Supply.

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

**A.** I am responsible for the safe, efficient, and reliable operation of Tampa Electric's electric generating and energy storage assets. My duties include oversight of all safety, environment, compliance, team member, operating, and capital budget management activities in our Energy Supply department. These include power plant operations; resource planning; origination and trading; and emerging technologies. I am also responsible for the company's general procurement and contracting activities.

I report to our President and Chief Executive Officer, Archie Collins. One officer, one senior director, and eight directors report directly to me. Together we lead the Energy Supply department.

**Q.** Please summarize your educational background and business experience.

**A.** I received a Bachelor of Science degree in Accounting and a Master of Accountancy degree from the University of South Florida in Tampa, in 1991 and 1995, respectively. I am licensed as a Certified Public Accountant in the State of Florida and have 28 years of electric utility experience.

I began my career at Florida Power Corporation (now Duke Energy Florida) and joined Tampa Electric's accounting department in 1999. After four years, I moved into the company's regulatory affairs department where I eventually became Vice President of Regulatory for both Tampa Electric and its affiliate, Peoples Gas System. I was given a special assignment in Electric Delivery in 2019 to gain operations experience before moving to my current position in 2021.

I have worked in the areas of fuel and interchange

accounting, surveillance reporting, budgeting and analysis, cost recovery clause management, rate case management, investor relations, transmission engineering and operations, fleet management, stores management, procurement, and Energy Supply.

**Q.** Have you testified before the Florida Public Service Commission ("Commission")?

**A.** Yes. I have testified or filed testimony before the Commission on behalf of Tampa Electric in the Commission's annual Fuel & Purchased Power proceedings from 2005 to 2012.

**Q.** What are the purposes of your direct testimony?

**A.** The purposes of my direct testimony are to (1) describe the company's Energy Supply system; (2) summarize our successes transforming Energy Supply since our last rate case; (3) outline the company's future Energy Supply plans; and (4) demonstrate that the Energy Supply rate base amounts and operations and maintenance ("O&M") expense levels for the 2025 test year are reasonable and prudent. I will also explain the South Tampa Resilience, Polk 1 Flexibility, Polk Fuel Diversity, Bearss Operations Center, and Corporate Headquarters projects, which are

included in our proposed 2026 and 2027 subsequent year adjustments ("SYA"), why these projects are prudent, and how they will benefit our customers.

**Q.** How does your direct testimony relate to the direct testimony of other Tampa Electric witnesses?

**A.** I have overall responsibility for the capital investments and O&M expenses for the Energy Supply area; however, Tampa Electric witness Kris Stryker, Vice President Clean Energy and Emerging Technology, reports to me and will discuss the solar generating and energy storage additions included in our 2025 test year and SYA. Tampa Electric witness Jose Aponte, Manager Resource Planning, will show that the generation, solar, and energy storage included in our 2025 test year and 2026 and 2027 SYA are cost effective.

Jeff Chronister

Tampa Electric witness ~~Richard Latta~~, Utility Controller, will compile the 2025 rate base amounts and O&M expense levels described in my testimony with similar information from other witnesses to calculate the company's 2025 revenue requirement and proposed 2025 base rate increase. He also uses the project costs in my testimony for the five SYA projects listed above to calculate the revenue requirements for our proposed 2026 and 2027 SYA. Our

proposed 2026 and 2027 SYA also include specific solar, energy storage, and Electric Delivery Projects that are explained by Mr. Stryker and Tampa Electric witness David Lukcic, Senior Director Operational Technology and Strategy, in their testimony.

**Q.** Have you prepared an exhibit to support your direct testimony?

**A.** Yes. Exhibit No. CA-1, entitled "Exhibit of Carlos Aldazabal" was prepared under my direction and supervision. The contents of my exhibit were derived from the business records of the company and are true and correct to the best of my information and belief. My exhibit consists of nine documents, as follows.

| | |
|---|---|
| Document No. 1 | List of Minimum Filing Requirement Schedules Sponsored or Co-Sponsored by Carlos Aldazabal |
| Document No. 2 | Generation Mix |
| Document No. 3 | Total System Heat Rate (2013-2023) |
| Document No. 4 | Total $CO_2$ Emissions (2013-2023) |
| Document No. 5 | System Heat Rate and Fuel Savings |
| Document No. 6 | Total System Net EAF Percentage |
| Document No. 7 | Solar Projects 2021-2023 |

C3-154

| | |
|---|---|
| Document No. 8 | Headquarters Evaluation Scorecard |
| Document No. 9 | Headquarters Evaluation |
| Document No. 10 | Energy Supply Capital Expense Summary 2022-2025 |

**Q.** Do you sponsor any sections of Tampa Electric's Minimum Filing Requirement ("MFR") Schedules?

**A.** Yes. I sponsor or co-sponsor the MFR schedules listed in Document No. 1 of my exhibit. The data and information on these schedules were taken from the business records of the company and are true and correct to the best of my information and belief.

**(1) ENERGY SUPPLY OVERVIEW**

**Q.** Please describe the company's Energy Supply area.

**A.** Our Energy Supply area has a combined staff of approximately 620 employee team members. Its functions include thermal and solar generating operations; environmental management; engineering and project management; resource planning; capital planning; natural gas origination and trading; energy trading; general company procurement; stores and inventory management for Energy Supply and Energy Delivery; and facility services.

It includes the Clean Energy and Emerging Technology group led by Mr. Stryker.

**Q.** What role does safety play in Energy Supply?

**A.** Safety is our number one priority. We are committed to the beliefs that all injuries are preventable and that no business interest can take priority over safety. We believe that everyone is responsible for safety and that all team members must be personally engaged in all aspects of safety.

The foundation of our safety program is a multi-tiered Safety Management System that sets minimum expectations for safety leadership; addresses risk management; prescribes programs, procedures, and practices; promotes safety communications, awareness, and training; cultivates a strong safety culture and safe behavior; sets contractor safety management standards; enhances asset integrity; establishes tools for measurement and reporting; prescribes incident management and investigates procedures; and includes auditing and compliance measures.

I am proud that Tampa Electric's Energy Supply organization has finished in the top two quartiles when compared to

other electric utilities in the Southeast Electric Exchange for the last three years. Additionally, in 2023 the company achieved an overall 0.70 incident rate, which is a six percent improvement from our five-year average.

**Q.** Please describe the Clean Energy and Emerging Technology group.

**A.** The Clean Energy and Emerging Technology group is devoted to diversifying the company's generation mix in a cost-effective manner for customers. They develop our solar and energy storage projects and explore innovative technologies to support our thermal generation units. Mr. Stryker further explains this group and the work it performs in his testimony.

**Q.** Please generally describe the company's current electric generating system.

**A.** Tampa Electric maintains a diverse portfolio of electric generating facilities to safely provide reliable, cost-effective electric power for its customers. Our generation portfolio consists of 14 thermal generating units and five thermal peaking units at three central generating stations, and 22 geographically dispersed solar sites, for a total

of approximately 6,433 megawatts ("MW") of winter peaking capacity. Our generating fleet includes a dual fuel (solid fuel/natural gas) steam unit; combined cycle units ("CC"); combustion turbine ("CT") peaking units, some of which are dual fuel (natural gas/oil); a dual fuel (petcoke/natural gas) integrated gasification combined cycle ("IGCC") unit; and photovoltaic solar facilities ("solar").

**Q.** Please describe the company's central electric generating stations.

**A.** The company's three central electric generating stations are the Big Bend Power Station ("Big Bend"), the Polk Power Station ("Polk"), and the H.L. Culbreath Bayside Power Station ("Bayside").

Big Bend consists of two units. The Big Bend Unit 1 modernization project was completed and went in service in December 2022. The repowered Big Bend Unit 1 is a natural gas fired two-on-one generating facility. Big Bend Unit 4 is a pulverized coal fired steam unit equipped with a desulfurization scrubber, electrostatic precipitator, and a Selective Catalytic Reduction ("SCR") air pollution control system. We added dual fuel capability to Big Bend Unit 4 in 2013 so it can also be fired with natural gas.

Bayside consists of two natural gas fired combined cycle ("NGCC") units and four aero derivative CT. Bayside Unit 1 consists of three CT, three Heat Recovery Steam Generators ("HRSG"), and one steam turbine. Bayside Unit 2 consists of four CT, four HRSG, and one steam turbine. Bayside Units 3, 4, 5, and 6 are natural gas aero derivative CT.

Polk has two units. Polk Unit 1 is a dual fuel IGCC/natural gas unit consisting of one CT, one HRSG, and one steam turbine. Polk Unit 2 uses four natural gas CT, four HRSG, and one steam turbine. Two of the Polk Unit 2 CT can use distillate oil as a back-up fuel. The Polk Unit 2 CT were transformed into highly efficient CC generating units ("Polk 2 Conversion") in 2017.

**Q.** Please describe the company's existing solar facilities.

**A.** Tampa Electric currently owns and operates solar facilities with approximately 1,250 MW of generating capacity at 22 geographically dispersed locations throughout its service territory. All 21 solar facilities are single axis tracking with capacities ranging from 19.8 MW to 74.5 MW. The Big Bend Solar facility includes a 12.6 MW energy storage unit. The company also owns and operates five small solar sites with a combined generating capacity of less than 8 MW. Mr.

Stryker discusses our future planned solar projects in his testimony.

**Q.** Please describe the company's current fuel mix for generating electricity.

**A.** Since 2013, Tampa Electric has dramatically changed the mix of fuel we use to generate electricity. In 2013, our generation mix was 58.7 percent coal, 41.2 percent natural gas, less than 0.1 percent light oil, and 0 percent solar. In 2023, about 3.8 percent of our electricity was generated using coal, about 87.6 percent was natural gas-fired, approximately 8.6 percent was from solar, and less than 0.1 percent from light oil. The company reduced its tons of coal consumption by approximately 92 percent since 2013. Document No. 2 of my exhibit depicts how our generation mix has changed in the last decade.

**Q.** Have these changes improved the company's thermal efficiency?

**A.** Yes. We measure our thermal efficiency by calculating our average net system heat rate (Btu/kWh). This calculation measures the amount of fuel energy we use to generate electric energy, so a lower number means that we are more

efficient because our system needs and uses less fuel energy to generate a kilowatt-hour ("kWh") of electricity.

Our system heat rate has declined from 9,277 in 2013 to 6,755 in 2023, an improvement of about 27 percent over the last decade. This heat rate reduction means lower air emissions from power generation and lower fuel costs for customers. Documents No. 3 and 4, respectively, in my exhibit detail how our thermal efficiency and emissions profile have improved since 2013.

**Q.** Have these changes to the company's generating facilities helped reduce the company's annual fuel expenses?

**A.** Yes. While market dynamics impact the price of natural gas, reducing our system heat rate has generated significant fuel savings for customers. For example, when our system heat rate was approximately 9,000, and assuming a natural gas price of $4 per MMBtu, it would cost $36 to generate one megawatt-hour ("MWh") of electricity. However, with our current heat rate of approximately 6,700, the cost to generate that same electricity would be $26.80 per MWh, which means over 25 percent lower fuel costs for customers.

As the company continues to add solar and make efficiency

improvements to its existing generating assets, the company's system heat rate will continue to decline and result in lower fuel costs for customers. Document No. 5 of my exhibit shows how our system heat rate has declined since 2016 and the corresponding estimated fuel savings associated with that decline.

**Q.** Please describe the reliability of Tampa Electric's generating units since 2017.

**A.** The reliability of our generating fleet is measured by generating unit annual net Equivalent Availability Factor ("EAF"), which reflects the amount of time our generating units are expected to be in service after accounting for planned and unplanned outages.

We have improved our overall fleet EAF from approximately 78 percent to 81 percent since 2017. Our fleetwide EAF is a weighted average of performance, with the NGCC fleet having a higher EAF (high 80's to low 90's) and our older dual fuel boiler units operating in the low 70's. The lower EAF across the boiler units is a result of higher wear and tear caused by coal combustion, resulting in boiler tube leaks, which corresponds to longer duration planned maintenance outages. The recent retirement of Big Bend Unit

3 in 2023 will yield a higher system EAF starting in 2024. Document No. 6 of my exhibit provides additional details on our system EAF since 2017.

**(2) ENERGY SUPPLY TRANSFORMATION SINCE LAST RATE CASE**

**Q.** What major changes did the company make in its Energy Supply area since its last rate case in 2021?

**A.** The settlement agreement in our 2021 rate case ("2021 Agreement") facilitated two major transformations in Energy Supply. First, we added over 600 MW of solar generating capacity. Second, we executed our Big Bend Modernization Project.

**Q.** Please describe the solar facilities placed in service during the term of the 2021 Agreement.

**A.** From late 2021 to 2023, the company installed an additional 595.3 MW of cost-effective solar additions through 11 individual facilities as an installed total cost of approximately $850 million. The revenue requirement associated with these facilities was recovered via two generation base rate adjustments ("GBRA") approved in the 2021 Agreement and is included in our current base rates and charges. These additions brought total solar capacity

on Tampa Electric's system to over 1.25 gigawatts, or enough to power 200,000 homes. Document No. 7 of my exhibit shows additional details about these projects.

**Q.** Were these projects constructed and placed in service consistent with the costs and dates estimated in the company's 2021 rate case and 2021 Agreement?

**A.** Three of the four projects planned in 2021 slipped into the first part of 2022, which made them eligible for Production Tax Credits ("PTC") benefiting customers. Due to the signing of the Inflation Reduction Act ("IRA"), competition for large scale solar components has increased resulting in cost pressures on any materials not under contract. While the PTC improves the cost-effectiveness of these projects, those benefits were partially offset by higher component and materials costs. Mr. Stryker provides additional details on the higher material and component costs in his direct testimony. All 11 projects contemplated in the 2021 Settlement Agreement were placed in service by the end of 2023.

**Q.** Please describe the Big Bend Modernization Project.

**A.** The Big Bend Modernization Project transformed the way we

generate electricity at Big Bend Station. Design work began in 2017, and field work began in 2019. The company retired Big Bend Unit 2, refurbished the Big Bend Unit 1 steam turbine and generator, and replaced the Unit 1 boiler and coal processing equipment with two new, highly efficient General Electric 7HA.02 combustion turbines and associated heat recovery steam generators.

The Big Bend Modernization project was constructed in two phases. In phase one, the company constructed two new highly efficient CT in simple cycle mode and placed them in service in 2021. The second phase involved the addition of the HRSG, facilitating the unit's operation in CC mode, and was completed in December 2022.

The repowered Big Bend Unit 1 went into service in December 2022 and now is the company's most efficient natural gas combined cycle unit. We repowered Unit 1 as a clean natural gas-fired two-on-one CC generating facility using an existing steam turbine generator and once-through cooling system. Big Bend Unit 1 now has a nominal 1,120 MW of winter capacity and 1,055 MW of summer capacity with a 6,300 heat rate.

**Q.** Did the company construct and place the Big Bend

Modernization Project in service consistent with the costs and dates estimated in the company's 2021 rate case and 2021 Agreement?

**A.** Yes. We forecasted the total cost of the project to be $904.6 million, and the actual cost was $875 million. This was an extraordinary accomplishment under the challenging supply chain and macroeconomic environment conditions at the time. We attribute the lower cost to exceptional project planning and the use of creative contract terms for projects of this size and scope, such as use of competitive bidding of fixed pricing terms for major equipment and use of competitive bidding followed by open book negotiation for the construction contract once the design was finalized.

**Q.** What other activities did the company undertake in the Energy Supply area to benefit customers since 2021?

**A.** Our other activities fall into three categories, new energy storage capacity at Big Bend, an Advanced Gas Path project at Bayside, and other smaller, more routine improvements.

BIG BEND ENERGY STORAGE

**Q.** Please describe the company's energy storage project.

**A.** The company installed a 12.6 MW energy storage unit at Big Bend and coupled it with a single axis tracking solar facility there. The energy storage unit went into service in December 2019 with a total project cost of $11.5 million. This energy storage pilot has provided valuable insights on how storage interacts with generation resources and how best to integrate them into our electric grid. This project benefited customers as it has provided valuable insights on how to optimally operate these storage systems and how to utilize them to drive down system heat rate.

BAYSIDE ADVANCED GAS PATH PROJECT

**Q.** What is an Advanced Gas Path ("AGP") Project?

**A.** AGP technology is a proprietary performance enhancement solution developed by General Electric for combustion turbines that consists of improvements to the cooling systems, hot section parts redesign, and sealing to maximize output, efficiency, and flexibility from existing assets. It is a proven technology that has been installed on hundreds of gas turbines. The company has

applied the AGP solution to Bayside Units 1 and 2.

**Q.** Please describe the Bayside Unit 1 AGP project.

**A.** The company completed the AGP work described above for Bayside Unit 1 in 2022, which resulted in a 10 percent increase in unit output and a heat rate improvement of nearly five percent. This translates to direct fuel savings for customers. By installing fast start capability, we can synchronize Bayside Unit 1 to the grid in six to seven minutes, which is a 55 percent improvement. That translates to better operating efficiency and an improved system heat rate, which reduces fuel costs for customers.

