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April 9, 2021

ELECTRONIC FILING

Mr. Adam J. Teitzman, Commission Clerk
Office of Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Docket 20210034-EI, Petition for Rate Increase by Tampa Electric Company

Dear Mr. Teitzman:

Attached for filing on behalf of Tampa Electric Company in the above-referenced docket is the Direct Testimony and Exhibit of Archibald D. Collins.

Thank you for your assistance in connection with this matter.

(Document 2 of 34)

Sincerely,

J. Jeffry Wahlen

JJW/ne
Attachment

cc: Richard Gentry, Public Counsel
Jon Moyle, FIPUG

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20210034-EI

IN RE: PETITION FOR RATE INCREASE

BY TAMPA ELECTRIC COMPANY

DIRECT TESTIMONY AND EXHIBIT

OF

ARCHIBALD D. COLLINS

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

ARCHIBALD D. COLLINS

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

A. My name is Archibald D. Collins. My business address is 702 N. Franklin Street, Tampa, Florida 33602. I am employed by Emera Inc. and am seconded to Tampa Electric Company ("Tampa Electric" or "company") as President and Chief Operating Officer and will become Chief Executive Officer on May 3, 2021.

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

A. Today as President and Chief Operating Officer, I report to the Chief Executive Officer of Tampa Electric. I have overall responsibility for all aspects of the company including strategy development, operations of the company, safety, environment, customer experience, generation, transmission, distribution, construction, facility services and other shared services including Information Technology, Legal, Human Resources, Finance and

Procurement. All Tampa Electric Officers report to me, and together we lead a total of approximately 2,400 team members.

Q. Please provide a brief outline of your educational background and business experience.

A. I graduated from St. Francis Xavier University with a diploma in Engineering and from Dalhousie University with a bachelor's degree in Chemical Engineering.

I have more than 30 years of experience in the energy industry. Prior to becoming Chief Operating Officer of Tampa Electric in 2018, and then President and Chief Operating Officer of the company in 2021, I held the position of President and Chief Executive Officer of Grand Bahama Power Co. and President and Chief Operating Officer of Emera Caribbean. In addition, I have served as Executive Vice President of Commercial Operations with Emera Energy, as Vice President of Operations at Emera Energy, and in senior roles with Nova Scotia Power.

Q. What are the purposes of your direct testimony?

A. Tampa Electric is requesting that the Florida Public

Service Commission ("Commission") approve a $294.9 million increase in the company's retail base rates and to reduce its miscellaneous service revenues by $6.6 million. Our filing also proposes Generation Base Rate Adjustments ("GBRA") in 2023 and 2024, for approximately $102.2 and $25.6 million, respectively. The purposes of my direct testimony are to (1) describe Tampa Electric's key actions since our last request for rate relief in 2013 and how they have benefitted customers; (2) explain how our strategic focus on our customers, cost control, and decarbonization, all enabled by our employees, has positioned our company to keep customer bills at about the same level they were in 2013; (3) describe significant investments planned or underway to meet customers' needs; and (4) summarize the company's request for rate relief. I will also introduce the other witnesses who have filed direct testimony in support of the company's petition and briefly describe the subject matter each witness will cover.

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

A. Yes. Exhibit No. ADC-1, entitled "Exhibit of Archibald D. Collins" was prepared under my direction and supervision. The contents of my exhibit were derived from the business

records of the company and are true and correct to the best of my information and belief. It consists of the four documents:

Document No. 1	List of Tampa Electric Witnesses and Purpose of their Direct Testimony
Document No. 2	List of Minimum Filing Requirement Schedules Sponsored by Archibald D. Collins
Document No. 3	CO_2 Emissions (Short Tons / Year)
Document No. 4	Generation Mix

OVERVIEW OF TAMPA ELECTRIC

Q. Please describe Tampa Electric.

A. Tampa Electric was incorporated in Florida in 1899 and was reincorporated in 1949. Tampa Electric is a wholly owned subsidiary of TECO Energy, Inc. ("TECO Energy") and became a wholly owned subsidiary of Emera Inc. ("Emera") in 2016 when Emera purchased all common stock of TECO Energy, Inc. Tampa Electric is an investor-owned utility regulated by the Commission and the Federal Energy Regulatory Commission.

Tampa Electric currently provides retail electric service

to approximately 800,000 customers over an approximate 2,000 square mile service territory within Hillsborough and portions of Polk, Pasco, and Pinellas counties. We serve these customers with approximately 2,400 employees and the utility facilities described below. Most of our team members work in the areas of Energy Supply, Electric Delivery, and Customer Experience, along with others who work in support areas like Information Technology, Accounting and Finance, Human Resources, and Regulatory Affairs.

The company maintains a diverse portfolio of generating facilities with a net winter capacity of approximately 5,790 megawatts ("MW"). Tampa Electric operates three electric generating stations that include fossil steam units, combined cycle units, combustion turbine peaking units, and an integrated gasification combined cycle unit. These units are located at Big Bend Power Station, H.L. Culbreath Bayside Power Station, and Polk Power Station. As of January 1, 2021, the company operated 655 MW of solar generation at 13 facilities located throughout its retail service territory and 12.6 MW_{ac} capacity of battery storage. For the full year 2020, these solar facilities provided approximately 6.0 percent of the company's total energy sales and represented 11.8 percent of the company's

installed generating capacity.

