BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

DOCKET NO. 20230007-EI

In re: Environmental cost
recovery clause.
________________________________/

VOLUME 1
PAGES 1 - 186

PROCEEDINGS: HEARING

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

DATE: Wednesday, November 1, 2023

TIME: Commenced: 9:30 a.m.

Concluded: 9:56 a.m.

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

REPORTED BY: DEBRA R. KRICK
Court Reporter

PREMIER REPORTING
112 W. 5TH AVENUE
TALLAHASSEE, FLORIDA
(850) 894-0828

APPEARANCES:

MARIA JOSE MONCADA and JOEL BAKER, ESQUIRES, 700 Universe Boulevard, Juno Beach, Florida 33408-2863; appearing on behalf of Florida Power & Light Company (FPL).

DIANNE M. TRIPLETT, ESQUIRE, 299 First Avenue North, St. Petersburg, Florida 33701; MATTHEW R. BERNIER and STEPHANIE A. CUELLO, ESQUIRES, 106 East College Avenue, Suite 800, Tallahassee, Florida 32301; appearing on behalf of Duke Energy Florida, LLC (DEF).

MALCOLM N. MEANS, J. JEFFREY WAHLEN and VIRGINIA PONDER, ESQUIRES, Ausley Law Firm, Post Office Box 391, Tallahassee, Florida 32302; appearing on behalf of Tampa Electric Company (TECO).

WALT TRIERWEILER, PUBLIC COUNSEL; CHARLES J. REHWINKEL, DEPUTY PUBLIC COUNSEL; PATRICIA A. CHRISTENSEN, MARY A. WESSLING and OCTAVIO PONCE, ESQUIRES, OFFICE OF PUBLIC COUNSEL, c/o The Florida Legislature, 111 West Madison Street, Room 812, Tallahassee, Florida 32399-1400; appearing on behalf of the Citizens of the State of Florida (OPC).

APPEARANCES CONTINUED:

JON C. MOYLE, JR. and KAREN A. PUTNAL, ESQUIRES, Moyle Law Firm, 118 North Gadsden Street, Tallahassee, FL 32301; appearing on behalf of Florida Industrial Users Group (FIPUG).

JACOB IMIG, TIMOTHY SPARKS and CARLOS MARQUEZ, II, FPSC General Counsel's Office, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, appearing on behalf of the Florida Public Service Commission (Staff).

APPEARANCES CONTINUED:

KEITH C. HETRICK, GENERAL COUNSEL; MARY ANNE HELTON, ESQUIRE, Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, Advisor to the Florida Public Service Commission.

I N D E X

EXHIBITS

NUMBER:		ID	ADMITTED
1	Comprehensive Exhibit List	183	183
2-23	As identified on the CEL	183	184

P R O C E E D I N G S

CHAIRMAN FAY: All right. Seeing none, we will conclude the 04 docket and move to the 07 docket, Commissioners.

So, Mr. Imig, when you are ready, you can get us up to date on the 07 docket.

MR. IMIG: Good morning, Mr. Chairman.

I note for the record that PCS Phosphate and Nucor have been excused from participating in these proceedings.

There proposed Type 2 stipulations on all issues, with the intervenors not objecting. These can be voted on today.

All witnesses have been excused and all parties have agreed to waive opening statements and post-hearing briefs.

CHAIRMAN FAY: All right. Any other preliminary matters from the parties?

Okay. Seeing none, Mr. Imig, we will move into prefiled testimony.

MR. IMIG: Staff asks that the prefiled testimony of all witnesses identified in Section VI of the Prehearing Order be inserted into the record as though read.

CHAIRMAN FAY: Okay. Show the prefiled

testimony of all witnesses entered into the record as though read.

(Whereupon, prefiled direct testimony of Richard L. Hume was inserted.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF RICHARD L. HUME

DOCKET NO. 20230007-EI

MARCH 31, 2023

Q. Please state your name, business address, employer and position.

A. My name is Richard Hume. My business address is 700 Universe Boulevard, Juno Beach, Florida 33408. I am employed by Florida Power & Light Company ("FPL" or "the Company") as Regulatory Issues Manager, Regulatory & State Governmental Affairs.

Q. Please describe your educational background and professional experience.

A. I graduated from the University of Florida in 1991 with a Bachelor of Science degree in Business Administration with a Finance Major and earned a Master of Business Administration degree with a Finance Concentration from the University of Florida in 1995. I have 25 years of utility industry experience. In 1998, I was employed by New-Energy Associates (which became a subsidiary of Siemens Power Generation), working in the areas of financial forecasting, budgeting, as well as cost of service and rate forecasting for both electric and gas utilities. In 2007, I joined Oglethorpe Power and after a year was promoted to the position of Director of Financial Forecasting. In that position I was primarily responsible for the long-range financial forecast and resource planning and new rate design. In 2012, I joined FPL managing a budgeting and data analytics team, where my responsibilities included conducting analysis related to customer rates and bill impacts. In 2019, I joined Gulf Power as the Regulatory Issues Manager, where my responsibilities included oversight of Gulf Power's Fuel and Purchased Power and Environmental Cost Recovery Clause ("ECRC"), including calculation of cost recovery factors and the related regulatory filings. I am currently employed by FPL as a Regulatory Issues Manager where my responsibility and oversight include support for FPL's cost recovery clause filings.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present for Florida Public Service Commission ("Commission") review and approval FPL's ECRC final net true-up amounts associated with environmental compliance activities for the period January 2022 through December 2022.

Q. Have you prepared or caused to be prepared under your direction, supervision or control an exhibit in this proceeding?

A. Yes, I am sponsoring Exhibit RLH-1. The following forms are contained in Exhibit RLH-1:

- Form 42-1A reflects the final net true-up for the period January 2022 through December 2022.
- Form 42-2A provides the final true-up calculation for the period.
- Form 42-3A provides the calculation of the interest provision for the period.
- Form 42-4A provides the calculation of variances between actual and actual/ estimated costs for O&M activities for the period.

- Form 42-5A provides a summary of actual monthly costs for O&M activities in the period.
- Form 42-6A provides the calculation of variances between actual and estimated revenue requirements for capital investment projects for the period.
- Form 42-7A provides a summary of actual monthly revenue requirements for the period for capital investment projects.
- Form 42-8A provides the calculation of depreciation and amortization expense and return on capital investment for each capital investment project. Exhibit RLH-1 provides the beginning of period and end of period depreciable base by production plant name, unit or plant account and applicable depreciation rate or amortization period for each capital investment project for the period.
- Form 42-9A presents the capital structures, components and cost rates relied upon to calculate the rate of return applied to capital investments and working capital amounts included for recovery through the ECRC for the period.

Q. What is the source of the data that you present by way of testimony or exhibits in this proceeding?

A. Unless otherwise indicated, the data presented in my testimony and supporting forms is taken from FPL's books and records, which are kept in the regular course of FPL's business in accordance with Generally Accepted Accounting Principles and practices, and with the provisions of the Uniform System of Accounts as prescribed by this Commission.

FPL 2022 FINAL TRUE-UP CALCULATION

Q. Please explain the calculation of FPL's final net true-up amount.

A. Form 42-1A shows the calculation of FPL's final net true-up for the period January 2022 through December 2022, an under-recovery including interest, of $850,694 which FPL is requesting be included in the calculation of the ECRC Factors for the January 2024 through December 2024 period.

The actual end-of-period under-recovery for the period January 2022 through December 2022 of $4,316,657 (shown on Form 42-1A, Line 3) minus the actual/estimated end-of-period under-recovery for the same period of $3,465,963 (shown on Form 42-1A, Line 6) results in the final net true-up under-recovery for the period January 2022 through December 2022 (shown on Form 42-1A, Line 7) of $850,694.

