SIERRA CLUB

October 21, 2024

Via electronic delivery

Adam Teitzman
Director, Office of Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, Florida 32399-0850

Re: **Docket No. 20240026-EI**
Petition for Rate Increase by Tampa Electric Company

Dear Mr. Teitzman,

Enclosed for filing on Sierra Club's behalf is the Post-Hearing Brief and Statement of Issues and Positions in the above referenced docket. Should you have any questions regarding this filing, please contact me.

Sincerely,

/s/ Nihal Shrinath

Nihal Shrinath
2101 Webster Street Suite 1300
Oakland, CA 94612
(415) 977-5566
(510) 208-3140 (fax)
nihal.shrinath@sierraclub.org

Sari Amiel
Sierra Club
50 F St. NW, Eighth Floor
Washington, DC 20001
(301) 807-2223
sari.amiel@sierraclub.org

Qualified Representatives for Sierra Club

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for rate increase by Tampa Electric Company	Docket No. 20240026 Filed: October 21, 2024

SIERRA CLUB'S POST-HEARING BRIEF AND STATEMENT OF ISSUES AND POSITIONS

TABLE OF CONTENTS

TABLE OF AUTHORITES

Cases

Statutes

LIST OF FIGURES

LIST OF TABLES

PART ONE: SIERRA CLUB'S POST-HEARING BRIEF

I. INTRODUCTION

It is no surprise that Tampa Electric Company ("TECO" or the "Company")'s customers pay some of the highest electricity bills in the country. Against ratepayers interests, TECO is asking the Florida Public Service Commission ("Commission") to build capacity in excess of its needs. Specifically, the Company is building out newer and cheaper sources of generation while neglecting to retire old, expensive, and underperforming fossil fuel units. In doing so, it asks ratepayers to foot the bill for hundreds of millions of dollars in retrofits and adjustments to these obsolete generating units. TECO justifies retaining more power than it needs by planning its system based on an overly high winter reserve margin, one that inaccurately discounts the contribution of its high and growing solar generation to peak load. Consequently, TECO's rate base is inflated because it is not planning for resource replacement, but is instead refurbishing and continuing to operate old generating units, at a steep cost.

TECO customers face the third-highest electricity bills in the country. TECO's ask in this case would increase rates by nearly 35 percent.[1] The Commission must not rubberstamp unaffordable bills. Instead, there are some simple solutions that the Commission should take to increase oversight on TECO and protect ratepayers. In particular, TECO should be required to reduce both the energy burden and pollution exposure of its ratepayers by retiring its remaining coal units, Polk Unit 1 ("Polk 1") and Big Bend Unit 4 ("Big Bend 4"). These units are not only unnecessary for reliability purposes; they are expensive and frequently break down.

[1]Testimony of Karl R. Rábago on Behalf of Florida Rising and League of United Latin American Citizens at 7:12-16 (June 11, 2024).

At the very least, it is no longer reasonable for TECO's ratepayers to shoulder the costs of maintaining outdated coal combustion equipment at Polk 1 and Big Bend 4. At these units, TECO seeks to recover costs to keep solid fuel (such as coal and petcoke) equipment available, despite the fact that operating Polk 1 and Big Bend 4 on coal has been both expensive and unreliable over the past five years. Going forward, TECO plans to saddle its customers with additional undisclosed costs: fuel volatility and environmental compliance costs inherent to coal combustion in 2024. TECO has not met its burden of showing that it should retain gasification capability at Polk 1 past 2024 or coal combustion capability at Big Bend 4 past the end of its coal supply contract.

It would further be unreasonable for TECO customers to shoulder the financial risks of operating Polk 1 and Big Bend 4 in perpetuity. Each of these units has been uneconomic to operate for the majority of the past five years, each has required repeated multi-million-dollar upgrades, and each is projected to have a net negative economic value going forward.

Rather than requiring customers to pay for uneconomic assets with low utilization, TECO should be required to consider customers' high electricity bills by planning to retire Polk 1 and Big Bend 4 by 2030 at the latest. The record shows that TECO is planning for an excessive and unjustified reserve margin. Worse yet, TECO is planning around a winter reserve margin, even though the Company has historically been a summer-peaking utility—and Tampa summers and winters are only getting warmer. If TECO planned around a prudent summer reserve margin, TECO would not need to replace Polk 1 at all, and it may not need to replace Big Bend 4 either. Even if the Commission finds that some of Big Bend 4's capacity has to be replaced, TECO can bring on less risky and more economic replacement resources starting in 2027 at the latest. Because of this reality, TECO should be prevented from recovering capital costs and operation &

maintenance ("O&M") costs for Polk 1 and Big Bend 4 until it studies different retirement scenarios for Polk 1 and Big Bend 4, using a summer reserve margin. These studies must first evaluate whether Polk 1 and Big Bend 4 are needed at all as reliability resources, and second, compare the cost of continued operation to the cost of replacement resources needed to meet a summer reserve margin.

Finally, for the reasons outlined above, it is unreasonable for customers to pay for costs associated with the proposed Polk 1 Flexibility and Fuel Diversity Projects. Polk 1 is a 220-megawatt ("MW") unit with coal and gas capabilities, and it has combusted only gas since 2018. Through the Polk 1 Flexibility project, TECO seeks to recover roughly $90.1 million to convert Polk 1 into a simple-cycle combustion turbine ("CT"), all the while retaining gasification technology to burn petcoke or coal. TECO has not justified incurring the steep costs of converting a small, old unit with low and declining utilization from one gas combustion technology to another. If Polk 1 were to retire today, TECO would still clear its self-assigned 20 percent reserve margin. TECO also has not justified asking its customers to finance the $53.9 million Fuel Diversity Project at Polk 1. This proposed investment again sinks millions of dollars into an underperforming asset that is not needed for reliability. The Fuel Diversity Project seeks to reduce TECO's overreliance on delivered fossil fuels—87 percent of TECO's generation is natural gas combustion, in Florida, a state with no natural gas supply—by retrofitting Polk 1 to burn a different delivered fossil fuel, fuel oil. Neither of the Polk 1 projects are necessary for TECO to meet its reserve margin, and TECO has not met its burden in showing the projects are cost-effective or beneficial to customers.

In sum, in order to protect customers from runaway rates and signal to TECO that it cannot continue to overbuild capacity and sink hundreds of millions of dollars into obsolete

infrastructure, Sierra Club urges the Commission to consider TECO's burden of proof and the record in this case, and take the following actions:

- Direct TECO to plan around a summer reserve margin and to count a percentage of solar assets towards that summer reserve margin;
- Reject the recovery of O&M costs associated with coal combustion at Polk 1 and Big Bend 4;
- Reject recovery of the capital costs for the Polk 1 Flexibility and Fuel Diversity Projects;
- Direct TECO to study whether Polk 1 and Big Bend 4 are (a) needed for reliability purposes with a summer reserve margin, and (b) can be retired and replaced by more cost-effective replacement resources;
- Prohibit TECO from recovering capital costs at Polk 1 and Big Bend 4 unless and until the above retirement study is completed; and
- Award TECO a 9.50 percent return on equity ("ROE").

II. LEGAL STANDARD

Section 366.06(1), Florida Statutes ("F.S."), provides that the Commission "shall have the authority to determine and fix fair, just, and reasonable rates that may be requested, demanded, charged, or collected by any public utility for its service."

Contested proceedings before the Commission are governed by the Administrative Procedure Act, Chapter 120, F.S., which states that "[f]indings of fact shall be based upon a preponderance of the evidence . . . and shall be based exclusively on the evidence of record and on matters officially recognized." Section 120.57(1)(j), F.S. Thus, the Commission's findings and conclusions in this case must be supported by competent, substantial evidence in the record. *Citizens v. Brown*, 269 So. 3d 498, 505 (Fla. 2019); *Sierra Club v. Brown*, 243 So. 3d 903, 907-08 (Fla. 2018).

The standard of review for a rate case requires each individual request to stand on its own as fair, just, and reasonable. "Within a rate case, the Commission applies this prudence standard to the individual investment projects for which a utility is seeking cost recovery." *Brown*, 243

So. 3d at 908. The Florida Supreme Court notes, "in the absence of a settlement agreement, prudence review of investments—regardless of magnitude—is still an express statutory requirement." *Id.* at 912, n.10. In this rate case, without a settlement agreement, the Commission must analyze each of TECO's requests and determine whether each one would result in fair, just, and reasonable rates.

The Commission's obligation in reviewing litigated rate cases is also summarized in PSC Order No. PSC-2021-0446-S-EI:

> However, there is a significant difference between the legal evaluation of these mechanisms and adjustments under Section 366.06(1), F.S., in the development of revenue requirements and rates when made in the context of a base rate case, and when made as part of a settlement agreement. In a base rate case each adjustment and mechanism is evaluated individually based on the applicable statutes, rules, case law, and our past decisions. The determination of the prudence of each issue, adjustment, or mechanism is necessary in a base rate case in order to construct the elements needed to establish the revenue requirement used to develop fair, just, and reasonable rates for each revenue class. In a settlement case, each issue, adjustment, or mechanism does not require our individual approval because the revenue requirement is the result of negotiations between the signatories that may or may not have included the individual impact of each such item.[2]

Again, because the Commission does not have a settlement agreement to review in this matter, the Commission must analyze each of TECO's requests, and each must stand on its own as fair, just, and reasonable.

The burden of proof in a Commission proceeding "is always on a utility seeking a rate change, and upon other parties seeking to change established rates." *Fla. Power Corp. v. Cresse*, 413 So. 2d 1187, 1191 (Fla. 1982). Because TECO is currently seeking to change its rates—and other parties are not seeking to change rates that have already been established—it is TECO that

[2] PSC Order No. PSC-2021-0446-S-EI, In re: Petition for rate increase by Florida Power & Light Company (Dec. 2, 2021) at 13, *available at* https://www.floridapsc.com/pscfiles/library/filings/2021/12919-2021/12919-2021.pdf.

bears the burden to prove that every element of its requested rate increase is appropriate, and the Commission may approve only the individual components of TECO's rate request that are fair, just, and reasonable.

III. ARGUMENT

A. TECO Is Overbuilding Its Capacity by Failing to Retire Older, Costly Fossil Units in Conjunction with Bringing On New Renewables (Issue Nos. 18, 20, 116 & 119).

TECO is unjustly and unreasonably imposing excessive costs on ratepayers by claiming that it needs to meet an overly high reserve margin and that solar energy is incapable of meeting peak electricity demand. This fallacious argument is enabling TECO to build out significant quantities of solar energy—which benefits its customers by providing many megawatts of clean, low-cost power—while simultaneously claiming that none of this solar energy can count toward an already inflated reserve margin. At the same time, TECO justifies sinking money into old fossil units, such as Polk 1 and Big Bend 4, because it incorrectly claims those units must continue operating in order to meet its winter reserve margin.

1. TECO's 20 percent reserve margin is not supported by the record.

TECO's investments in generation are driven and justified by resource adequacy, as documented in its annual Ten-Year Site Plan.[3] TECO evaluates resource additions with a "minimum 20 percent firm reserve margin," along "with a minimum contribution of 7 percent supply-side resources."[4] While TECO witnesses asserted that this 20 percent minimum reserve

[3] TECO Fla. Pub. Serv. Comm'n Exh. 114, TECO response to Sierra Club 1st IRRs [hereinafter "TECO Fla. Pub. Serv. Comm'n Exh. 114"] at C32-3245, TECO Fla. Pub. Serv. Comm'n Exh. 117, TECO Ten-Year Site Plan,
January 2024 – December 2033 [hereinafter "TECO Fla. Pub. Serv. Comm'n Exh. 117"], at C32-3468.
[4] TECO Fla. Pub. Serv. Comm'n Exh. 114 at C32-3245.

margin was determined by the Commission, that is not the case.[5] TECO, Florida Power and Light, and Florida Power Company *stipulated* in 1999 to "voluntarily" adopt 20 percent reserve margins as a minimum planning criterion, which was an increase from the 15 percent reserve margin the Commission required investor-owned utilities ("IOUs") to maintain.[6] Not only has the Commission never declared that a 20 percent reserve margin is a floor for resource adequacy in Florida, but also the IOUs' stipulation noted that:

> [T]he Commission shall retain the ability and discretion to consider all facts and circumstances applicable to a given utility and/or peninsular Florida. Further, with respect to the evaluation of the adequacy of reserves in peninsular Florida, the Commission may employ any methodology and consider any facts and circumstances it deems appropriate, subject to applicable legal requirements.[7]

Such language makes clear that while TECO has agreed with other IOUs to resource plan based on a 20 percent reserve margin, the formal minimum reserve margin remains 15 percent.[8] It is completely within the Commission's discretion to scrutinize and reduce TECO's self-assigned reserve margin to 15 percent, or a different appropriate value.

Indeed, TECO admits that it has provided no support for the 20 percent reserve margin, beyond the 1999 stipulated agreement.[9] Reserve margins are intended to ensure reliability.[10]

---

[5] *See* Hearing Transcript In the Matter of Petition for rate increase by Tampa Electric Company; Petition for approval of 2023 depreciation and dismantlement study, by Tampa Electric Company; and In re: Petition to implement 2024 generation base rate adjustment provisions in paragraph 4 of the 2021 stipulation and settlement
10 agreement, by Tampa Electric Company; Docket Nos. 20240026-EI, 20230139-EI, and 20230090-EI [hereinafter "Hearing Tr."] at 762:14-17 (held Aug. 26-30, 2024); *see also* TECO Fla. Pub. Serv. Comm'n Exh. 117 at C32-3468.