Tampa Electric's transmission system consists of nearly 1,350 circuit miles of overhead facilities, including approximately 25,400 transmission poles and structures, and approximately nine circuit miles of underground facilities. The company's distribution system consists of approximately 6,300 circuit miles of overhead facilities, approximately 414,000 poles, and 5,500 circuit miles of underground facilities. Our transmission and distribution systems are connected through 216 substations throughout its service territory.

Q. Please describe Emera.

A. Emera is a geographically diverse energy and services company headquartered in Halifax, Nova Scotia, with approximately $31 billion CAD (Canadian dollars) in assets and 2020 revenues of more than $5.5 billion CAD. The company primarily invests in regulated electric and gas utilities, with a strategic focus on transformation from high carbon to low carbon energy sources. Emera has investments throughout North America and in four Caribbean countries.

Q. Please describe the purchase of TECO Energy by Emera and how it has benefited Tampa Electric's customers.

A. Emera officially acquired Tampa Electric in July 2016, as the successful bidder in a competitive process led by TECO Energy and its advisors. Emera is pleased to be part of the Florida business community and to have the opportunity to operate a safe and customer-focused business in the Tampa Bay region and in the state through Tampa Electric and its sister company, Peoples Gas System. Our customers have benefited in many ways since Emera's arrival, including Emera's continued commitment to the community. Recent examples of our community focus are our drive to reduce coal consumption and reduce emissions of CO_2, SO_2, and NO_X and our focus on supporting our customers during the COVID-19 pandemic. Emera has brought a disciplined focus on impact and results, the success of which is shown in our reliability improvements, safety results, and JD Power customer service satisfaction scores. During 2020, we achieved our lowest safety incident rate ever. Tampa Electric has invested in technology to modernize customer billing systems and Advanced Metering Infrastructure ("AMI"), the modernization of Big Bend Unit 1, and significant amounts of utility-scale renewable solar generation for the benefit of customers. Tampa Electric's

improvements to its grid infrastructure are reducing the number and length of disruptions. The company is accomplishing these enhancements through a focus on prudent investments, providing services customers desire, and cost containment, and Emera has improved business stability by ensuring access to equity.

Q. Please describe Tampa Electric's leadership and management philosophy as part of Emera.

A. Since Emera acquired Tampa Electric in 2016, the company has focused on three strategic priorities – improving safety, improving the customer experience, and reducing our environmental impact. This was accomplished while focusing on cost control, efficiency, and prudent management.

Tampa Electric's Transformation

Q. Please describe Tampa Electric's key actions since 2013.

A. Tampa Electric last requested a general base rate increase eight years ago in 2013. Since then, the company has been operating under two Commission-approved general base rate settlement agreements, which were entered into in 2013 and in 2017. These agreements limited our ability to request

base rate relief while allowing us to continue making sound investments to serve our customers and communities. These investments, combined with disciplined cost management, have enabled us to begin transforming and modernizing the company while maintaining customer rates that are among the lowest in Florida and well below the national average.

These agreements created a constructive regulatory framework for Tampa Electric, promoted rate stability and predictability, and delivered important benefits to our customers.

The agreements allowed the company to begin transforming its generation fleet; become a solar energy leader in Florida; improve safety, reliability, and the customer experience; maintain a strong financial profile; take advantage of low natural gas prices and reduce fuel expenses; make the company's generation mix cleaner, greener, and less carbon intensive; and keep operations and maintenance expenses relatively flat.

Q. How has Tampa Electric begun transforming its generation fleet?

A. The 2013 agreement allowed the company to harness the energy

associated with waste heat at its Polk Power Station by converting Polk Units 2 through 5 into a highly efficient combined cycle generating unit. Under the 2017 agreement, the company built and recovered the cost of its investments in 600 MW of cost-effective photovoltaic solar generating capacity and, during its term, began important transformational projects such as construction of the Big Bend Modernization Project. By December 31, 2020, the Polk and solar projects reduced the company's carbon emissions and saved our customers over $184 million in fuel costs. Tampa Electric witness David A. Pickles provides additional details regarding the company's generation plant changes since 2013, including the Big Bend Modernization construction status, timeline, and expected cost. Tampa Electric witness J. Brent Caldwell presents the analysis demonstrating the Big Bend Modernization project's prudence and the savings it will provide customers.

Q. Does Tampa Electric plan to expand its solar generation portfolio?

A. Yes. Tampa Electric is one of Florida's solar energy leaders. Our existing solar generating assets power more than 100,000 homes, businesses, and schools. We are planning to build another 600 MW of "Future Solar" in three

tranches of approximately 225 MW, 225 MW, and 150 MW, which will allow all customers to enjoy the benefits of solar generation. Adding 600 MW of solar generation enhances our system fuel diversity and provides fuel savings and environmental benefits to customers. When we complete these Future Solar projects, nearly 14 percent of our energy will come from the sun. This cost-effective long term energy solution will power more than 200,000 homes, promote price stability for customers, increase our fuel diversity, and reduce carbon emissions. Tampa Electric witness Jose A. Aponte explains why 600 MW is the optimal amount of Future Solar to add to our system over the next three years and demonstrates the cost-effectiveness of the solar projects. Tampa Electric witness C. David Sweat describes the Future Solar projects, their costs, and benefits of building them over the next three years.