Q. Are all costs listed in Forms 42-4A through 42-9A attributable to environmental compliance projects approved by the Commission?

A. Yes.

FPL Variance Explanations

Q. How did actual project O&M and capital revenue requirements for January 2022 through December 2022 compare with FPL's actual/estimated amounts for the period as presented in Docket 20220007-EI?

A. Form 42-4A shows that the variance in total actual project O&M was $7,116,655 or 12.0% lower than projected. Form 42-6A shows a variance in total actual revenue requirements (depreciation, amortization, income taxes and return on capital investments) associated with the project capital investments of $14,904,089 or 4.5% higher than projected. Individual project variances are provided on Forms 42-4A and 42-6A. Actual revenue requirements for each capital project for the period January 2022 through December 2022 are provided on Form 42-8A. Explanations for significant variances not explained in my testimony are addressed by FPL witness Katharine MacGregor.

Q. Please explain the reasons for the variances in project O&M and capital revenue requirements associated with Projects 2, 11, 41 and 403.

A. Individual project variances are explained below. Significant O&M and capital revenue requirement variances not explained in my testimony are addressed by witness Katharine MacGregor.

FPL O&M Variance Explanations

Project 41. Manatee Temporary Heating System

Project O&M expenses were $1,097,057 or 88.1% lower than projected. The Cape Canaveral manatee heating system upgrade was initially budgeted as an O&M

expense with costs beginning in 2022; however, after further accounting review, the project will be capitalized. The project also was rescheduled to 2023.

<u>FPL Capital Variance Explanations</u>

Project 2. Low NOx Burner Technology

Project revenue requirements were $420,014 or 23.9% higher than projected. After the submittal of the 2022 Actual/Estimated filing, FPL discovered the omission of the amortization of the regulatory asset associated with the retirement of the coal generation assets at Gulf Clean Energy Center ("GCEC"). The regulatory asset includes assets associated with Unit 6 and 7 low NOx burner systems. This correction is reflected in the Final True-Up schedules and is the driver of this variance. The amortization of this regulatory asset is in accordance with Order No. PSC-2021-0115-PAA-EI, Docket No. 20210007-EI, dated March 22, 2021.

Project 11. Air Quality Compliance

Project revenue requirements were $12,446,768 or 6.5% higher than projected. After the submittal of the 2022 Actual/Estimated filing, FPL discovered the omission of the amortization of the regulatory asset associated with the retirement of the coal generation assets at GCEC. The regulatory asset includes assets associated with the Unit 4-7 flue gas desulfurization scrubber, Unit 6 Selective Catalytic Reduction, hydrated lime injection system, and the associated supporting systems. This correction is reflected in the Final True Up schedules and is the driver of this variance. The amortization of this regulatory asset is in accordance with Order No. PSC-2021-0115-PAA-EI, Docket No. 20210007-EI, dated March 22, 2021.

Project 41. Manatee Temporary Heating System

Project revenue requirements were $1,340,594 or 46.5% higher than projected. The variance is primarily due to additional depreciation expense that was not estimated in June 2022. The depreciation expense adjustment was not finalized until the end of June after the Actual/Estimated filing was submitted. The total depreciation adjustment in May and June were recorded in order to fully recover the costs of the Manatee Temporary Heating System at the Lauderdale plant by June 2022, as approved in Order No. PSC-2018-0014-FOF-EI, in Docket No. 20180007-EI, dated January 5, 2018.

Project 403. GCEC 7 Flue Gas Conditioning

Project revenue requirements were $74,610 or 61.0% higher than projected. After the submittal of the 2022 Actual/Estimated filing, FPL discovered the omission of amortization of the regulatory asset associated with the retirement of the coal generation assets at GCEC. The regulatory asset includes assets associated with the Unit 7 flue gas condition system previously used to enhance particulate removal during coal-fired operation. This correction is reflected in the Final True-Up schedules and is the driver of this variance. The amortization of this regulatory asset is in accordance with Order No. PSC-2021-0115-PAA-EI, Docket No. 20210007-EI, dated March 22, 2021.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF RICHARD L. HUME

DOCKET NO. 20230007-EI

JULY 28, 2023

Q. Please state your name, business address.

A. My name is Richard Hume. My business address is 700 Universe Boulevard, Juno Beach, Florida 33408.

Q. By whom are you employed and in what capacity?

A. I am employed by Florida Power & Light Company ("FPL" or "the Company") as the Regulatory Issues Manager in the FPL Finance Department.

Q. Have you previously filed testimony in this Environmental Cost Recovery Clause ("ECRC") docket?

A. Yes.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present for Commission review and approval the Actual/Estimated True-up associated with FPL's environmental compliance activities for the period January 2023 through December 2023.

Q. Have you prepared or caused to be prepared under your direction, supervision or control an exhibit in this proceeding?

A. Yes, I have. My Exhibit RLH-2 consists of nine forms, PSC Forms 42-1E through 42-9E.

- Form 42-1E provides a summary of the Actual/Estimated True-up amount for the period January 2023 through December 2023.
- Forms 42-2E and 42-3E reflect the calculation of the Actual/Estimated True-up amount for the period.
- Forms 42-4E and 42-6E reflect the Actual/Estimated O&M and capital cost variances as compared to original projections for the period.
- Forms 42-5E and 42-7E reflect jurisdictional recoverable O&M and capital project costs for the period.
- Form 42-8E reflects return on capital investments and depreciation by project as well as provides the beginning of period and end of period depreciable base by production plant name, unit or plant account, and applicable depreciation rate or amortization period for each capital investment project.
- Form 42-9E provides the capital structure, components and cost rates relied upon to calculate the rate of return applied to capital investment amounts included for recovery for the period January 2023 through December 2023.

Q. Please explain the calculation of the ECRC Actual/Estimated True-Up amount FPL is requesting this Commission to approve.

A. The Actual/Estimated True-Up amount for the period January 2023 through December 2023 is an over-recovery, including interest, of $2,189,109. The

Actual/Estimated True-Up amount is calculated on Form 42-2E by comparing actual data for January 2023 through May 2023 and revised estimates for June 2023 through December 2023 to original projections for the same period. The over-recovery of $2,157,730 (shown on Form 42-1E, Line 1) plus the interest provision of $31,379 (shown on Form 42-1E, Line 2), results in the final over-recovery of $2,189,109 (shown on Form 42-1E, Line 3).

Q. Are all costs listed in Forms 42-4E through 42-8E attributable to environmental compliance projects approved by the Commission?

A. Yes, except for the proposed modification of the St. Lucie Turtle Nets Project discussed in the testimony of FPL witness Katharine MacGregor, which is being filed contemporaneously with my testimony in this docket.

Q. How do the actual/estimated project costs for January 2023 through December 2023 compare with original projections for the same period?

A. Form 42-4E shows that total O&M project costs are $9,185,905 lower than projected, and Form 42-6E shows that total capital project revenue requirements are $11,380,692 higher than projected. Individual project variances are provided on Forms 42-4E and 42-6E. Revenue requirements for each capital project for the 2023 actual/estimated period are provided on Form 42-8E. Explanations for significant variances in project costs are addressed below and by FPL witness MacGregor.

Q. Is the Weighed Average Cost of Capital calculation in accordance with Commission Order No. PSC-2020-0165-PAA-EU, Docket No. 20200118-EU?