[6] Docket No. 981890-EU, Order No. PSC-99-2507-S-EU (December 22, 1999), Attachment A [hereinafter "Attachment A"] at 3-4, *available at* https://www.psc.state.fl.us/library/Orders/1999/15628-1999.pdf; *see also* Hearing Tr. at 762:18-22.

[7] Attachment A at 4.

[8] *Id.* at 4.

[9] Hearing Tr. at 762:14-22.

[10] *See* TECO Fla. Pub. Serv. Comm'n Exh. 117 at C32-3468.

They are traditionally set based on loss of load probability studies, which measure the chance of not meeting load; TECO witness Carlos Aldazabal, Vice President Energy Supply, identified the industry standard for loss of load as one day in 10 years.[11] Yet despite agreeing that loss of load probability is "a measure of the reliability of the portfolio,"[12] TECO also admits that it has not conducted any loss of load probability studies for its system.[13] In short, TECO has not met its burden of proving that it requires a 20 percent reserve margin, as it has not conducted a loss of load probability study for determining its resource adequacy requirements.

2. TECO's inflated reserve margin renders retirement of obsolete assets virtually impossible.

TECO goes on to justify investments in Polk 1 and Big Bend 4—and accordingly fails to consider retirement of these units—based on a rigid adherence to a 20 percent reserve margin. TECO witness Kris Stryker, Vice President Clean Energy and Technology, makes the astonishing claim that TECO needs 100 percent of Big Bend 4 and Polk 1's capacity to meet its winter reserve margin.[14] This is despite the record demonstrating that TECO's planned capacity clears 20 percent for each year between 2024 and 2033, never dipping below 21 percent.[15] TECO's winter reserve margin clears 20 percent by multiple percentage points most years, reaching as high as 30 percent in 2024. With a 30 percent reserve margin, where capacity is 30 percent higher than projected load, ratepayers are saddled with extra costs to pay for that excess capacity.

[11] Hearing Tr. at 1034:7-12.
[12] *Id*. at 9-10.
[13] *Id.* at 1034:4-6.
[14] *Id.* at 943:13-25.
[15] TECO Fla. Pub. Serv. Comm'n Exh. 120, TECO response to SC IRR 31, Attachment (BS 28967) Sierra Club 1st Set 2024 - 2033 Firm Generators and RM IRR Q31 [hereinafter "TECO Fla. Pub. Serv. Comm'n Exh 120"], at C32-3577.

TECO's high reserve margins—and its practice of significantly exceeding them—results in resource planning that ignores affordability, rather than balancing reliability and affordability. By setting its reserve margin unreasonably high, TECO makes it difficult to retire a generation asset, even when operating that asset is costly and not necessary for reliability purposes. Witness Stryker conceded that "a higher reserve margin generally requires a higher degree of installed capacity."[16] Naturally, a higher requirement for installed capacity will make it more difficult to retire existing poorly-performing units, such as Polk 1 and Big Bend 4, as their capacity will be needed longer to contribute to an unjustifiably high reserve margin.

3. TECO inflates its reserve margin by forecasting a winter peak, despite evidence pointing to TECO being a summer-peaking utility.

The record in this case does not support TECO's assessment that it is a winter-peaking utility. TECO's annual system peak demand projections forecast a 31-degree day in January[17] and a corresponding winter heating peak that does not line up with historical reality or current climate trends. In 2019, TECO's January retail peak occurred at 46 degrees, the second-lowest peak demand of any month, and its annual peak was a summer (June) cooling peak at 5 p.m. with 94-degree temperatures.[18] In 2020, TECO's January retail peak occurred at 37 degrees, the fourth-lowest peak demand of any month, and its annual peak was a summer (September) cooling peak at 5 p.m. with 94-degree temperatures.[19] In 2021, TECO's January retail peak occurred at 50 degrees, the lowest peak demand of any month, and its annual peak was a summer

[16] Hearing Tr. at 1067:16-19.
[17] *Id.* at 1563:18-22 ("[W]e forecast a 31-degree peak…at the time of the peak, because we need to plan to make sure – ensure we have the capacity to meet winter load.").
[18] TECO Fla. Pub. Serv. Comm'n Exh. 831, TECO Resp to OPC 1 POD No. 1 [hereinafter "TECO Fla. Pub. Serv. Comm'n Exh. 831"] at F16-89.
[19] *Id*. at F16-90.

(August) cooling peak at 6 p.m. with 84-degree temperatures.[20] In 2022, TECO's January retail peak occurred at 49 degrees, the sixth-highest peak demand of any month, and its annual peak was a summer (June) cooling peak at 5 p.m. with 93-degree temperatures.[21] In 2023, TECO's January retail peak occurred at 48 degrees, the third-lowest peak demand of any month, and its annual peak was a summer (August) cooling peak at 6 p.m. with 93-degree temperatures.[22] Only one January in the past five years had a day with temperatures falling below 40 degrees, and none approached 31 degrees.

As Florida Industrial Power Users Group ("FIPUG") witness Jeffry Pollock states, "TECO remains a strongly summer peaking system."[23] For each of the past five years, TECO was summer-peaking. In 2019, 2020, 2021, 2022, and 2023, TECO's annual system peak demand occurred in June, September, August, June, and August, respectively.[24] And for five of the last six winters from 2018-2024, TECO's winter peak not only fell far short of projections, but also it was a *cooling* peak, driven by air conditioning use during high-temperature winter days.[25] In the face of this evidence, TECO projects a January winter peak by insisting that past winters have been "anomalous" or unusually mild winters.[26] These projections do not withstand scrutiny and do not justify TECO's adherence to an early morning winter heating peak. TECO witness Lori Cifuentes, Director Load Research and Forecasting, recognizes that the last *nine* years have seen winter temperatures far lower than TECO's projections through its Monte Carlo

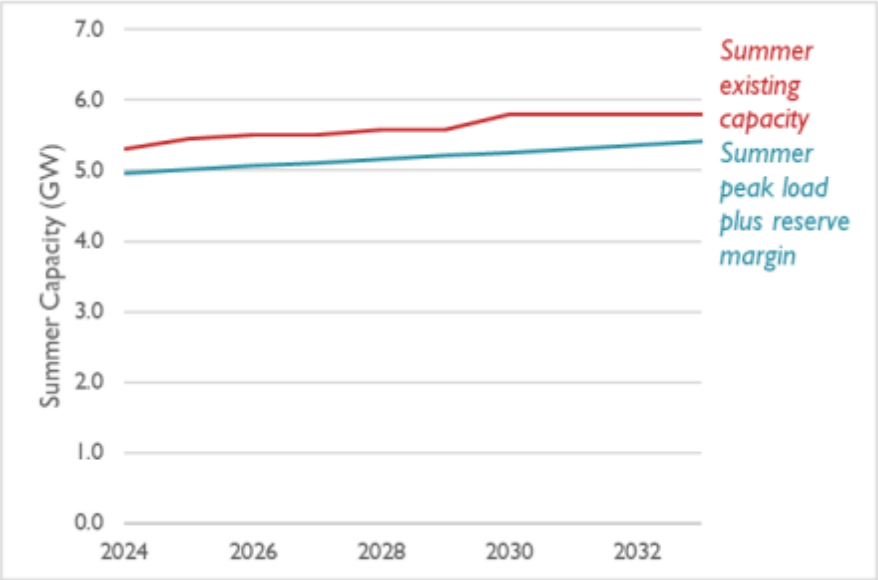
[20] *Id*. at F16-91.
[21] *Id*. at F16-92.
[22] *Id*. at F16-93.
[23] Hearing Tr. at 2674:16-18.
[24] *See also* TECO Fla. Pub. Serv. Comm'n Exh. at C27-2861.
[25] Hearing Tr. at 1581:23-25, 1582:1-4.
[26] *Id*. at 1600:16-20 ("These last nine years, not just that they are a small sample, they are also very anomalous compared to the 40 or 50 years prior…yes, it's been hot these past 10 years.").

simulation.[27] Instead of incorporating and acknowledging recent data showing a shift to warmer winters, TECO chooses to dismiss *nine years* as resulting from "a lot of winter weather events, such as La Niñas, El Niños" and other non-representative events.[28] It is abundantly clear that the only reason that TECO is projecting a winter peak—and thereby planning capacity around a winter reserve margin—is because it refuses to factor in recent historical trends that point to annual summer peaks and lower *cooling* winter peaks.

The revelation that TECO is a summer-peaking utility and should be planning for resource adequacy based on a *summer* reserve margin leads to the conclusion that TECO is severely overbuilding its capacity, at a high cost to ratepayers, many of whom are struggling to pay their electric bills.[29] TECO's projected summer reserve margins for 2024 to 2033 are 28, 30, 30, 29, 30, 28, 31, 30, and 29 percent.[30] These extremely high reserve margins are, on average, about 50 percent above TECO's already inflated 20 percent minimum reserve margin.

[27] *Id.* at 1600:21-24.
[28] *Id.*
[29] *See id.* at 197:4-25.
[30] TECO Fla. Pub. Serv. Comm'n Exh. 120 at C32-3577.

Figure 1: TECO Summer Capacity Position (Existing and Planned)[31]



In sum, TECO is building unreasonably excess capacity, and, as explained below, that excess is not fully captured by Figure 1.

4. TECO counts no solar towards its reserve margin, despite evidence that solar contributes to its summer peak, further impeding retirement of existing fossil assets.

TECO ignores historical data and trends that point to a summer peak in favor of forecasting a hypothetical winter peak. By assuming an early morning winter peak, the Company attempts to justify counting zero solar capacity toward its winter reserve margin. In doing so, TECO ensures that ratepayers pay for both rate base and ROE on new generation assets, but do not derive rate benefits from the retirement of existing assets.

[31] Direct Testimony of Devi Glick on Behalf of Sierra Club [hereinafter "Glick Direct"] at 20:5 (June 6, 2024).

As outlined above, substantial evidence points to TECO having a summer peak.[32] While TECO itself admits that solar generation contributes to its summer reserve margin[33]—the sun is shining and generating solar energy when summer electricity demand peaks—TECO also unreasonably undercuts solar assets' contribution to the summer reserve margin by assuming that solar contributes only 1.5 percent of its capacity to the summer peak.[34] Again, this assumption is based on projections that do not withstand scrutiny, as they diverge from historical reality. TECO's summer peaks occur during daytime hours, at 5 or 6 p.m., when TECO's existing 1,252 MW of solar photovoltaic ("PV") units[35] must contribute more than 1.5 percent of their capacity to the grid. TECO has even contradicted itself on solar PV's capacity contribution: in 2021, TECO proposed allocating solar assets as 50 percent demand related and 50 percent energy related.[36] It would make no sense to allocate 50 percent of the value of solar to demand if solar actually contributed only 1.5 percent to the summer peak (and 0 percent to the winter peak, as alleged). And TECO concedes that "[b]ased on the expected generation profiles on the summer peak load day, solar PV output is approximately 56 percent of its maximum capacity value for the hour during which peak firm retail load occurs."[37] Even if solar buildout shifts summer peak demand later in the day, as TECO assumes,[38] it will still contribute somewhere between 0 and 56 percent of maximum capacity, not the unreasonably low 1.5 percent TECO models.

---

[32] Even if the Commission were to assume a winter peak, all evidence also points to TECO's winter peak being a *cooling* peak occurring during daytime hours, meaning that solar capacity should contribute to the reserve margin.
[33] Hearing Tr. at 1029:15.
[34] *Id.* at 1031:16-18.
[35] TECO Fla. Pub. Serv. Comm'n Exh. 117 at C32-3445.
[36] Hearing Tr. at 3742:9-18.
[37] TECO Fla. Pub. Serv. Comm'n Exh. 114 at C32-3243.
[38] *Id.*

Going forward, it is likely that TECO's existing solar capacity, in addition to TECO's planned solar projects totaling 842 MW (2024-2028) and 745 MW (2029-2033), will contribute *substantially* to the summer reserve margin.[39] Assuming a conservative 30 percent capacity credit, solar PV would contribute over 800 MW more towards the 2033 summer reserve margin than TECO claims: (30% - 1.5%) x (1,252 MW + 842 MW + 745 MW solar capacity by 2033). Adding this undercounted solar contribution to a 29 percent 2033 summer reserve margin with about 400 MW of excess capacity—9% x 4,511 MW summer peak demand[40]—TECO's excess capacity above its minimum 20 percent reserve margin could be more than 1200 MW or 1.2 gigawatts ("GW") in 2033, which would result in a fantastically high reserve margin of about 47 percent. In other words, TECO's failure to count its existing and planned solar generating units toward its summer reserve margin results in capacity bloat, manifested here by an unwillingness to retire old, expensive fossil fuel assets. The Commission should closely reexamine the basis for TECO's reserve margin calculations and require it to concurrently retire old generation in exchange for planned low-cost solar and storage additions.