**Q.** Please describe the Bayside Unit 2 AGP project.

**A.** The Bayside Unit 2 AGP project is essentially the same as the Unit 1 project. We expect to complete the Bayside Unit 2 portion of the project in the Spring of 2024 and to see the same type of improvements to Bayside Unit 2 that we experienced for Bayside Unit 1.

**Q.** Why were the Bayside AGP projects needed?

**A.** Yes. The Bayside AGP upgrades were initiated to help meet and maintain our winter reserve margin requirements. Our analysis showed these projects were a very low-cost option to add 128 MW of output capacity compared to other generation options. We also anticipated that the projects would reduce unit heat rate, generate fuel savings for customers, and provide operational flexibility by improving start times, which helps us react quickly to load and supply changes.

**Q.** What alternatives did the company consider?

**A.** The company considered batteries and other new generation options, but the cost-effectiveness of these projects compared to the next best option was $86.6 million favorable to customers.

**Q.** What did the company do to ensure the projects were or will be completed at the lowest reasonable cost?

**A.** The company issued a request for proposal ("RFP") to multiple vendors for Output and Efficiency enhancements for the seven Bayside 7FA combustion turbines. From that RFP, two main vendors were selected for further discussions. After more detailed discussions and

negotiations with both vendors, General Electric ("GE") was selected as our preferred vendor for the upgrades. We then engaged in negotiations with GE for final pricing for the upgrades. We negotiated firm turn-key pricing to eliminate any price or market volatility and other unknowns associated with the outage. For the remainder of the work not covered by the GE contract, primarily the HRSG and balance of plant work, we issued another firm price, turn-key RFP to vendors. Two vendors, Central Maintenance and Welding and TEIC, were selected for the remainder of the required work. During the outage, we tracked all additional work through the "Extra Work Authorization" process to ensure the validity of the request. Finally, we ensured cost management with direct Tampa Electric supervision over all contractors onsite.

**Q.** Are the Bayside AGP projects prudent?

**A.** Yes. The Bayside AGP projects are part of Tampa Electric's continuing effort to improve the efficiency, sufficiency, and adequacy of its facilities. As previously stated, these projects were needed to meet a winter reserve margin requirement. These innovative technologies result in direct fuel savings for customers. The improved unit flexibility also helps support renewable generation on

the grid because the faster response time of the turbines helps with solar intermittency that can occur during afternoon storms, cloud cover, and sunrise and sundown, which has direct fuel savings for customers. These investments in emerging technologies at Bayside will allow us to deliver safe, reliable, and efficient power to customers for many years to come.

OTHER PROJECTS

**Q.** What other projects did the company undertake in the settlement period to improve Energy Supply?

**A.** The company also invested capital at Polk to improve reliability by upgrading the relays on the generator step-up transformers ("GSU") and station transformers, replaced the 13kV bus and insulators in CT 2, replaced the brush rigging on CT 2 through 5, and performed switchgear feeder relay upgrades. That work will translate to improved unit reliability and availability.

Investments at Bayside in addition to the AGP work include a steam turbine major outage with rotor replacements, valve overhauls, exciter replacements, and controls upgrades, which will provide long-term reliability of the station. Another major investment was the refurbishment

of the 60-year-old cooling water intake structure, which required refurbishment for safety and long-term reliability. Finally, the station also replaced circulating water pumps and added a vacuum priming system which helped improve unit heat rate and upgraded protection relays that were no longer supported by the manufacturer.

Investments at Big Bend include replacement of the Big Bend Unit 4 furnace waterwall tubing to improve reliability and heat rate as the new tubing allows for increased header pressure and capacity. A new natural gas addition to the Big Bend Unit 4 boiler created a full capacity dual fuel operation design. Lastly, in 2024, heat rate improvements will be realized with the replacement of the A and B Big Bend Unit 4 hot air expansion joints and pulverizer inlet ductwork. The C and D pulverizer joints and ducts were replaced in 2023.

RESULTS

**Q.** Have the addition of solar, Big Bend Modernization, AGP, and the other capital projects during the settlement period enabled the company to change the way Energy Supply operates to benefit customers?

**A.** Yes. The changes described above have substantially changed how our generating fleet is dispatched and the level of O&M expenses required to sustain reliable operation. Overall Energy Supply employee count will decline in 2024 and remain constant in 2025.

**Q.** Please explain.

**A.** We are adding employees to operate and maintain our new solar facilities but need fewer employees at Big Bend for a net employee reduction in 2024.

We use a combination of in-house and contractor resources to operate and maintain our solar facilities but consider market dynamics to increase and decrease our use of outside contractor services while deliberately working to "build our bench" with employees who are skilled solar operators. This will allow us to keep solar operating costs down while developing in-house solar skills and knowledge.

The Big Bend Modernization project enabled us to make staffing and contractor reductions at Big Bend as we continue to shift away from older generation, which requires more operating and maintenance personnel, to more efficient combined cycle units, like repowered Big Bend

Unit 1, that need fewer people to operate and maintain.

**Q.** Were all the changes to the company's generating fleet described above prudent?

**A.** Yes. Each change was made considering the conditions and circumstances known at the time after careful internal studies that considered safety, reliability, and economics.

**(3) FUTURE ENERGY SUPPLY PLANS**

**Q.** Are technological improvements, fuel prices, and public policy considerations continuing to drive changes in how the company generates electricity?

**A.** Yes. Technology improvements and tax incentives have made solar generation a cost-effective alternative to natural gas-fired generation. Energy storage technology continues to improve and provides capacity to store power with a lower cost to generate and helps reduce costs to customers.

Absent an unforeseen change, the economic viability of coal for generating electricity will continue to erode, while the future will remain bright for renewable energy resources and storage capacity. However, as shown in

Document No. 6 of my exhibit, Tampa Electric still relies heavily on highly efficient NGCC technology to meet a large portion of our electric generation needs. Natural gas plays a vital and strategic role in meeting the energy needs of our customers and will continue playing a crucial role despite the company's commitment to fuel cost reduction and fuel diversity.

**Q.** What future plans does the company have for Energy Supply?

**A.** In 2024 and 2025, the company plans to add additional solar generating capacity, energy storage capacity, and begin a small project, funded primarily by United States Department of Energy grants, to investigate the suitability of the geological conditions at and near Polk for underground carbon storage. Mr. Stryker describes these projects and why they are prudent in his testimony.

We have three major planned outages in 2025 and will be making structural improvements at our generating stations. I will explain these later in my testimony.

**Q.** Does the company have other plans for Energy Supply in 2026 and 2027?

**A.** Yes. The company plans to place in service six additional solar facilities and four energy storage capacity facilities in 2024, 2025, and 2026. These projects, some of which are included in the company's proposed SYA, are explained by Mr. Stryker.

The company is also planning a Polk 1 Flexibility Project, a Polk Fuel Diversity Project, and a South Tampa Resilience Project. I will describe each of these projects in the SYA section of my testimony, below.

STRUCTURE IMPROVEMENTS AT GENERATION STATIONS

**Q.** What are the company's plans to upgrade structures at its generating facilities?

**A.** While many of the generating units have gone through conversions, many of the administrative buildings that house the support staff are still the original buildings. These buildings require improvements to HVAC systems, lighting, layout, and facilities and no longer meet building codes.

**Q.** Why are these improvements needed?

**A.** Tampa Electric's generation stations have all been in

service for several decades. For example, some of the existing buildings at Big Bend and Bayside are more than 50 years old. Those buildings are no longer up to code or ADA compliant. As repairs are needed, it is sometimes necessary to remodel the buildings and bring them up to existing codes to obtain permits to proceed with the necessary work. These improvements allow employees to occupy the space in a safe manner with updated facilities.

**(4) 2025 RATE BASE AND O&M EXPENSES**

RATE BASE

**Q.** How does Tampa Electric determine the construction program and capital budget for the Energy Supply area?

**A.** Tampa Electric uses an Integrated Resource Planning ("IRP") process. The IRP process determines the timing, type, and amounts of additional resources required to maintain system reliability in a cost-effective manner. The process considers expected growth in customer demand, energy efficiency, and conservation programs; existing and future demand-side management ("DSM") programs; and a wide range of supply-side generating technologies applicable to the company's service area.

**Q.** How does the company plan and manage its generation and

other major capital improvement expansion projects?

**A.** The company has a mid-term planning process in place to manage its generation and other major capital improvement projects. As part of this process, the company conducts a screening analysis and develops a multi-year business plan. This plan includes capital and maintenance forecasts for projects deemed necessary to ensure safety; maintain or improve performance of existing stations; capacity, efficiency, and reliability improvements; and environmental compliance. The company updates the business plan as new information is obtained.

Each year the company determines the capital plan for the following fiscal year. Information regarding generating unit availability, operating conditions, new regulations, and environmental compliance is reviewed and considered for inclusion in the capital plan. Some projects are required because of new environmental or safety regulations or considerations. Other projects are prioritized based upon their relative benefits. Through a review process, the projects are selected for inclusion in the budget for the next year. These projects are initiated and executed by a project team in a method like that for new generation projects. Each project goes through an estimating and

approval process to ensure its benefit and need. These projects are monitored for cost, schedule, and desired performance throughout the process until they are completed and in-service. This process has been particularly challenging over the last several years due to inflation. To illustrate, material costs such as Grain Oriented Electrical Steel (GOES) have doubled since January 2020, and transformers needed for our solar sites have also increased nearly 50 percent.

**Q.** Does the company consider planned generation outages when preparing its annual capital budget?

**A.** Yes. A proper asset management and maintenance program is critical to ensure the company's generating assets are reliable and perform as designed. Tampa Electric works with the original equipment manufacturer ("OEM") of each critical asset to ensure outages are taken at the appropriate intervals and the needed maintenance is performed. The company also has entered into Contract Service Agreements ("CSA") with GE, who is the OEM for many of our CT, to help monitor these assets and ensure parts are available during planned outages. The company plans the outages during the shoulder months to ensure generation resource availability, as well as plans for internal and

external resources to oversee and perform the work.

**Q.** How much capital did the company invest or plan to invest in the Energy Supply area in 2022 through 2024?

**A.** The company has invested or plans to invest approximately $1.95 billion in capital in Energy Supply projects from 2022 through 2024. Of that capital, approximately $474.8 million was for solar projects and the Big Bend Modernization costs approved as part of our 2021 Settlement Agreement. The remaining $1.48 billion includes $114.3 million associated with Environmental Cost Recovery Clause ("ECRC") and Clean Energy Transition Mechanism ("CETM") projects, $372.8 million for future solar and storage capacity as described in Mr. Stryker's testimony, and $394.3 million for the corporate headquarters and Bearss Operation Center. The remaining $598.6 million is related to other rate base capital and SYA projects described later in my testimony.

**Q.** What major projects are included in the total for 2022 to 2024?

**A.** Major projects for 2022 to 2024 fall into eight categories. Those categories consist of outage capital; plant

improvement non-outage capital; blanket capital; ECRC Capital; CETM capital; AFUDC capital; building renovation capital; and other.

**Q.** How much capital does the company expect to invest in the Energy Supply area in 2025?

**A.** In 2025, the company is planning on spending $845.5 million in capital to operate the generating system and address future growth safely and reliably.

**Q.** What major outages are included in the total for 2025?

**A.** There are three major needed outages happening in 2025. These include a 70-day major outage for Bayside Unit 1, a 70-day outage for Polk Unit 2, and a one-month outage for Big Bend Unit 4.

**Q.** Please explain each of the three major outages planned for 2025, what capital work will be done, the expected cost, and why the expenditures are prudent.

**A.** Bayside Unit 1 requires a major outage to replace the steam turbine Low Pressure ("LP"), High Pressure ("HP"), and Intermediate Pressure ("IP") rotors. Additionally, an

overhaul of the steam valves and an upgrade of the steam turbine controls are necessary. The total expected capital costs of the Bayside Unit 1 outage are expected to be $14.5 million. This outage is necessary because the run hours on the steam turbine are expected to be 380,000 and beyond the recommended OEM design of 250,000 hours.

Polk Unit 2 requires a major outage to perform a steam turbine and generator major inspection, HP/IP turbine seals replacement, blade feathering, IP rotor blade replacements, and main steam valve and actuator inspections. The total capital cost for this work is anticipated to be $6 million assuming the inspected items do not require additional capital discovered during inspection. This outage is necessary because the OEM recommends a major overhaul at 50,000 hours of operation, which includes opening and inspecting the turbine and replacement of parts as prescribed in the OEM's Technical Information Letters. This will be the first time opening the turbine since installation in 2017, and the unit is expected to be at 66,000 hours of operation when completed. These turbine overhauls are critical to maintain system reliability and efficiency.

Big Bend Unit 4 requires a one-month outage for compressed

air system improvements, seawall cathodic protection, boiler circulating pump work, and intake screen replacement. The anticipated capital costs to perform this work are $3.1 million, and it is needed to continue safe, reliable unit operation.

**Q.** Please identify and describe the other major capital expenditures planned for 2025 in the Energy Supply area.

**A.** In addition to outage capital, and capital needed to maintain existing equipment as well as respond to unplanned outages, capital is being devoted to solar and energy storage capacity projects described in Mr. Stryker's testimony. Capital also is needed for the SYA projects described later in my testimony and the corporate headquarters and Bearss Operation Center also described later in my testimony. Finally, capital is needed for dismantlement activities at Big Bend as part of our CETM, and a small amount of capital is needed for building renovations.

**Q.** How does the amount of production plant for the 2025 test year compare to the amount of production plant in the company's 2021 rate case?

**A.** The production plant will increase by approximately $1.5 billion since 2021. It is projected to be $7.8 billion in 2025 versus $6.3 billion in 2021.

**Q.** Please describe the major production plant additions for 2023, 2024, and 2025 as shown on MFR Schedules B-7, B-8, B-11, and B-12.

**A.** For 2023, major production plant additions included $29.6 million for the Bayside Unit 1 Major Outage and Advanced Hardware Upgrades, and $355.4 million for the final tranche of wave 2 solar.

For 2024, major production plant additions include $49.9 million for the Bayside Unit 2 Major Outage and Advanced Hardware Upgrades, $158.1 million for future solar, and $20.0 million for energy storage capacity.

For 2025, major production plant additions include $244.9 million for future solar, $147.5 million for energy storage capacity, $113.3 million for the South Tampa Resilience project, and $65.5 million for Polk 1 fuel flexibility.

The remainder of the additions for these years is attributable to prudently incurred annual sustaining

capital expenditures required to maintain the operational and environmental reliability of the company's existing generating fleet and so that those generating units will remain used and useful for delivery of electric service to our customers.

**Q.** What major production plant projects are in Construction Work in Progress for 2025 as shown on MFR Schedule B-13?

**A.** The Energy Supply Construction Work in Progress major production plant projects for 2025 include $247 million for solar, $55.9 million for South Tampa Resilience, $5.8 million for Polk fuel diversity and fuel flexibility projects and $44.5 million for an environmental compliance project.

**Q.** With these projects, what does the company expect its summer and winter reserve margins to be in 2025 and 2026?

**A.** Tampa Electric expects its 2025 summer reserve margin to be 30.5 percent and winter reserve margin to be 22.9 percent. For 2026, the summer reserve margin is expected to be 30.4 percent and the winter reserve margin to be 23.1 percent.

O&M EXPENSES

**Q.** How have the company's operating expenses for production changed since its last rate case?

**A.** The production expense has increased by $121.0 million, the majority of which is due to increased fuel costs, and $28.2 million is related to base rate expenditures. The increase in base rate expenditures represents a 29 percent increase above 2022 levels.

**Q.** What items are causing the increase in operating expenses?

**A.** The increase in operating expenses is driven by three major outages taking place in 2025 and incremental solar operations costs to manage the new solar sites. The necessary outage work and associated costs are described later in my testimony.

**Q.** What is the forecasted amount for 2025 O&M expense, and is the amount reasonable?

**A.** The forecasted 2025 O&M Production expense is $809.2 million, of which $125.1 million are base rate expenditures. These expenses are necessary to operate the generation assets in a safe, reliable manner and are

reasonable.

**Q.** What is the performance against the O&M benchmark for 2020 of the company's functional expense for production?

**A.** The production expense is higher than the benchmark by $10.9 million. The variance compared to the benchmark is due to the timing of planned outages at the company's generating units for the continued safe, reliable operation of the units. The difference is also caused by increased solar generation that provides safe, low-cost energy to our customers.

**Q.** What steps has the company taken to reduce O&M expenses in Energy Supply?

**A.** Numerous steps have been taken to manage and reduce O&M expenses within Energy Supply. First, budgets are set in a bottom-up approach to ensure the spending is necessary and prudent and then scrutinized in a top-down manner to reduce discretionary costs. Comparisons to prior year budgets and results are evaluated, and variances must be justified and explained. An Energy Supply scorecard is developed that includes an O&M goal that incents team members to control costs. Individual generation station budgets are also

managed, and station scorecards are shared with team members throughout the year. In addition, an Energy Supply continuous improvement pilot initiated in 2024 encourages team members to find ways to reduce O&M expenses.