A. Yes.

Q. Please explain the reasons for the significant variances in project O&M expenses and capital revenue requirements.

A. The significant variances in FPL's 2023 actual/estimated O&M expenses and capital revenue requirements from original projections are explained below.

O&M Variance Explanation

Project 41. Manatee Temporary Heating System

Project expenses were $1,454,267 or 93.9% lower than projected. After further review, it was determined that since the original heating system was recorded as a capital investment, the costs associated with the Cape Canaveral manatee heating system upgrade should also have been reflected as a capital investment instead of an O&M expense as was reflected in the 2023 Projection filing.

Capital Variance Explanations

Project 11. Air Quality Compliance

Project revenue requirements are estimated to be $21,454,453 or 11.7% higher than projected. After the submittal of the 2023 Projection filing, FPL discovered that it understated the amortization amounts for the regulatory asset associated with the retired coal generation assets at the Gulf Clean Energy Center (Units 4-7). The 2023 Actual/Estimated True Up schedules were corrected to reflect the total regulatory asset amortization in accordance with Order No. PSC-2021-0115-PAA-EI, which was issued in Docket No. 20210007-EI on March 22, 2021.

Project 39. Martin Next Generation Solar Energy Center

Project revenue requirements are estimated to be $7,583,394 or 17.9% lower than projected. The variance is primarily related to the timing difference between the assumed dismantlement costs in FPL's 2023 Projection and the lower actual dismantlement accrual required by FPL's 2021 base rate settlement agreement (Order No. PSC-2021-0446-S-EI, Docket No. 20210015-EI).

Q. Does this conclude your testimony?

A. Yes.

C1-111

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF RICHARD L. HUME

DOCKET NO. 20230007-EI

AUGUST 25, 2023

Q. Please state your name and address.

A. My name is Richard Hume. My business address is 700 Universe Boulevard, Juno Beach, Florida 33408.

Q. By whom are you employed and in what capacity?

A. I am employed by Florida Power & Light Company ("FPL" or "the Company") as the Regulatory Issues Manager in the FPL Finance Department.

Q. Have you previously filed testimony in this docket?

A. Yes.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present for Commission review and approval FPL's Environmental Cost Recovery Clause ("ECRC") projections and factors for the January 2024 through December 2024 period.

Q. Is this filing in compliance with Order No. PSC-93-1580-FOF-EI, issued in Docket No. 930661-EI?

A. Yes. The costs being submitted for the 2024 projected period are consistent with that order.

Q. Have you prepared or caused to be prepared under your direction, supervision or control any exhibits in this proceeding?

A. Yes. I am sponsoring Exhibits RLH-3 and RLH-4. Exhibit RLH-3 provides the calculation of proposed ECRC factors for the period January 2024 through December 2024 and includes PSC Forms 42-1P through 42-8P. Exhibit RLH-4 provides the calculation of the separation factors used in the calculation of the 2024 ECRC factors. FPL witness Katharine MacGregor is co-sponsoring Form 42-5P, which is included in Exhibit RLH-3.

Q. Have you provided a schedule showing the calculation of projected environmental costs being requested for recovery for the period January 2024 through December 2024?

A. Yes. Form 42-1P in Exhibit RLH-3 provides a summary of projected environmental costs being requested for recovery for the period January 2024 through December 2024. Total jurisdictional revenue requirements including true-up amounts, are $378,102,918 (page 1, line 5). This amount includes jurisdictional revenue requirements projected for the January 2024 through December 2024 period, which are $379,441,334 (page 1, line 1c), the actual/estimated true-up over-recovery of $2,189,109 for the January 2023 through December 2023 period, (page 1, line 2) and the final net true-up under-recovery of $850,694 for the January 2022 through December 2022 period (page 1, line 3). The detailed calculations supporting the 2022 net final true up under-recovery of $850,694 and the 2023 actual/estimated true up over-recovery of $2,189,109 were provided in

C1-224

Exhibits RLH-1 and RLH-2 filed in this docket on March 31, 2023, and July 28, 2023, respectively.

Q. Please describe the schedules that are provided in Exhibit RLH-3.

A. Forms 42-1P through 42-8P provide the calculation of ECRC factors for the period January 2024 through December 2024 that FPL is requesting this Commission to approve.

Form 42-1P provides a summary of projected environmental costs being requested for recovery for the period January 2024 through December 2024.

Form 42-2P presents the O&M costs associated with each environmental project for the projected period, along with the calculation of the total jurisdictional amount of $33,765,286 for these projects.

Form 42-3P presents the recoverable amounts associated with capital costs for environmental projects for the projected period, along with the calculation of the total jurisdictional recoverable amount of $345,676,047.

Form 42-4P presents the detailed calculation of the capital recoverable amounts by project for the projected period. It provides the beginning of period and end of period depreciable base by production plant name, unit or plant account and applicable depreciation rate or amortization period for each capital project.

C1-225

Form 42-5P provides the description and progress of approved environmental projects included in the projected period.

Form 42-6P calculates the allocation factors for demand and energy at generation. The average 12CP demand allocation factors are calculated by determining the percentage each rate class contributes to the average of the twelve-monthly system peaks. The GNCP demand allocation factors are calculated by determining the percentage each rate class contributes to the sum of the classes' group non-coincident peaks. The energy allocators are calculated by determining the percentage each rate class contributes to total kWh sales, as adjusted for losses.

Form 42-7P presents the calculation of the proposed 2024 ECRC factors by rate class.

Form 42-8P presents the capital structure, components and cost rates relied upon to calculate the rate of return applied to capital investments included for recovery through the ECRC for the period January 2024 through December 2024.

Q. Has FPL calculated the Weighted Average Cost of Capital ("WACC") in accordance with Commission Order No. PSC-2020-0165-PAA-EU?

A. Yes. The resulting after-tax WACC to be applied to the 2024 projected ECRC capital investments is 6.9%, which is based on FPL's 2024 currently approved midpoint ROE of 10.8%. The calculation of the WACC for 2024 is provided in Form 42-8P included in Exhibit RLH-3.

Q. Are all costs listed in Forms 42-1P through 42-8P included in Exhibit RLH-3, attributable to environmental compliance projects previously approved by the Commission or pending Commission approval?

A. Yes.

Q. Has FPL accounted for stratified wholesale power sales contracts in the jurisdictional separation of the environmental costs?

A. Yes. The separation factors used in the calculation are consistent with the FPL Ten Year Power Plant Site Plan 2023-2032 filed April 3, 2023. FPL has separated the production-related environmental costs based on stratified separation factors that better reflect the types of generation required to serve load under stratified wholesale power sales contracts. The use of stratified separation factors thus results in a more accurate separation of environmental costs between the retail and wholesale jurisdictions. The calculations of the stratified separation factors are provided in Exhibit RLH-4.

Q. Does this conclude your testimony?

A. Yes.

(Whereupon, prefiled direct testimony of Katharine MacGregor was inserted.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF KATHARINE MACGREGOR

DOCKET NO. 20230007-EI

MARCH 31, 2023

Q. Please state your name and address.

A. My name is Katharine MacGregor and my business address is 700 Universe Boulevard, Juno Beach, Florida 33408.

Q. By whom are you employed and in what capacity?

A. I am employed by Florida Power & Light Company ("FPL" or "Company") as Vice President of Environmental Services.

Q. Please describe your educational background and professional experience.

A. I received a Bachelor of Arts in American History and Classical Studies from the University of Pennsylvania in 2004. I was employed by the United States House of Representatives from 2007 to 2017, serving as Professional Staff on the House Committee on Natural Resources from 2011 to 2017. I was employed by the Department of the Interior from 2017 to 2021 in multiple roles, including the Principal Deputy Assistant Secretary for Land and Mineral Management and later as the Deputy Secretary for the Department. I have been employed by FPL since 2021 as the Vice President of Environmental Services. In that role, I am responsible for FPL's environmental licensing and compliance efforts.