Q. How has Tampa Electric improved the efficiency of its generating fleet?

A. Tampa Electric's average net system heat rate (Btu/kWh), which reflects the efficiency of our generating fleet, has improved from about 9,200 in 2013 to 7,600 in 2020, an improvement of about 17 percent. A more efficient generation fleet means less fuel is required to generate

the same amount of energy. This is important because it saves customers money through reduced costs of fuel, and it reduces emissions.

Q. How has Tampa Electric improved the company's safety?

A. We have committed ourselves to achieving World Class safety, and to the beliefs that (1) all injuries are preventable and (2) no business consideration can take priority over safety. In 2018, we began implementation of a 10-element comprehensive safety management system founded on employee ownership and engagement in safety initiatives. Having a safe work environment and understanding that safety is the top value at Tampa Electric creates a sense of ownership among employees for all outcomes of the business. Tampa Electric reported its lowest OSHA recordable incident rate ever during 2020. Even though our incident rate (the number of work-related recordable injuries and illnesses per 100 full-time employees in a one-year period) has improved significantly in recent years, we believe our safety work is not done, and we continue to aspire to live and work injury-free.

Q. How has Tampa Electric improved the customer experience?

A. Tampa Electric has improved the customer experience through investments in new technology, process improvements, and training for employees. Our investments in technology, like our Customer Relationship and Billing system ("CRB"), AMI, and other digital enhancements, provide customers more convenience, choice, and self-service offerings. We now offer alerts and notifications through a customer's channel of choice, *e.g.*, phone, text, or website, and a customer self-service portal that allows customers to conduct business with us at their convenience. We also enhanced our outage map and outage communications so customers know more about outages and resolution time and can report them more easily. Tampa Electric also made internal process improvements and transactional enhancements that make it easier for customers to do business with us. We also implemented new training programs that will allow customers to be served more efficiently and consistently, getting them the information they need without unnecessary hand-offs. These investments in technology, process, and training allowed us to improve our service levels, including average speed of answer and call handle time when customers reach us through the contact center. Tampa Electric witness Melissa L. Cosby describes our customer experience improvements in greater detail.

Q. Has Tampa Electric improved distribution reliability?

A. Yes. We have steadily improved distribution reliability since 2013 through investments in our distribution infrastructure, as evidenced by improvements in two main reliability indices: System Average Interruption Duration Index ("SAIDI") and Momentary Average Interruption Frequency Index ("MAIFI"). Implementation of our annual distribution reliability plan and operational changes such as additional troublemen, dispatchers, and flex crews have contributed to reduce outage times when they occur. These actions have resulted in significant improvements in system reliability, and compared to 2013, outages during 2020 were 20% percent shorter in duration (SAIDI), and flickers were 36% percent less frequent (MAIFI). Tampa Electric witness Regan B. Haines describes these investments and reliability improvements in his direct testimony.

Q. Have the company's efforts improved customer satisfaction?

A. Yes. Our investments and programs have improved the company's safety, reliability, efficiency, and overall customer experience. Our efforts have resulted in higher customer satisfaction as measured by JD Power. Our JD Power ranking for residential customer overall satisfaction has

improved from the fourth quartile in 2017 to the top of the second quartile in 2020, as described in the direct testimony of Ms. Cosby.

Q. How has the company's financial profile changed since 2013?

A. With more than 20 million residents, Florida is one of the nation's fastest growing states, and the Tampa Bay/I-4 Corridor is its fastest growing area. We now serve approximately 800,000 customers, up about 15 percent from approximately 695,000 customers in 2013. Our rate base investments have grown from about $4 billion in 2013 to $6.7 billion today and are expected to be approximately $7.9 billion in 2022. Our annual base revenues have increased from about $900 million in 2013 to approximately $1.2 billion in 2020, or by about 33 percent. Major portions of our rate base growth have helped us take advantage of low-cost natural gas as our primary fuel source as well as the addition of zero-cost-fuel solar generation, reducing the fuel expenses borne by our customers. We reduced our overall fuel expenses and delivered the value of lower natural gas prices to our customers through prudent construction of solar generation, expansion of dual-fuel capability at our coal-fired power plants, continued investments in efficient natural gas fired combined cycle

technology as discussed in the direct testimony of Mr. Aponte, Mr. Caldwell, and Mr. Pickles.

Q. How have the company's fuel mix and carbon emissions changed since 2013?

A. Since 2013, we have made significant changes in our fuel mix by pivoting away from coal to natural gas and solar generation. First, we reduced our coal consumption by approximately 90 percent since 2015. In 2013, about 59 percent of Tampa Electric's electricity was generated using coal, about 41 percent was natural gas-fired, and we had no solar generation. By 2020, about five percent of our electricity was generated using coal, about 89 percent was natural gas-fired, and about 6 percent was from solar generation. As I previously stated, the direct testimony of Mr. Pickles provides additional information regarding the changes in the company's generation fleet since 2013.