5. TECO further undercuts its own solar investments' contribution to reserve margin by under planning for battery storage.

Battery storage is capable of discharging its full capacity during peak demand, as storage capacity does not vary with daylight. Witness Aldazabal concedes that storage has a 100 percent capacity credit: *i.e.*, storage units can provide 100 percent of their capacity during peak demand.[41] Further, solar can be paired with storage to increase the capacity credit of solar and thereby increase solar's contribution to TECO's summer *and* winter reserve margins, as TECO

[39] Glick Direct at 57:16-19, 58:1-6.
[40] TECO Fla. Pub. Serv. Comm'n Exh. 117 at C32-3500.
[41] Hearing Tr. at 1073:15-22.

witnesses Archie Collins, President and CEO, and Jose Aponte, Manager Resource Planning, have both acknowledged.[42] Yet, TECO makes clear that it is not currently planning to pair solar and battery storage.[43] In fact, TECO is planning to bring online only one 70 MW battery storage project in 2028.[44] In planning for only one new battery storage project starting in 2028, while simultaneously planning for ten times that capacity in solar buildout, TECO is not optimizing the reliability value of its new solar projects for the grid, and as a result, is artificially deflating solar's contribution to reserve margins.

6. Factoring in TECO's unjustified and inflated minimum reserve margin, actual summer peak, and undercounted solar contribution to that peak, TECO is unlikely to need Polk 1 and Big Bend 4's capacity for reliability.

Assuming a summer cooling peak instead of a winter heating peak *alone* renders Polk 1's 220 MW unnecessary for resource adequacy, given TECO's enormous cushion in its planned summer reserve margin through 2033. Assuming a summer peak and a 15 percent minimum reserve margin almost renders Polk 1 and Big Bend 4's combined 706 MW entirely superfluous. But perhaps most illuminating, assuming a summer peak and assuming conservative (30 percent) levels of solar contribution to summer reserve margins, Polk 1 and Big Bend 4's combined 706 MW of capacity will not be necessary to meet TECO's self-assigned 20 percent minimum reserve margin starting in 2024. TECO's contention that Polk 1 and Big Bend 4 are necessary for reliability purposes is built on reserve margin assumptions that are poorly reasoned and have no basis in the record.

[42] *Id.* at 384:23, 385:1, 1073:15-22, 1074:18-25.
[43] *Id.* at 1072:20-24, 1073:1.
[44] TECO Fla. Pub. Serv. Comm'n Exh. 114 at C32-3266.

Table 1: TECO Excess Capacity

Year	Total Capacity Available (MW)[45]	System Firm Summer Peak Demand (MW)[46]	Existing Solar	New Solar[47]	Undercounted Solar Contribution (28.5%) (MW)	Excess over 20% Reserve Margin (MW)	Excess over 15% Reserve Margin (MW)
2024	5,314	4,143	1,252[48]	98	357	**699**	906
2025	5,457	4,182	1,350	149	385	**823**	1,032
2026	5,504	4,222	1,499	242	427	**865**	1,076
2027	5,506	4,261	1,741	149	496	**889**	1,102
2028	5,577	4,302	1,890	204	539	**953**	1,168
2029	5,578	4,343	2,094	149	597	**963**	1,180
2030	5,779	4,385	2,243	149	639	**1,156**	1,375
2031	5,796	4,427	2,392	149	682	**1,165**	1,387
2032	5,796	4,469	2,541	149	724	**1,157**	1,381
2033	5,797	4,511	2,690	149	767	**1,150**	1,376

B. Maintaining Coal Is Not Necessary to Improve TECO's Fuel Diversity, Which Can Be Better Bolstered by Lower-Cost Renewables (Issue Nos. 18, 20 & 116).

The Commission should require TECO to follow the lead of utilities across the country in retiring its costly and unreliable coal units. Witness Aldazabal acknowledged that many coal plants have retired around the United States in recent years.[49] In fact, many of these retirements happened earlier than planned, and TECO itself has retired several of its own coal units ahead of schedule.[50] Witness Collins acknowledged that Big Bend 4 is an "aging" unit, and that Polk 1 and Big Bend 4 "are the least efficient generating assets in [TECO's] fleet."[51] Witness Aldazabal contrasted the prospects of renewable alternatives to old coal units like Big Bend 4, stating,

[45] TECO Fla. Pub. Serv. Comm'n Exh. 117 at C32-3500.
[46] *Id.*
[47] *Id.* at C32-3503
[48] *Id*. at 3.
[49] Hearing Tr. at 798:19-21.
[50] *Id.* at 798:22-25, 799:1-4.
[51] *Id.* at 361:16-23, 365:4-6.

"[a]bsent 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."[52]

Witness Aldazabal further enumerated the many disadvantages of operating TECO's coal units, including their lower efficiency and higher operating costs relative to newer generating assets.[53] Coal's higher operating costs are especially pronounced when considering environmental compliance costs and the availability of federal Inflation Reduction Act tax credits for installing renewable energy, including solar energy and battery storage.[54] As witness Aponte acknowledged in his testimony, "[p]ublic policy considerations and customer expectations in the United States and around the world are trending against carbon emissions and in favor of renewable energy like solar generation."[55] In light of this reality, he asserted that "it is reasonable to consider the value of avoided carbon costs when evaluating the cost-effectiveness of generating alternatives, including [TECO's] Future Solar projects."[56] He also agreed that as TECO considers avoided carbon costs in its generation mix, its renewable units would be considered even more cost-effective, as compared with TECO's fossil fuel units.[57]

As detailed in Sections III.C.4 and III.D.2 below, TECO's coal and gas units are also unreliable, with eye-popping outage rates. Witness Collins noted that once TECO replaces Big Bend 4's coal combustion with predominantly gas combustion, he expects reduced coal usage to

---

[52] Prepared Direct Testimony and Exhibit of Carlos Aldazabal [hereinafter "Aldazabal Direct"] at 25:22-25 (April 2, 2024).
[53] Hearing Tr. at 799:10-25, 800:1-11.
[54] Prepared Direct Testimony and Exhibit of Kris Stryker [hereinafter "Stryker Direct"] at 8:7-12; Hearing Tr. at 1062:9-12.
[55] Prepared Direct Testimony and Exhibit of Jose Aponte [hereinafter "Aponte Direct"] at 31:3-6.
[56] *Id.* at 31:9-12.
[57] Hearing Tr. at 1078:12-17.

improve the unit's reliability.[58] From a reliability perspective, he explained, "it's much more challenging to operate on coal" than gas.[59]

Without an economic, resource adequacy, or reliability rationale for keeping Polk 1 and Big Bend 4 running, TECO turns to fuel diversity. However, coal is only a small part of TECO's overall system: 87 percent of its energy came from gas generation in 2023.[60] Coal generation comprised only about 3.8 percent of TECO's electricity generation mix in 2023.[61] Any fuel diversity offered by Polk 1 and Big Bend 4 pales in comparison to TECO's total system-wide load. Maintaining 706 MW of coal capacity cannot guard against gas price shocks or supply shocks impacting GWs of generation on TECO's system. Witness Aldazabal acknowledged that TECO's coal capacity may not be sufficient to compensate for a gas supply issue.[62] Additionally, TECO is not entering into any new agreements to procure coal or petcoke for Big Bend 4 or Polk 1, so if there were a gas price or supply shock, TECO would be subject to coal or petcoke prices in the spot market, which would likely rise as the relative demand for these solid fuels increases during gas price shocks.[63]

Moreover, the mere fact that coal and petcoke are different types of fossil fuels than gas does not justify any reliance on those fuels for fuel diversity purposes. TECO can—and already does—obtain fuel diversity from newer and more cost-effective resources than coal. Witness Aldazabal readily agreed that solar energy, energy storage, and energy efficiency measures also provide TECO's system with fuel diversity.[64] Just as TECO would not burn obsolete forms of

[58] *Id*. at 367:19-25.
[59] *Id*. at 367:6-12.
[60] *Id.* at 790:8-11.
[61] *Id.* at 790:4-7.
[62] *Id.* at 790:12-22.
[63] Hearing Tr. at 796:7-18.
[64] *Id*. at 789:15-22.

fuel, such as kerosene, just to diversify the energy resources on its system, TECO should not continue maintaining costly coal units for this purpose.[65]

On the contrary, TECO should expand its fuel diversity while reducing costs to its ratepayers by adding more renewables and storage capacity to its system. TECO recognizes that solar and energy storage are low-cost sources of new generation, especially given the availability of federal production and investment tax credits under the Inflation Reduction Act.[66] Sierra Club supports TECO's present request to add more of these clean, cost-effective energy sources to its generation mix.[67] The Commission should, however, require TECO to add more battery storage, as well as paired solar and battery storage, to its resource mix over the next decade. In doing so, TECO can meet its reliability needs, reduce overall costs for ratepayers, and achieve greater fuel diversity. TECO witnesses agreed that TECO can obtain fuel diversity from non-fossil resources, including new solar, storage, energy efficiency measures, and demand-side management and hedge against high gas prices.[68,69]

TECO's projections indicate that it is bringing on eight new solar projects (totaling 488.7 MW) from 2024 to 2026, as well as four new battery storage projects totaling 115 MW.[70] However, planned battery storage drops off after 2027, with TECO adding only one storage unit—a 70 MW project in 2028—in the entire six-year span from 2027 to 2033.[71] TECO has not explained why it could not add more battery storage units during the six-year period from 2027 to 2033, when it is bringing substantial solar capacity online. Witness Aponte acknowledged

[65] *See infra* Sections III.C.4 & III.D.
[66] Prepared Direct Testimony and Exhibit of Kris Stryker at 8:7-12; Hearing Tr. at 1062:9-12.
[67] *See* Glick Direct at 54:15-21.
[68] Hearing Tr. at 384:13-25, 385:1, 789:15-22, 1071:1-9.
[69] *Id.* at 1071:13-15.
[70] Stryker Direct at 37:24-25, 38:1-7.
[71] TECO Fla. Pub. Serv. Comm'n Exh. 120 at C32-3577.

there are no technical barriers to bringing on additional storage and advanced no explanation for TECO's failure to do so.[72] He stated that TECO *might* bring on more than one storage project during that time period, given its potential to amplify solar energy's capacity and add reliability and resilience to TECO's system.[73] The Commission should require TECO to include additional battery storage units in its resource planning projections and its retirement planning for Polk 1 and Big Bend 4. The Commission should also require TECO to pair more of its new solar units with storage, as failing to do underutilizes solar resources.

Currently, TECO builds and owns battery storage itself—and witness Collins indicated it plans to continue doing so.[74] TECO investors of course benefit financially from building its own capital assets, reaping ROE on those assets. Holding an open-source Request for Proposal ("RFP") would enable TECO to take in bids from solar and storage developers and use market competition to drive down the prices of these resources. To that end, the Commission should require TECO to issue an open-source RFP for new battery storage assets—and provide the results of that RFP to the Commission—before its subsequent rate case.

C. The Commission Should Deny TECO's Requested Flexibility and Fuel Diversity Projects at Polk 1 and Require Polk 1's Retirement by 2030 At the Latest (Issue Nos. 24, 32, 43, 45, 102, & 116).

TECO has not met its burden of showing that it is fair, just, or reasonable for ratepayers to pay millions of dollars to upgrade Polk 1, an underutilized and expensive unit. The Commission should reject the proposed Polk 1 Flexibility and Fuel Diversity Projects and require TECO to immediately retire Polk 1's gasification equipment. And the Commission

[72] Hearing Tr. at 1072:11-14.
[73] *Id.* at 1072:6-10.
[74] Hearing Tr. at 381:16-25.

should require TECO to retire Polk 1 by 2030. If not, it must require that TECO conduct an updated, thorough retirement study for Polk 1 that considers retirement dates earlier than 2036.

1. TECO has not met its burden of showing the Polk 1 Flexibility Project is fair, just, or reasonable for ratepayers.

It would be unjust for customers to pay for costs associated with the proposed Polk 1 Flexibility project. Polk 1 is a 220-MW dual-fuel unit capable of burning coal or petcoke using integrated gasification combined-cycle ("IGCC") technology. Polk 1 has only combusted gas since 2018.[75] Through the Polk 1 Flexibility project, TECO seeks to recover $90.1 million to convert Polk 1 into a simple-cycle CT. After this conversion, TECO intends to retain IG technology so that Polk 1 can burn petcoke or coal, but it is unlikely that the IG components will ever be used during Polk 1's remaining lifespan.[76]

TECO has not met its burden of proving that the Flexibility Project is cost-effective. While witness Aponte's testimony quotes the total price tag of the Flexibility Project at $80.5 million, he clarified at the hearing that the project's net present value is actually $90.1 million: a $90.1 million sum will be passed on to ratepayers.[77] This expense is not justified. Even if TECO undertakes and realizes some efficiency upgrades from the Polk 1 Flexibility Project, Polk 1 is still expected to have an overall negative net present value revenue requirement ("NPVRR") of around $30.5 million, which means Polk 1's future costs are expected to exceed its future benefits, when both are expressed in 2023 dollars.[78]

As explained in Section III.C.4 below, retiring Polk 1 is more cost-effective than continuing to spend tens of millions of dollars on upgrading it. In addition to seeking the

[75] Glick Direct at 14:11-14, 15:1-11; TECO Fla. Pub. Serv. Comm'n Exh. 117 at C32-3446.
[76] Aldazabal Direct at 44:20-24, Hearing Tr. at 1059:2-21.
[77] Hearing Tr. at 1059:2-21.
[78] Glick Direct at 34:11-15.