C2-412

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to explain the significant variances in costs associated with operation & maintenance ("O&M") expenses and capital investments included in FPL's Environmental Cost Recovery Clause ("ECRC") Final True-up for the period of January 2022 through December 2022.

FPL Variance Explanations

Q. How did FPL's actual project O&M and capital revenue requirements for January 2022 through December 2022 compare with actual/estimated amounts presented in Docket No. 20220007-EI?

A. Form 42-4A shows that the variance in total actual project O&M was $7,116,655 or 12.0% lower than projected, and Form 42-6A shows that the variance in total actual revenue requirements associated with the project capital investments (depreciation, amortization, income taxes and return on capital investments) was $14,904,089 or 4.5% higher than projected. Individual project variances also are provided on Forms 42-4A and 42-6A. Actual revenue requirements for each capital project for the period January 2022 through December 2022 are provided on Form 42-8A. The calculation of actual revenue requirements is sponsored by FPL witness Richard L. Hume.

Q. Please explain the reasons for the significant variances in project O&M expenses and capital revenue requirements.

A. The significant variances in FPL's 2022 actual O&M expenses and capital revenue requirements from actual/estimated amounts are associated with the following projects.

<u>FPL O&M Variance Explanations</u>

Project 3. Continuous Emission Monitoring Systems

Project expenses were $388,987 or 33.4% lower than projected. The variance is primarily due to O&M cost for the Plant Daniel continuous emission monitoring ("CEM") systems being less than originally estimated. Daniel Unit 1 was offline during the second half of 2022 and less preventative maintenance was performed on the CEM systems due to upcoming unit retirements.

Project 5. Maintenance of Stationary Above Ground Fuel Storage Tanks

Project expenses were $896,537 or 87.1% lower than projected. The variance is primarily due to rescheduling the recoating projects for Lauderdale Plant storage tank Nos. 2 and 3 from 2022 to 2023. Additional time was required to complete the competitive bid process and to finalize the purchase order.

Project 19. Oil-Filled Equipment and Hazardous Substance Remediation

Project expenses were $2,072,647 or 26.4% lower than projected. The variance is primarily due to delays in obtaining equipment clearances (i.e., ability to deenergize equipment) required for equipment repair, which resulted in a lower than projected number of transformers being repaired during 2022.

Project 21. St. Lucie Turtle Nets

Project expenses were $113,738 or 31.8% higher than projected. The variance is primarily due to higher than projected costs associated with inspections and net cleaning work resulting from higher than anticipated amounts of jellyfish at the St. Lucie Plant. The increased jellyfish presence required more frequent cleaning due to high net loading in order to reduce potential sea turtle injury or mortality.

Project 23. Spill Prevention, Control and Countermeasures

Project expenses were $212,809 or 22.0% higher than projected. The variance is primarily due to unplanned repairs of damaged oil diversionary structures at substation sites.

Project 28. Clean Water Act 316(b) Phase II Rule

Project expenses were $69,533 or 34.2% lower than projected. The variance is primarily due to rescheduling preparation of the Impingement Mortality Optimization Study plans for the Port Everglades Energy Center and Dania Beach Energy Center from 2022 to 2023. Plan preparation was postponed because the Florida Department of Environmental Protection (FDEP) issued the associated industrial wastewater permits later than expected.

Project 39. Martin Next Generation Solar Energy Center

Project expenses were $493,255 or 11.7% lower than projected. The variance is primarily due to deferring the 2022 planned outage based on FPL's request to retire Martin Thermal Solar in early 2023, which was approved by the Commission in Order No. 2022-0424-FOF-EI.

Project 42. Turkey Point Cooling Canal Monitoring Plan

Project expenses were $1,053,911 or 12.4% lower than projected. The variance is primarily due to longer than anticipated material lead times and supply chain disruptions resulting in a number of activities originally planned to be completed in 2022 being rescheduled to 2023.

Project 54. Coal Combustion Residuals (CCR)

Project expenses were $138,760 or 9.9% higher than projected. The variance is primarily due to operating the Plant Daniel temporary wastewater treatment system longer than originally planned. The temporary wastewater treatment system is being utilized while the ash pond is being closed and repurposed as a lined industrial wastewater treatment pond. Construction of the new wastewater pond was delayed due to inclement weather conditions.

Project 427. General Water Quality

Project expenses were $328,430 or 23.4% lower than projected. The variance is primarily due to lower than projected costs associated with Plant Daniel and Gulf

Clean Energy Center ("GCEC") groundwater monitoring and sampling required for renewal of the GCEC industrial wastewater permit.

Project 430. General Solid & Hazardous Waste

Project expenses were $193,813 or 24.2% higher than projected. This program involves federal and state mandated identification, handling, storage, transportation, and disposal of solid and hazardous wastes at generation, distribution and transmission facilities in FPL's Northwest region. The variance is primarily due to clean-up costs associated with a diesel release inside containment that occurred from an aboveground piping flange at the GCEC.

Project 431. Title V

Project expenses were $52,375 or 40.7% lower than projected. The variance is due to further cost reductions for Title V permitting and compliance activities, which were achieved as a result of the consolidation of the former Gulf Power and FPL.

<u>FPL Capital Variance Explanations</u>

Project 124. FPL Miami-Dade Clean Water Recovery Center

Project revenue requirements were $287,538 or 12.7% higher than projected. The variance is primarily due to additional payments made in 2022 for the underground injection control well system, reclaimed water line, and concrete storage tank preconstruction activities that were forecast to occur in 2023 at the time FPL submitted its 2022 Actual/Estimated True-up filing. The preconstruction activities included design, planning, and material procurement activities.

Q. Does this conclude your testimony?

A. Yes.

C2-418

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF KATHARINE MACGREGOR

DOCKET NO. 20230007- EI

JULY 28, 2023

Q. Please state your name and address.

A. My name is Katharine MacGregor and my business address is 700 Universe Boulevard, Juno Beach, Florida 33408.

Q. By whom are you employed and in what capacity?

A. I am employed by NextEra Energy, Inc. as Vice President of Environmental Services.

Q. Have you previously testified in this proceeding?

A. Yes.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to present for Florida Public Service Commission ("Commission") review and approval FPL's request for modification of an existing project approved for Environmental Cost Recovery Clause ("ECRC") recovery, the St. Lucie Turtle Nets Project. My testimony also explains the significant variances in costs associated with operation and maintenance ("O&M") expenses and capital investments included in FPL's ECRC actual/estimated true-up for the period of January 2023 through December 2023. This is based on five months of actual data and seven months of estimated data.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes, I am sponsoring the following exhibit:

- KM-1 – St. Lucie Nuclear Power Plant Biological Opinion

<u>St. Lucie Turtle Nets Project Modification</u>

Q. Please describe FPL's approved St. Lucie Turtle Nets Project.

A. The St. Lucie Turtle Nets Project includes a barrier net that is installed across the intake canal at the St. Lucie Nuclear Plant ("PSL") to prevent several species of sea turtles and other listed species from being drawn into the cooling-water inlets of the generation units. The St. Lucie Turtle Nets Project was originally requested for recovery through the ECRC in Docket No. 020648-EI, on June 18, 2002, and subsequently approved through Order No. PSC-02-1421-PAA-EI, issued on October 17, 2002. The initial project included a bottom survey, maintenance dredging, and installation of a 5-inch barrier net and sand pump. Subsequent project modifications, including coating and replacing the net, have been approved since FPL's initial request for ECRC recovery.