**Q.** What was the employee count for Energy Supply 2022, 2023, and 2024?

**A.** The actual employee count for Energy Supply in 2022 was 581, increasing to 607 in 2023 and expected to be 613 in 2024.

**Q.** What is the projected employee count for Energy Supply in 2025?

**A.** Energy Supply expects employee count to remain at 613 in 2025.

**Q.** What factors caused the need to change the employee count?

**A.** Changes in employee count can be attributed to changes in generating stations and workload. The retirement of Big Bend Unit 2 and Unit 3 helped reduce contractors and employee count; however, the Big Bend Modernization project and new solar sites required additional employees. The

increase in employee count since 2022 is primarily driven by the increase in solar technicians needed to perform maintenance on the solar sites.

**Q.** How has Tampa Electric been able to manage its O&M benchmark for the 2025 production expenses?

**A.** The Energy Supply organization and the company as a whole understand that O&M expense control is strategically important. Additionally, there is an inherent competitiveness between generation stations to manage their costs and achieve the best performance metrics. Work is competitively bid, and employee oversight of service contract work takes place to ensure the work is performed and billed in accordance with agreed upon terms. Preferred source contracts are rarely used and require senior leadership approval with accompanying justification. Lastly, to ensure O&M expense is an important consideration for all employees, it is an incentive goal for team members in the Energy Supply area and the Tampa Electric organization.

**Q.** Does Tampa Electric incur O&M expenses in conjunction with a planned outage?

**A.** Yes. During planned outages there is a significant amount of work that must be performed that cannot be capitalized and is treated as O&M expense. Maintenance, as defined by FERC accounting instructions, conducted during planned outages is charged to O&M expense. Maintenance consists of large tasks that are performed infrequently and have a long duration. Typical examples are steam turbine inspections and repairs, replacement of large heat transfer surfaces in the boiler, and refurbishment of large motors and pumps. The maintenance performed during these outages is required to ensure the safe, reliable operation of the generating units.

**Q.** What is the O&M expense for planned major outages on Tampa Electric's generating units in the 2025 test year?

**A.** There are extensive O&M costs in major outages that are required on a regular four-to-five-year cycle, and efforts are made to stagger these outages to levelize O&M spending. For the 2025 test year, Bayside Unit 1, Big Bend Unit 4, and Polk Unit 2 have planned major outages, and the estimated cost is $14.5 million in incremental O&M expense.

**Q.** Please describe the work for the major planned outages in the 2025 test year that will cause O&M expenses to be

incurred.

**A.** The Bayside Unit 1 work is estimated to cost $6.5 million. Big Bend Unit 4 outage work is expected to cost $2.0 million, and the Polk Unit 2 outage O&M expense is expected to cost $6.0 million. The scope of this work includes opening and closing the casing, including vendor costs for generator and valve inspections and scaffolding. Other O&M expenses during these major outages include duct repairs; flushing lube oil and seal oil systems; valve maintenance, including internal parts replacements; motor and GSU maintenance; and, for the coal unit, cleaning ash from the precipitator and boiler slag blasting. This work is necessary and recurring during major outages.

**Q.** Has Tampa Electric taken other measures to control generation O&M costs while maintaining a safe and productive workplace?

**A.** Yes. Tampa Electric applies many different approaches to control costs, including an asset management program to manage expenses. The company focuses on centralized contractor work planning and dispatch across all three generating stations. This broader view of work demands allows for a more efficient and effective way to control

contractor head count and contractor spending. We perform ongoing assessments of in-house capabilities and cost-effectiveness versus an external contractor approach. We utilize internal resources to perform solar operations and maintenance activities, which has reduced costs while providing jobs for team members affected by the modernization of Big Bend.

**Q.** Is the overall level of production O&M expense for 2025 reasonable?

**A.** Yes. O&M expenses for 2025 are reasonable and prudent. If the incremental O&M costs associated with the additional solar sites requiring operations and maintenance personnel and the three major outages are excluded, O&M expenses will be managed close to 2022 levels. We will accomplish this by carefully managing all three major outages which, by themselves, will have a $14.5 million impact to the O&M budget. We will continue to mitigate inflation and standard labor increases by applying Asset Management procedures, implementing cost savings and continuous improvement initiatives, centralizing contractor coordination and contractor reductions. The company's O&M expenses are also mitigated by the reduction in reducing wear and tear on units due to the transition to natural gas at Big Bend and

conversion of Polk Unit 1 to a simple cycle natural gas unit.

**(5) SYA PROJECTS**

**Q.** Please list the SYA projects for which you are responsible in this proceeding.

**A.** I am responsible for explaining the Polk 1 Flexibility Project, the South Tampa Resilience Project, the Bearss Operations Center, and the company's new Corporate Headquarters, all of which are included in the company's proposed 2026 SYA. I also explain the Polk Fuel Diversity Project, which is included in the company's proposed 2027 SYA.

POLK 1 FLEXIBILITY PROJECT – 2026 SYA

**Q.** Please describe the Polk 1 Flexibility Project and why it is necessary.

**A.** The Polk 1 Flexibility Project consists of converting our existing Polk Unit 1 CC unit to a highly efficient simple cycle unit with the latest technology to better utilize that asset. It is expected to cost $80.5 million and to be in service in May 2025.

The Polk Unit 1 CC plant has been in operation for the past 27 years. The unit uses early GE 7FA turbine technology and is a one-of-a-kind installation because it is supplied fuel via the coal gasification process. Gas turbines like Polk Unit 1 require "major maintenance" at defined intervals set by the OEM, which is GE in this case. These maintenance intervals are determined by the number of running hours, stops, and starts. Polk Unit 1 requires major maintenance in 2025 to ensure the assets remain safe and reliable. However, the existing combustion system is no longer supported by GE.

Since 2018, Polk Unit 1 has been fueled with natural gas rather than syngas generated in the gasifier. Undertaking an "in kind" overhaul in 2025 would result in a unit that remains tied to the gasifier. The company reviewed all options and determined that converting the unit to simple cycle operation would provide the most customer benefits. This approach results in lower costs, improves the efficiency of the unit, and results in a nimbler asset that can follow system loads more quickly. In the event petcoke becomes more cost-effective than natural gas in the future, Tampa Electric retains the option to convert the unit to CC operation by modifying and performing maintenance on the HRSG.

**Q.** How will this project benefit customers?

**A.** The Polk Unit 1 conversion to simple cycle has an estimated fuel benefit of $40 million, and an estimated cumulative present value revenue requirements ("CPVRR") benefit of $166.9 million compared to maintaining the same configuration. It will have lower operating costs because of the updated and advanced technology, shifting the maintenance cycles from every 8,000 hours to every 32,000 hours, and improved reliability due to the reduced maintenance intervals. The simple cycle configuration increases the unit's flexibility, allowing fast starts, increased ramp rates, and lower turndowns, which will allow the company to better optimize our lower cost system assets. The simple cycle unit will also have an improved heat rate, which along with flexibility are the main drivers for fuel savings.

SOUTH TAMPA RESILIENCE PROJECT – 2026 SYA AND 2027 SYA

**Q.** Please describe Tampa Electric's South Tampa Resilience Project.

**A.** The South Tampa Resilience Project is a Distributed Energy Resource ("DER") facility located on MacDill Air Force Base ("MAFB") consisting of two phases. The first phase

includes two Reciprocating Internal Combustion Engine ("RICE") units with a capacity of 37.6 MW and has an expected commercial in-service date of April 2025. The second phase includes two additional RICE units and an Energy Storage Capacity System. Phase 2 is expected to be in service in June of 2026. The South Tampa Resilience Project generating units will serve all Tampa Electric customers during normal operations, providing electricity to MAFB and the surrounding community. In the extremely rare event of a validated threat to the military base, this project supports national security as MAFB can be electrically islanded and entirely powered by the South Tampa Resilience Project.

**Q.** Why is the South Tampa Resilience Project needed?

**A.** The four reciprocating engines are quick start units that are designed to start at a moment's notice. That quick start capability provides the company flexibility to better manage its resources and additional resilience in the middle of a dense load center. MAFB provided no cost access to the site in exchange for the added level of resilience.

**Q.** What alternatives to the project did the company consider?

**A.** There were no alternatives to the project due to MAFB's resilience and redundancy requirements. While the load requirements for the base were only 26 MW, there was an opportunity to serve the base, help alleviate transmission constraints, and improve resilience in South Tampa by adding generation in a relatively small footprint.

**Q.** What steps did the company take to ensure the project was completed at the lowest reasonable cost?

**A.** The company followed prudent procurement practices for the South Tampa Resilience Project. All major contracts were competitively bid and thoroughly evaluated prior to contract award. Tampa Electric staffed the project with skilled project management, engineering, and construction management staff to ensure that the work was completed in an efficient, high-quality manner. Tampa Electric's site management team engages frequently with the suppliers and construction team to identify opportunities to remove obstacles and resolve potential concerns. Progress in the field is cross-checked with invoices to ensure that the project is billed consistently with the contract terms. Payment of invoices occurs only after Tampa Electric confirms that the contract requirements have been met. These practices help to ensure that Tampa Electric delivers

a high quality, reliable, and safe power plant at the lowest reasonable cost.

**Q.** What benefits will the project provide to customers?

**A.** The South Tampa Resilience Project strengthens the company's near-term reserve margins and further insulates customers from an extreme weather event such as winter storm Uri in Texas that occurred in February 2021 and storm Elliott along the U.S. east coast in December 2022. Additionally, customers benefit by having four cost-effective, highly reliable resources that can be dispatched instead of larger CT, more frequently resulting in fuel savings. The cumulative projected fuel savings to customers for this project is expected to be $137.9 million.

**Q.** Will the project require new employees?

**A.** Yes. These four reciprocating engines and energy storage capacity will require five additional employees. There will be multiple shifts during the week plus weekend shifts to monitor and maintain the reciprocating engines, which will be available for dispatch around the clock.

**Q.** What is the total cost for the South Tampa Resilience

Project?

**A.** The total cost of the South Tampa Resilience Project excluding energy storage is forecasted to be approximately $160 million, including AFUDC.

**Q.** Is the project prudent?

**A.** Yes. The project will help Tampa Electric maintain summer and winter reserve margins greater than 20 percent as load continues to grow. The project is expected to achieve $137.9 million in fuel savings for customers and will provide additional resilience in a highly populated, dense load center with limited space to add transmission or new generation.

BEARSS OPERATIONS CENTER – 2026 SYA

**Q.** Please describe Tampa Electric's Bearss Operations Center and Energy Management System ("EMS") project.

**A.** The Bearss Operations Center is a modern, storm-hardened, secure operation center that will replace Tampa Electric's Energy Control Center ("ECC") and Ybor Data Center. The Bearss Operations Center and EMS project is a multi-year project to physically relocate Tampa

Electric's control and data centers into a single, Category 5 hurricane rated facility. This new facility is designed to withstand major hurricanes, protect all company cyber assets, and operate the utility command and control capabilities for the next 40 years. The project includes EMS upgrades, such as new map boards and dispatching consoles, to properly match the operating assets within the Bearss Operations Center.

**Q.** Please describe Tampa Electric's existing ECC.

**A.** Tampa Electric's ECC became operational in 1989. The facility houses the company's grid operations functions. The building was designed using 1980s technology and building codes, and the existing ECC is approaching the end of its useful life.

**Q.** Please describe Tampa Electric's existing Ybor Data Center.

**A.** Tampa Electric's Ybor Data Center also became operational in 1988. This facility serves as Tampa Electric's prime data center and customer contact center. The building was designed using 1980s technology and building codes. Like the existing ECC, this facility is not hardened to

withstand a major hurricane and is located within a storm evacuation zone.

**Q.** Why did the company conclude that it needed to replace the ECC and Ybor Data Center?

**A.** The company's decision is based on three main factors – storm resilience, space needs, and strategic objectives.

**Q.** How will construction of the Bearss Operations Center improve storm resilience?

**A.** The existing ECC is at risk from high storm surge. The facility is in Hillsborough County evacuation zone B and is located just a half mile from the Palm River, which directly connects to Tampa Bay. If a major hurricane tracked directly into Tampa Bay, the ECC would not be able to withstand the wind speeds and storm surge expected in its location, meaning the company would be forced to relocate operations control to the company's much smaller alternate Secure Center. Similarly, the Ybor Data Center is located only a short distance from Tampa Bay and would be subject to high winds and storm surge in the event of a major hurricane tracking into Tampa Bay. The new Bearss Operations Center will be located in a safer, higher, and

more inland location and will be designed to withstand major hurricane winds up to 171 mph sustained.

**Q.** What are the company's space needs that drive the need for the Bearss Operations Center?

**A.** In 2021, the company performed an assessment of the space necessary to accommodate current and future operations functions. The assessment concluded that the existing ECC was at its maximum capacity, with limited space to expand for customer growth and emerging business requirements.

**Q.** What are the strategic objectives that drive the need for the Bearss Operations Center?

**A.** The Bearss Operations Center is designed to accommodate the company's future grid reliability requirements and grid decentralization. The facility will incorporate new industry best practices, including a Renewables Control Center ("RCC") and a Diagnostic and Drone Center ("DDC"). The company also will be able to implement an EMS upgrade to properly match the operating assets within the Bearss Operations Center, such as new map boards and dispatching consoles.

**Q.** How did the company determine that the Bearss Operations Center Project is the best option to address the resilience, space, and strategic needs you described?

**A.** Tampa Electric implemented a systematic approach to evaluate how to address these needs. This approach included several steps.

First, Tampa Electric sought industry-wide advice and input from our Southeastern Electric Exchange and North American Transmission Forum Partners and conducted site reviews of several control centers to support information gathering.

Second, the company issued a RFP from reputable and experienced Architecture and Engineering ("A&E") firms with expertise in programming, evaluating, and designing Control Centers and Data Centers. Tampa Electric ultimately selected an A&E firm through this process.

Third, Tampa Electric and the A&E firm worked together in two phases to select the best option to address these needs.

**Q.** Please describe the two phases in the selection process.

**A.** In Phase I, Tampa Electric and the A&E contractor worked together to evaluate existing Tampa Electric facilities and future space plans for those facilities; potential new site locations; and conceptual site layouts. Site location criteria included size, security risk, flood zone, storm surge exposure, topography, environmental conditions, distance from strongest winds from hurricane, employee commute, site ingress and egress, proximity to major highways, proximity to load center, water supply, and relay service capability.

In Phase II, the company considered the location options and criteria identified in Phase I and developed site and building construction documents for the new facility and for renovations of existing facilities.

At the end of this process, Tampa Electric determined that the Bearss location was the best option to meet the company's needs.

**Q.** Why was the Bearss location selected as the best option?

**A.** As previously stated, the current ECC and Grid Control Center has reached its end of useful life as it is approaching 40 years old using 1980's technology and

building codes. A modern, more resilient, storm-hardened facility will allow Tampa Electric to respond faster to customer outages without having to recover its own control of the grid first. The design for the new facility also considered other potential threats such as physical, biological, and chemical, to further enhance the resilience of the facility. The ability to implement new technologies will provide customers with more reliable service in both 'blue sky' and 'black sky' conditions. It will also serve to attract and retain the best and brightest employees to implement, operate, and maintain these new technologies.

**Q.** Please explain the process Tampa Electric employed for awarding contracts for the construction and design of Bearss Operations Center.

**A.** In accordance with Tampa Electric procurement processes and procedures, the company identified an initial list of potentially qualified candidates and sent RFP to these candidates. From these RFP, the company evaluated each candidate based on experience, expertise, and capability, along with pricing. In the case of the design team, each candidate was provided with a full description of the project and with detailed requirements. Once the detailed design documents were developed with the successful design

team, this information was provided to the list of potential construction candidates for their submittal. Each construction submittal was evaluated based on experience, expertise, and capability, along with pricing.

**Q.** What is the total project cost for the Bearss Operations Center and EMS project?

**A.** The total project cost for the Bearss Operations Center and the EMS project is $335.0 million. The budgeted costs are as follows.

| | |
|---|---|
| Land Acquisition Costs | $ 10.9 million |
| Architectural Services | $ 6.1 million |
| Facility Construction Costs | $224.1 million |
| EMS | $ 27.6 million |
| IT & Telecomm Costs | $ 24.1 million |
| Other Owners Costs | $ 22.9 million |
| Contingency | $ 19.3 million |
| Total | $335.0 million |

**Q.** Please provide a background of the purpose of EMS and why the upgrade is needed.

**A.** The upgrade is necessary for several reasons. First, the

current version of the EMS software does not have the capabilities to support the grid's overall performance and will be going out of support. The existing version of EMS went in-service in 2017. Typically, Tampa Electric upgrades the EMS environment every seven years to stay current with industry requirements and the evolution of information technologies. Second, the BOC facility will have new situational awareness features such as visual displays, alarming features, operator consoles, and training simulators, all needing a new EMS configuration to ensure system monitoring and control integrity. Finally, the latest release of the EMS platform offers new functionalities.