Second, these changes in our fuel generation mix resulted in a significant reduction in our carbon emissions, which fell from 15.7 million tons in 2013 to about 8.8 million tons in 2020, a 44 percent reduction. By 2023, we will have reduced our carbon dioxide emissions by the equivalent of removing one million cars from local roadways. Document No.

3 of my exhibit shows CO_2 emissions over the last eight years and demonstrates our significant reduction in CO_2 emissions over that period.

Q. How have the company's O&M expenses changed since 2013?

A. Despite upward pressure on the costs of providing service from inflation and significant customer growth and the infrastructure improvements I discussed above, we have kept our operations and maintenance ("O&M") expenses essentially flat from 2013 to 2020. More details about management of operating costs are provided in the testimony of other Tampa Electric witnesses. The direct testimony of Mr. Pickles, Mr. Haines, and Ms. Cosby address management of O&M expenses for Energy Supply, Electric Delivery, and Customer Experience, respectively. The direct testimony of Tampa Electric witness Jeffrey S. Chronister also addresses management of O&M expenses.

Q. How do customer bills today compare with customer bills in 2013?

A. As a result of our actions to invest in assets and reduce fuel and O&M expenses and a focus on cost control, we kept customer bills stable, at about the same level since 2013.

Adding solar generation and transitioning away from coal allowed us to capture the value of declining natural gas prices and "no-fuel" solar to drive our typical monthly residential bill lower in 2020 than it was in 2013. Our typical monthly residential bill in 2013 was $102.58 and in 2020 was $97.69, a decrease of almost $5 a month. Our 2021 typical monthly residential bills are among the lowest in Florida and are 17 percent below the national average. We expect them to remain among the lowest in Florida and below the national average when including the current request for rate relief.

More Transformation and Customer Benefits to Come

Q. Does Tampa Electric have any significant projects currently underway or scheduled to begin in the next two years?

A. Yes. Tampa Electric is safer, cleaner and greener, and provides a better customer experience than in 2013; however, our work is not complete. To continue delivering the value our customers expect, we must plan for the long term and invest now to create an even cleaner, greener, and more efficient energy future. We constantly strive to identify and implement projects and strategies that will further improve our safety, reliability, customer experience, and environmental profile. The following

projects - planned or currently underway - are vital to our vision for our customers and company:

1. Big Bend Modernization (Units 1 and 2)

The company will retire Unit 2 and repower Unit 1 as a clean natural gas-fired two-on-one combined cycle generating facility. The repowered Unit 1 will be the most efficient generating unit in the company's fleet. Among other benefits, these changes will generate approximately $750 million in cumulative present value revenue requirement ("CPVRR") savings for our customers. This project is discussed in greater detail in the direct testimony of Mr. Caldwell.

2. Retirement of Big Bend Unit 3

Retiring Unit 3 in April 2023 - rather than operating it on coal or natural gas until its planned retirement in 2041 - will reduce carbon emissions, provide operational benefits, and generate approximately $299 million in CPVRR savings for our customers, as described in the direct testimony of Mr. Caldwell.

3. 600 MW of Solar Generation

Through 2023, Tampa Electric plans to add an additional 600 MW of utility-scale solar generating

capacity ("Future Solar") through 11 specific projects across our service territory in three tranches of approximately 225 MW, 225 MW, and 150 MW. These cost-effective projects are expected to generate CPVRR savings of over $120 million. Mr. Sweat and Mr. Aponte describe these projects and the related cost savings.

4. Smart Grid and AMI

Tampa Electric has plans to further empower customers through technology via a multi-year project to build a smarter grid that delivers more reliable, affordable energy to our customers. The AMI implementation is a cornerstone of our grid modernization strategy. It includes installation of advanced meters, communication infrastructure, and data management systems, which taken together, provide the ability to offer new customer engagement programs and services. Mr. Haines provides more information about the modernization of the grid in his direct testimony. Additionally, we are investing in digital solutions to offer customers more personal choice in their service experiences, as explained in the direct testimony of Ms. Cosby.

Q. Are there any other innovative programs and projects that

Tampa Electric is currently exploring?

A. Yes. Tampa Electric is exploring new technologies and new ways to serve our customers. To support the growth of electric vehicles in our service territory, Tampa Electric requested and received approval to expand the availability of EV charging infrastructure with a 200-port charging pilot. The charging infrastructure pilot, along with customer education and working with fleet operators to support their conversion to EVs, will accelerate transportation electrification and decarbonization.

As Mr. Pickles describes, we implemented a 12.6 MW lithium-ion based battery energy storage system at Big Bend Station to study the benefits of this new technology. The Big Bend Battery project will examine how battery storage can increase reliability of power supplied to the grid, reduce peak demands, serve frequency regulation, and contribute to contingency reserves.

The company is currently seeking approval for an innovative new pilot program, a direct current micro-grid known as the Block Energy System with Emera Technologies, Metro Development Group, and Lennar Homes. This pilot will test the capability of the system to provide power to 37

residential homes using a high proportion of renewable energy as well as enhanced reliability and resiliency.