Q. Please describe the law or regulation requiring the St. Lucie Turtle Nets Project.

A. In accordance with Section 7(a)(2) of the Endangered Species Act ("ESA"), the National Marine Fisheries Services ("NMFS") issued a Biological Opinion ("BO") to PSL on May 4, 2001 that includes specific terms and conditions related to protection of ESA-listed species and designated critical habitat. The barrier net is required to fulfill FPL's obligation under the ESA to limit lethal takes of sea turtles, consistent with the 2001 BO and subsequent amendments. The BO requires that the net be inspected at least quarterly and repaired or replaced, as necessary. The barrier net system is also required by Appendix B to the Facility Operating License for PSL Unit 2, granted to FPL by the United States Nuclear Regulatory Commission ("NRC").

Q. Please briefly describe FPL's proposed modification of the St. Lucie Turtle Nets Project.

A. On August 8, 2022, NMFS issued a new BO to PSL that includes new requirements related to monitoring the barrier net system for possible giant manta ray entanglement. Prior to implementation of the August 2022 BO, PSL was required under normal circumstances to have a trained marine biologist available during daylight hours on weekdays to monitor the barrier net for and rescue sea turtles and smalltooth sawfish. The new BO expands those requirements. PSL is now required to have at least one biologist trained by NMFS in safe handling and release of giant manta rays available to monitor the barrier net 365 days per year between the hours of 6 a.m. and 10 p.m. The BO also establishes new recovery protocols for the giant manta ray, requiring that any giant manta rays entangled in the net be recovered, tagged, and released in accordance with the specific procedures.

Because the added requirements under the BO extend the amount of time PSL is required to have a biologist available to monitor the barrier net, FPL's necessary monitoring costs will increase. FPL is therefore seeking to modify the St. Lucie

Turtle Nets Project to include those additional costs associated with the giant manta ray monitoring and recovery activities required under the August 2022 BO.

Q. What is the estimated O&M expense associated with the proposed modification to the approved St. Lucie Turtle Nets Project that FPL is requesting to recover through the ECRC?

A. The estimated 2023 O&M cost FPL is requesting to recover through the ECRC for giant manta ray monitoring is $62,500. Annual costs of approximately $150,000 are forecast for 2024 and beyond. The additional cost is due to the increase in time and days required for monitoring the barrier net and having a biologist available to handle and release the giant manta rays 365 days per year between the hours of 6 a.m. and 10 p.m, rather than during weekday daylight hours. FPL has not forecast cost for recovering, tagging, and releasing giant manta rays due to the low probability of occurrence. If this project modification is approved, FPL would seek ECRC recovery of incremental actual labor and equipment costs incurred for release and recovery of giant manta rays not recovered through any other mechanism.

Q. Has FPL included capital costs associated with the proposed modification to the St. Lucie Turtle Nets Project?

A. No, FPL has not included any projected capital costs for the proposed modification at this time.

Q. Could additional activities be required under the St. Lucie Turtle Nets Project?

A. Yes, additional requirements could be added to the BO in the future based on reported impacts to listed species or new species being listed under the ESA.

Q. Please describe the measures FPL is taking to ensure that costs of the St. Lucie Turtle Nets Project are reasonable and prudently incurred.

A. In general, FPL competitively bids the procurement of materials and services. FPL benefits from strong market presence allowing it to leverage corporate-wide procurement activities to the specific benefit of individual procurement activities. However, consistent with applicable policies and procedures, single or sole source procurement also may be used. Here, FPL's estimate for the costs associated with this requested modification was based on a proposal from the contractor that was selected to perform comparable sea turtle monitoring work following a request for proposals.

Q. Did FPL anticipate that it would need to perform these activities at the time that it prepared the Minimum Filing Requirements for its 2021 rate case?

A. No.

Q. Is FPL recovering through any other mechanism the costs for the St. Lucie Turtle Nets Project for which it is petitioning for ECRC recovery?

A. No.

C2-423

Q. Has FPL already incurred costs to comply with the additional monitoring requirements included in the modified PSL BO issued in 2022?

A. Yes. Because the modifications to the PSL BO were issued in August of 2022, FPL has already begun incurring costs associated with the new compliance requirements. However, FPL is seeking ECRC recovery only for activities conducted after the date of FPL's petition.

<u>Variance Explanations</u>

Q. How do the actual/estimated project O&M and capital revenue requirements for January 2023 through December 2023 compare with original projections for the same period?

A. Form 42-4E shows that the variance in total project O&M was $9.2 million, or 20.3%, lower than projected, and Form 42-6E shows that the variance in total revenue requirements associated with the project capital investments (depreciation, amortization, income taxes and return on capital investments) were $11.4 million, or 3.4%, higher than projected. Individual project variances are provided on Forms 42-4E and 42-6E. Revenue requirements for each capital project for the period January 2023 through December 2023 are provided on Form 42-8E. The calculation of revenue requirements is sponsored by FPL witness Richard L. Hume.

Q. Please explain the reasons for the significant variances in project O&M expenses and capital revenue requirements.

A. The significant variances in FPL's 2023 actual/estimated O&M expenses and capital revenue requirements from original projections are associated with the following projects.

<u>O&M Variance Explanations</u>

Project 1. Air Operating Permit Fees

Project expenses are estimated to be $56,127 or 27.8% higher than projected. The variance is primarily due to 2022 actual generation being greater than projected for the Gulf Clean Energy Center ("GCEC"), Ft. Myers, and Plant Smith. Permit fees are based on the prior year's emissions and the Florida Department of Environmental Protection ("FDEP") required cost per ton emitted. Emissions from electric generating units is the driver of the calculations of the fee and associated payments.

Project 21. St. Lucie Turtle Nets

Project expenses are estimated to be $732,082 or 198.7% lower than projected. The variance is primarily due to estimated adjustments in 2023 to reverse costs that were incorrectly booked to ECRC instead of base during the 2022 and 2023 timeframe.

Project 27. Lowest Quality Water Source

Project expenses are estimated to be $59,400 or 17.1% lower than projected. The variance is due to lower costs incurred at the GCEC and Sanford Plant. In 2021, the St. Johns River Water Management District issued a Consumptive Use Permit renewal to Sanford, which requires all groundwater use at the Sanford Plant be replaced with a lower quality surface water source. The site is projected to eliminate groundwater use by the end of 2023 and has estimated lower O&M cost for 2023. The GCEC costs are lower due to decreased reclaimed water treatment system run time and associated chemical cost during the first half of 2023.

Project 50. Steam Electric Effluent Guidelines Revised Rules

Project expenses are estimated to be $4,235,654 or 60.3% lower than projected. The variance is primarily due to the timing of Plant Scherer Unit 4's Effluent Limitations Guidelines ("ELG") compliance project associated with FPL's share of the plant's common costs. In early 2023, construction of a membrane treatment pilot project was initiated and is scheduled to last four to six months to optimize the design of the treatment system. Equipment procurement for the final design will not begin until EPA issues final revisions to the 2020 ELG regulation. On March 29, 2023, EPA published a proposed revision to the agency's 2020 ELG rule and is expected to issue a final rule during the first half of 2024.

Project 54. Coal Combustion Residuals

Project expenses are estimated to be $4,390,099 or 72.5% lower than projected. The variance is primarily due to rescheduling construction of Cell 3 of the Scherer coal combustion residuals landfill to 2025. Construction was delayed to 2025 based on updated storage capacity need projections.