**Q.** What new benefits will customers see from the EMS Upgrade?

**A.** There are numerous customer benefits for the new EMS Upgrade. As mentioned above, the new EMS system will provide new functionalities. These include features that will strengthen and modernize the grid; provide flexibility to accommodate new technology options and advancements; optimize the use of our generation system by incorporating energy storage capabilities, improving the generation and transmission of renewables; provide Wide Area Monitor System ("WAMS") capabilities that provide insights on

system oscillations and inertia, allowing the company to proactively identify and address system stability issues; and provide Intelligent Alarm Processes ("IAPS") that will enable faster and more informed decision making during abnormal system conditions. This upgrade will have the additional benefits of coupling EMS to a new operation center expanding situational awareness, expanding controls, and driving broader customer reliability satisfaction.

This upgrade will also enhance the company's dispatching capabilities by providing:

1. Access up-to-date forecasts for renewable energy production.
2. Utilize renewable energy dispatch to manage congestion, stability, and other factors.
3. Improve equipment lifespan, reduce losses, and enhance security through VAR dispatch.
4. Control battery charging and dispatch.
5. Enable the Distributed Energy Resource System (DERMS).
6. Efficiently manage different types of assets, such as storage and solar power.
7. Model energy storage systems and renewable energy sources.

8. Use forecasted values when real-time data is not available.

**Q.** What is the status of the Bearss Operation Center?

**A.** The Bearss Operation Center is currently under construction with an anticipated in-service date of June 2025. As of December 2023, the construction project is approximately 20 percent complete. By the end of 2024, the Bearss Operation Center is expected to be 90 percent complete.

The EMS project started in January 2023 and is approximately 32 percent complete. The EMS in-service date aligns with the first day of dispatching, which is expected to be October 1, 2025.

**Q.** What is the estimated certificate of occupancy date for the Bearss Operation Center?

**A.** The estimated certificate of occupancy for the Bearss Operation Center is May 29, 2025.

**Q.** How will the Bearss Operations Center benefit customers?

**A.** The Bearss Operation Center project is part of Tampa

Electric's continuing effort to improve the efficiency, resiliency, and reliability of its facilities. Tampa Electric's customers will see many benefits from the project. As I mentioned previously, the current ECC and Grid Control Center is nearly 40 years old and has reached the end of its useful life. Having a more resilient, storm hardened facility will allow Tampa Electric to respond faster to customer outages without the need to relocate to the backup control center. The design for the new facility also considered other potential threats such as physical, biological, and chemical, to further enhance the resilience of the facility. The ability to implement new technologies will provide customers with more reliable service in both blue sky and black sky conditions. It will also serve to attract and retain the best and brightest employees to implement, operate, and maintain these new technologies.

Tampa Electric Corporate Headquarters – 2026 SYA

**Q.** Please describe Tampa Electric's Corporate Headquarters Project ("Corporate Headquarters").

**A.** Tampa Electric is relocating its corporate headquarters from its current location in TECO Plaza in Downtown Tampa to a new 18-story tower in Midtown Tampa. Tampa Electric

will purchase a portion of the new tower as well as the rights to approximately 740 parking spaces. The new corporate headquarters will house Tampa Electric and our affiliate Peoples Gas System, Inc. ("Peoples"). Tampa Electric will occupy six floors, Peoples will occupy three floors, and employees of both will share two assembly floors containing meeting rooms and amenities for both companies. Each company will own its share of the tower. Construction of the new tower is still underway, and Tampa Electric expects to receive a Certificate of Occupancy in the Summer of 2025 with an anticipated in-service date of June 1, 2025.

**Q.** Why is the Corporate Headquarters project necessary?

**A.** Tampa Electric has leased TECO Plaza for 40 years. The company's existing lease expires in 2025. As the expiration date for the lease approached, the company began a formal process to evaluate multiple options for the company's future corporate headquarters needs. At the end of this process, the company determined that the new Corporate Headquarters was the best option for both the company and for customers.

**Q.** Please describe the process the company used to evaluate

the options to meet its corporate office needs.

**A.** Tampa Electric formed an internal team of 18 members that partnered with Colliers International to explore the option to lease or own several buildings in the Tampa area. These locations included TECO Plaza as well as other buildings in Midtown Tampa, the Water Street District, International Plaza, and Tampa Heights. The internal team developed ten scoring criteria for each option including resilience and security, connection to community, walkability, parking, nearby amenities, talent recruitment, dedicated elevators, dedicated lobby, building signage, and sustainability. The team then heard presentations from developers and scored all options according to these criteria. A copy of the final scorecard for all options is included as Document No. 8 of my exhibit. Based on this scoring, the team selected the Midtown location as the best option to meet the company's office space needs.

**Q.** How will customers benefit from the Corporate Headquarters project?

**A.** The Corporate Headquarters project is part of Tampa Electric's continuing effort to improve the efficiency, sufficiency, and adequacy of its facilities. Customers will

benefit from this project in several ways. First, owning office space is a better value proposition for customers than leasing because it should result in the accumulation of equity. Second, the Midtown location provides greater resilience in harsh weather conditions as compared to TECO Plaza because of its inland location and because it will be built to modern code standards. Third, the Midtown location offers modern facilities, dedicated parking, and more efficient floor layouts that will accommodate more team members, reduce space needs in the future, and improve employee satisfaction, which should result in lower employee turnover and costs. Finally, the new headquarters will provide flexibility by providing Tampa Electric with a right of first refusal to lease vacant space on other floors in the building and the right to sublease portions of the floors it will own if they are not needed.

**Q.** Did the company consider renovating or upgrading the existing office space in TECO Plaza?

**A.** Yes, we considered improving the existing office space, and the internal team determined that this was not in the best interests of the company or customers. The primary basis for this decision is that the cost of completing a project to upgrade TECO Plaza to modern standards and

extending the existing lease agreement would be similar to purchasing the new office space in Midtown. Furthermore, there are several issues with TECO Plaza that would not be resolved by a renovation project. First, TECO Plaza's location in Downtown Tampa does not offer the same level of resilience as the new Corporate Headquarters location. This is especially concerning because the company's critical backup systems are located below mean sea level in the basement of the building. Second, the company's employee count is expected to eventually surpass the available footprint of the building. Third, TECO Plaza does not offer dedicated employee parking, which imposes an additional cost on employees. The lack of available space and parking can in turn cause issues with employee recruitment and retention and safety concerns for employees needing to walk to remote parking lots.

**Q.** What is Tampa Electric's cost for the Corporate Headquarters Project?

**A.** Tampa Electric's cost is $188.7 million, which includes the purchase of six entire floors and the pro-rated cost for the two floors shared with Peoples in the building tower, the rights to 740 parking spaces, and the completion of the interior floors.

**Q.** How does this cost compare to the other options considered?

**A.** Tampa Electric performed a net present value revenue requirement calculation for the new Corporate Headquarters and for scenarios in which the company renovates TECO Plaza and remains in that building and eventually purchases the existing building. As shown in Document No. 9 of my exhibit, the three scenarios are nearly equivalent in terms of cost over the next 30 years.

**Q.** What steps did the company take to ensure that it is obtaining the lowest reasonable cost for the design and construction of the Corporate Headquarters project?

**A.** In late 2020, anticipating the need for design services, Tampa Electric conducted a Request For Information ("RFI") in 2021 to select architects. During the process we interviewed architects with significant experience in the utility industry, including AECOM, Song & Associates, RE Lamb, Gensler, and HDR. Ultimately, Gensler was selected based on Tampa Electric's detailed evaluation criteria, which included account cost, project management skills, staffing, work plans, and quality control. Once Tampa Electric selected the Midtown location with advice from Gensler and Colliers International, the company

worked with the Midtown building developers (Bromley and Highwoods Properties) to competitively select a contractor for the construction of the project. Tampa Electric evaluated a pool of five companies, including JE Dunn, Kast, Barr and Barr, DPR, and Brasfield and Gorrie. The company selected Brasfield and Gorrie based on over two dozen criteria used to evaluate the teams and pricing.

**Q.** Why doesn't Tampa Electric continue to lease its existing building?

**A.** Continuing to lease an aging building that was designed over 40 years ago, without parking infrastructure and with outdated systems and susceptible to low levels of flood waters, is not in Tampa Electric's best interest. Internal financial analyses were performed for an own versus lease scenario, which demonstrated that the purchase option provided a similar net present value ("NPV") value over a 30-year period.

POLK FUEL DIVERSITY PROJECT – 2027 SYA

**Q.** Please describe the Polk Fuel Diversity Project and why it is necessary.

**A.** Two of the five CT at Polk already have liquid fuel

capabilities. The Polk Fuel Diversity project is a strategic effort to add additional fuel diversity to our generation mix at Polk by adding the same dual fuel capabilities to the remaining three CT using infrastructure that is already in place at the site. In the last five years Tampa Electric has retired two pulverized coal units, placed one in long-term reserve, and converted one into a highly efficient natural gas combined cycle unit. Now, over 80 percent of Tampa Electric's generation is fueled by natural gas. This project helps to mitigate fuel supply disruption risk and energy demand in excess of natural gas supply and transportation capability.

**Q.** What will the Polk Fuel Diversity project cost?

**A.** This project is estimated to cost approximately $53.9 million.

**Q.** What options did the company consider before undertaking this project?

**A.** The company explored multiple options for mitigating these risks and determined that adding additional liquid fuel capacity to the remaining three CT was the most cost-

effective option. Initial screening options included the evaluation of capacity and storage, liquified natural gas ("LNG") storage, incremental firm gas transportation, solid fuel generation, purchased power, transmission, and renewable generation. After removing options that were too expensive or did not mitigate the fuel risk, the remaining viable options were LNG or oil.

Tampa Electric initially considered using LNG in a local storage facility to meet the backup fuel supply need. While this approach provided significant backup supply optionality and avoided generation unit modifications to burn liquid fuel, high capital expense and long-term O&M cost uncertainty coupled with permitting complexities and potential community opposition eliminated liquified natural gas as a viable option.

Tampa Electric also explored constructing an oil pipeline from the Port of Tampa Bay petroleum storage tanks to Bayside and adding liquid fuel capability to the CT and aero derivative units. This solution was appealing since it used existing assets and large quantities of oil located relatively close to the station. However, this option is not viable due to permitting uncertainty of constructing an oil pipeline under the shipping channel

and terminal suppliers' unwillingness to commit large storage volumes reserved for Tampa Electric.

This left the options of adding oil to Polk--where oil tanks already exist and two units are dual fuel capable--or build new fuel oil capacity adjacent to Tampa Bay at either Bayside or Big Bend. Using Polk is the most logical option due to its inland location and existing infrastructure for operating and maintaining units with liquid fuel capability.

**Q.** How will this project benefit customers?

**A.** The Polk Fuel Diversity project is part of Tampa Electric's continuing effort to improve the efficiency, sufficiency, and adequacy of its facilities. This project will mitigate our customers' exposure to natural gas supply disruption risk. Adding additional backup liquid fuel capacity at Polk reduces Tampa Electric customers' risk of interruption from events including terrorism, cybersecurity, a major operational natural gas pipeline failure, or an extreme weather event like storm Uri that hit Texas in February of 2021 or storm Elliott that impacted the entire east coast of the United States in December 2022. Tampa Electric has a strong, diversified

natural gas supply and transportation portfolio. But should an extreme event interrupt fuel supply or significantly increase demand in Florida, Tampa Electric will need all its resources, including additional oil at Polk, to overcome the loss of supply or with the dramatic increase in demand. The project is anticipated to be in service December 1, 2026.

**(6) SUMMARY**

**Q.** Please summarize your direct testimony.

**A.** My direct testimony provides an overview of the company's generating system and its evolution over the past decade to improve the reliability and efficiency of its generating assets resulting in significant fuel savings for customers. I describe how the company's capital budget for 2024 and projections for 2025 and beyond are reasonable and prudent. I also demonstrate that the company's proposed O&M expenses for Energy Supply in the 2025 test year are reasonable and prudent. I describe important capital projects that the company has placed in service to improve fuel diversity, resilience, reliability, customer experience, and environmental profile that are prudent and in the best interest of our customers.

Finally, I cover five SYA projects that are needed for generating system flexibility that results in fuel savings for customers, fuel diversity to generating systems, and resilience in a period of larger and more intense storms. While the company has been fortunate not to experience a direct impact from a major hurricane, it is crucial that we have an operations center and headquarters that are hardened and in non-flood prone areas so that the company can respond and restore service to customers during such an event.

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

**A.** Yes, it does.

(Whereupon, prefiled rebuttal of Carlos Aldazabal testimony was inserted.)

TECO®
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AN EMERA COMPANY

**BEFORE THE**

**FLORIDA PUBLIC SERVICE COMMISSION**

**DOCKET NO. 20240026-EI**

**PETITION FOR RATE INCREASE**

**BY TAMPA ELECTRIC COMPANY**

# REBUTTAL TESTIMONY AND EXHIBIT

**OF**

**CARLOS ALDAZABAL**

**TAMPA ELECTRIC COMPANY**
**DOCKET NO. 20240026-EI**
**FILED: 07/02/2024**

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**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

**REBUTTAL TESTIMONY**

**OF**

**CARLOS ALDAZABAL**

**Q.** Please state your name, address, occupation and employer.

**A.** My name is Carlos Aldazabal. My business address is 702 North Franklin Street, Tampa, Florida 33602. I am employed by Tampa Electric Company ("Tampa Electric" or the "company") as Vice President Energy Supply.

**Q.** Are you the same Carlos Aldazabal who filed direct testimony in this proceeding?

**A.** Yes.

**Q.** Have your title and duties and responsibilities changed since the company filed your prepared direct testimony on April 2, 2024?

**A.** No.

**Q.** What are the purposes of your rebuttal testimony?

**A.** My rebuttal testimony serves three general purposes.

First, I will address the proposal from the Office of Public Counsel's ("OPC") witness Lane Kollen to disallow planned generation maintenance expense based on a normalized number.

Second, I will respond to the direct testimony of witness Karl Rábago, filed on behalf of the League of United Latin American Citizens ("LULAC") and Florida Rising, and his arguments that the Corporate Headquarters, Polk Fuel Diversity, and Sowuth Tampa Resilience Projects should be disallowed.

Third, I will respond to the direct testimony of Devi Glick, filed on behalf of the Sierra Club, and Ms. Glick's recommendations regarding Big Bend Unit 4 and Polk Unit 1. I will also respond to the proposed issues raised by Sierra Club based on Ms. Glick's testimony.

**Q.** Have you prepared an exhibit supporting your rebuttal testimony?

**A.** Yes. Rebuttal Exhibit No. CA-2, entitled "Rebuttal Exhibit of Carlos Aldazabal," was prepared by me or under

my direction and supervision. The contents of this rebuttal exhibit were derived from the business records of the company and are true and correct to the best of my information and belief. My rebuttal exhibit consists of the following two documents:

| | |
|---|---|
| Document No. 1 | Tampa Electric's Answer to OPC's First Set of Interrogatories No. 7 |
| Document No. 2 | 2022 Fuel Savings Associated with Using Coal |

## I. NORMALIZATION OF PLANNED GENERATION MAINTENANCE EXPENSE

**Q.** On page 11 of his testimony, Mr. Kollen asserts that Tampa Electric deferred planned maintenance and "bunched the outages" in the projected test year to inflate test year planned generation maintenance expense. Is this accurate?

**A.** No. Outages are scheduled based on planned maintenance schedules and to accommodate resource and parts availability. Major planned outage work occurs in uneven cycles. The uneven nature of planned outage work is reflected in the information contained in the company's answer to OPC's First Set of Interrogatories No. 37, which I have included as Document No. 1 in my rebuttal exhibit.

**Q.** Do you agree with Mr. Kollen's recommendation for normalization of planned generation expenses in the company's test year?

**A.** No. Mr. Kollen's normalization proposal is flawed in that he recommends normalization of historical average costs rather than the costs the company expects to incur in the test year. On page 11 of his testimony, he proposes using an average of expenses starting in the year 2019. Historical costs are not indicative of needed generation expenses in the test year.

**Q.** OPC's witness, Mr. Kollen provides an alternative solution to defer what he calls "abnormally high expense" more than his calculated level of normalized expense and amortize that deferral over an extended period. He opines that this approach would "attempt to allocate the benefits" of the planned maintenance to the periods benefitting from the planned maintenance scope of work and expenses. Please comment on that alternative approach.

**A.** If the Commission decides to adjust the company's test year outage expense, then I believe it is appropriate to defer the costs above the annual allowed or "normalized"

amount for recovery in future years. Further, I believe that such an adjustment, if applied, should be made using the approach described in the rebuttal testimony of Tampa Electric witness Jeff Chronister.

## II. TAMPA ELECTRIC PERFORMED A FULL COST-BENEFIT ANALYSIS FOR THE CORPORATE HEADQUARTERS

**Q.** On page 51 of his testimony, Mr. Rábago asserts that the Commission should disallow rate recovery for the company's Corporate Headquarters "until TECO produces a comprehensive BCA that fully considers alternatives to new building construction." Did Tampa Electric perform a benefit-cost analysis for the project that included alternatives?