Q. Please describe Tampa Electric's long term goals to continue to reduce greenhouse gas emissions.

A. In February, Emera announced its commitment to achieving net zero carbon emissions by 2050. This commitment complements our goal to generate as much clean power as we can without compromising affordability or reliability. Tampa Electric's reductions of greenhouse gas emissions will contribute to achieving the Emera commitment. Tampa Electric's goals are being developed and, our first milestone goal is 60 percent GHG reduction by 2025 relative to 2000, which will be achieved with the addition of our cost-effective Big Bend Modernization project and Future Solar projects. Tampa Electric is committed to producing clean energy, which will contribute to a brighter future for our community and the global reduction of greenhouse gas emissions, as well as significant fuel savings benefits for our customers.

Q. How has Tampa Electric helped customers during the pandemic and economic downturn?

A. Tampa Electric is aware of the impact that the pandemic has had on our customers and the communities we serve. Since the onset of the pandemic in early 2020, Tampa Electric, its sister company Peoples Gas System, and our employees have donated over $2 million to local organizations providing pandemic relief. In addition to financial assistance, Tampa Electric has taken several other steps to assist our customers. As a result of these efforts, our customers received bill payment assistance totaling more than $10 million in 2020. Ms. Cosby describes our assistance to customers in more detail.

Major Factors Necessitating a General Base Rate Increase

Q. Why is a general base rate increase necessary?

A. To continue delivering the value our customers expect and knowing that our customers' expectations continue to evolve based on the service they receive from non-energy companies, we must plan for the long term and invest now to create an even cleaner, more efficient, and more reliable energy future. The major factors driving the need for a rate case include continued growth in rate base and associated depreciation expense, modest increases to O&M expenses to meet customer expectations, and revenue growth that has not kept pace with the needs of our system.

Q. What are the major factors driving the need for rate relief?

A. The major factors causing the need for rate relief are as follows.

1. The company's investment in rate base assets has grown 68 percent since 2013 to $6.7 billion today and is expected to be $7.9 billion in 2022. Some of this rate base growth has been addressed through incremental GBRA and Solar Base Rate Adjustment ("SoBRA") revenues, but general revenue growth will not be sufficient to allow the company to recover the costs associated with important projects like the Big Bend Modernization, Smart Grid/AMI, the Future Solar generation capacity described earlier in my testimony, and the general capital needs associated with our growing system.

2. Our investment in Energy Supply assets (production plant) will have increased by approximately $2 billion from 2013 to 2022. All have improved efficiency and environmental performance, are cost-effective, and are in the long-run best interests of our customers. They include the Polk Units 2 through 5 conversion, 655 MW of solar generating capacity in service by January 2021, and the capital costs associated with major planned outages at Big

Bend, Bayside, and Polk Power Stations, as well as the first phase of the Big Bend Modernization and 225 MW of Future Solar projects.

3. Since 2013, we have expanded our Electric Delivery system to serve new load and have become stronger and more resilient in the process. Our major capital spending in Electric Delivery from 2013 to 2022 includes transmission and distribution system enhancements to serve new customers, preventive maintenance, and the AMI implementation.

4. Our rate base growth has been accompanied by a commensurate increase in depreciation expense, which has grown from about $215 million in 2013 to $310 million in 2020.

5. We filed a depreciation and dismantlement study on December 30, 2020 in accordance with the 2017 Agreement. Depreciation expense during 2022 will be approximately $430 million, of which $46 million will be attributable to the higher depreciation rates in the study. Although the depreciation study filing moratorium in the 2013 and 2017 agreements reduced cost pressures during the term of the agreements by deferring rate-driven depreciation expense

increases, delaying depreciation and dismantlement studies had the predictable effect of pushing a material depreciation expense increase into the 2022 test year. Tampa Electric witnesses Davicel Avellan, Jeffrey S. Kopp, and Charles R. Beitel provide detail regarding depreciation and dismantlement.

6. Our December 30, 2020 depreciation and dismantlement filing also outlines a need to establish capital recovery schedules for the undepreciated net book value on December 31, 2021 of our investment in: (a) the portions of Big Bend Units 1 through 3 to be retired and (b) the AMR meters to be retired in conjunction with our Smart Grid initiative. The company has proposed that the net book value of these assets be amortized over ten years at an annual total cost of $63 million, $47 million of which are costs for base rate assets, and $16 million of which represents assets recovered through the environmental cost recovery clause. The direct testimony of Mr. Avellan discusses the need for capital recovery for these assets.

7. Tampa Electric has invested in Information Technology ("IT") to improve its customer experience and comply with new regulations and customer privacy requirements. These improvements include our CRB system and the infrastructure

that will support AMI. The costs we have incurred for IT have been influenced by requirements of the Federal Energy Regulatory Commission, the North American Electric Reliability Corporation, and the Sarbanes-Oxley Act of 2002, as well as increased customer cybersecurity and privacy demands. Our IT investments and projects are described in greater detail in the direct testimony of Tampa Electric witness Karen M. Mincey.