Commission's approval to spend $90.1 million[79] in ratepayer dollars to convert Polk 1 to a CT, TECO seeks approval to spend $53.9 million to bring liquid fuel capability to Polk 1, and an initial sum of $18.2 million to explore the possibility of installing experimental carbon capture and storage ("CCS") technology at Polk.[80] These planned and proposed investments sit on top of tens of millions of dollars that TECO has already sunk into Polk 1's operations and maintenance in recent years, including the steep sum of $30 million from 2010 to 2013 to build underground injection wells to house wastewater produced from solid fuel combustion.[81] TECO does not provide evidence that sinking more money into Polk 1 is fair, just, or reasonable for TECO's ratepayers.

TECO plans to operate Polk 1 very infrequently throughout the remainder of its life. Polk 1 already has a very low capacity factor, and it is expected to decrease further until the unit's current planned retirement date of 2036.[82] TECO's records reflect that Polk 1 was operating at just a 14.6 percent capacity factor in 2024.[83] TECO anticipates running Polk 1 significantly less over the remainder of its lifespan, projecting its capacity factor will dip as low as 2.5 percent in 2025 and fluctuate from 3.8 to 5 percent afterwards.[84] Witness Aldazabal confirmed that even if Polk 1 undergoes the proposed Flexibility Project, its capacity will remain below 5 percent.[85] In addition to Polk 1's low projected capacity factor, the unit's total capacity is also expected to be

[79] Hearing Tr. at 1059:19-21.
[80] Aldazabal Direct at 68:17-18; TECO Fla. Pub. Serv. Comm'n Exh. 114 at C32-3254.
[81] Part of the roughly $30 million total cost—about $7 million—was funded not by TECO ratepayers, but by "Southwest Florida Water Management District in the Reclaimed Water Initiative." TECO Fla. Pub. Serv. Comm'n Exh. 799, TECO Answers to Sierra Club's Fourth Set of IRRs (Nos. 96 - 103) [hereinafter "TECO Fla. Pub. Serv. Comm'n Exh. 799"] at F6-208.
[82] TECO Fla. Pub. Serv. Comm'n Exh. 117 at C32-3446.
[83] TECO Fla. Pub. Serv. Comm'n Exh. 808, BS 28927 Sierra Club 1st Set IRR Q9 [hereinafter "TECO Fla. Pub. Serv. Comm'n Exh. 808"], at F6-399.
[84] Hearing Tr. at 769:6-12.
[85] Hearing Tr. at 734:17-21.

diminished after the costly CT conversion. The CT conversion is projected to reduce Polk 1's firm capacity contribution from 220 MW in the summer and winter to only 190 MW in the summer and 203 MW in the winter.[86]

The Commission should deny TECO's request for a $90.1 million investment that does not meaningfully contribute to reliability or fuel diversity on TECO's system. The proposed conversion simply replaces one form of gas combustion with another. As witness Collins admitted, it would "increase[] the dependency on natural gas" of TECO's system.[87] TECO has not met its burden of proving that the Polk 1 Flexibility Project is justified, from a resource adequacy, cost, or fuel diversity perspective. Further, as is explained in greater detail below, retiring Polk 1, instead of spending ratepayer dollars on countless upgrades, is likely to reduce overall costs for TECO's ratepayers.

2. TECO has not justified spending additional ratepayer dollars on the Polk Fuel Diversity project.

TECO proposes to spend $53.9 million at Polk 1 to allow it to burn fuel oil—on top of coal and gas—through the Polk Fuel Diversity Project.[88] Witness Aldazabal attempts to justify the project by pointing to the fact that "[TECO] [does] [not] have a lot of fuel diversity in [its] generation mix,"[89] as 87 percent of its generation is gas.[90] TECO's claims that fuel oil will provide fuel diversity fall flat for a few reasons. First, if fuel diversity is needed at Polk 1, then the IGCC components at Polk 1 do not provide the fuel diversity that TECO claims to seek vis-a-vis coal and petcoke combustion. TECO should not be able to keep IGCC components in long-

[86] TECO Fla. Pub. Serv. Comm'n Exh. 120 at C32-3577.
[87] Hearing Tr. at 384:1-9.
[88] Aldazabal Direct at 67:21-25, 68:1-18.
[89] Hearing Tr. at 786:16-17.
[90] *Id*. at 790:8-11.

term reserve while also charging customers for a redundant fuel diversity project. Second, fuel oil has the same fuel cost and fuel supply issues associated with gas, and therefore does not provide useful fuel diversity. Liquid fuel will have to be delivered to Polk 1 even if TECO builds liquid storage tanks.[91] Building new fuel storage tanks would incur even more costs, which would be passed on to ratepayers. Notably, TECO has not provided any estimates of the costs to build onsite liquid storage, nor has it detailed any of the inevitable environmental compliance costs associated with burning fuel oil, which would likely generate significant local emissions. In the meantime, the same weather-related delivery issues that plague natural gas would threaten fuel oil delivery to Polk 1, thereby undercutting any of its fuel diversity benefits. Third, TECO has not even justified the continued operation of Polk 1 when factoring in additional costs associated with the Fuel Diversity Project. As discussed in Section III.C.4 below, TECO based its decision to continue operation at Polk 1 on a 2022 Polk 1 retirement study that did not include the cost of the Polk Fuel Diversity Project.[92] That study *as-is* found it cost-effective to retire Polk 1 immediately, relative to the costs of continuing to operate Polk 1.[93] TECO did not study alternative generation resources in its 2022 Polk 1 retirement study, but if it had, the costs associated with additional proposed upgrades at Polk 1, including both the Fuel Diversity and Flexibility Projects, would surely have made early retirement (coupled with lower-cost replacement generation) even more economic compared to the continued operation of Polk 1.

In sum, it makes little sense for ratepayers to spend $53.9 million to prop up an asset as underutilized as Polk 1, currently slated for retirement by 2036.[94] Rather than continuing to

[91] *Id*. at 785:16-25, 786:1-7.
[92] *Id*. at 1063:12-15.
[93] *Id.* at 1048:22-24.
[94] TECO Fla. Pub. Serv. Comm'n Exh. 117 at C32-3446.

throw money at a unit that is not cost-effective compared to immediate retirement, TECO should pursue alternative generation options that do not have fuel costs. For example, battery storage can provide fuel diversity, and battery storage does not include the fuel costs that make gas reliance harmful.[95] In a weather shock, battery storage will not fail in the same manner that gas and fuel oil pipelines and transportation will. There is scant evidence in the record justifying the expense of adding a *third* fossil-fueled capability to Polk 1.

3. TECO has not justified keeping Polk 1's IGCC components in long-term reserve.

If TECO is permitted to move forward with the Flexibility or Fuel Diversity Projects at Polk 1, the Commission should nonetheless require TECO to retire Polk 1's solid fuel-burning capacity, which places ongoing maintenance costs on customers without conferring any benefits. Polk 1 contains integrated gasification ("IG") equipment that has historically been used to convert coal or petcoke—two costly and highly polluting forms of solid fuel—into gas that can be combusted in Polk 1's combined cycle turbine.[96] Importantly, TECO has no express intention of using Polk 1's IG equipment ever again. Owing in part to the high costs of coal and petcoke relative to gas, and in part to the old age and disrepair of this unit's IG equipment, Polk 1 has not burned solid fuel at all since 2018.[97] Looking forward, TECO's projected 3.8 to 5 percent capacity factor for Polk 1 through the remainder of its lifespan reflects *only* gas combustion.[98] This is largely due to TECO's projections that the costs of coal and petcoke will remain higher

[95] Hearing Tr. at 1071:7-9.
[96] TECO Fla. Pub. Serv. Comm'n Exh. 114 at C32-3202.
[97] Hearing Tr. at 788:3-5.
[98] *Id.* at 770:6-9.

than gas prices over the remainder of Polk 1's lifespan,[99] as well as the potential costs and time required for upgrading the IG equipment at Polk 1 so it can be usable again.

Since 2018, TECO's ratepayers have borne the continual costs of maintaining the IG equipment that has been in reserve.[100] TECO has not met its burden to justify continuing to spend ratepayer dollars on maintaining this IG equipment in reserve. Before using the IG equipment again, TECO would need to procure new gas combustion hardware because the original equipment manufacturer no longer supports Polk 1's technology.[101] TECO would also need to update the steam cycle components and gas turbine components for Polk 1 to become operational again.[102] This update is required to operate Polk 1's IG equipment regardless of whether TECO moves forward with the Polk 1 Flexibility and Fuel Diversity Projects.[103]

The necessary update to Polk 1's IG, steam cycle, and gas turbine components has an indeterminate duration and an indeterminate cost. Despite TECO's lack of analysis regarding this cost, it still asks ratepayers to indefinitely retain Polk 1's IG equipment in long-term reserve. Before beginning an update to Polk 1, TECO would need to conduct an "engineering assessment" to assess what the update would entail and what its costs would be.[104] TECO would also likely need to modify or acquire new environmental permits to run Polk 1 on petcoke or coal again.[105] Witness Aldazabal projected these processes could take around one year in total, but admitted they could take longer, especially because it is unclear how long it would take for new

[99] *Id.* at 779:9-12.
[100] *Id.* at 770:10-14.
[101] *Id.* at 770:15-24, 772:10-14; Aldazabal Direct at 45:10-11.
[102] Hearing Tr. at 772:4-9.
[103] *Id*. at 780:20-23.
[104] *Id*. at 771:15-18.
[105] *Id.* at 772:15-23.

permits to be issued.[106] TECO has no control over the Florida Department of Environmental Protection ("FDEP")'s permitting process, which could take multiple years to complete. After all, FDEP still has not issued the updated NPDES permit that TECO applied for in 2016.[107] Moreover, the Polk 1 IG update would render the unit inoperable for various time periods during the update.[108]

TECO has provided no cost estimate for bringing Polk 1's IG equipment out of long-term reserve.[109] Even if the cost and duration of updating this IG equipment were known with certainty, TECO asserts it would not undertake the update unless its total costs were lower than the projected difference between future gas and solid fuel prices. To justify initiating the IG update, witness Aldazabal admitted that forward gas prices would need to be higher than the forward prices of coal or petcoke for more than one year, with the difference between petcoke or coal prices and elevated gas prices exceeding the capital cost of the IG update.[110] In short, TECO is unlikely to ever update Polk 1's IG equipment. In 2022, when gas prices spiked due to the conflict in Ukraine, TECO decided not to activate Polk 1's IG equipment.[111] Similarly, TECO did not attempt to burn solid fuel at Polk 1, or consider updating Polk 1's IG equipment, during Winter Storm Uri in February 2021 or during a more recent gas price spike in January 2024.[112] Looking ahead, TECO projects that the dispatch costs of petcoke would be higher than the

[106] *Id.* at 772:21-23, 773:9-11.
[107] TECO Fla. Pub. Serv. Comm'n Exh. 794, Big Bend NPDES Permit Application [hereinafter "TECO Fla. Pub. Serv. Comm'n Exh. 794) at F6-106; *see also* Hearing Tr. at 934: 11-18, 934:21-23.
[108] Hearing Tr. at 771:23-25, 772:1-3.
[109] *Id*. at 774:11-25, 775:9-18.
[110] *Id*. at 771:18-22.
[111] *Id.* at 777:1-10.
[112] *Id.* at 788:6-21.

dispatch costs of gas for every year from 2024 through 2030.[113] And in justifying its decision to retire Big Bend 4 earlier, TECO projects that gas prices will remain below coal prices through at least 2040.[114] Witness Aldazabal agreed that "TECO projects that *throughout the lifespan of Polk one, gas will remain more cost effective than coal.*"[115]

Because all evidence suggests TECO will never use Polk 1's gasification equipment again, retaining the IG equipment does not carry fuel diversity benefits. TECO cannot have it both ways: moving up Big Bend 4's retirement date because it predicts gas prices will remain sufficiently lower than coal prices, yet failing to advance the retirement date for Polk 1's coal-burning equipment.

TECO's ancillary attempts to justify keeping Polk 1's IG equipment in reserve also fall flat. Witness Collins suggested that the unit's IG equipment might someday be capable of combusting hydrogen.[116] TECO provides no evidence that hydrogen combustion is technically or commercially feasible. Hydrogen carries less energy per volume than natural gas,[117] and TECO has not made a showing in this rate case that the gasification equipment at Polk 1 can burn hydrogen. The Commission should not permit TECO to keep its IG equipment online for the speculative possibility of one day using it to burn hydrogen. This costly assessment process has done little to illustrate the feasibility of hydrogen, and the cost of the assessment alone should caution the Commission against approving spending on unproven energy sources.