**A.** Yes. As I explained in my direct testimony, Tampa Electric performed a net present value revenue requirement ("NPVRR") calculation for the new Corporate Headquarters and compared it to two alternatives. This analysis was included in Document No. 9 of my Exhibit CA-1. That analysis shows that there is less than a $1 million net present value ("NPV") differential between continuing to lease the existing corporate headquarters and purchasing the Midtown location. The company then compared this quantitative assessment against the resilience and

qualitative benefits that the new Midtown location provides.

**Q.** Did the company consider alternatives other than construction of a new headquarters in Midtown?

**A.** Yes. As stated in my direct testimony, Tampa Electric partnered with Colliers International, a global commercial real estate company, to explore various lease or own locations throughout our service area. Some of these options are listed on Document No. 8 of my Exhibit CA-1. The company also evaluated extending the lease of TECO Plaza or purchasing the existing building, as shown in Document No. 9 of my Exhibit CA-1.

**Q.** What qualitative benefits did the company identify for the Midtown location?

**A.** As I explained in my direct testimony, the company created an internal team of 18 director-level employees to evaluate several criteria, which are listed on Document No. 8 of my Exhibit CA-1. This team identified Midtown as the option that provided the highest level of these qualitative benefits. Additionally, as I explained in my direct testimony, the company also identified several

qualitative drawbacks to remaining in TECO Plaza, including flooding and storm surge risk, available capacity limits, and lack of dedicated parking.

**Q.** How did the company weigh the expected costs of the TECO Plaza and the Midtown options against the identified benefits?

**A.** After careful consideration, the company determined that the Midtown location was the best alternative from a value, resilience, and employee retention and satisfaction perspective. Furthermore, as the analysis proceeded, the need to locate the company's headquarters away from potential flooding became a more important priority, especially since the economics of the options being considered were about the same. The company weighed the identified qualitative benefits of the Midtown location against the approximately $1 million difference in NPVRR cost and concluded that the benefits outweighed the $1 million difference in cost.

## III. TAMPA ELECTRIC'S POLK FUEL FLEXIBILITY PROJECT IS NECESSARY, PRUDENT, AND WILL BENEFIT OUR CUSTOMERS

**Q.** Mr. Rábago recommends that the Commission should disallow the Polk Fuel Diversity Project because the company has

not demonstrated the cost-effectiveness of the project. Do you agree with this recommendation?

**A.** No. The decision to invest in a backup oil project of this nature was based upon the need to mitigate risk. Even with the growth in the company's solar generation, Tampa Electric projects over 80 percent of its electricity for customers will come from natural gas fired generation. Florida's peninsular geography means that the state and Tampa Electric can face challenges importing fuel or power when one or more of the current sources is constrained or fully subscribed. The fact that surrounding interconnection options are limited by geography makes on-site fuel diversity even more important than for utilities with interconnection options all around them.

The Polk Fuel Diversity Project mitigates the risk of service interruptions to customers due to a disruption or deficiency in natural gas supply or delivery. The Polk Fuel Diversity Project combines existing facilities, capabilities, and expertise at the Polk Power Station to expand the backup fuel oil capacity at Polk Power Station. This is a very effective and low-cost alternative for mitigating natural gas supply risk.

As I explained in my direct testimony, the company also considered several alternatives including purchases of capacity, storage, liquified natural gas ("LNG") storage, incremental firm gas transportation, solid fuel generation, purchased power, transmission, and renewable generation. The company determined that this project was the most feasible and logical option to add fuel diversity. In short, the company did not develop a quantitative cost-effectiveness analysis for the Polk Fuel Diversity Project because it is not needed. This project will be completed to mitigate fuel supply risk, which enhances reliability, and it is clearly the right option for Polk Power Station.

## IV. TAMPA ELECTRIC'S SOUTH TAMPA RESILIENCE PROJECT IS NECESSARY, PRUDENT, AND WILL BENEFIT OUR CUSTOMERS

**Q.** On page 50 of his testimony, Mr. Rábago asserts that Tampa Electric did not provide a cost-benefit analysis for the South Tampa Resilience Project. Do you agree with this assertion?

**A.** No. Tampa Electric performed a comprehensive cost-benefit analysis which showed that the South Tampa Resilience Project has a projected net benefit to customers of approximately $10 million CPVRR, excluding any benefit

from the value of reduced emissions. This net benefit includes projected fuel savings to customers of $137.9 million, and is shown in Document No. 5 in Exhibit No. JA-1, which is attached to the direct testimony of Jose Aponte. This project was also scrutinized by the company's capital leadership team and reviewed and approved by the Board of Directors.

**Q.** Mr. Rábago also asserts that the project will have "new highly-pollution [sic] fossil fuel generation." Is this an accurate characterization of the project?

**A.** No. As stated in my direct testimony the South Tampa Resilience Project is expected to produce $137.9 million of cumulative projected fuel savings for customers. These engines are highly efficient, and, because of their efficiency, they operate using less fuel, which will also result in reduced $CO_2$ emissions on our system over their operating life.

**Q.** How will these natural gas burning engines result in reduced $CO_2$ emissions?

**A.** These reciprocating engines complement Tampa Electric's portfolio of four large, efficient natural gas combined

cycle units. Because the reciprocating engines can dispatch very quickly (and turn off quickly, ramp up and down rapidly, and be cycled on and off repeatedly), they will allow Tampa Electric to dispatch its generating assets more efficiently. Large combustion turbines ("CT") have a limited number of starts, must be started early to warm up, must be blended into the combined cycle, and then must run for several hours to meet minimum run times. By contrast, the company can dispatch the South Tampa reciprocating engines on and off to meet the load exactly when it is needed. Keeping the combined cycle steady while dispatching reciprocating engines to precisely match changing load demands uses less fuel and reduces emissions compared using large, combined cycle units to follow load.

Additionally, the quick start nature of the reciprocating engines allows them to cover spinning reserves without even turning on. Without the reciprocating engines, spinning reserves may have to be covered by keeping extra MW spinning in combined cycle mode which causes extra fuel to be used without serving more load. This more efficient and effective use of the combined cycle units will likely extend the life of those assets.

**Q.** Also on page 50, Mr. Rábago criticizes the project on the

grounds that it will not receive "direct funding support from the U.S. Department of Defense." Do you agree with this criticism?

**A.** No. Although the government provided no "cash" funding support for the project, the lease agreement between the government and Tampa Electric allows "rent" to be paid in the form of in-kind consideration or "in-kind rent" which takes the form of Electrically Islanded Operations on MacDill Air Force Base ("MAFB") in the event of a very rare, declared emergency.

**Q.** Why was this rent-free land beneficial for the project?

**A.** Available land in South Tampa is very limited. Securing an available parcel that could both accommodate these reciprocating engines and be permitted for their use would have been difficult, if not impossible, in this load congested area. This arrangement is a great solution that addresses a capacity need for the company and solves a resilience need for MAFB.

## V. TAMPA ELECTRIC'S PLANS FOR POLK UNIT 1 AND BIG BEND UNIT 4 ARE PRUDENT AND WILL PROVIDE BENEFITS TO OUR CUSTOMERS

**Q.** In her direct testimony, Ms. Glick asserts that Polk Unit

1 cannot mitigate the impacts of natural gas price volatility because the Integrated Coal Gasification Combined Cycle ("IGCC") equipment is in reserve standby, because environmental regulations restrict potential IGCC operation, and because Polk Unit 1 has been unreliable. Do you agree with this analysis?

**A.** No. Due to limited interconnects with other states, the amount of renewable power or replacement power that can be imported into the state is limited. Therefore, any renewable power or any replacement power must be generated within the state to meet reliability needs. Retaining the existing solid fuel assets of Polk Unit 1 is important to provide fuel diversity options and help mitigate the potential volatility of natural gas prices. With some necessary maintenance, Polk Unit 1 could return to IGCC operation within a year and help protect customers from high natural gas prices if the forward price curve shows petcoke prices will be lower than natural gas prices. Additionally, if Polk Unit 1 were to return to IGCC operation but retire before 2032, it would not be subject to any Greenhouse Gas ("GHG") emission standards. If Polk Unit 1 ceased operation after January 1, 2032, but before 2039, co-firing a minimum of 40 percent natural gas would be required, or a Carbon Capture and Storage ("CCS")

system with a 90 percent $CO_2$ capture rate could be used. Finally, Polk Unit 1 has been a very reliable generating asset on our system, and it is expected to be even more reliable once converted to simple cycle operation in the Polk 1 Flexibility Project.

**Q.** On page 33, Ms. Glick presents the net equivalent forced outage rate and argues that Polk Unit 1 has been "relatively unreliable." Do you agree with her characterization of that information?

**A.** No. As noted in Ms. Glick's testimony, Polk Unit 1 had unusually high net equivalent forced outage rates ("NEFOR") in the years 2020, 2021, and 2022; however, I do not view these anomaly years as an accurate predictor of future performance. There were two unexpected major forced outage events that caused significant down time during this period. However, several primary components of the combustion turbine and generator were refurbished to "like new" condition during the outage work. These refurbishments, along with the combustion system upgrades associated with the planned simple cycle conversion, incorporate robust, advanced combustion turbine technology and will position the unit for high reliability for its remaining useful life.

**Q.** On page 26 of her testimony, Ms. Glick also asserts that the Polk Unit 1 IGCC assets are no longer used and useful, and that the only reason that the company has not retired those assets is to keep them in rate base. Do you agree with this characterization of the company's decision-making?

**A.** No. The IGCC assets on Polk Unit 1 are a unique, proven technology and have been in a designed layup configuration for the past several years. With certain evaluation, inspection, maintenance, and testing, the unit can be returned to service operating as an IGCC within a year. The primary equipment and systems within the IGCC have been maintained in a used and useful state and remain an integral component to mitigate risk related to volatile natural gas prices.

**Q.** On page 27, Ms. Glick suggests that the Commission should order retirement of the Polk Unit 1 IGCC assets and create a regulatory asset to allow the company to recover some or all the undepreciated balance of the assets. Do you agree with this proposed treatment of the IGCC equipment?

**A.** No. It is not appropriate to order the retirement of these assets since they are potentially useful and could benefit

customers in the future. However, I do agree that if the Commission orders the retirement of the IGCC equipment, then the remaining value of the assets should be transferred to a regulatory asset and recovered from customers. Of course recovery of the regulatory asset over a shorter period than the remaining life of the assets would increase customer bills. In addition, since a regulatory asset balance recovered over the remaining life of the assets would have the same impact on customer bills as keeping the assets in rate base for future use, I do not see the benefit in forcing retirement of the assets. In either scenario, customers would lose the fuel diversity benefits of retaining the IGCC components in service.

**Q.** Ms. Glick asserts that Tampa Electric did not provide an analysis demonstrating that converting Polk Unit 1 to simple cycle operation is more economic than alternatives, including retirement. She also asserts that the converted unit will be only "marginally economic." Do you agree with her assessment?

**A.** No. First, Tampa Electric did compare the economics of converting Polk Unit 1 to simple cycle operation to alternatives, including early retirement of the combined

cycle components of Polk Unit 1. Second, this analysis showed that the conversion to simple cycle operation resulted in the most cost savings for customers when compared to a reference case with Polk Unit 1 continuing to operate as a natural gas combined cycle unit.

The company evaluated two additional options besides the conversion of Polk Unit 1 to simple cycle operation. In one of the options, the company analyzed retirement of the combined cycle components for Polk Unit 1 early in the year 2028. The second option evaluated an optionality case, in which Polk Unit 1 could operate in combined and simple cycle modes. Ultimately, the analysis showed that conversion of Polk Unit 1 to simple cycle mode is the most favorable option for customers, with an estimated CPVRR savings of $166.9 million, compared to an estimated $24.6 million savings for the early retirement option, and $39.1 million savings for the optionality case.

The Polk Unit 1 conversion is not only the most economic option for customers; it also provides additional dispatch flexibility to our system. Operating Polk Unit 1 as a simple cycle combustion turbine will allow for faster starts, shorter up/down times, and lower turndowns, enabling Tampa Electric to better optimize

dispatch of the other assets in the generation portfolio.

**Q.** On pages 42 to 44 of her direct testimony, Ms. Glick asserts that Big Bend Unit 4 was uneconomic to operate in 2019, 2020, and 2023. Is this statement accurate?

**A.** No. As Ms. Glick admits in her testimony on page 44, the approach of including long-term capital investments as a lump sum in a single year can give false uneconomic signals. Tampa Electric had large capital investments in the years 2019, 2020, and 2023 that resulted in false economic signals in Ms. Glick's Table 6.

**Q.** Why did Tampa Electric operate Big Bend Unit 4 using coal during the years referenced by Ms. Glick?

**A.** Big Bend Unit 4 burned coal for a variety of reasons over the last five years. From 2019 through 2021, the unit operated on coal when the capacity was needed. The coal-fired capacity was more than double the capability on natural gas and the additional capacity was needed to serve load and reserves. The unit also operated on coal for environmental reasons related to the Manatee Protection Plan or managing water levels at the plant.

Big Bend Unit 4 was also committed on coal during a Gulfstream Natural Gas System ("GNGS") pipeline outage for about two weeks in March 2021. This was a significant pipeline outage for Tampa Electric and the state of Florida, in which Big Bend Unit 4's dual fuel capability was critical to meet the demand of Tampa Electric customers.

Other than the GNGS outage or environmental reasons, the unit was committed only when it was economic relative to the purchased power market or when constraints such as inbound transmission, availability of power supply, or system conditions prevented economic purchased power from displacing Big Bend Unit 4.

During Winter Storm Uri in February 2021, Big Bend Unit 4 was committed on coal at maximum capacity to reduce natural gas requirements. Tampa Electric experienced a significant loss of natural gas supply during the event, and Big Bend Unit 4's coal capability reduced system natural gas requirements. As natural gas prices spiked during the event, operating Big Bend Unit 4 on coal provided fuel savings for customers and mitigated natural gas pipeline penalties as pipeline alert days were posted every day. Penalties on pipeline alert days can be three

times the gas price when actual gas burns exceed scheduled burns.

In late 2021, the capability of Big Bend Unit 4 on natural gas was increased to a level like its coal-fired capacity. In 2022, with natural gas prices at their highest levels in years, Tampa Electric used coal in Big Bend Unit 4 because it was more economic than natural gas. The estimated fuel savings for customers was over $32 million in 2022, as demonstrated in Document No. 2 of my rebuttal exhibit CA-2 titled, "2022 Fuel Savings Associated with Using Coal". These savings are a direct result of Big Bend Unit 4 being dual fuel capable.

Although Ms. Glick claims on page 43 of her testimony that the market conditions in 2022 are rare and not expected to continue going forward, Tampa Electric prepares to be resilient and reliable in any number of unexpected scenarios. We have experienced extreme events (weather and other) recently and prepare for uncertain conditions going forward.

**Q.** Are there other examples showing the benefits of dual fuel capability at Big Bend Unit 4?

**A.** Yes. In December 2022, Big Bend Unit 4 operated on coal to reduce portfolio natural gas requirements during Winter Storm Elliott. In 2023, Big Bend Unit 4 coal burn was at an all-time low. During 2023, the unit operated on coal early in the year to support environmental constraints. In August 2023, Tampa Electric experienced extreme heat and set a new summer peak record almost five percent greater than its previous summer peak. Gas pipeline alert days were issued daily throughout the summer, and there was very little delivered gas available in the Florida market. Again, Big Bend Unit 4 operated on coal to reduce system natural gas needs and to mitigate natural gas pipeline penalties.

In 2024, Big Bend Unit 4 has burned little coal year to date. The only coal burn took place on January 13, 2024, through January 16, 2024, as a winter storm drove natural gas prices to $12/MMBtu at the Henry Hub. The estimated fuel savings for customers was approximately $600,000 during the event. Based on the extreme weather experienced during May 2024, we expect to commit Big Bend Unit 4 on coal this summer as needed to reduce system natural gas requirements and mitigate natural gas pipeline penalties.

**Q.** On pages 45 and 46 of her direct testimony, Ms. Glick

projects that Big Bend Unit 4 will remain uneconomic to operate going forward. Do you agree with her analysis?

**A.** No. Tampa Electric expects to operate Big Bend Unit 4 mostly on natural gas. However, it is important that we maintain the coal capability on Big Bend Unit 4 for fuel diversity, resilience, and to minimize fuel expense for our customers.

Dual fuel capability on Big Bend Unit 4 allows Tampa Electric to avoid buying additional firm gas transportation. The available gas transportation in Florida is limited and expensive. Given the limited availability of transportation, transportation is typically only available for the entire year, rather than seasonally, and for 10 to 15-year minimum terms. To serve a similar-sized 400 MW combined-cycle natural gas unit, the cost of incremental firm natural gas pipeline transportation would exceed $25 million annually. If this avoided cost of pipeline transportation was added to Ms. Glick's Table 7, the projected net value of Big Bend Unit 4 would be positive in all years.

The dual fuel capability of Big Bend Unit 4 allows Tampa Electric to put the unit on coal for short periods of

time during periods of extreme demand and avoid the significant fuel expense of buying additional long term firm gas pipeline transportation.