8. Although the company has been able to keep its overall O&M expense levels essentially flat since 2013 through the smart use of technology and prudent cost management practices, the costs of labor, contractors, materials, insurance, and health care benefits are accelerating at a pace that is causing the company's O&M expenses to increase. These increases are offset by lower tax and debt expense (as explained in the direct testimony of Mr. Chronister) and reasonable levels for employee compensation (as explained in the direct testimony of Tampa Electric witness Marian C. Cacciatore).

9. As explained in the direct testimony of Tampa Electric witness Edsel L. Carlson Jr., we are not seeking an annual accrual for the company's storm reserve and propose to continue the storm cost recovery method specified in the

company's previous two base rate settlement agreements. Tampa Electric witness Steven P. Harris describes our storm-related risk in his storm study and direct testimony.

10. Although the Tax Cuts and Jobs Act of 2017 benefitted our customers by reducing our federal income tax rate, it also eliminated "bonus" depreciation for federal income tax purposes. The combination of the loss of bonus depreciation and the required re-valuation of our accumulated deferred income tax balances has reduced the amount of zero-cost capital in our capital structure, thus requiring additional equity. More detail regarding this topic is provided in the direct testimony of Mr. Chronister.

11. An appropriate return on common equity ("ROE") is essential for a regulated utility to competitively attract the capital necessary to make long-term investments, maintain and improve the company's quality of service, and achieve lower costs for customers over the long term. Tampa Electric currently projects that its earned ROE in 2022 without rate relief will be below five percent which will not provide the level of financial integrity needed to maintain unrestricted access to cost-effective capital in the market and is not in the best interest of customers or shareholders. Tampa Electric requests that the Commission

approve an authorized ROE of 10.75 percent, with a range of plus or minus 100 basis points. Tampa Electric witness Dylan W. D'Ascendis supports the company's request for an authorized ROE of 10.75 percent.

12. Tampa Electric requests a capital structure of 55 percent equity and 45 percent debt to maintain Tampa Electric's financial integrity and credit ratings. Maintaining an equity ratio that supports financial integrity enables the company to access capital at competitive rates for the investments needed to provide customers with reliable service at reasonable rates. Witness Kenneth D. McOnie will present the company's proposed equity ratio for the 2022 test year and describe how the company's proposed capital structure and revenue increase will help preserve the company's overall financial integrity.

Our Request for New Rates and Charges

Q. Please summarize the company's requested base rate increase.

A. The company requests a $294.9 million general base rate increase and to reduce its miscellaneous service charge revenues by $6.6 million, both effective as of January 2022.

This increase will effectively recover the reasonable costs of providing service and allow the company an opportunity to earn an appropriate return on rate base. The revenue requirement is addressed in greater detail in the direct testimony of Tampa Electric witness A. Sloan Lewis.

The 2022 test year request addresses Phase One of the Big Bend Modernization, our investment in AMI, and approximately 225 MW of our planned Future Solar capacity. Instead of requesting larger general base rate increases for 2023 and 2024, the company requests authorization to implement GBRAs in 2023 and 2024. The 2023 GBRA of $102.2 million recovers costs for Phase Two of the Big Bend Modernization and approximately 225 MW of additional solar generation. The $25.6 million GBRA for 2024 will recover costs for about 150 MW of solar capacity. These base rate increases will be partially offset by fuel savings.

Tampa Electric's proposed rate design accurately reflects the cost to serve each of the various rate classes. Tampa Electric witness Lorraine L. Cifuentes presents the company's 2022 test year customer, energy sales, and peak demand forecast. Tampa Electric witness William R. Ashburn describes our proposed rate design, rates, and charges, and revised tariff sheets, and Tampa Electric witness Lawrence

J. Vogt provides the cost of service and jurisdictional separation studies.

We continue to design our rates so that it is less expensive to consume under 1,000 kilowatt-hours ("kWh") in a month, which benefits our low-income customers. Our 2022 residential bill will be only 5 percent higher than in 2009, will be 17 percent lower than they were in 2009 on an inflation-adjusted basis, will still be among the lowest in Florida, and will remain below the national average.

Actions Taken to Avoid a Retail Base Rate Increase

Q. What actions have you taken to avoid a retail base rate increase?

A. Since 2013, Tampa Electric has worked diligently to keep its costs low. The company continues to pursue efficiency improvements and cost reductions in all areas of its operations. Here are some of the steps we have taken to avoid seeking a general base rate increase:

- Since 2013, we have voluntarily limited our ability to request general base rate increases by entering the 2013 and 2017 agreements. These agreements have provided demonstrable benefits to our customers.

- We reduced base revenues by approximately $107.0 million without delay to give our customers 100 percent of the expense savings from federal and state tax rate reductions.

- The company has used cost discipline, process and system improvements, smart asset management, and has controlled O&M expenses since 2013. This results in proposed O&M expense levels for our 2022 test year that will be significantly below the Commission's benchmark, as described in the direct testimony of Mr. Chronister.

- We have captured the benefit of lower borrowing costs for our customers. The company has refinanced higher cost debt at lower rates, issued new debt at historically low rates, and adjusted our short-term borrowing portfolio to optimize the use of instruments with the lowest attainable rates.