---

[113] *Id*. at 780:4-8; TECO Fla. Pub. Serv. Comm'n Exh. 115, TECO response to Sierra Club 2nd IRRs [hereinafter "TECO Fla. Pub. Serv. Comm'n Exh. 115"] at C32-3325.
[114] Hearing Tr. at 779:1-5.
[115] *Id.* at 779:9-12 (emphasis added).
[116] *Id*. at 914:18-23.
[117] *Id*. at 918:13-17.

Because TECO provides no compelling rationale to keep the IG equipment available for an eventual update, the Commission should require TECO to retire IG equipment at Polk 1 immediately.

4. TECO has not justified its intent to continue operating Polk 1, rather than retiring that unit ahead of schedule.

In 2022, TECO conducted an analysis on retiring Polk 1 and found that retirement would be lower cost than continuing to operate the unit.[118] That 2022 retirement analysis was missing many key variables that, if included, are likely to show that additional spending on Polk 1 is not cost-effective. TECO's cursory 2022 retirement analysis considered only one potential retirement year, 2028, and thus, was not sufficiently comprehensive to minimize costs to ratepayers.[119] Additionally, the retirement study did not consider a scenario in which Polk 1's capacity was replaced with renewable energy or battery storage,[120] even though these are the primary sources of energy that TECO is proposing to add over the coming decade.[121] Thus, TECO's retirement study was unable to capture any cost benefits from replacing Polk 1 with newer, cleaner, and low-cost energy sources. The retirement study could have reflected even greater savings from replacing Polk 1's capacity with renewables acquired through an open-source RFP process, but it did not do so.[122] The retirement study also did not evaluate whether Polk 1 is necessary for meeting TECO's summer reserve margin. As detailed in Section III.A.4

[118] TECO Fla. Pub. Serv. Comm'n Exh. 805 at F6-369. *see also* TECO Fla. Pub. Serv. Comm'n Exh. 114 at C32-3205 (stating that TECO's retirement study for Polk 1 was conducted in "Fall 2022").
[119] Hearing Tr. at 782:4-6, 1061:6-8.
[120] *Id.* at 1061:9-13.
[121] *See* TECO Fla. Pub. Serv. Comm'n Exh. 120 at C32-3577.
[122] *See supra* Section III.B; Hearing Tr. at 1061:14-18.

above, evaluating TECO's system through the lens of a summer peak means that some resources can be retired without being replaced because of excess planned capacity.

The retirement study is also out of date. Its analysis did not consider the current prices of renewable energy, which are decreasing over time.[123] Similarly, because the analysis was conducted in 2022, it naturally does not reflect 2024 gas prices. In the retirement study, TECO did not consider the costs of TECO's proposed capital investments at Polk 1, namely the Flexibility and Fuel Diversity Projects.[124] TECO likewise did not consider the projected costs of any environmental compliance measures at Polk 1, including any costs related to the recently enacted federal greenhouse gas standards.[125]

Even still, TECO found that retiring Polk 1 is more cost-effective than continuing to operate it as a combined cycle unit. Updating the 2022 analysis to include the variables expanded upon above would make retirement even more economic relative to continued operation. After all, the record reflects that Polk 1 is already uneconomic, with unit costs that have exceeded market value for two of the past five years.[126] And Polk 1's poor economics are not justified by reliability needs. Polk 1 cannot be counted on as a reliability asset. Its outage rate reached as high as 67 percent, in 2021, and has been above 25 percent three of the past five years.[127]

---

[123] Glick Direct at 52:16-19

[124] Hearing Tr. at 1063:12-25, 1064:1 (When asked about this, witness Aponte testified that TECO considered the retirement study when analyzing the Polk 1 Flexibility Project, but did not state the opposite (i.e. that TECO included the Flexibility Project as a variable in its retirement study).

[125] *Id.* at 1064:2-9; TECO Fla. Pub. Serv. Comm'n Exh. 114 at C32-3254.

[126] Glick Direct at 33.

[127] *Id*. at 33:8-9; *see also* TECO Fla. Pub. Serv. Comm'n Exh. 124, TECO response to SC IRR 8, Attachment (BS 28923) 2019 - 2023 Factor and Rates [hereinafter "TECO Fla. Pub. Serv. Comm'n Exh. 124"] at C32-3596.

Table 2: Polk 1 Net Equivalent Forced Outage Rate (NEFOR)[128]

	2019	2020	2021	2022	2023
Polk 1	8.54%	27.35%	67.40%	30.11%	7.52%

The Commission should require TECO to retire Polk 1 by 2030 at the latest. In the alternative, the Commission should require TECO to perform an updated retirement study to assess whether Polk 1 is necessary for reliability purposes. In this study, the Company must assess the cost-effectiveness of retiring Polk 1 as early as 2025. Until TECO conducts such analysis, incurring continued capital and O&M costs at Polk 1 would be unfair, unjust, and unreasonable.

D. The Commission Should Require TECO to Retire Big Bend 4 by 2030 at the Latest (Issue Nos. 32, 44 & 45).

Big Bend 4 is the lone remaining coal unit at the Big Bend Power Station, located "on Tampa Bay adjacent to the community of Apollo Beach."[129] Big Bend 4 is an aging and uneconomic asset that is not needed for resource adequacy and that cannot be called upon reliably. TECO has not met its burden of showing that continued capital and O&M spending at Big Bend 4 is necessary to provide reliable service to TECO customers.

1. Big Bend has seen declining utilization in recent years.

Big Bend 4, a dual-fuel 486 MW generating unit,[130] is described by witness Collins as an "aging" generation asset, and one of the two "least efficient generating assets in [TECO's] fleet."[131] As shown in Table 3 below, Big Bend 4 has seen declining utilization in recent years.

[128] TECO Fla. Pub. Serv. Comm'n Exh. 124 at C32-3596.
[129] Glick Direct at 16.
[130] TECO Fla. Pub. Serv. Comm'n Exh. 117 at C32-3446.
[131] Hearing Tr. at 365:2-7.

In 2022, Big Bend 4 had 36 and 2 percent capacity factors for coal and gas, respectively, and in 2023, the unit had 21 and 7 percent capacity factors for coal and gas.[132] Through April 2024, the unit ran at even lower capacity factors, with a 3 percent capacity factor for coal and an 8 percent capacity factor for gas.[133] This trend represents a shift away from coal usage, coupled with steady or slightly increasing gas utilization. TECO has confirmed this trend: "[T]he company plans to operate Big Bend 4 mostly on natural gas and expects to burn minimal amounts of coal to keep the solid fuel equipment viable."[134] Consistent with lower utilization, TECO is not renewing its coal supply contract for Big Bend 4, and instead intends to purchase coal on the spot market beyond 2024.[135] Put differently, TECO does not anticipate that burning coal will be economic, but rather than retire Big Bend 4's coal-burning equipment, it plans to continue to purchase coal on the spot market and burn it at a heightened expense to ratepayers. This is despite the fact that O&M costs to burn coal at Big Bend 4 are over twice the costs to burn gas, due to not only higher fuel costs, but also higher variable O&M costs for coal.[136] Looking ahead, TECO projects that Big Bend 4 will operate at a very low total utilization rate, from 8.8 to 17.6 percent, over the next decade.[137]

[132] TECO Fla. Pub. Serv. Comm'n Exh. 119, TECO response to SC IRR 1-8, Attachment (BS 28921) 2018-2023 GFP .xlsx [hereinafter "TECO Fla Pub. Serv. Comm'n Exh. 119"] at C32-3570.
[133] *Id.*
[134] TECO Fla. Pub. Serv. Comm'n Exh. 114 at C32-3257.
[135] TECO Fla. Pub. Serv. Comm'n Exh. 115 at C32-3311.
[136] Glick Direct at 49:10-12.
[137] TECO Fla. Pub. Serv. Comm'n Exh. 808 at F6-399.

Table 3: Big Bend 4 Unit Statistics Operating on Coal and Gas[138]

	2019	2020	2021	2022	2023
Net Capability (MW)					
Coal	438	392	425	425	425
Gas	188	170	157	418	413
Service Hours (hrs)					
Coal	3,973	3,337	4,850	5,575	3,404
Gas	681	1,278	2,367	1,355	3,331
Net Generation (MWh)					
Coal	1,214,307	909,110	1,357,954	1,336,581	769,413
Gas	83,516	143,651	274,144	83,267	263,553
Annual Capacity factor (%)					
Coal	32%	26%	36%	36%	21%
Gas	5%	10%	20%	2%	7%

2. Big Bend 4 has been unreliable in the past, and is likely to become more unreliable as it gets older.

TECO witness Collins concedes that Big Bend 4 has been "relatively unreliable" in the past, as measured by its net equivalent forced outage rate ("NEFOR"), which measures the duration that a unit is unavailable for service due to forced outages or deratings when its load is needed.[139] Big Bend's NEFOR was above 15 percent for four of the past five years, and it reached nearly 30 percent for three of the past five years.[140] Outages this frequent expose TECO ratepayers to blackout risks as TECO continues to run the unit.

TECO attempts to explain these high NEFOR numbers as "anomaly years" due to unexpected outage events caused by a need to refurbish certain equipment.[141] TECO then goes on to assert, without evidence, that these upgrades "will position the unit for high reliability for

[138] TECO Fla. Pub. Serv. Comm'n Exh. 119 at C32-3570.
[139] Hearing Tr. at 366:8-11.
[140] TECO Fla. Pub. Serv. Comm'n Exh. 124 at C32-3596.
[141] Rebuttal Testimony and Exhibit of Carlos Aldazabal [hereinafter "Aldazabal Rebuttal"] at 14:12-25 (July 2, 2024).

its remaining useful life."[142] TECO makes no mention of how expensive these upgrades were. Nor does it explain why an admittedly aging coal-burning unit such as Big Bend 4 will not continue to break down and require more costly refurbishments in the future. All evidence points to Big Bend 4 continuing to perform poorly, even as TECO puzzlingly labels it a reliability resource.

Table 4: Big Bend Net Equivalent Forced Outage Rate (NEFOR)[143]

	2019	2020	2021	2022	2023
Big Bend Unit 4	28.09%	32.04%	8.71%	31.61%	18.08%

3. Big Bend 4's coal capability does not positively impact reliability or provide the fuel diversity TECO claims.

TECO points to Big Bend 4's flexibility in switching between burning coal and gas as demonstrating the importance of keeping Big Bend 4 running for reliability purposes. TECO's own actions contradict this assertion. Given how expensive and inefficient it is to burn coal at Big Bend 4, TECO has intentionally and understandably wound down its use of coal at this unit.[144] As witness Collins noted: "[I]t's much more challenging to operate [Big Bend 4] on coal. So we rarely consume coal in that unit now. Only under unusual circumstances do we consume coal in the Big Bend 4 [unit]. And so . . . by virtue of that, you are going to see improved reliability on Big Bend 4."[145] Retaining Big Bend 4's coal capability for reliability purposes is not justified for at least three reasons.

First, it is disingenuous for TECO to simultaneously assert that it is improving reliability by no longer burning coal as much at Big Bend 4, while also claiming that burning coal at Big

[142] *Id.*
[143] TECO Fla. Pub. Serv. Comm'n Exh. 124 at C32-3596.
[144] TECO Fla. Pub. Serv. Comm'n Exh. 115 at C32-3310.
[145] Hearing Tr. at 367:6-12.

Bend 4 is necessary for reliability. Witness Collins stated that "the reliability impact of operating on coal is – it's much more challenging to operate on coal."[146] He also explained that by virtue of burning coal less, "you are going to see improved reliability on Big Bend 4."[147] Collins went on: "Big Bend 4, by virtue of the fact that the unit now largely consumes natural gas, it will be more reliable."[148] TECO provides no evidence or explanations to reconcile its claim that moving towards 100 percent combustion of natural gas at Big Bend 4 improves reliability,[149] and its claim that it must maintain coal capability at Big Bend 4 for "to provide fuel diversity and system reliability."[150]

Second, relying on the spot market to purchase coal (rather than firm supply contracts) cuts against coal's alleged reliability benefits at Big Bend 4. As part of its move away from coal, TECO is not renewing its coal supply contract, and is instead choosing to purchase coal on the spot market.[151] As TECO has admitted, when it desires to burn coal for reliability purposes (for example, during a gas supply shock), then customers will be subject to and impacted by the price of coal on the spot market.[152] TECO customers will be vulnerable price-takers during times of grid stress, when market-wide demand for coal is likely to increase, driving up coal prices on the spot market. And the same weather and supply-related constraints that plague natural gas delivery are likely to be present when TECO is attempting to purchase coal from the spot market.

Third, the evidence provided in this case indicates that Big Bend 4 will continue to be unreliable, as it is, by TECO's own admission, lowest on TECO's priority list for maintenance

---

[146] *Id*.
[147] *Id.*
[148] *Id*. at 367:23-25.
[149] *See id.* at 367:2-5;
[150] Aldazabal Rebuttal at 24:6-17.
[151] TECO Fla. Pub. Serv. Comm'n Exh. 115 at C32-3310.
[152] Hearing Tr. at 796:7-10.

upgrades.[153] This is because of the unit's inefficiency and because its upgrades are costly.[154] TECO witness Collins affirms that "Big Bend 4 still contains an older design with a poor unit efficiency."[155] He also admits that "we don't respond to maintenance issues with the same level of urgency" when it comes to the "last units to dispatch," such as Big Bend 4.[156]

Big Bend 4's poor reliability illuminates TECO's unreasonable approach to deteriorating fossil fuel assets. TECO should not continue to sink ratepayers' money into an old, declining asset. TECO should not continue to run Big Bend 4 when it is unreliable and uneconomic. Instead, as detailed below, TECO should proactively plan to retire the unit, as its operation is not necessary for system-wide reliability.