Emissions Allowances

Project expenses are estimated to be $1,544,652 higher than previously projected. The variance is due to the purchase of NOx allowances in February of 2023 to cover the 2022 ozone season obligation for FPL's ownership portion of Plant Daniel Units 1 and 2. The Plant Daniel ozone season NOx allowance cost was inadvertently omitted from the 2023 ECRC projection filing.

Capital Variance Explanations

Project 3. Continuous Emission Monitoring Systems

Project revenue requirements are estimated to be $210,993 or 16.7% lower than previously projected. The variance is primarily due to rescheduling the Ft. Myers Energy Center analyzers replacement project, which shifted capital expenditures and the in-service date from 2022 to the second half of 2023. Additional time was required to complete the competitive bid process and to procure necessary equipment. In addition, the emission monitoring equipment had to be installed during a generating unit outage with very limited outage opportunities available.

Project 5. Maintenance of Stationary Above Ground Fuel Tanks

Project revenue requirements are estimated to be $209,291 or 13.5% higher than previously projected. The variance is primarily due to costs for the Martin tank containment liner replacement having been incorrectly forecast on Project 23. The costs incurred have been correctly booked to Project 5.

Project 28. Clean Water Act 316(b) Phase II Rule

Project revenue requirements are estimated to be $397,633 or 42.8% lower than projected. The variance is primarily due to rescheduling the Ft. Myers 316(b) compliance project from 2023 to 2024. The FDEP was originally expected to issue the renewed industrial wastewater permit for Ft. Myers in the late 2022 to early 2023 timeframe. FDEP has now reviewed the Ft. Myers 316(b) compliance plan and will incorporate requirements to install a fish return system and to upgrade the traveling screens into the facility's renewed industrial wastewater permit. FDEP plans to issue the renewed permit by the fourth quarter of 2023, which is later than originally expected.

Project 34. St. Lucie Cooling Water System Inspection & Maintenance

Project revenue requirements are estimated to be $224,409 or 35.1% lower than projected due to changes to the PSL cooling water intake structure project schedule. FPL received an updated BO from NMFS in August of 2022 that removed the requirement to install an excluder device. Instead, FPL must design, test, construct, and implement a deterrent at the three intake structures by January 1, 2028. The deterrent is required to reduce impacts to sea turtles, smalltooth sawfish, and giant manta rays. FPL met with the NMFS and the NRC in January 2023 to discuss testing of the deterrent required by the 2022 BO. FPL is currently working on engineering modifications to the existing test tank and developing a research plan to implement the deterrent testing.

Project 50. Steam Electric Effluent Guidelines Revised Rules

Project revenue requirements are estimated to be $115,969 or 13.7% lower than projected. The variance is primarily due to the timing of Plant Scherer Unit 3's ELG compliance project associated with FPL's share of the plant's common costs. In early 2023, construction of a membrane treatment pilot project was initiated and is scheduled to last four to six months to optimize the design of the treatment system. Equipment procurement for the final design will not begin until EPA issues final revisions to the 2020 ELG regulation. On March 29, 2023, EPA published a proposed rule revising the agency's 2020 ELG rule and is expected to issue a final rule during the first half of 2024.

Project 427. General Water Quality

Project revenue requirements are estimated to be $301,633 or 12.9% lower than previously projected. The variance is primarily due to rescheduling completion of the GCEC Closed Ash Landfill project from April 2023 to December 2023. Work on the northern portion of the project originally scheduled to begin in November 2022 was delayed to January 2023 due to a delay in an electric transmission line outage that needed to occur to move forward with work in the area.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF KATHARINE MACGREGOR

DOCKET NO. 20230007- EI

AUGUST 25, 2023

Q. Please state your name and address.

A. My name is Katharine MacGregor and my business address is 700 Universe Boulevard, Juno Beach, Florida 33408.

Q. By whom are you employed and in what capacity?

A. I am employed by NextEra Energy, Inc. as Vice President of Environmental Services.

Q. Have you previously testified in this proceeding?

A. Yes.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to present for Florida Public Service Commission ("Commission") review and approval FPL's request for modification of a project previously approved for Environmental Cost Recovery Clause ("ECRC") recovery, the Solar Site Avian Monitoring and Reporting Project. I am also supporting FPL's Project Progress Report, which provides information regarding the various environmental compliance projects that have been approved, or are pending approval, for cost recovery through the ECRC.

Q. Are you sponsoring any exhibits?

A. Yes. I am sponsoring Exhibit KM-2 – FPL Monarch Solar Site FDEP General Permit.

Q. Are you also co-sponsoring an exhibit that describes the progress of FPL's Commission-approved ECRC Projects?

A. Yes. Form 42-5P, which I co-sponsor, provides a brief and accurate description of each of FPL's ECRC projects and provides an update on the 2023 activity associated with each project.

<u>Solar Site Avian Monitoring and Reporting Project Modification</u>

Q. Please describe FPL's approved Solar Site Avian Monitoring and Reporting Project.

A. The Solar Site Avian Monitoring and Reporting Project originated from a county avian mortality monitoring and reporting requirement included in the permit for an FPL solar center. The purpose of the monitoring program was to estimate the overall annual avian fatality rate and species composition associated with a universal solar site. The Solar Site Avian Monitoring and Reporting Project was originally requested for recovery through the ECRC in Docket No. 20180007-EI, on June 13, 2018, and subsequently approved through Order No. PSC-2018-0594-FOF-EI, issued on December 20, 2018.

Q. Please describe the law or regulation requiring the Solar Site Avian Monitoring and Reporting Project.

A. FPL was required to obtain a siting permit from the Alachua County Department of Growth Management ("Alachua DGM") for its solar center located in the County. Pursuant to the Development Review Committee Order DR-17-04 issued by the Alachua DGM on February 16, 2017, FPL was required to conduct four seasons of avian mortality monitoring and reporting as a permit condition. Monitoring was conducted over the 2018 through 2019 timeframe and the final report was submitted to Alachua County and the Florida Fish and Wildlife Conservation Commission in 2020.

Q. Please briefly describe FPL's proposed modification of the Solar Site Avian Monitoring and Reporting Project.

A. On March 17, 2023, FPL received a General Permit from the Florida Department of Environmental Protection ("FDEP"), attached as Exhibit KM-2, for construction of a new solar site in Martin County, the Monarch Solar Site ("Monarch"). The permit requires FPL to conduct a three-year, post-construction survey of Northern crested caracara ("caracara"), formerly known as Audubon crested caracara, a federally threatened bird species. The purpose of the post-construction monitoring is to evaluate if solar arrays located within the primary management zone of a known caracara nest cause an observable change in site occupancy, number of broods, or fledgling rate, when construction occurs outside of the breeding season months. Annual post-construction breeding success reports are required to be submitted to the U.S. Fish and Wildlife Service ("USFWS"). FPL expects to commence post-construction monitoring in January 2024.

Q. What is the estimated O&M expense associated with the proposed modification to the approved Solar Site Avian Monitoring and Reporting Project that FPL is requesting to recover through the ECRC?

A. The estimated 2024 O&M cost FPL is requesting to recover through the ECRC for post-construction monitoring is $30,000. Annual costs of approximately $30,000 forecast for 2024 through 2026 consist primarily of costs for qualified biologists to conduct site surveys following the USFWS caracara monitoring protocol and to provide annual breeding success reports to the USFWS.

Q. Has FPL included capital costs associated with the proposed modification to the Solar Site Avian Monitoring and Reporting Project?