SUMMARY

Q. Please summarize your direct testimony.

A. My direct testimony describes the prudent ways we have invested to reduce our environmental impact and improve our customers' experience, all while controlling our costs.

Tampa Electric has implemented a strategy of reducing fuel expense through replacement of older and higher cost generation with newer, cost effective renewables and other lower-carbon generation. Up to now, the costs of these capital investments have been offset by lower fuel expense and reduced operating costs associated with the investments as well as some GBRA and SoBRA revenues included in our 2013 and 2017 agreements. Tampa Electric has kept O&M expenses relatively flat over a period of years. We sought and implemented efficiencies, controlled costs, made prudent investments, and improved customer satisfaction over the last several years. These efforts have allowed Tampa Electric to avoid a general base rate increase since 2013.

My direct testimony describes how Tampa Electric is requesting a $294.9 million increase in base rates and reduction of miscellaneous service charge revenues of $6.6 million effective January 2022, based on a 2022 projected test year. This increase will cover the reasonable costs of providing service and allow the company an opportunity to earn an appropriate return on rate base. To promote regulatory efficiency and avoid larger general base rate increases for 2023 and 2024, the company also requests approval for GBRAs in 2023 and 2024. The 2023 GBRA is $102.2

million, and the 2024 GBRA request is $25.6 million.

I also introduce the other company witnesses and list the topics discussed in their direct testimony.

Q. Does this conclude your direct testimony?

A. Yes, it does.

TAMPA ELECTRIC COMPANY
DOCKET NO. 20210034-EI
WITNESS: COLLINS

EXHIBIT

OF

ARCHIBALD D. COLLINS

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List of Tampa Electric Witnesses

And Purposes of Their Direct Testimony

Witness	Purposes of Direct Testimony
Archibald D. Collins	Provides overview of the actions and initiatives taken since 2013, our performance highlights, significant work planned or underway, actions taken to avoid new rates, and the request for new rates.
Melissa L. Cosby	Presents the operational changes since 2013 that have improved the customer experience, describes the company's response to the COVID-19 pandemic, explains how the company measures its performance in customer service and satisfaction metrics, provides details about the company's plans for improving customer experience, and demonstrates that the company's proposed Customer Experience capital budget and O&M expenses for the 2022 test year are reasonable and prudent.
David A. Pickles	Describes other generation plant additions since 2013, other planned generation plant additions, overall generation reliability and efficiency metrics and details of the O&M Benchmark results in Energy Supply, demonstrates that the company's production plant construction program and capital budget for 2022 and 2023 are reasonable and prudent, and shows that the company's proposed level of O&M expense for Energy Supply in the 2022 test year is reasonable and prudent.
J. Brent Caldwell	Describes the Big Bend Modernization project and its benefits to customers; explains why the retirement of Big Bend Unit 3 is prudent.

Witness	Purposes of Direct Testimony
C. David Sweat	Describes the Future Solar projects and their construction timelines and costs.
Jose A. Aponte	Describes the reason 600 MW is the appropriate amount of solar generation to add to our system now; demonstrates the cost-effectiveness of the Future Solar projects.
Regan B. Haines	Describes transmission and distribution plant additions since 2013 (including AMI), transmission and distribution plant additions planned for the future, transmission and distribution reliability metrics and details of the O&M Benchmark results in Electric Delivery, demonstrates that the company's T&D construction program and capital budget for 2022 is reasonable and prudent, and shows that the company's proposed level of O&M expense for Electric Delivery during the 2022 test year is reasonable and prudent.
John C. Heisey	Describes the prudent level of fuel inventory for the test year; describes the company's Optimization Mechanism and explains why it should be continued.
Karen M. Mincey	Describes the company's investments in information technology since 2013, its future plans for information technology improvements, describes the impact of information technology changes on the company's 2022 test year rate base and expenses.
Marian C. Cacciatore	Describes and justifies the company's employee compensation and benefits system.
Lorraine L. Cifuentes	Presents and explains the company's 2022 test year customer, energy sales and peak demand forecast.