4. Big Bend 4 has been uneconomic in the recent past and promises to be uneconomic going forward.

Big Bend 4's recent financial performance has been poor. Big Bend 4 has had a net negative value for three of the past five years, which means that its unit costs exceeded its total value, captured as the sum of its capacity and energy value.[157] The only two years during which Big Bend 4 exhibited a net positive value were 2021 and 2022, when COVID-19 and the war in Ukraine spiked energy and market prices in an unusual fashion unlikely to occur in concert going forward.[158] As Sierra Club witness Glick states, "it may be reasonable for expenses to exceed

[153] *Id*. at 365:8-11 ("And so because we are so focused on affordability, we don't – we don't treat every generating asset – we don't respond to the maintenance issues with the same level of urgency.").
[154] *Id; see also id.* at 365:12-16.
[155] *Id.* at 366:21-23.
[156] *Id.* at 365:8-16.
[157] Where capacity value was based on five years of bilateral capacity contracts and energy value based on the past five years of the Company's off-system energy sales and purchases. Glick Direct at 43:10-20, 44:1-4.
[158] Glick Direct at 43:1-3.

revenues in a single year," but if that occurs over multiple years, "that is a strong indication that the unit is not operating economically."[159]

Table 5: Historical Net Value of Big Bend 4 ($2023M) (2019-23)[160]

	2019	2020	2021	2022	2023
Big Bend 4	($38.9)	($63.5)	$21.4	$82.5	($29.1)

Big Bend 4's projected economic value is even worse than its past performance. TECO's own projected cost data shows that Big Bend 4 will be consistently uneconomic to operate from 2024 to 2033, in part due to a low projected capacity factor and in part due to high maintenance costs.[161] These projected net negative values demonstrate the importance of TECO exploring an early retirement for Big Bend 4 and, if needed, planning to install lower-cost renewable replacement capacity.

[159] Glick Direct at 44:14-19.
[160] *See* Fla. Pub. Serv. Comm'n Exh. 119 (TECO response to SC IRR 1-8, Attachment (BS 28921) 2018 – 2023 GFP.xlsx), for fuel costs and Capex data; *see also* Fla. Pub. Serv. Comm'n Exh. 114 at C32-3240 for figures used in calculating energy revenues; *see also* Fla. Pub. Serv. Comm'n Confidential Exh. 761 for capacity value calculated from bilateral energy and capacity contracts; *see also* TECO Fla. Pub. Serv. Comm'n Exh. 808.
[161] Glick Direct at 45:14-18.

Table 6: Projected Net Value of Big Bend 4 ($2023M) (2024-2033)[162]

Year	$2023 M
2024	($6.1)
2025	($1.9)
2026	($6.6)
2027	($10.5)
2028	($5.6)
2029	$2.9
2030	($4.2)
2031	($12.7)
2032	($21.1)
2033	($10.0)

Notably, TECO has countered with no such analysis of its own showing that Big Bend 4 provides value to ratepayers. It treats Big Bend 4's continued operations as a hard-coded input into resource planning, noting that alternatives analyses are not needed because "the asset has numerous years of remaining useful life."[163] TECO's expenditures at Big Bend 4, however, cannot be considered fair, just, or reasonable if they no longer provide value to customers and are simply continuing because TECO set an unreasonable retirement date.

And despite Big Bend 4's poor performance, TECO has done very little analysis to justify continued operation. TECO has not analyzed the costs or feasibility of operating Big Bend 4 entirely on gas instead of coal and gas, nor has it analyzed the cost of potential replacement resources, which—given the reserve margin analysis above—should only have to replace a small portion, if any, of Big Bend 4's capacity.[164] TECO justifies this lack of analysis by stating, "it is premature to incur significant costs to develop cost estimates and system

[162] TECO Confidential response to SC 1-30(c-d), various attachments; capacity value from TECO Confidential response to SC 1-25b, various attachments.
[163] TECO Fla. Pub. Serv. Comm'n Exh. 114 at C32-3201.
[164] *See supra* Section III.A.6.

impacts associated with repowering a unit with at least fifteen years of life left on it."[165] However, as witness Glick notes, TECO cannot ensure least-cost reliable service for ratepayers if it makes retirement decisions based on sunk costs and hard-coded retirement dates.[166] Instead, unit economics, compared against the costs of alternative replacement resources, should govern retirement decisions and dates.

5. TECO customers cannot afford to keep sinking money into the inefficient and expensive Big Bend 4 unit.

From 2019 to 2023, TECO customers saw over $20 million in net negative value from operating Big Bend 4.[167] Part of this was because of the high variable O&M costs to burn coal at the unit,[168] and another part was due to the high cost of capital upgrades at Big Bend 4.[169] Witness Aldazabal states that Big Bend 4 had "large capital investments in the years 2019, 2020, and 2023," yet does not even explain why these investments were necessary, let alone why similar upgrades would not be necessary in the future.[170] Nevertheless, each major capital cost in the past can be tied to Big Bend 4's age and deterioration. The Company had to spend at least $4 million to enable Big Bend 4 to burn gas,[171] and it spent even more in 2021 in order to enable Big Bend 4 to operate on 100 percent gas.[172] In order to comply with the U.S. Environmental Protection Agency ("EPA")'s effluent limitations guidelines ("ELGs"), which regulate coal waste streams, TECO spent over $33 million to construct two deep injection wells ("DIWs") at

[165] TECO Fla. Pub. Serv. Comm'n Exh. 114 at C32-3251.
[166] Glick Direct at 47:12-21.
[167] *See supra Table 6.*
[168] Glick Direct at 41:5-12, 42:1-2.
[169] Aldazabal Rebuttal at 18:10-12.
[170] *Id.*
[171] Hearing Tr. at 367:13-18.
[172] Aldazabal Rebuttal at 20:4-13.

Big Bend 4 from 2020 to 2024.[173] Analogous foreseeable costs promise to make Big Bend 4 even more uneconomic than projected in Table 6 over the next decade.

Ratepayers also face potentially steep ELG compliance costs at Big Bend 4. TECO has not met its burden of demonstrating that it has "already achieved compliance with the ELG rule through its deep injection well [] system."[174] The ELG rule was updated in 2024 to require zero discharge of wastewaters produced by coal-fired units.[175] Big Bend 4 produces one such wastewater, flue gas desulfurization wastewater ("FGD").[176] TECO asserts that it can comply with zero-discharge requirements by injecting all FGD wastewater into DIWs without pre-treatment.[177] TECO further contends that because its DIW wells are permitted by the Florida Department of Environmental Protection ("FDEP")'s Underground Injection Control ("UIC") program, injection without treatment is compliant with the ELG rule.[178] However, nowhere in the 2024 ELG update is deep well injection mentioned as a potential compliance pathway.[179] Furthermore, EPA projects that ELG compliance at Big Bend 4 would cost TECO $129 million in capital costs and $9 million in annual O&M costs.[180] In projecting compliance costs, EPA lists out three different compliance pathways, none of which include DIWs.[181] And FLDEP's UIC permits, while they render TECO's DIWs legal to operate, do not speak on whether deep well

[173] TECO Fla. Pub. Serv. Comm'n Exh. 799 at F6-207.
[174] Aldazabal Rebuttal at 24:23-25 - 25:1.
[175] Glick Direct at 49:22-23, 50:1-13.
[176] TECO Fla. Pub. Serv. Comm'n Exh. 799 at F6-205.
[177] Aldazabal Rebuttal at 24:23-25, 25:1-8.
[178] *Id.*
[179] TECO Fla. Pub. Serv. Comm'n Exh. 122, EPA Memorandum, Steam Electric Rulemaking Record – EPA-HQ-OW-2009-0819. Generating Unit-Level Costs and Loadings Estimates by Regulatory Option for the 2024 Final Rule (DCN SE11756), April 22, 2024, at C32-3584.
[180] TECO Fla. Pub. Serv. Comm'n Exh. 121, EPA Memorandum, Steam Electric Rulemaking Record – EPA-HQ-OW-2009-0819. Unit-Level Costs and Loadings Estimates for the 2024 Final Rule (DCN SE11756A1), April 22, 2024, at C32-3579-C32-3580.
[181] TECO Fla. Pub. Serv. Comm'n Exh, 122 at C32-3579, C32-3580

injection satisfies zero-discharge requirements in the ELG rule.[182] Further, while TECO and FLDEP have made revisions to TECO's NPDES permit application to incorporate the contention that FGD wastewater will not be subject to zero-discharge requirements, TECO has not had a NPDES permit approved since its original submission in 2016.[183] Nowhere has either EPA *or* FLDEP confirmed that TECO's approach is compliant.[184]

Even if DIW is a valid ELG compliance pathway, TECO has not provided *any* evidence that the O&M costs associated with injecting wastewaters thousands of feet into the ground will be *de minimis*. In fact, TECO originally claimed that there would be no ELG compliance costs at all,[185] before walking back that claim when queried about the costs of actually injecting wastewater into the wells and maintaining them.[186] Now, TECO, without any explanation or breakdown of costs, projects O&M costs for the DIWs at $600,000 in 2024, $800,000 in 2025 and then just $100,000 each year from 2026 to 2029.[187] These costs are so out of step with estimated EPA compliance costs that they deserve close scrutiny from the Commission. Similarly, TECO's explanations for how it will avoid costs from wastewater leakage and extreme weather events are without evidentiary backing. When asked about potential leakage concerns, TECO simply notes that the DIWs are deep and states it is protecting the DIWs from extreme weather events by building the wells up to industry code.[188]

---

[182] TECO Fla. Pub. Serv. Comm'n Exh. 795, Big Bend UIC Permit, 2023 – 2028 at F6-120; *see also* Hearing Tr. at 940:9-14.
[183] TECO Fla. Pub. Serv. Comm'n Exh. 794 at F6-106; *see also* Hearing Tr. at 934:21-23.
[184] Hearing Tr. at 934:11-20.
[185] TECO Fla. Pub. Serv. Comm'n Exh. 114 at C32-3224.
[186] TECO Fla. Pub. Serv. Comm'n Exh. 799 at F6-216 (acknowledging "ongoing O&M costs" for compliance with the ELGs).
[187] *Id.* at F6-211.
[188] *Id.* at F6-214.

6. TECO should, at a minimum, conduct a retirement study for Big Bend 4, which it has not done to date.

As detailed in Section III.A.6 above, TECO likely does not need to replace the capacity of Big Bend 4 at all to meet a reasonable summer reserve margin. Even still, TECO has not compared the relative costs of continuing to operate Big Bend 4 with the costs of acquiring the same generation from newer energy sources, such as renewables and energy storage. Mr. Collins claims that TECO has at least evaluated the cost of ceasing coal combustion against that of replacement gas capacity at Big Bend 4, but he could not point to any specific study showing that.[189] And TECO does not claim to have studied replacing some or all of Big Bend 4's capacity with non-fossil fuel resources. Incurring continued capital and O&M costs at Big Bend 4 would be unfair, unjust, and unreasonable without such a study. TECO cannot claim it is seeking out the least-cost reliable portfolio for its ratepayers unless earlier retirement dates are explored and the costs of earlier retirement are compared to the costs of continued operation of Big Bend 4. TECO's failure to conduct such a study is particularly harmful because the prices of renewable energy resources have been dropping in recent years, and coal units across the country have been retiring early due to high costs and the availability of cheaper alternative generation.[190] As witness Glick suggests, TECO should inform its retirement studies by proactively testing the market with open-source RFPs for replacement resources, such as solar and battery storage.[191] Without such studies, Mr. Collins' unsubstantiated contention that "coal capability at Big Bend 4 is the least cost alternative"[192] is unreasonable, as it is without evidence.

[189] Hearing Tr. at 380:1-25, 381:1-8.
[190] *See supra* Section III.B.
[191] Glick Direct at 53:1-5.
[192] Hearing Tr. 380:24-25, 381:1.

7. TECO has not justified incurring capital and O&M costs associated with coal combustion at Big Bend 4.

As outlined above, TECO has not shown that combusting coal is necessary for fuel diversity or system reliability purposes. And TECO saddles its customers with elevated O&M costs, risks from the coal spot market, outages, and potentially astronomical environmental compliance costs when it continues to burn coal at Big Bend 4. Given this reality, the Commission should require that TECO stop combusting coal at Big Bend 4 by the end of 2025 or when it winds down its current coal supply and supply contract, whichever occurs sooner. The Commission should further reject any capital and O&M costs associated with coal combustion at Big Bend 4 after 2025.

IV. CONCLUSION

Bill affordability is fundamental to whether TECO's rates are fair, just and reasonable. With so many TECO customers already energy burdened by TECO's bills, the Commission must be vigilant in protecting ratepayers against even higher bills through a requested rate increase, especially as many Tampa Bay residents suffer the after effects of Hurricane Milton.