**Q.** How does fuel switching capability at Big Bend Unit 4 benefit customers?

**A.** The fuel switching capability at Big Bend Unit 4 is important and can result in fuel savings for customers, help avoid pipeline penalties, reduce gas requirements during periods of extreme demand, and avoid the expense of long-term firm gas pipeline transportation. During extreme events or a pipeline disruption, onsite solid fuel for Big Bend Unit 4 could mitigate potential electric service interruptions for our customers. Big Bend Unit 4 is the only dual fuel unit in the company's portfolio capable of quickly switching from one fuel to another and remaining on that onsite fuel during an extended fuel interruption such as a cyber-attack similar to the Colonial pipeline incident in 2021, a terrorist attack on energy infrastructure, an operational pipeline failure, extreme winter weather such as Winter Storms Uri or Elliott, a hurricane in the Gulf Coast damaging natural gas infrastructure, or the Piney Point reservoir incident near a Gulfstream pipeline compressor in 2021.

**Q.** On page 47 of her testimony, Ms. Glick claims that Tampa Electric did not evaluate whether continued operation of Big Bend Unit 4 is in the best interest of the company's customers. Is this statement correct?

**A.** No. Tampa Electric evaluated continued operation of Big Bend Unit 4 and considers the continued operation of that unit to be in the best interest of the company's customers. Big Bend Unit 4 currently has dual fuel capability and can operate using natural gas or coal. Considering the recent volatility of natural gas prices, the scarcity of available firm natural gas pipeline transportation and amount of pipeline alert days in Florida, and supply constraints on the natural gas pipelines during periods of extreme demand, keeping Big Bend Unit 4 in operation to provide fuel diversity and system reliability is crucial for our customers.

**Q.** Do you agree with Ms. Glick's assumptions on the costs for Big Bend Unit 4 to comply with EPA's Effluent Limitation Guidelines ("ELG") rule?

**A.** No. Ms. Glick's environmental assessments are based on incorrect assumptions. Tampa Electric has already achieved compliance with the ELG rule through its deep

injection well ("DIW") system. The discharge of flue gas desulfurization ("FGD") wastewater to the DIW system is now permitted and regulated through the Florida Department of Environmental Protection's ("FDEP") Underground Injection Control ("UIC") Program. Tampa Electric has already incurred the cost to comply with the ELG rule as part of its design and construction of the DIW system.

I do not know the exact source of the $129 million compliance cost estimate included in the EPA report cited in Ms. Glick's testimony. It is possible that EPA made an erroneous assumption due to the fact that Big Bend's National Pollutant Discharge Elimination System ("NPDES") permit has been delayed. The EPA is not privy to additional information that has been provided to FDEP but has not yet reached EPA as a part of the formal review process. It appears that the EPA's projections assume that Tampa Electric will design and build a zero-discharge system for FGD wastewater (and Bottom Ash and Fly Ash Transport Water). For plants that have no alternative to surface water discharge and no basis for exemption, the zero-discharge system is the only compliance option. However, Big Bend does have an alternative to continued surface water discharge, through its DIW system. Since a

zero-discharge system is not required at Big Bend Unit 4, EPA's projected cost estimate is not applicable.

**Q.** Do you agree with Ms. Glick's assumptions about Big Bend Unit 4 compliance with EPA's Mercury and Air Toxics Standards ("MATS") regulations?

**A.** No. Big Bend Unit 4 is already compliant with the MATS regulations and will continue to be compliant in the future. No additional costs will be incurred to continue operating the unit under MATS.

**Q.** What is the basis for Ms. Glick's apparent misunderstanding?

**A.** The lowest achievable filterable particulate matter ("FPM") rate of 0.00953 lb/MMBtu referenced by the Sierra Club is incorrect. The Sierra Club referenced this rate based on the EPA MATS Technical Analysis, suggesting the Big Bend Unit 4 may not be able to comply with the new 0.01 lb/MMBtu and may need controls to meet the compliance deadline by 2027. Tampa Electric was able to recalculate the lowest achievable filterable FPM rate of 0.00974 lb/MMBtu using the same FPM hourly database data referenced by EPA, which is close to the FPM rate of

0.00953 lb/MMBtu referenced by Sierra Club. However, this is not the rate that would be used to determine compliance. The FPM rate must be recalculated using the 30-boiler operating day data to make an appropriate compliance assessment with the new limit of 0.010 lb/MMBtu based on a 30-boiler operating day average. Tampa Electric recalculated the quarterly lowest achieved FPM rate using the actual 30-boiler operating day data. The average FPM rate on Big Bend Unit 4 was 0.0035 lb/MMBtu on a 30-boiler operating day average from January 1, 2023, through December 31, 2023. This FPM monitoring data shows that Big Bend Unit 4 will continue to demonstrate compliance with the new MATS Rule Revisions, including the FPM limit of 0.010 lb/MMBtu based on a 30-boiler operating day average.

**Q.** On page 51 of her testimony, Ms. Glick suggests that the company could convert Big Bend Unit 4 to seasonal operation during winter peak months. Have you evaluated this alternative?

**A.** No. The company needs Big Bend Unit 4 to be dual fuel operational during the entire year. Specifically, Tampa Electric customers benefit from Big Bend Unit 4's coal capability during extreme events (weather or other) in

the summer and winter months to reduce portfolio gas requirements and to avoid having to acquire long-term firm natural gas pipeline transportation. Outside of the summer and winter periods, Big Bend Unit 4's coal capability provides fuel resilience in the event of a gas pipeline interruption.

**Q.** Ms. Glick also suggests the unit could be converted to operation solely on natural gas ahead of its retirement. Have you evaluated this alternative?

**A.** No. As I previously stated, the dual fuel functionality of Big Bend Unit 4 provides needed fuel diversity and resilience that helps to mitigate risk associated with a natural gas supply interruption as well as mitigating the impacts of volatile natural gas prices. Without Big Bend Unit 4's dual fuel functionality, Tampa Electric would be required to purchase incremental long-term gas transportation, and it would be detrimental to fuel resilience as it would increase the impact of a natural gas supply disruption for customers.

**Q.** On pages 52 through 57 of her testimony, Ms. Glick argues that the company should retire all its coal-fired generation because it exposes customers to volatile fuel

prices and high environmental compliance costs. Do you agree with this conclusion?

**A.** No. Tampa Electric does not rely on coal and petcoke as Ms. Glick suggests on page 54. Going forward, Tampa Electric projects coal as a percentage of generation mix to be less than one percent annually. Maintaining the dual fuel capability of Big Bend Unit 4 and Polk Unit 1 will help our customers mitigate the risk of volatile natural gas prices as those dual fuel units provide an alternate fuel to natural gas during periods of price volatility. Specific examples of coal-fired generation mitigating natural gas price volatility are Winter Storm Uri, the high natural gas prices in 2022, and most recently, the four days of natural gas price spikes in January 2024, which I previously described.

**Q.** On page 57 of her testimony, Ms. Glick asserts that Tampa Electric should replace its coal-fired assets with solar generation, energy storage, energy efficiency, and demand response. Do you agree that these resources could provide a substitute for the company's coal-fired generation?

**A.** No. While transitioning to solar generation, energy storage, energy efficiency, and demand response

technologies reduce carbon emissions, there are certain challenges associated with these technologies. For example, solar generation is not available to meet customer's needs during early morning winter peaks. Solar generation requires significant amounts of land that simply may not be available in a compact, urban service territory like Tampa Electric's. Solar generation, energy storage, energy efficiency, and demand response technologies are important tools that Tampa Electric supports to complement our generation resources. However, these alternative energy resources outlined in Ms. Glick's testimony are not a viable option to replace Tampa Electric's coal units at this time.

**Q.** On pages 58 through 63 of her testimony, Ms. Glick describes the Energy Infrastructure Reinvestment ("EIR") program and recommends that the company should set an early retirement date for Big Bend Unit 4 and apply for EIR funding. Have you evaluated this program and considered Ms. Glick's recommendation?

**A.** Although Tampa Electric is aware of the EIR program, we have not evaluated its use as an early retirement mechanism for Big Bend Unit 4. As I previously stated, the continued operation of Big Bend Unit 4 as a dual fuel

unit is in the best interest of customers, and it provides added fuel resilience and helps mitigate volatile natural gas prices. Tampa Electric does not believe the EIR program is an economic alternative to accelerate the retirement of these assets, nor does the company believe they should be retired at this time.

## VI. TAMPA ELECTRIC'S POSITIONS ON SIERRA CLUB'S OTHER ISSUES

**Q.** Should Tampa Electric recover Operating and Maintenance ("O&M") costs associated with keeping integrated gasification, steam turbine, and/or heat recovery steam generator components at Polk Unit 1 in long-term standby, and what adjustments should be made?

**A.** Yes. As I previously explained, the IGCC, steam turbine, and heat recovery steam generator components of Polk Unit 1 should remain in service because they allow the unit to burn solid fuel. This provides fuel diversity and reliability benefits to the company's customers. Consequently, the company should be able to recover the O&M costs associated with those components, and no adjustments should be made.

**Q.** Should Tampa Electric recover O&M costs associated with injecting wastewater into deep wells at Polk Unit 1 and

Big Bend Unit 4, and what adjustments should be made?

**A.** Yes. These wells are necessary to maintain compliance with applicable environmental regulations at those units. Again, maintaining the capability to operate Polk Unit 1 and Big Bend Unit 4 on solid fuel provides fuel diversity and reliability benefits to Tampa Electric's customers. As a result, the company should be able to recover O&M costs associated with the wastewater injection wells, and no adjustments should be made.

**Q.** Should Tampa Electric recover any O&M costs associated with coal or petcoke combustion at Polk Unit 1 and/or Big Bend Unit 4, and what adjustments should be made?

**A.** Yes. Maintaining the ability to burn solid fuel in Polk Unit 1 and Big Bend Unit 4 provides fuel diversity and reliability benefits to the company's customers. As a result, the company should be able to recover O&M costs associated with coal or petcoke combustion at Big Bend Unit 4 and/or Polk Unit 1, and no adjustments should be made.

**Q.** Should Tampa Electric be required to conduct an alternative analysis for retiring Polk Unit 1 and/or Big

Bend Unit 4 before their current retirement dates?

**A.** No. Tampa Electric should not be required to conduct alternative analyses for retiring Polk Unit 1 or Big Bend Unit 4. As I stated earlier in my testimony, Tampa Electric performed an analysis of early retirement of the combined cycle components of Polk Unit 1 which demonstrated the conversion to simple cycle resulted in the greatest cost savings for customers. Tampa Electric did not evaluate retirement of Big Bend Unit 4 because, as previously stated, the dual fuel functionality of Big Bend Unit 4 provides needed fuel diversity and resiliency that helps to mitigate risk associated with a natural gas supply interruption or volatile natural gas prices.

**Q.** Should Tampa Electric be required to conduct an analysis for retiring Polk Unit 1 and/or Big Bend Unit 4 earlier to avoid environmental compliance costs associated with EPA coal rules finalized in April 2024?

**A.** No. As I previously explained, Tampa Electric has already evaluated whether these units will comply with these environmental regulations and determined that the company will not incur any incremental expense to comply with those regulations.

**Q.** Should Tampa Electric be required to evaluate procurement of additional solar and energy storage projects to facilitate the earlier retirements of Polk Unit 1 and Big Bend Unit 4.

**A.** No. The company evaluated the level of cost-effective solar generation and energy storage it could implement in the near term and is seeking cost recovery for projects totaling approximately 490 MW of additional solar generation and 115 MW of energy storage capacity in this rate case. Furthermore, as I previously explained, these resources are not a viable option to replace Tampa Electric's coal units at this time.

**Q.** Should Tampa Electric be required to apply for the U.S. Department of Energy's Energy Infrastructure Reinvestment Program for Polk Unit 1 and/or Big Bend Unit 4?

**A.** No. Again, Tampa Electric's solid fuel units provide fuel diversity and reliability benefits that cannot be cost-effectively replaced by solar and energy storage at this time, and those units should not be retired.

**Q.** Should Tampa Electric be required to cease all coal combustion at Polk Unit 1 by 2024 and Big Bend Unit 4 by

2025?

**A.** No. For all the reasons I have already discussed in my testimony, these units should remain in-service and retain the equipment necessary to combust solid fuel.

## VII. SUMMARY

**Q.** Please summarize your rebuttal testimony.

**A.** My rebuttal testimony addressed statements made in the direct testimony of OPC's witness Kollen, LULAC's witness Rábago, and Sierra Club witness Glick. I explained why the Commission should reject witness Kollen's proposal to reduce the company's 2025 test year outage expense, and I recommended that if the Commission decided to adjust outage expense, then it should adopt the approach described in Mr. Chronister's rebuttal testimony.

I addressed the assertions of Mr. Rábago, filed on behalf of LULAC, that the Corporate Headquarters, Polk Fuel Diversity, and South Tampa Resilience Projects should be disallowed. I explained that his arguments are unfounded, that these projects are prudent, and that Mr. Rábago's recommendations should not be followed.

I responded to the direct testimony of Ms. Glick, filed on behalf of the Sierra Club, and Ms. Glick's recommendations regarding Big Bend Unit 4 and Polk Unit 1. I explained that these units are useful, provide benefits to customers, and contrary to Ms. Glick's recommendations, should not be retired or replaced at this time. I also explained that the costs of operating and maintaining the units should continue to be recovered in base rates.

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

**A.** Yes.

BY MR. MEANS:

**Q Mr. Aldazabal, did you also prepare and cause to be filed with your direct testimony an exhibit marked CA-1, consisting of 10 documents?**

A I did. I did.

**Q And did you also prepare in cause to be filed with your rebuttal testimony an exhibit marked CA-2, consisting of two documents?**

A Yes, that's correct.

MR. MEANS: Mr. Chairman, we would note for the record that Exhibits CA-1 and CA-2 have been identified on the Comprehensive Exhibit List as Exhibits 18 and 142.

CHAIRMAN LA ROSA: Okay.

BY MR. MEANS:

**Q Mr. Aldazabal, did you prepare a summary of your direct and rebuttal testimony?**

A I did.

**Q Would you please provide that now?**

A Sure.

Good afternoon, Commissioners. My direct testimony describes the company's energy supply department and the improvements in the fuel efficiency and reliability of our generation fleet since Tampa Electric's last base rate case. My testimony also

describes our plan to build on these successes, including the addition of approximately 490 megawatts of solar generation, and 115 megawatts of energy storage through the end of 2026.

The company also plans to install four reciprocating combustion engines at MacDill Air Force Base in South Tampa.

The company plans to complete three major outages and a critical unit conversion at Polk that will provide fuel savings, and add needed flexibility to meet system needs. In 2026 we plan to add fuel diversity to our system by adding liquid fuel capability at Polk station.

My testimony also addresses two major projects, the Bearss Operation Center and the new Midtown headquarters.

The Bearss Operation Center will be a modern category five rated operation center that will replace functions currently housed in the company's Energy Control Center and Ybor Data Center. The new operations center will be located at a safer, higher and more inland location, and will be designed to operate the company's system for the next 40 years. The new operations center will include an energy management system upgrade, including new map boards and dispatching

consoles.

The Midtown headquarters will replace Tampa Electric's existing headquarters in TECO Plaza, and provide modern facilities, dedicated parking, a greater storm resilience due to its inland location, and construction under modern building codes. The building's more efficient floor layout will accommodate more team members, reduce space needs in the future, and improve employee satisfaction. This new headquarters is nearly equivalent in cost to remaining in TECO Plaza and renovating the existing space, but with the added benefits I previously described.

My rebuttal testimony addresses three main topics.

First, I respond to OPC Witness Kollen's proposal to use historical average planned outage costs to normalize future planned outage costs.

Second, I explain why this commission should reject LULAC's Witness Rabago's recommendation for the corporate headquarters, Polk fuel diversity and South Tampa Resilience Projects.

Third, my rebuttal testimony explains why it is prudent for the company to retain dual fuel capabilities at Polk Unit 1 and Big Bend Unit 4 in response to arguments raised by Sierra Club. In short,

retaining dual fuel capability provides fuel diversity, reliability and fuel price mitigation for our customers.

Thank you. That concludes my summary.

MR. MEANS: Mr. Chairman, we tender the witness for cross-examination.

CHAIRMAN LA ROSA: Thank you.

OPC.

MR. REHWINKEL: Thank you, Mr. Chairman.

EXAMINATION

BY MR. REHWINKEL:

**Q Good afternoon, Mr. Aldazabal.**

A Good afternoon.

**Q Good to see you again.**

A Good seeing you.

**Q I just want to talk to you about normalization of outage costs, if I can.**

**You would agree that Tampa Electric has three major outages planned for 2025?**

A We do.

**Q Wouldn't you agree that major outages occur on a regular four- to five-year cycle?**

A Yes. That's typical.

**Q And the total expected capital costs of the Bayside Unit 1 outage is expected to be 14-and-a-half million dollars?**

A The total expected O&M costs for all three outages is expected to be 14-and-a-half million dollars.

**Q Okay. This outage is necessary because the run -- run time or run hours on the steam turbine are expected to be 380,000 hours in the test year?**

A Yes. That's correct. And just to clarify, I was referring to the O&M costs on those outages.