A. No, FPL has not included any projected capital costs for the proposed modification at this time.

Q. Could additional activities be required under the Solar Site Avian Monitoring and Reporting Project?

A. Yes, additional requirements and/or sites could be added in the future as more solar sites are developed in Florida, in order to better understand the potential interaction with and impacts of the construction and operation of solar infrastructure on wildlife.

Q. Is FPL currently required to conduct similar post-construction monitoring and reporting programs at any other solar sites?

A. No. Monarch is currently the only FPL solar site required to conduct post-construction caracara monitoring. However, it is possible that future solar sites will have similar monitoring and reporting requirements included in their permit conditions for caracara or other listed species.

Q. Please describe the measures FPL is taking to ensure that costs of the Solar Site Avian Monitoring and Reporting Project are reasonable and prudently incurred.

A. In general, FPL competitively bids the procurement of materials and services. FPL benefits from strong market presence allowing it to leverage corporate-wide procurement activities to the specific benefit of individual procurement activities. However, consistent with applicable policies and procedures, single or sole source procurement also may be used. Here, FPL's estimate for the costs associated with this requested modification are based on pricing from an existing contract for services, including avian studies and monitoring, which FPL evaluated through competitive evaluation.

Q. Did FPL anticipate that it would need to perform these activities at the time that it prepared the Minimum Filing Requirements for its 2021 rate case?

A. No.

C2-577

Q. Is FPL recovering through any other mechanism the costs for the Solar Site Avian Monitoring and Reporting Project for which it is petitioning for ECRC recovery?

A. No.

Q. Has FPL already incurred costs to comply with the post-construction monitoring requirements included in the FDEP permit issued in March 2023?

A. No. Construction of the Monarch solar site is ongoing and scheduled to be completed in January 2024. Therefore, no post-construction survey activities have commenced.

Q. Does this conclude your testimony?

A. Yes.

(Whereupon, prefiled direct testimony of Gary P. Dean was inserted.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

GARY P. DEAN

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

March 31, 2023

Q. Please state your name and business address.

A. My name is Gary P. Dean. My business address is 299 First Avenue North, St. Petersburg, FL 33701.

Q. By whom are you employed and in what capacity?

A. I am employed by Duke Energy Florida, LLC ("DEF" or the "Company"), as Rates and Regulatory Strategy Manager.

Q. What are your responsibilities in that position?

A. I am responsible for regulatory planning and cost recovery for DEF. These responsibilities include completion of regulatory financial reports and analysis of state, federal and local regulations and their impacts on DEF. In this capacity, I am responsible for DEF's Final True-Up, Actual/Estimated Projection and Projection Filings in the Fuel Adjustment Clause, Capacity Cost Recovery Clause and Environmental Cost Recovery Clause ("ECRC").

C3-594

Q. Please describe your educational background and professional experience.

A. I joined DEF on April 27, 2020 as the Rates and Regulatory Strategy Manager. Prior to working at DEF, I was the Senior Manager, Optimization for Chesapeake Utilities Corporation ("CUC"). In this role, I was responsible for all pricing related to the company's natural gas retail business. Prior to working at CUC, I was the General Manager, Electric Operations for South Jersey Energy Company ("SJEC"). In that capacity I held P&L and strategic development responsibility for the company's electric retail book. Prior to working at SJEC I had various positions associated with rates and regulatory affairs. In these positions I was responsible for all rate and regulatory matters, including tariff and rate design, financial modeling and analysis, and ensuring accurate rates for billing. I received a Master of Business Administration from Rutgers University and a Bachelor of Science degree in Commerce and Engineering, majoring in Finance, from Drexel University.

Q. Have you previously filed testimony before this Commission in connection with DEF's Environmental Cost Recovery Clause ("ECRC")?

A. Yes.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present for Commission review and approval DEF's actual true-up costs associated with environmental compliance activities for the period January 2022 - December 2022.

Q. Are you sponsoring any exhibits in support of your testimony?

C3-595

A. Yes. I am sponsoring Exhibit No.___ (GPD-1), that consists of nine forms.

Exhibit No.___ (GPD-1) consists of the following:

- Form 42-1A: Final true-up for the period January 2022 - December 2022;
- Form 42-2A: Final true-up calculation for the period;
- Form 42-3A: Calculation of the interest provision for the period;
- Form 42-4A: Calculation of variances between actual and actual/estimated costs for O&M Activities;
- Form 42-5A: Summary of actual monthly costs for the period for O&M Activities;
- Form 42-6A: Calculation of variances between actual and actual/estimated costs for Capital Investment Projects;
- Form 42-7A: Summary of actual monthly costs for the period for Capital Investment Projects;
- Form 42-8A, pages 1-9: Calculation of return on capital investment, depreciation expense and property tax expense for each project recovered through the ECRC; and
- Form 42-9A: DEF's capital structure and cost rates.

These exhibits were developed under my supervision and they are true and accurate to the best of my knowledge and belief.

Q. What is the source of the data that you will present in testimony and exhibits in this proceeding?

A. Unless otherwise indicated, the actual data is taken from the books and records of the Company. The books and records are kept in the regular course of DEF's business in accordance with generally accepted accounting principles and practices, and provisions of the Uniform System of Accounts as prescribed by the Federal Energy Regulatory Commission, and any accounting rules and orders established by this Commission. The Company relies on the information included in this testimony and exhibits in the conduct of its affairs.

Q. What is the final true-up amount DEF is requesting for the period January 2022 - December 2022?

A. DEF requests approval of an actual over-recovery amount of $1,560,296 for the year ending December 31, 2022. This amount is shown on Form 42-1A, Line 1.

Q. What is the net true-up amount DEF is requesting for the period January 2022 - December 2022 to be applied in the calculation of the environmental cost recovery factors to be refunded/recovered in the next projection period?

A. DEF requests approval of an adjusted net true-up over-recovery amount of $309,443 for the period January 2022 - December 2022 reflected on Line 3 of Form 42-1A. This amount is the difference between an actual over-recovery amount of $1,560,296 and an actual/estimated over-recovery of $1,250,853 for the period January 2022 - December 2022, as approved in Order PSC-2022-0424-FOF-EI.

Q. Are all costs listed on Forms 42-1A through 42-8A attributable to environmental compliance projects approved by the Commission?

A. Yes.

Q. How did actual O&M expenditures for January 2022 - December 2022 compare with DEF's actual/estimated projections as presented in previous testimony and exhibits?

A. Form 42-4A shows a total O&M project variance of $68,655 or 1% lower than projected. Individual O&M project variances are on Form 42-4A.

Q. How did actual capital recoverable expenditures for January 2022 - December 2022 compare with DEF's estimated/actual projections as presented in previous testimony and exhibits?

A. Form 42-6A shows a total capital investment recoverable cost variance of $54,244 or 1% higher than projected. Individual project variances are on Form 42-6A. Return on capital investment, depreciation and property taxes for each project for the period are provided on Form 42-8A, pages 1-9.

Q. Please explain the variance between actual project expenditures and the Actual/Estimated projections for the SO_2/NOx Emissions Allowance (Project 5).

A. The O&M variance is $1,121 or 30% lower than projected. This is primarily due to lower than expected SO_2 Allowance expense.