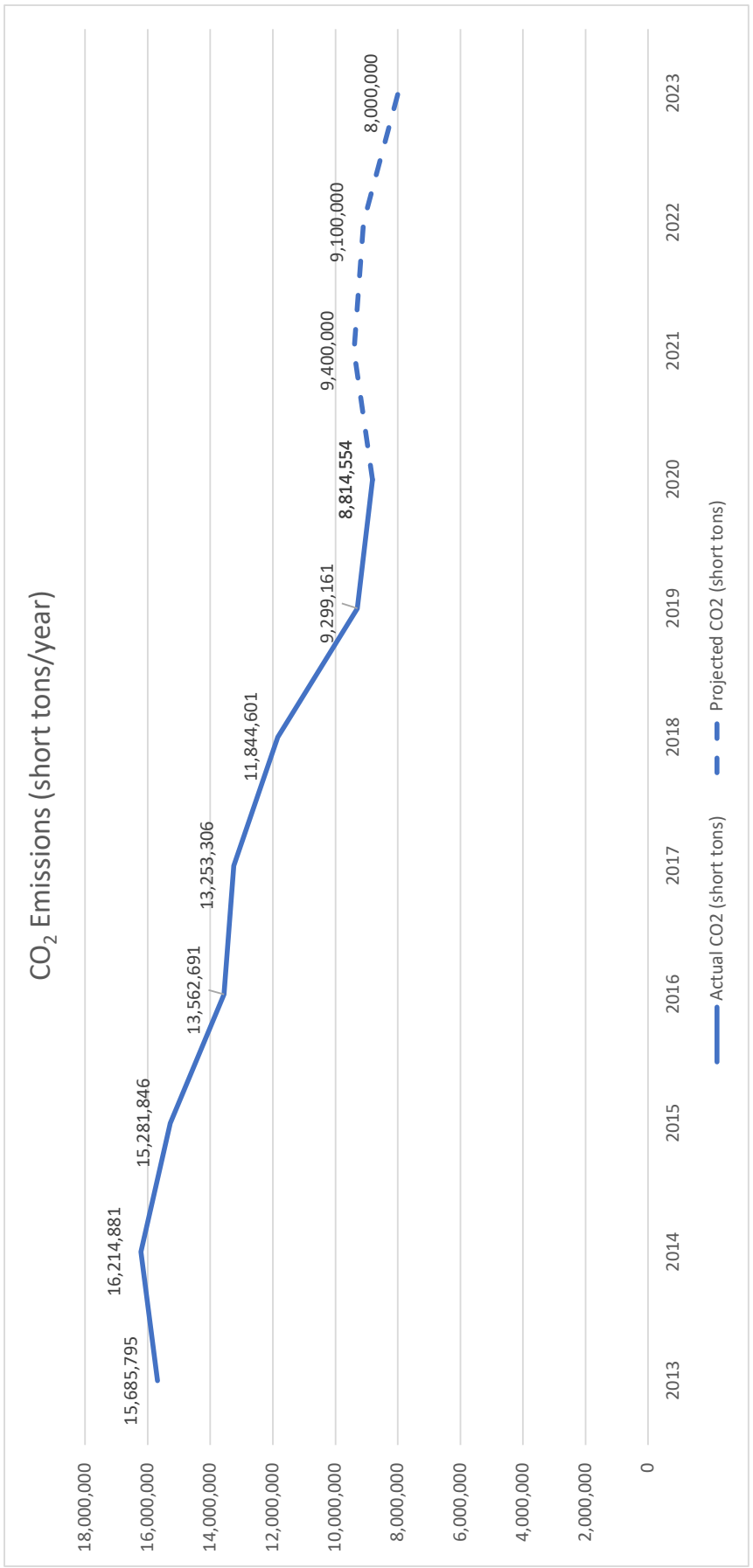
Witness	Purposes of Direct Testimony
Lawrence J. Vogt	Presents the company's cost of service and jurisdictional separation studies.
A. Sloan Lewis	Presents the proposed 2022 test year and describes the 2022 operating budget as reflected in MFRs; describes the budgeting process and sources of financial information; presents calculation of overall revenue requirement and required revenue increase for 2022 test year.
Kenneth D. McOnie	Presents the company's proposed equity ratio for the 2022 test year and describes how the company's proposed equity ratio is prudent and needed to preserve the company's overall financial integrity and credit metrics.
Dylan W. D'Ascendis	Presents company's proposed rate of return on equity and supporting calculations.
Davicel Avellan	Presents the company's depreciation study, proposed depreciation rates and proposed level of 2022 test year depreciation expense and describes and justifies the special cost recovery schedules proposed by Tampa Electric for the undepreciated net book value of assets retired in conjunction with the Big Bend Modernization Project, Big Bend Unit 3 retirement, and AMR meters.
Jeffrey S. Kopp	Presents the company's traditional dismantlement study and proposed dismantlement costs reflected in the company's proposed depreciation rates.

Witness	Purposes of Direct Testimony
Charles R. Beitel	Presents the selective dismantlement studies for Big Bend Units 1 through 3 and proposed dismantlement costs reflected in the company's proposed depreciation rates and capital recovery schedules.
Steven P. Harris	Describes and presents the company's storm damage loss and reserve study.
Edsel L. Carlson, Jr.	Describes the proposed storm cost recovery method and insurance costs.
Jeffrey S. Chronister	Describes regulatory agreements; the change in the company's financial profile since 2013; income tax and capital structure; presents the company's GBRA proposal as well as a proposed tax rate change methodology.
William R. Ashburn	Presents the company's proposed rate design and proposed rates and tariffs.

LIST OF MINIMUM FILING REQUIREMENT SCHEDULES

SPONSORED BY ARCHIBALD D. COLLINS

MFR Schedule	Title
F-09	Public Notice


CO_2 Emissions (short tons/year)
18,000,000
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
15,685,795
16,214,881
15,281,846
13,562,691
13,253,306
11,844,601
9,299,161
8,814,554
9,400,000
9,100,000
8,000,000
Actual CO2 (short tons)
Projected CO2 (short tons)

TAMPA ELECTRIC COMPANY
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EXHIBIT NO. ADC-1
WITNESS: COLLINS
DOCUMENT NO. 4
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