One way to reduce costs without jeopardizing reliability is to curb TECO's capacity overbuild, which is driven by inaccurate reserve margin determinations. The record demonstrates that TECO is a summer-peaking utility, and as a result, TECO is planning for far more resource costs than is necessary. The Commission can and must challenge TECO's reserve margin assumptions and adjust its approval of expenses and investments accordingly.

A reexamination of TECO's actual capacity needs demonstrates that ratepayers should not have to pay for capital investments at either of TECO's remaining coal units. The record further shows that customers derive no reliability benefit from Polk 1 and Big Bend 4's coal capabilities and instead pay for elevated operating costs. Last, TECO can retire Polk 1 and Big.

Bend 4 and replace them with planned additions of solar and battery storage without sacrificing resource adequacy or reliability. Each of these steps will reduce the current and future costs borne by TECO customers. With affordability in mind, Sierra Club respectfully requests that the Commission to:

- Direct TECO to plan around a summer reserve margin and to count a percentage of solar assets towards that summer reserve margin;
- Reject the recovery of O&M costs associated with coal combustion at Polk 1 and Big Bend 4;
- Reject the recovery of capital costs for the Polk 1 Flexibility and Fuel Diversity Projects;
- Direct TECO to study whether Polk 1 and Big Bend 4 (a) are needed for reliability purposes with a summer reserve margin, and (b) can be retired and replaced by more cost-effective replacement resources;
- Prohibit TECO from recovering capital costs at Polk 1 and Big Bend 4 unless and until the above retirement study is completed; and
- Award TECO a 9.50 percent return on equity ("ROE").

/s/ Nihal Shrinath

Nihal Shrinath
2101 Webster Street Suite 1300
Oakland, CA 94612
(415) 977-5566
(510) 208-3140 (fax)
nihal.shrinath@sierraclub.org

Sari Amiel
Sierra Club
50 F St. NW, Eighth Floor
Washington, DC 20001
(301) 807-2223
sari.amiel@sierraclub.org

Qualified Representatives for Sierra Club

Dated: October 21, 2024

PART TWO: STATEMENT OF ISSUES AND POSITION

ISSUE 1: Is TECO's projected test period for the twelve months ending December 31, 2025, appropriate?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 2: Are TECO's forecasts of customers, KWH, and KW by revenue and rate class, appropriate?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 3: What are the inflation, customer growth, and other trend factors that should be approved for use in forecasting the test year budget?

POSITION: Sierra Club has no position on this issue.

****

QUALITY OF SERVICE

ISSUE 4: Is the quality of electric service provided by TECO adequate?

POSITION: No, part of the adequacy of electric service is its affordability and TECO does not provide electric service at affordable rates.

****

DEPRECIATION AND DISMANTLEMENT STUDY

ISSUE 5: Should currently prescribed depreciation rates and provision for dismantlement of TECO be revised?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 6: What should be the implementation date for new depreciation rates and the provision for dismantlement?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 7: What depreciation parameters and resulting depreciation rates for each depreciable plant account should be approved?

POSITION: Sierra Club adopts FL Rising/LULAC's position.

****

ISSUE 8: Based on the application of the depreciation parameters and resulting depreciation rates that the Commission approves, and a comparison of the theoretical reserves to the book reserves, what are the resulting imbalances?

POSITION: Sierra Club adopts FL Rising/LULAC's position.

****

ISSUE 9: What, if any, corrective reserve measures should be taken with respect to the imbalances identified in Issue 8?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 10: Should the current amortization of investment tax credits (ITCs) and flow back of excess deferred income taxes (EDITs) be revised to reflect the approved depreciation rates?

POSITION: Sierra Club adopts FL Rising/LULAC's position.

****

ISSUE 11: What annual accrual for dismantlement should be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 12: What, if any, corrective dismantlement reserve measures should be approved?

POSITION: Sierra Club has no position on this issue.

****

2025 RATE BASE

ISSUE 13: Has TECO made the appropriate adjustments to remove all non-utility activities from Plant in Service, Accumulated Depreciation, and Working Capital in the 2025 projected test year? What, if any, adjustments should be made?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 14: Should TECO's proposed Future Environmental Compliance Project be included in the 2025 projected test year? What, if any, adjustments should be made?

POSITION: No, TECO has not justified its request to sink $18.2 million into studying carbon storage, an experimental and relatively untested technology, at Polk Units 1 and 2.

****

ISSUE 15: Should TECO's proposed Research and Development Projects be included in the 2025 projected test year? What, if any, adjustments should be made?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 16: Should TECO's proposed Customer Experience Enhancement Projects be included in the 2025 projected test year? What, if any, adjustments should be made?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 17: Should TECO's proposed Information Technology Capital Projects be included in the 2025 projected test year? What, if any, adjustments should be made?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 18: Should TECO's proposed Solar Projects be included in the 2025 projected test year? What, if any, adjustments should be made?

POSITION: Yes, TECO's new solar projects are cost-effective for ratepayers and increase the fuel diversity of TECO's system.

****

ISSUE 19: Should TECO's proposed Grid Reliability and Resilience Projects be included in the 2025 projected test year? What, if any, adjustments should be made?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 20: Should TECO's proposed Energy Storage projects be included in the 2025 projected test year? What, if any, adjustments should be made?

POSITION: Yes, TECO's new energy storage projects are cost-effective for ratepayers and increase the fuel diversity of TECO's system.

****

ISSUE 21: Should TECO's proposed Corporate Headquarters project be included in the 2025 projected test year? What, if any, adjustments should be made?

POSITION: Sierra Club adopts FL Rising/LULAC's position on this issue.

****

ISSUE 22: Should TECO's proposed South Tampa Resilience project be included in the 2025 projected test year? What, if any, adjustments should be made?

POSITION: Sierra Club adopts FL Rising/LULAC's position on this issue.

****

ISSUE 23: Should TECO's proposed Bearss Operations Center project be included in the 2025 projected test year? What, if any, adjustments should be made?

POSITION: Sierra Club adopts FL Rising/LULAC's position on this issue.

****

ISSUE 24: Should TECO's proposed Polk 1 Flexibility project be included in the 2025 projected test year? What, if any, adjustments should be made?

POSITION: No, as TECO has not met its burden of showing this project is fair, just, and reasonable for its ratepayers, who are already burdened with above-average electricity rates. The Commission should disallow recovery unless TECO provides an analysis demonstrating that converting its combined cycle unit to a simple cycle is necessary for reliability resources *and* lower cost than retiring the unit and replacing it with alternative resources by 2030 or earlier.

****

ISSUE 25: What amount of Plant in Service for the 2025 projected test year should be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 26: What amount of Accumulated Depreciation for the 2025 projected test year should be approved?

POSITION: Sierra Club adopts the position of OPC and FL Rising/LULAC on this issue.

****

ISSUE 27: What amount of Construction Work in Progress for the 2025 projected test year should be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 28: What amount of level of Property Held for Future Use for the 2025 projected test year should be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 29: What amount of unfunded Other Post-retirement Employee Benefit (OPEB) liability and any associated expense should be included in rate base?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 30: What level of TECO's fuel inventories should be approved?

POSITION: $0, TECO has not demonstrated the reliability benefits of coal-fired generation at Big Bend 4 nor the utility of coal inventory.

****

ISSUE 31: What amount of Working Capital for the 2025 projected test year should be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 32: What amount of rate base for the 2025 projected test year should be approved?

POSITION: This is a fallout issue. The Polk 1 Flexibility Project and Fuel Diversity Projects should be removed from rate base. For the projects described in Issues 14, 16, 17, 19, 21, 22, and 23, Sierra Club also supports removal from rate base based on arguments put forth by intervenors.

TECO's customers experience higher energy burdens than the national average, and their electricity rates can be reduced by removing unjustified spending.

****

2025 COST OF CAPITAL

ISSUE 33: What amount of accumulated deferred taxes should be approved for inclusion in the capital structure for the 2025 projected test year?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 34: What amount and cost rate of the unamortized investment tax credits should be approved for inclusion in the capital structure for the 2025 projected test year?

POSITION: Sierra Club adopts OPC's position on this issue.

****

ISSUE 35: What amount and cost rate for customer deposits should be approved for inclusion in the capital structure for the 2025 projected test year?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 36: What amount and cost rate for short-term debt should be approved for inclusion in the capital structure for the 2025 projected test year?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 37: What amount and cost rate for long-term debt should be approved for inclusion in the capital structure for the 2025 projected test year?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 38: What equity ratio should be approved for use in the capital structure for ratemaking purposes for the 2025 projected test year?

POSITION: Sierra Club adopts OPC's position on this issue.

****

ISSUE 39: What authorized return on equity (ROE) should be approved for use in establishing TECO's revenue requirement for the 2025 projected test year?

POSITION: Sierra Club adopts OPC and FL Rising/LULAC's position on this issue. The currently proposed ROE is unreasonably excessive.

****

ISSUE 40: What capital structure and weighted average cost of capital should be approved for use in establishing TECO's revenue requirement for the 2025 projected test year?

POSITION: Sierra Club adopts OPC's position on this issue.

****

2025 NET OPERATING INCOME

ISSUE 41: Has TECO correctly calculated the revenues at current rates for the 2025 projected test year?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 42: What amount of Total Operating Revenues should be approved for the 2025 projected test year?

POSITION: This is also a fallout issue. The amount of Total Operating Revenues that is ultimately approved should be adjusted in accordance with the substantive recommendations outlined in this brief and issues statement, including the removal of O&M expenses associated with burning coal at Polk 1 and Big Bend 4.

****

ISSUE 43: What amount of O&M expense associated with Polk Unit 1 has TECO included in the 2025 projected test year? Should this amount be approved and what, if any, adjustments should be made?

POSITION: Sierra Club opposes the inclusion of any O&M expenses at Polk Unit 1 that cover the procurement or combustion of coal or petcoke. This includes O&M expenses of keeping Polk Unit 1's IGCC equipment in service. TECO should not be permitted to recover O&M expenses at Polk Unit 1 unless it conducts an updated retirement study that demonstrates that continuing to operate this unit is needed for reliability and more cost-effective than immediate retirement.

****

ISSUE 44: What amount of O&M expense associated with Big Bend Unit 4 has TECO included in the 2025 projected test year? Should this amount be approved and what, if any, adjustments should be made?

POSITION: Sierra Club urges the Commission to reject inclusion of O&M expenses associated with coal combustion at Big Bend 4 for 2025, including fuel costs, maintenance costs, operating costs, and environmental compliance costs. TECO should not be permitted to recover O&M expenses at Big Bend 4 unless TECO conducts an updated retirement study that demonstrates that continuing to operate this unit is needed for reliability and more cost-effective than retiring it immediately.

****

ISSUE 45: What amount of generation O&M expense should be approved for the 2025 projected test year?

POSITION: Generation O&M expenses approved for Polk Unit 1 and Big Bend Unit 4 should be modified to reflect no coal or petcoke-related costs. More generally, generation O&M expenses should not be recoverable unless TECO conducts updated retirement studies for Polk Unit 1 and Big Bend 4, as outlined in Sections III.C and III.D above, that demonstrate that continuing to operate the units is needed for reliability purposes and more cost-effective than retiring them as soon as possible.

****

ISSUE 46: What amount of transmission O&M expense should be approved for the 2025 projected test year?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 47: What amount of distribution O&M expense should be approved for the 2025 projected test year?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 48: Has TECO made the appropriate test year adjustments to remove fuel revenues and fuel expenses recoverable through the Fuel Adjustment Clause?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 49: Has TECO made the appropriate test year adjustments to remove conservation revenues and conservation expenses recoverable through the Conservation Cost Recovery Clause?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 50: Has TECO made the appropriate test year adjustments to remove capacity revenues and capacity expenses recoverable through the Capacity Cost Recovery Clause?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 51: Has TECO made the appropriate test year adjustments to remove environmental revenues and environmental expenses recoverable through the Environmental Cost Recovery Clause?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 52: Has TECO made the appropriate test year adjustments to remove all storm hardening revenues and expenses recoverable through the Storm Protection Plan Cost Recovery Clause

POSITION: Sierra Club has no position on this issue.

****

ISSUE 53: What amount of salaries and benefits, including incentive compensation, should be approved for the 2025 projected test year?

POSITION: Sierra Club adopts OPC's position on this issue, as it is concerned about awarding excessive executive compensation when many TECO customers are energy burdened.

****

ISSUE 54: Does TECO's pension and OPEB expense properly reflect capitalization credits in the 2025 projected test year? If not, what adjustments, if any, should be made?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 55: What cost allocation methodologies and what amount of allocated costs and charges with TECO's affiliated companies should be approved for the 2025 projected test year and what, if any, other measures should be taken?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 56: What amount of Directors and Officers Liability Insurance and Board of Director expense for the 2025 projected test year should be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 57: What amount of Economic Development expense for the 2025 projected test year should be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 58: What amount and amortization period for TECO's rate case expense for the 2025 projected test year should be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 59: What amount of O&M Expense for the 2025 projected test year should be approved?

POSITION: This is a fallout issue. The amount of O&M Expense that is approved for the 2025 projected test year should be adjusted in accordance with the substantive recommendations outlined in this brief and issues statement.

****

ISSUE 60: What amount of depreciation and dismantlement expense for the 2025 projected test year should be approved?