**Q Okay.**

A Yes.

**Q This 380,000-hour number is contrasted with the OEM, or original equipment manufacturer's recommendation that the run time between outages should be 250,000 hours?**

A Yeah. For the base outage, yes, that's correct.

**Q The company chose, for whatever reason, to exceed the OEM recommendations, correct?**

A Well, we exceeded those OEM hours as a testament to our asset management program. When you have these large components, you do borescope inspections, and if you don't observe any issues through the asset management process, you can defer the outages beyond the OEM recommended time.

**Q But it was the company's choice to do that, right?**

A It was our choice for the benefit of customers, yes.

**Q All right. So the steam turbine for Bayside 1 reached 250,000 operating hours in 2004?**

A Yes. That's correct.

**Q Okay. So for the last 20 years, you have been operating the steam turbine at this unit beyond the OEM recommendation?**

A That's correct.

**Q Polk Unit 2, what are the O&M costs associated with this outage?**

A The O&M costs with -- for the Polk outage are -- give me one second.

**Q Is it six million?**

A Yep, six million.

**Q Okay. And this outage is necessary because the OEM recommends an overhaul at 50,000 hours, is that right?**

A That is correct.

**Q And that threshold was reached in fourth quarter of 2021, right?**

A That is correct.

**Q And wouldn't this be the first time you open this turbine at this unit since installation in 2017?**

A That is correct.

**Q By the time you implement this -- or perform this outage in 2025, you will have reached 66,000 hours estimated, right?**

A That's the estimated time. Yes.

**Q Was this maintenance related to this outage deferred?**

A No.

**Q So it was never planned at a prior time and then --**

A Not for Polk, no.

**Q Okay. Were any of the three outages that we are talking about here, was the -- were those projects deferred?**

A No. The only outage that was deferred was the Bayside 2 outage, which had a similar steam turbine upgrade done. And that one was deferred because we had some issue with some parts. But those other outages have not been deferred.

**Q Okay. Big Bend 4, your costs for this outage is three-and-a -- $3.1 million?**

A I believe it's two million.

**Q Two million, okay.**

A And to clarify, we call them three majors. Two of the outages are majors. They are 70-day outages, so they are long duration outage. The Big Bend 4 outage

is actually a 30-day outage. We are calling it a major, because typically, cleanup outages are two weeks in duration. When they exceed two weeks, we tend to refer to them as major outages. But the Big Bend 4 outage is a -- I would call it a minor major, if you will.

**Q Okay. But what you are doing at Big Bend 4, that's not something that you do every year at Big Bend 4, right?**

A That's correct.

**Q In 2023, is it true -- isn't it true that you incurred $46,738,000 of generation maintenance expense?**

A 40 -- what was the number you quoted?

**Q 46.738.**

A That's correct.

**Q Okay. And for the test year, you are forecasting to incur 68.539 million for generation maintenance?**

A That is correct. And this year, we are forecasting to incur 59 million in generation maintenance.

**Q What was the last thing you said?**

A This year, we are expecting 59 million in generation maintenance expense, 2024.

**Q So the test year generation maintenance expense is 28.8, or 46.6 percent greater than the last**

**actual year of generation maintenance that you have experienced, right?**

A Can you repeat your numbers?

**Q Well, let me -- yes.**

**And just as a predicate, 2023 is the last full year of actual generation maintenance experience that the company has, right?**

A Yes.

**Q And the two numbers that we talked about, 68.5 million and 46.7 million, the difference there is 21.8 million, right?**

A Yeah. That's correct.

**Q And that 21.8 million is 46.6 percent greater than the 2023, that's 20 -- that's 46.6 percent of the amount you incurred in 2023, right?**

A I trust your math. Yes.

**Q Okay. So of the planned generation maintenance component of these expenses, didn't you incur 9.484 million in 2023?**

A We did.

**Q And your forecast for 2025 shows the same type of expense, 25.205 million, right?**

A That is correct. But again, in 2024, we are expecting 13.3.

**Q Okay. That's not an actual. That's a**

**forecast, or budget, which is --**

A It's -- actual and forecast is combined.

**Q Okay. So you would agree with me that test your expense for planned maintenance generation is 16.0 million, or 68.9 percent greater than the amount incurred, the same type, in 2023?**

A For planned maintenance, that's correct.

**Q Okay. This difference, this 68.9 percent difference, isn't it true that it is due, in significant part, to the -- in significant part to the company reflecting in its filing that it is planning all of these outages in 2025?**

A That certainly contributes to the difference, Mr. Rehwinkel. But again, I would argue that by shifting outages and not having the outages during the OEM, customers benefited over a longer duration by pushing those outages out and getting that unit to run much longer than anticipated.

**Q But we are here today to talk about the correct level of revenue requirements on a going forward basis from 2025 forward, right?**

A Yes.

**Q Isn't it true that nowhere in your testimony, or any of the other materials that the company submitted in this case, shows that this level of planned**

**maintenance generation expense will be recurring at this level?**

A We don't have any other years where it's 25.2 or higher, that's correct --

**Q Okay.**

A -- for planned maintenance.

**Q If you assume that the planned generation maintenance expense reverts to the lower level of expense in 2023, in subsequent years, won't the company, nevertheless, continue to recover this abnormally high level of expense in subsequent years until base rates are reset in a future case, if the Commission allows your level of expense that you are requesting?**

A No, I don't think that's a fair assumption. You know, we do forecast what our planned outages are going to be in outer years. We have already forecasted 2026 and 2027, and we are anticipating expenses to come down from 25.2, but they are still going to be significantly higher than 2023 numbers.

**Q But you agree with me that there is -- the test year level is higher than your -- even that you are forecasting for subsequent years, right?**

A It is.

**Q If the company collects costs for these maintenance projects as projected in 2025, but they are**

**not incurred in future years, won't that mean that customers' bills are higher than they should be, all other things being equal, and, thus, even less affordable?**

A That's a big assumption on all other things being equal. On this particular component, if we were to just cherrypick planned outages, yes, the O&M costs are higher, but there is numerous other outage, or other maintenance type expenses that we incur from an O&M perspective that are going the other direction.

**Q It's interesting, you use the word cherrypick. Isn't using the peak amount of expense that you have put in the test year, isn't that kind of cherrypicking that number?**

A Yeah. Again, we pushed the outage out to 2025. It wasn't, as Witness Kollen says, trying to bunch all the outages out in 2025. It just so happens we can only have major outages during a certain period of time, during the shoulder months. So you have three months in the spring, three months in the -- in the fall we can have these outages. It just so happened we were having two majors in the spring and the fall of 2025.

**Q Okay. Regardless of your motivation, you would agree the Commission should normalize this cost, I guess the debate is just about how to go about**

**normalizing that; is that right?**

A I think it's -- so Witness Kollen refers to normalization, and he provides various examples of how he would normalize the outages. You know, I have always believed in the outages, since they occur in four- to five-year periods, makes sense to take the outage costs and amortize those costs over a four- or five-year period.

Witness Chronister suggests normalizing those costs -- and I say normalizing, really tying them up on the balance sheet, and deferring that expense over a three-year period, is what Witness Chronister proposes in his testimony, the amount above the baseline, once the baseline is determined.

**Q Okay. Was the answer to my question yes?**

A Yes on the deferral. I don't know on the normalization.

**Q Okay. I think you have been doing the yes and explain, but just to make sure.**

**Now, you assert that Mr. Kollen's proposal disallows expenses, is that right?**

A His base proposal, yes.

**Q But he has not asked -- he is not saying you don't get to recover them. The question -- only question is, in the ratemaking formula, how do you**

**recover those expenses, right?**

A Maybe I misunderstood his testimony, but I thought he was taking a baseline over a seven-year period in saying that anything above the baseline would be disallowed from a revenue requirement perspective.

**Q Okay. So for purposes of -- well, he is not -- even under that scenario, Mr. Kollen isn't recommending that your costs be disallowed in entirety, right, even if you take it the way you look at it? He is saying you get recovery for these maintenance costs in the large part, right, even under your theory?**

A I would hope that's what he was intending to say in his testimony.

**Q Okay. What is your understanding of the period that Mr. Kollen recommends amortization, or normalization?**

A He suggested a period of 2019 through 2025, seven-year period.

**Q Okay. You are a CPA, right?**

A I am.

**Q And you have some significant experience in regulatory affairs, right?**

A I do.

**Q You understand the Commission doesn't set rates for a single year with the expectation the company**

**will be right back in the next year, do you?**

A I understand that. Yes.

**Q And you would agree, the test year is supposed to reflect conditions that are expected to be in effect for the period that rates are expected to be in place, right?**

A Yes, I do.

**Q If the company is allowed to recover the unusually high major planned outage expense without normalization, then it -- then won't it recover the unusually high major planned outage expense at excessive levels each year thereafter?**

A If the amount above a baseline is not deferred and amortized, yes, I would agree. And I believe Witness Chronister supports amortization of the amount above the baseline over a three-year period.

**Q Okay. Mr. Aldazabal, thank you for your answers. Thank you for your time.**

MR. REHWINKEL: Those are all the questions.

CHAIRMAN LA ROSA: Thank you.

Let's now move to Florida Rising/LULAC.

MS. LOCHAN: Thank you so much, Chairman.

EXAMINATION

BY MS. LOCHAN:

**Q Good afternoon. My name is Hema Lochan for**

**Florida Rising and LULAC.**

**First and foremost, important business, I want to make sure I get your last name correctly. It's Aldazabal?**

A That's correct.

**Q Amazing. I believe we met virtually --**

A Yes.

**Q -- so it's nice to see you in person.**

A Good to see you.

**Q I first want to ask you a few questions on the new Midtown headquarters that you mentioned in your summary. So TECO is currently building the new headquarters?**

A Yes. That's correct.

**Q And in this consideration, TECO also considered renewing the lease it currently has?**

A We did.

**Q And in your direct testimony you state that one of TECO's main concerns was flooding?**

A That was one -- that was one of the concerns.

**Q Would you say it was one of the main concerns?**

A It was a primary concern.

CHAIRMAN LA ROSA: It sounds like we may be losing your microphone a little bit.

THE WITNESS: It's on.

CHAIRMAN LA ROSA: Mine is too. It may be a little low.

MS. LOCHAN: It's a little low.

CHAIRMAN LA ROSA: Yeah.

MS. LOCHAN: Is this better?

CHAIRMAN LA ROSA: Yours is good.

THE WITNESS: Test. Test.

CHAIRMAN LA ROSA: I think his is not. Yeah. Can you try hitting --

THE WITNESS: Test.

CHAIRMAN LA ROSA: That sounds -- that's off also? Yeah, I think mine is low also. Can you guys hear me okay? Okay.

Yeah, let's take a -- I know Brian ran to the back. Let's take a three-minute break and let the audio folks do their thing.

(Brief recess.)

CHAIRMAN LA ROSA: All right. Sorry for that small technical difficulty, but let's go ahead and take our seats and we will jump back in where we left off.

BY MS. LOCHAN:

**Q All right. Thank you so much.**

**Just to test the mic?**

A Test. Test.

**Q How are you doing?**

MS. LOCHAN: Is the mic working?

THE WITNESS: It sounds like it is.

CHAIRMAN LA ROSA: Yeah. It sounds good.

MS. LOCHAN: Okay.

BY MS. LOCHAN:

**Q We were discussing TECO's considerations for the new headquarters, and we were just discussing flooding. I believe the question was: Was flooding one of the main considerations for TECO's new headquarters?**

A I wouldn't characterize it as the main consideration. It was a primary consideration. Lack of space is probably the main consideration.

**Q Thank you.**

**I am actually going to pull up an exhibit attached to your direct testimony. It is master number, if that's helpful, C3-230.**

**Is it my understanding that this was the scorecard used for the new headquarters?**

A This was a scorecard that was used as part of an evaluation for the new corporate headquarters. That's correct.

**Q And is it also my understanding that multipliers were used in the scoring?**

A Yes, multipliers were used.

**Q And the highest multiplier was a 10, and the lowest multiplier was a one?**

A Yes, but again, the multiplier was simply a function to try to create some differentiation between the different categories.

**Q And was there a reason for the ranking of the multipliers?**

A So this scorecard was provided to 18 senior level -- senior level directors within the organization to make a determination back in 2020, 2021 timeframe of what they felt were the top criteria for the new corporate headquarters, and this is how these 18 senior directors ranked these criteria.

**Q So the criteria was ranked at that time in terms of priority?**

A Yes.

**Q Thank you.**

A For those 18 directors.

**Q Thank you.**

**In the first category, what -- for a connection to community, do you know what considerations went into that category?**

A Essentially being part of the community, lobby, space for community partnership.

**Q Did this category include whether it would**

**improve grid resilience for the community?**

A That was not a consideration for that category. No.

**Q Did it -- was a consideration whether it reduced customer costs?**

A No.

**Q Thank you.**

**And on this scorecard for security and resiliency, that is the category that included flooding?**

A Amongst many things, correct.

**Q Thank you.**

**I will now pull up -- this is FLL-184, which is master number F3.3-5971.**

**This is the -- this lays out the total capital costs between the Plaza lease, the Plaza purchase and the Midtown purchase, correct?**

A It does.

**Q And the difference between the total capital between the Plaza lease and the Midtown purchase is about 100 million, correct?**

A On the cap -- keep in mind, this is the total cost of the building. This building is being shared between Tampa Electric and Peoples Gas. So six floors would pertain to Tampa Electric, three floors would pertain to Peoples Gas, and there would be two shared

floors. The component associated with only Tampa Electric, which is in the MFRs, is 188 million.

**Q But on -- listed here, the difference is about 100 million, correct?**

A That's the total building cost. The difference between just the capital component on the top line would be about 100 million. That's correct.

**Q Thank you.**

**And just drawing your attention to the financial impact to customers, for the six-year NPV of revenue requirement for the Midtown purchase is 345.6 million, correct?**

A Again, that's on the total building cost. On the Tampa Electric component, it would be 255 million.

**Q All right. Thank you.**

**I would also like to pull up master number F1-153.**

**And here is the NPV of revenue requirements, correct?**

A It is.

**Q And the bottom of the page is the -- is what I am going to direct you to. This is -- these are the final numbers for the three considerations, correct, for the revenue requirement?**

A I am sorry, you trailed off there at the end.

**Q Sorry. The bottom of the page is the revenue requirement, correct?**

A No, it's not.

**Q The totals at the bottom, not the total bottom, but all the way after 2084, after 60 years.**

A Give me one second. So that's accumulation of the revenue requirements by year over a 60-year period comparing the three different options.

**Q Thank you.**

**And looking at this page, when we were thinking about the lease, is it possible that lease prices could go down within these six years, especially with, say, the continuation of remote work?**

A There is a potential they could go down, or they could go up. We do have a fixed lease in agreement right now with the company that we were leasing the property from, the existing TECO Plaza.

**Q All right. Thank you.**

**Could you pull up -- this is FLL-192, but master number F3.3-6376. And this shows here that the corporate headquarters is at 4.3 million O&M costs for 2025?**

A You said O&M cost?

**Q I did.**

A I have a different number.

**Q Do you recognize this chart?**

A I do not.

**Q All right. Thank you.**

**If we can pull up FLL-183, which is master number F3.3-5968. I think this will also -- this is going to send us to an Excel. So I think we click the hyperlink.**

**Okay. So this shows the residential bill impact of the project Tampa headquarter -- Midtown headquarters, correct?**

A Can you point me to the right line, the line you are looking at?

**Q This Excel as a whole shows the residential bill per 1,000 kilowatt hour.**

A I see a 135.63 on 1,000 kWh total there for 2025. That seems low.

**Q If you look at the -- if you scroll down to, I believe it is line 66, which is -- it says, the residential rate increase, and starting in 2025, it goes to one -- $1.31?**

A Yeah, I see that. I am sorry, I am not trying to be difficult. I am just not familiar with this document, and I don't know how this pertains to the corporate headquarters.

**Q I believe this is -- the title of this**

**document refers to the project Tampa Midtown, but we can come back to it later. We can -- if -- well, we can move on to the next topic.**

**So -- give us one second. I am going back to the Excel sheet, which is FLL-183. Can you confirm that this looks like a document produced by the company, and does the Bates stamp number give you a clue?**

A The document looks familiar. I just don't remember the document.

**Q But you are the witness responsible for the Midtown project?**

A I am, and I have a revenue requirement for the Midtown project, which I don't see up there, for 2025.

**Q However, does this document purport to calculate the residential rate impact of the Midtown project?**

A It does appear to calculate a residential rate increase there at the bottom of 2025 for the Midtown project of a -- I believe it's $1.31. But I can tell you that we did do a net present value analysis over the life of staying in the Plaza or build -- moving into the new Midtown headquarters, and as is on the bottom of my exhibit, document number nine, the difference between staying in the TECO Plaza or moving to the Midtown headquarters over a net present value over a 30-year

period was less than $1 million, not taking into account all the qualitative benefits of moving to a much higher ground, moving out of a flood prone area. So there is some significant benefits to the Midtown location.

**Q However, as of now, we have no reason to question the numbers on this document?**

A Subject to check.