POSITION: This is a fallout issue. The amount of depreciation and dismantlement expense that is approved for the 2025 projected test year should be adjusted in accordance with the substantive recommendations outlined in this brief and issues statement.

****

ISSUE 61: What amount of Taxes Other Than Income Taxes for the 2025 projected test year should be approved?

POSITION: Sierra Club has no position on this issue.

ISSUE 62: What amount of Parent Debt Adjustment is required by Rule 25-14.004, Florida Administrative Code, for the 2025 projected test year?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 63: What amount of Production Tax Credits should be approved and what is the proper accounting treatment for the 2025 projected test year?

POSITION: Sierra Club adopts FL Rising/LULAC's position on this issue.

****

ISSUE 64: What treatment, amounts, and amortization period for the Production Tax Credits that were deferred in 2022-2024 should be approved for the 2025 projected test year?

POSITION: Sierra Club adopts FL Rising/LULAC's position on this issue.

****

ISSUE 65: What treatment and amount of the Investment Tax Credits pursuant to the Inflation Reduction Act should be approved for the 2025 projected test year?

POSITION: Sierra Club adopts FL Rising/LULAC's position on this issue.

****

ISSUE 66: What amount of Income Tax expense should be approved for the 2025 projected test year?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 67: What amount of Net Operating Income should be approved for the 2025 projected test year?

POSITION: This is a fallout issue. The amount of Net Operating Income that is approved for the 2025 projected test year should be adjusted in accordance with the substantive recommendations outlined in this brief and issues statement.

****

2025 REVENUE REQUIREMENTS

ISSUE 68: What revenue expansion factor and net operating income multiplier, including the appropriate elements and rates, should be approved for the 2025 projected test year?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 69: What amount of annual operating revenue increase for the 2025 projected test year should be approved?

POSITION: Sierra Club has no position on this issue.

****

2025 COST OF SERVICE AND RATES

ISSUE 70: Is TECO's proposed separation of costs and revenues between the wholesale and retail jurisdictions appropriate?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 71: What is the appropriate methodology to allocate production costs to the rate classes?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 72: What is the appropriate methodology to allocate transmission costs to the rate classes?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 73: What is the appropriate methodology to allocate distribution costs to the rate classes?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 74: How should any change in the revenue requirement approved by the Commission be allocated among the customer classes?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 75: Should the proposed modifications to the delivery voltage credit be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 76: What are the appropriate service charges (initial connection, reconnect for nonpayment, connection of existing account, field visit, temporary overhead and underground, meter tampering)?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 77: Should the modifications to the emergency relay power supply charge be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 78: What are the appropriate basic service charges?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 79: What are the appropriate demand charges?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 80: What are the appropriate energy charges?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 81: What are the appropriate Lighting Service rate schedule charges?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 82: What are the appropriate Standby Services (SS-1, SS-2, SS-3) rate schedule charges?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 83: Should the proposed modifications to the time-of-day periods be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 84: Should the proposed modifications to the Non-Standard Meter Rider tariff (Tariff Sheet No. 3.280) be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 85: Should the proposed tariff modifications to the Budget Billing Program (Fifth Revised Tariff Sheet No. 3.020) be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 86: Should the proposed tariff modifications regarding general liability and customer responsibilities (Fifth Revised Tariff Sheet No. 5.070 and Original Tariff Sheet No. 5.081) be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 87: Should the proposed tariff modifications to Contribution in Aid of Construction (Fifth Revised Tariff Sheet No. 5.105) be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 88: Should the proposed tariff modifications to the Economic Development Rider (Third Revised Tariff Sheet Nos. 6.720, 6.725, 6.730) be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 89: Should the proposed modifications to LS-1 (Eleventh Revised Tariff Sheet No. 6.809) regarding lighting wattage variance be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 90: Should the proposed LS-2 Monthly Rental Factors (Original Tariff Sheet No. 6.845) be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 91: Should the proposed termination factors for long-term facilities (Fifth Revised Tariff Sheet No. 7.765) be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 92: Should the non-rate related tariff modifications be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 93: Should the Commission give staff administrative authority to approve tariffs reflecting Commission approved rates and charges?

POSITION: Sierra Club has no position on this issue.

****

2026 AND 2027 SUBSEQUENT YEAR ADJUSTMENTS

ISSUE 94: What are the considerations or factors that the Commission should evaluate in determining whether an SYA should be approved?

POSITION: Sierra Club adopts FL Rising/LULAC's position on this issue.

****

ISSUE 95: Should the Commission approve the inclusion of TECO's proposed Solar Projects in the 2026 and 2027 SYA? What, if any, adjustments should be made?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 96: Should the Commission approve the inclusion of TECO's proposed Grid Reliability and Resilience Projects in the 2026 and 2027 SYA? What, if any, adjustments should be made?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 97: Should the Commission approve the inclusion of TECO's proposed Polk 1 Flexibility Project in the 2026 SYA? What, if any, adjustments should be made?

POSITION: No.

****

ISSUE 98: Should the Commission approve the inclusion of TECO's proposed Energy Storage Projects in the 2026 SYA? What, if any, adjustments should be made?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 99: Should the Commission approve the inclusion of TECO's proposed Bearss Operations Center Project in the 2026 SYA? What, if any, adjustments should be made?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 100: Should the Commission approve the inclusion of TECO's proposed Corporate Headquarters Project in the 2026 SYA? What, if any, adjustments should be made?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 101: Should the Commission approve the inclusion of TECO's proposed South Tampa Resilience Project in the 2026 and 2027 SYA? What, if any, adjustments should be made?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 102: Should the Commission approve the inclusion of TECO's proposed Polk Fuel Diversity Project in the 2026 and 2027 SYA? What, if any, adjustments should be made?

POSITION: No. TECO has not proven that additional fuel diversity is necessary at Polk 1, nor has it proven that the proposed project provides fuel diversity at all. On the contrary, the project attempts to solve fuel availability issues by adding another delivered fuel to Polk 1. Furthermore, Polk 1's low utilization rate and planned retirement date of 2036 make the project an unfair, unjust, and unreasonable use of ratepayer dollars.

ISSUE 103: What overall rate of return should be used to calculate the 2026 and 2027 SYA?

POSITION: Sierra Club adopts OPC's position on this issue.

****

ISSUE 104: Should the SYA for 2026 and 2027 reflect additional revenues due to customer growth? What, if any, adjustments should be made?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 105: Should the Commission approve the inclusion of TECO's proposed incremental O&M expense associated with the SYA projects in the 2026 and 2027 SYA?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 106: Should the depreciation expense and Investment Tax Credits amortization used to calculate the proposed 2026 and 2027 SYA be adjusted to reflect the Commission's decisions on depreciation rates and ITC amortization for the 2025 projected test year?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 107: What annual amount of incremental revenues should be approved for recovery through the 2026 and 2027 SYA?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 108: What rate design approach should be used to develop customer rates for the 2026 and 2027 SYA?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 109: When should the 2026 and 2027 SYA become effective?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 110: Should TECO be required to file its proposed 2026 and 2027 SYA rates for Commission approval in September 2026 and 2027, respectively, reflecting then current billing determinants?

POSITION: Sierra Club has no position on this issue.

****

OTHER

ISSUE 111: Should TECO's proposed Corporate Income Tax Change Provision be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 112: Should TECO's proposed Storm Cost Recovery Provision be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 113: Should TECO's proposed Asset Optimization Mechanism be approved, and what, if any, modifications should be made?

POSITION: Sierra Club adopts FL Rising/LULAC's position on this issue.

****

ISSUE 114: What are the appropriate updated Clean Energy Transition Mechanism factors and when should they become effective?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 115: Should the proposed Senior Care Program (Original Tariff Sheet No. 3.310) and associated cost recovery be approved?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 116: Should TECO be required to perform any studies or analysis relating to the retirement of Polk Unit 1 and/or Big Bend Unit 4, including early retirement dates, environmental compliance costs, and/or procurement of alternative resources?

POSITION: Given TECO is summer-peaking and overshooting capacity needs, Sierra Club recommends retiring both Polk 1 and Big Bend 4 by 2030. If the Commission does not order 2030 retirements, TECO should be required to study earlier retirement dates, including by 2028, 2030 and 2032. In the study, TECO should (a) demonstrate the units' needs as reliability resources and (b) measure the cost-effectiveness of retiring each unit early against the cost of acquiring replacement resources.

****

ISSUE 117: What is the appropriate effective date for TECO's revised 2025 rates and charges?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 118: Has the Commission considered TECO's performance pursuant to Sections 366.80–366.83 and 403.519, Florida Statutes, when establishing rates?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 119: What considerations should the Commission give the affordability of customer bills and how does TECO's rate increase impact ratepayers in this proceeding?

POSITION: Given that TECO customers face the third-highest electricity bills in the nation, the Commission should favor measures to reduce ratepayers' bills when making policy choices regarding TECO's proposed expenses. Wherever the Commission can reduce costs to ratepayers, especially for investments with unproven benefits, the Commission should favor such cutbacks. Finally, the Commission should scrutinize TECO's reserve margin and reliability planning assumptions, with an eye toward reducing overbuild and costs to ratepayers.

****

ISSUE 120: Should TECO be required to file, within 90 days after the date of the final order in this docket, a description of all entries or adjustments to its annual report, rate of return reports, and books and records which will be required as a result of the Commission's findings in this rate case?

POSITION: Sierra Club has no position on this issue.

****

ISSUE 121: Should this docket be closed?

SIERRA CLUB: Sierra Club has no position on this issue**.**

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been furnished by electronic mail on this 21st day of October, 2024, to the following:

Florida Public Service Commission/OGC
Adria Harper
Carlos Marquez
Timothy Sparks
Daniel Dose
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850
aharper@psc.state.fl.us
cmarquez@psc.state.fl.us
tsparks@psc.state.fl.us
ddose@psc.state.fl.us

Tampa Electric Company
Ms. Paula K. Brown
Regulatory Affairs
Tampa FL 33601-0111
(813) 228-1444
(813) 228-1770
regdept@tecoenergy.com

Office of Public Counsel
Walt Trierweiler/Patricia A. Christensen
c/o The Florida Legislature
Tallahassee FL 32399-1400
(850) 488-9330
christensen.patty@leg.state.fl.us
trierweiler.walt@leg.state.fl.us
ponce.octavio@leg.state.fl.us
rehwinkel.charles@leg.state.fl.us
watrous.austin@leg.state.fl.us
wessling.mary@leg.state.fl.us

Gardner Law Firm
Robert Scheffel Wright/John T. LaVia, III
1300 Thomaswood Drive
Tallahassee FL 32308
(850) 385-0070
(850) 385-5416
jlavia@gbwlegal.com
schef@gbwlegal.com

Florida Industrial Power Users Group
Jon C. Moyle, Jr./Karen A. Putnal
c/o Moyle Law Firm
Tallahassee FL 32301
(850) 681-3828
(850) 681-8788
jmoyle@moylelaw.com
kputnal@moylelaw.com

Federal Executive Agencies
L. Newton/A. George/T. Jernigan/E. Payton
139 Barnes Drive, Suite 1
Tyndall AFB FL 32403
(850) 283-6347
ebony.payton.ctr@us.af.mil
thomas.jernigan.3@us.af.mil
Leslie.Newton.1@us.af.mil
Ashley.George.4@us.af.mil
Michael.Rivera.51@us.af.mil

Earthjustice
Bradley Marshall/Jordan Luebkemann
111 S. Martin Luther King Jr. Blvd.
Tallahassee FL 32301
(850) 681-0031
(850) 681-0020
bmarshall@earthjustice.org
jluebkemann@earthjustice.org
hlochan@earthjustice.org
flcaseupdates@earthjustice.org

Berger Law Firm
Floyd R. Self/Ruth Vafek
313 North Monroe Street, Suite 301
Tallahassee FL 32301
(850) 521-6727
fself@bergersingerman.com
rvafek@bergersingerman.com

Ausley Law Firm
J. Wahlen/V. Ponder/M. Means
P.O. Box 391
Tallahassee FL 32302
(850) 224-9115
(850) 222-7952
jwahlen@ausley.com
mmeans@ausley.com
vponder@ausley.com

Southern Alliance for Clean Energy
William C. Garner
3425 Bannerman Rd. Unit 105, No. 414
Tallahassee FL 32312
(850) 320-1701
(850) 792-6011
bgarner@wcglawoffice.com

Spilman Law Firm (24 PA)
Steven W. Lee
1100 Bent Creek Boulevard, Suite 101
Mechanicsburg PA 17050
(717) 791-2012
(717) 795-2743
slee@spilmanlaw.com

Lewis Law Firm
F.L. Aschauer, Jr./A.J. Charles/L. Killinger
106 East College Ave., Suite. 1500
Tallahassee FL 32301
(850) 222-5702
Faschauer@llw-law.com
Acharles@llw-law.com
Lkillinger@llw-law.com

AARP Florida
Chante' Jones
(850) 272-0551
cejjones@aarp.org

/s/ Caden Koontz
Caden Koontz
Sierra Club
50 F St. NW, Eighth Floor
Washington, DC 20001
(202) 650-6075
caden.koontz@sierraclub.org