**Q Yeah. And -- so in this document, it says, in 2025, it is 1.31, correct?**

A I'm sorry?

**Q And in this document, it shows that the cumulative residential rate increase in 2025 would be $1.31?**

A It does reflect the $1.31 increase there, but again, it doesn't show the impact of staying at the TECO Plaza lease.

**Q Thank you.**

**Now, I am going to turn your attention to red folders that have magically been placed, I think, next to you, and I think everyone should have these red folders. This -- these are the smaller red folders.**

A Oh, those. I am sorry.

MR. MEANS: Just to clarify, is this FLL-303C and FLL-316C?

CHAIRMAN LA ROSA: Yeah. Two stacks.

MS. LOCHAN: Yeah. This is going to be FLL-303C.

MR. MEANS: Okay. Thank you. I just want to make sure I have the right folders.

BY MS. LOCHAN:

**Q If you could take a second to review what is in the folder. I am going to ask you to read parts of what's in the folder, not out loud, and then I will ask you whether or not what you are reading is confidential. And if it is, I will not ask you the question; but if it is -- if you are able to talk about it, or answer the question, you will let us know.**

**CHAIRMAN LA ROSA: Could you just direct the witness to the -- to which folder when you --**

MS. LOCHAN: It is 303C.

BY MS. LOCHAN:

**Q Okay. So this exhibit is the -- for the South Tampa Resilience Project, TECO is planning on leasing the land for the project?**

A No, that's not correct.

**Q It's your testimony that there is no lease with the Air Force for the South Tampa Resiliency Project?**

A To be clear, we are not paying for a lease. They are providing the land free of cost over a 33-year

lease, period. So we are not paying for the lease.

**Q Okay. Thank you.**

**This -- in this exhibit, this is your signature, correct, on Bates number 45162?**

A Yes.

**Q And you would say that this document speaks for itself?**

A It's been a while since I read this document, but, yes, I signed it.

**Q All right. Thank you.**

**If you can turn to Bates number 45158.**

A Okay.

**Q And if you can go all the way to the bottom, under Roman Numeral V. Sorry -- oh, I am sorry. If you, on 45158, under the exhibit title, can you read the line to yourself under it of the title of the document?**

A Okay. Yes.

**Q Is that confidential, the title?**

A It is not.

**Q Okay. What does it say?**

A Electrically Islanded Operations Agreement.

**Q Thank you.**

**Now could you turn to 45160?**

A Okay. I am there.

**Q And all the way at the bottom, Roman Numeral**

**V, is that section confidential?**

A It is not.

**Q Could you read what it says?**

A Sure.

Upon notice from MacDill Air Force Base to Tampa Electric of inability or failure to achieve EIO capabilities which failure T -- Tampa Electric is not able to cure within 180 days of such notice, Tampa Electric shall pay ground rent as provided in section 2.2 of the EAL until TECO -- until TEC establishes and demonstrates effective EIO capabilities as determined by MacDill Air Force Base.

**Q Thank you.**

**And now the previous page, 45159.**

A Okay.

**Q Can you read to yourself the first sentence of B?**

A Okay.

**Q Is that confidential?**

A It is not.

**Q Could you read that out loud?**

A In the event MacDill Air Force Base identifies a potential validated threat to actual or planned MacDill Air Force base missions, or an actual grid outage, the MacDill Air Force Base primary or secondary

point of contact shall contact the Tampa Electric primary or secondary point of contact to request EIO.

**Q And EIO refers to electrically island and operations?**

A That is correct. Again, and during a validated threat. A validated threat is a very rare type situation. The last time the base experienced a validated threat was 9/11. So these are very rare circumstances where we would have to electrically island the base.

**Q All right. Thank you. That's it for this document.**

**For now, we are going to talk about the Bearss Operations Center, or -- it is pronounced Bearss, correct?**

A I was born and raised in Tampa. I have always called it Bearss, but I have heard people call it Bearss. I don't know.

**Q Great. Okay. We will go with Bearss then.**

**So if we can pull up FLL-149, which is master number F3.36385. So this is the Bearss revenue requirement?**

A Okay.

**Q And you were responsible for contributing the cost to this document?**

A I provide the cost to Jordan Williams to calculate his allocation methodology on here, yes.

**Q Okay. Thank you so much.**

**And if you scroll to the second page of this document, the total at the bottom is about 24 million?**

A Yes. That's correct.

**Q Thank you.**

**And if you scroll back to the first page. Thank you so much for the scrolling. This shows that if you look at line six under a 4CP allocation, residential customers are responsible for five -- 59.84 percent of the revenue requirement?**

A That is correct.

**Q Thank you.**

**I will now turn your attention to the second red folder, 316. And this is confidential, but can you confirm, or read the title of this presentation?**

A Sure. It says: Bearss Operations Center, CLT follow-up presentation.

**Q If you can, flip to Bates 15411.**

A I am there.

**Q If you could look all the way to the bottom, the bottom section, is that confidential information?**

A It is not.

**Q Could you read what the title of the bottom**

**is?**

A Sure. It says: Customer Bill Impact, Residential Bill Impact Estimate.

**Q And could you confirm that the numbers are going up from 2025 to 2029 -- I'm sorry, 2025 to 2027?**

A They are increasing. Yes.

**Q Thank you.**

**Okay. Just a few more topics, and no more confidential information, so.**

**If you can pull up FLL-158 which is master number F3.3-4066. And can you confirm whether these are the actual costs that have been spent at Polk and Big Bend?**

A Yes. These look like capital costs for Polk Unit 1.

**Q Thank you.**

**And I am going to jump to another document, which is FLL-161, or master number F3.34090. And can you confirm whether these are the future costs at Polk and Big Bend?**

A Yes. This reflects capital costs projected for Big Bend 4 and Polk Unit 1.

**Q Okay. Thank you.**

**A few more documents. If we can jump to FLL-309, which is master number F3.625880. And if we**

**can scroll down to 2025, which would be the fourth page of that document.**

A Okay. I am there.

**Q And would you agree that Big Bend is the highest cost per capacity for this year, Big Bend 4?**

A I guess I am trying to understand what this document is trying to say. I don't know where these numbers came from.

CHAIRMAN LA ROSA: Can we get an explanation of the document?

MS. LOCHAN: Yes. One second.

BY MS. LOCHAN:

**Q I believe there is a demonstrative Excel that goes with this document, which are the work papers. Do you recognize this Excel as the work papers for MFR C-33?**

A Yes. That looks like MFR C-33.

**Q And if we can go to the tab which is cost per installed capacity, which is where the numbers are pulled from. Uh-huh. Yeah, there is a lot of tabs. And I think that is where this -- these numbers were pulled from. Do you recognize this document?**

A I don't recognize the document, but I understand the document.

**Q And going back to the document, would you**

**agree that the costs listed -- cost per capacity listed for Big Bend 4 in 2025 is one of the highest on the list?**

A Yes, I would agree it's one of the highest on the list; but what that document is reflecting is the total cost of that asset over its life.

**Q And Polk 1 is also high on that list?**

A Yes, it is.

**Q As is MacDill Air Force?**

A I don't see MacDill Air Force Base on here.

**Q It is -- if you are looking at it, it's right under Polk 1 and 2, or 196, line 196.**

A On a cost per capacity, it's higher than some of the others, correct.

**Q Okay. Thank you.**

**And last few questions here. Pulling up FLL-247, which is master number F3.3.4-19916. Yes, FLL-247. And if we can -- perfect. And just on -- yeah, if you can zoom in a little bit. Under the first -- this is -- actually, if we can scroll up a few pages to -- just one more. Yes.**

**This is a presentation on the MacDill Air Force, correct?**

A The CLT presentation, yes.

**Q Thank you.**

**Okay. Now, just scroll back to that chart we were looking at. Under column 1, row 2, could you read what that consideration was?**

A Sure.

Global warming increases floodplain elevation or increases severity of hurricane storm surge.

**Q Thank you.**

**Would you say that that is a consideration for the company?**

A It absolutely is a consideration where we site our units, yes.

**Q Okay. Thank you so much.**

**I am just going to check really quickly to see if I have any other questions. All right. Thank you so much, Mr. Aldazabal. Those are all my questions.**

A Thank you.

CHAIRMAN LA ROSA: Great. Thank you.

Let's now move to FIPUG.

MR. MOYLE: Thank you, Mr. Chair.

EXAMINATION

BY MR. MOYLE:

**Q Good afternoon.**

A Good afternoon.

**Q I want to ask you a little more about a topic you brought up, it's in your testimony also, with**

**respect to your major repairs, and you said you got to do those at a certain time period, is that right?**

A That's correct.

**Q And they are called shoulder months, is that right?**

A Yes, sir.

**Q Could you just tell us what a shoulder month is, and why you schedule your major outages on shoulder months, please?**

A Sure.

Shoulder months are -- typically they are their lower load months, February, March and April, early part of the year, and then September, October, November, in the latter part of the year, where you have typically much lower peak loads.

**Q And that's obviously what -- based on the weather. The weather is more temperate during those months, so you are not having, you know, high heating days or cold, cold cooling days, correct?**

A That's correct.

**Q So I want to refer you to your testimony on page 27 -- I am sorry, 25, line 17.**

A My direct testimony?

**Q That's right.**

A Okay, I am there.

**Q And I will just -- the question was: Are technical improvements, fuel prices and public policy considerations continuing to drive changes in how the company generates electricity? And you said, yes, and talk about technological improvements and tax incentives have made solar a cost-effective alternative to natural gasifier generation, is that right?**

A Yes. That's correct.

**Q I just want to ask some -- a little more depth on what you are referencing with respect to some of these topics.**

**So when you say technological improvements, could you explain what that references, as to how that's making solar more cost-effective compared to a natural gas-fired unit?**

A Sure. The cost of PV panels have come down significantly over the years, so we are seeing some technology improvements in the efficiency and capability of PV, which makes solar competitive when you factor in the production tax credit.

**Q And when you are tracking those improvements, you know, if you were going to graft it out, I mean, my understanding is when solar first started, it was very, very expensive, and then there was a pretty dramatic price decrease, but as we go along now, the price**

**decrease is less significant; is that largely correct?**

A Yes. Witness Stryker can probably get into the details on the cost of solar, but, yes, generally that is correct.

**Q Okay. And with respect to fuel prices, what are you referencing there that makes solar more attractive, I guess?**

A Well, fuel prices from solar obviously is a zero cost resource from a fuel perspective. When you have spikes in natural gases -- natural gas, like we had in 2023, solar becomes significantly much more beneficial.

**Q Right. But when you are looking at it, don't you -- I mean, you look at projections, and the 2023 natural gas price was extremely high, and today it's not, correct?**

A It's certainly lower, which makes sometimes solar a little bit more challenging from a cost-effective perspective, but it is still cost-effective.

**Q And is it also -- you know, what makes it cost-effective in significant part are the tax credits --**

A Yes. Absolutely.

**Q -- that are provided?**

A Yes.

**Q And are those both production tax credits and incentive? There is another tax credit that goes with the solar. You are a CPA, you probably know it off the top of your head, but --**

A So we are using the production tax credit now.

**Q Production tax credit?**

A It's much more beneficial than the investment tax credit.

**Q Investment. And you can't stack them?**

A No.

**Q So do you know, at a big picture level, if you were comparing natural gas on a production cost per megawatt compared to solar which one is the better deal?**

A Can you repeat the first part of the question? I am sorry.

**Q Yeah. It's comparison between putting in a, say, a combined-cycle unit natural gas as compared to putting in an equivalent amount of solar, what would, you know, based on your role as VP of Operations, what would be the better economic deal for ratepayers in your view?**

A So it depends, is the answer to that question.

Solar helps. Obviously, from a cost-effective perspective, it's economic. But from a reserve margin

perspective, solar doesn't benefit customers for winter peaks. So we have to build spinning generation in order to meet those winter peaks, and solar can't do that.

**Q And you are aware also that as you add more and more solar, the firm capacity that is available for your planning purposes continues to drop off, isn't that right?**

A What continues to drop off? I am sorry.

**Q The firm capacity that comes from solar units.**

A It does significantly decrease as the peak shifts out in time. Yes.

**Q And, you know, are you aware that some of the -- some of the firm capacity, you know, as you are getting just a small piece of the overall ability of the solar unit to produce -- you guys are doing them at 74.9, correct? Largely, the solar units are 74.9?**

A 74.9?

**Q Megawatts.**

A Oh, 74.5, yes, megawatts.

**Q But of that 75 megawatts, when you are looking at it from a reserve margin standpoint, how much is it worth today?**

A Nothing for the winter. Small percentage for the summer.

**Q Are you responsible for -- you have some**

**testimony on reserve margins. Are you responsible for planning of the generation units and keeping the reserve margins at certain levels?**

A No. Witness Aponte talks about the reserve margin, covers that. But resource planning is under my responsibility.

**Q Okay. And then, in that question, you also referenced public policy considerations -- well, that's the question. It says: Are there public policy considerations continuing to drive changes in how the company generates electricity?**

**Could you comment on what you -- when you answered yes, what public policy considerations you were referencing?**

A Yeah. Absolutely. I was referring to recent policy, such as going back to the Clean Air Act, and then just more recently, the EPA mandates for fossil fuel units.

So we are starting to see -- continuing see public policy pushing for less greenhouse gas emissions. And I am just referring to the fact that being able to operate on coal is going to become increasingly challenging.

**Q You made a comment in your testimony about coal being largely uneconomic, it continues to be**

**uneconomic. Could you expand on that a little bit? I thought everybody was getting rid of coal. So from supply and demand, why are coal prices high, if you can comment on that?**

A John Heisey can probably be the better person to ask on the reasons for the differences in prices between natural gas and coal.

Right now, coal prices are higher on an MMBtu basis than natural gas, so we aren't running the units on coal. We are running them on natural gas. Big Bend 4 is a dual fuel unit. It can run on natural gas or coal. So we have been operating that unit on natural gas.

**Q So that -- you basically economic dispatch that unit depending on pricing?**

A Strictly based on economic dispatch, notwithstanding, in the winter, sometimes we have a manatee protection plan, so we do operate that unit sometimes on coal to keep the manatees warm.

**Q The final point I just want to -- I just want to raise with you and ask you a couple of questions about is -- and you've been around. You were former VP of Regulatory Affairs, correct?**

A Yes.

**Q And FIPUG, as you may recall, supports solar**

**energy, provided it's cost-effective and needed; is that your understanding?**

A That is my understanding, and that's still the case, Mr. Moyle.

**Q Yeah. And with respect to the need piece of that, there is not a process now, really, that goes and looks at are, all of these solar projects, when they come in, are they needed, correct?**

A Correct. Unless we are building a project over 75 megawatts, we would not go through a need process. Yes.

**Q You know, so you had made reference to public policy. From a public policy standpoint, how would this commission, or others, make a judgment as to need when solar projects keep, you know, coming in, coming in, coming in, coming in, and how do you know they are needed?**

A So I think it's important to look at the economics of the solar projects. Witness Aponte will talk to the different solar projects that we are projecting in our filing.

And need is important from a reserve margin perspective, but these solar projects are providing economic benefits in the form of lower fuel costs, versus the alternative of not building these solar sites

again. Again, that benefit is shrinking. It's continuing to shrink. And there will come a time where we cannot continue to add solar because the economics won't justify it.

**Q And your reserve margins, you -- on page 36 of your testimony, you say that they are going to be 20 -- 25, reserve margins are going to be 30 percent, and winter reserve margin is 22.9. That was for 2025, is that right?**

A Yes.

**Q And 2026 still at 30 percent for the summer, and the winter is 23.1?**

A Yes. That's correct.

**Q And there is a rule -- the PSC has a rule on reserve margin that says it should be 15 percent, correct?**

A 20 percent minimum reserve margin for IOUs.

**Q That's in a stipulation, is it not?**

A Yes.

**Q And there is a rule that says 15 percent?**

A Not for the IOUs. It's a stipulated settlement, 20 percent.

**Q You -- the Florida Bar is going to be looking for you here on that if you keep up with this.**

MR. MOYLE: That's all the questions I have.

Thank you.

CHAIRMAN LA ROSA: Great. Thank you.

FEA.

CAPTAIN GEORGE: Thank you, Mr. Chairman. I have no questions.

CHAIRMAN LA ROSA: Okay. Sierra Club.

MS. AMIEL: Thank you. I do have a number of questions, so I don't know if we intended to take a break. I am happy to jump in and take a break whenever is best.

CHAIRMAN LA ROSA: No. Let's -- it's almost five o'clock, so let's take a break now, and then we will reconvene here at 5:05, in 10 minutes.

(Brief recess.)

(Transcript continues in sequence in Volume 4.)

CERTIFICATE OF REPORTER

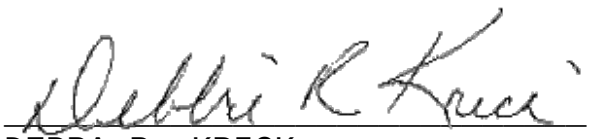
STATE OF FLORIDA )
COUNTY OF LEON )

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 am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED this 27th day of September, 2024.



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