Q. Does this conclude your testimony?

A. Yes.

C3-598

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

GARY P. DEAN

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

July 28, 2023

Q. Please state your name and business address.

A. My name is Gary P. Dean. My business address is 299 First Avenue North, St. Petersburg, FL 33701.

Q. By whom are you employed and in what capacity?

A. I am employed by Duke Energy Florida, LLC ("DEF" or the "Company") as Rates and Regulatory Strategy Manager.

Q. Have you previously filed testimony before this Commission in Docket No. 20230007-EI?

A. Yes, I provided direct testimony on March 31, 2023.

Q. Has your job description, education, background and professional experience changed since that time?

A. No.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present, for Commission review and approval, Duke Energy Florida, LLC's ("DEF") actual/estimated true-up costs associated with environmental compliance activities for the period January 2023 through December 2023. I also explain the variance between 2023 actual/estimated cost projections versus original 2023 cost projections for SO_2/NOx Emission Allowances (Project 5).

Q. Have you prepared or caused to be prepared under your direction, supervision or control any exhibits in this proceeding?

A. Yes. I am sponsoring the following exhibit:

1. Exhibit No. __(GPD-2), which consists of PSC Forms 42-1E through 42-9E.

This exhibit provides detail on DEF's actual/estimated true-up capital and O&M environmental costs and revenue requirements for the period January 2023 through December 2023.

Q. What is the actual/estimated true-up amount for which DEF is requesting recovery for the period of January 2023 through December 2023?

A. The 2023 actual/estimated true-up is an under-recovery, including interest, of $3,091,285 as shown on Form 42-1E, line 4. The final 2022 true-up over-recovery of $309,443 as shown on Form 42-2E, Line 7a, is added to this total, resulting in a net under-recovery of $2,781,842 as shown on Form 42-2E, Line 11. The calculations supporting the 2023 actual/estimated true-up are on Forms 42-1E through 42-9E.

Q. What capital structure, components and cost rates did DEF rely on to calculate the revenue requirement rate of return for the period January 2023 through December 2023?

A. The capital structure, components and cost rates relied on to calculate the revenue requirement rate of return for the period January 2023 through December 2023 are shown on Form 42-9E. This form includes the derivation of debt and equity components used in the Return on Average Net Investment, lines 7 (a) and (b), on Form 42-8E. Form 42-9E also cites the source and includes the rationale for using the particular capital structure and cost rates.

Q. How do actual/estimated O&M expenditures for January 2023 through December 2023 compare with original projections?

A. Form 42-4E shows that total O&M project costs are estimated to be $9,140,026. This is $3.4M, or 60% higher than originally projected. This form also lists individual O&M project variances. Explanations for these variances are included in the Direct Testimonies of Reginald Anderson, Eric Szkolnyj, and Patricia West.

Q. How do estimated/actual capital recoverable costs for January 2023 through December 2023 compare with DEF's original projections?

A. Form 42-6E shows that total recoverable capital costs are estimated to be \$4,686,401. This is \$107k or 2% higher than originally projected. This form also lists individual project variances. The return on investment, depreciation expense and property taxes for each project for the actual/estimated period are provided on Form 42-8E, pages 1 through 10. Explanations for these variances are included in the Direct Testimonies of Mr. Anderson, Mr. Szkolnyj, and Ms. West.

Q. Please explain the O&M variance between actual project expenditures and the Actual/Estimated projections for the SO_2/NOx Emissions Allowance (Project 5).

A. The O&M variance is \$277, or 12% lower than projected, due to lower-than-projected SO_2 allowance expense.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

GARY P. DEAN

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

August 25, 2023

Q. Please state your name and business address.

A. My name is Gary P. Dean. My business address is 299 First Avenue North, St. Petersburg, FL 33701.

Q. Have you previously filed testimony before this Commission in Docket No. 20230007-EI?

A. Yes. I provided direct testimony on March 31, 2023, and July 28, 2023.

Q. Has your job description, education, background or professional experience changed since that time?

A. No.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present, for Commission review and approval, Duke Energy Florida, LLC's ("DEF" or "Company") calculation of revenue requirements and Environmental Cost Recovery Clause ("ECRC") factors for customer billings for the period January 2024 through December 2024. My testimony also addresses capital and O&M expenses for DEF's environmental compliance activities for the year 2024.

Q. Have you prepared or caused to be prepared under your direction, supervision, or control any exhibits in this proceeding?

A. Yes. I am sponsoring the following exhibit:

Exhibit No. __(GPD-3), which consists of PSC Forms 42-1P through 42-8P

The individuals listed below are co-sponsors of Forms 42-5P pages 1-4 and 6-25 as indicated in their direct testimony. I am sponsoring Form 42-5P page 5.

- Mr. Anderson and Ms. West will co-sponsor Form 42-5P page 7.
- Mr. Anderson will co-sponsor Form 42-5P pages 20-22.
- Mr. Szkolnyj will co-sponsor Form 42-5P page 23.
- Ms. West will co-sponsor Forms 42-5P pages 1-4, 6, 8-19, and 24-25.

Q. Please summarize your testimony.

A. My testimony supports the approval of an average ECRC billing factor of 0.044 cents per kWh which includes projected jurisdictional capital and O&M revenue requirements for the period January 2024 through December 2024 of approximately $14.8 million, and a net true-up under-recovery provision of approximately $2.8 million from prior periods. My testimony also supports that projected environmental expenditures for 2024 are appropriate for recovery through the ECRC.

Q. **What is the total recoverable revenue requirement for the period January 2024 through December 2024?**

A. The total recoverable revenue requirement including true-up amounts is approximately $17.6 million as shown on Form 42-1P line 4 of Exhibit No. __(GPD-3).

Q. **What is the total true-up to be applied for the period January 2024 through December 2024?**

A. The total true-up applicable to this period is a net under-recovery of approximately $2.8 million. This amount consists of the final true-up over-recovery of approximately $309 thousand for the period January 2022 through December 2022, and an estimated true-up under-recovery of approximately $3.1 million for the current period of January 2023 through December 2023. The detailed calculation supporting the 2023 estimated true-up was provided on Forms 42-1E through 42-9E of Exhibit No. __ (GPD-2) filed with the Commission on July 28, 2023.

Q. **Are all the costs listed on Forms 42-1P through 42-7P attributable to environmental compliance programs previously approved by the Commission?**

A. Yes, with the exception of Projects 19 (Reclaimed Water Interconnection) and 20 (Lead and Copper Rule), which were submitted for approval on June 30, 2023 in this Docket. All other costs listed on Forms 42-1P through 42-7P were previously approved by the Commission and are listed below:

The Substation and Distribution System Programs (Project 1 & 2) were previously approved in Order No. PSC-2002-1735-FOF-EI.

The Pipeline Integrity Management Program (Project 3) and the Above Ground Tank Secondary Containment Program (Project 4) were previously approved in Order No. PSC-2003-1348-FOF-EI.

The recovery of sulfur dioxide (SO_2) Emission Allowances (Project 5) was previously approved in Order No. PSC-1995-0450-FOF-EI, however, the costs were moved to the ECRC docket from the Fuel docket beginning January 1, 2004 at the request of Staff to be consistent with the other Florida investor owned utilities.

CAIR was replaced by the Cross-State Air Pollution Rule on January 1, 2015. Consistent with Order No. PSC-2011-0553-FOF-EI, DEF treated the costs associated with unusable NOx emission allowances as a regulatory asset and amortized it over three (3) years, beginning January 1, 2015, until fully recovered December 31, 2017, with a return on the unamortized investment.

The Phase II Cooling Water Intake 316(b) Program (Project 6) was previously approved in Order No. PSC-2004-0990-PAA-EI, PSC-2018-0014-FOF-EI, and PSC-2020-0433-FOF-EI.

DEF's Integrated Clean Air Compliance Plan (Project 7) was approved by the Commission as a prudent and reasonable means of complying with the Clean Air Interstate Rule and related regulatory requirements in Order No. PSC-2007-0922-FOF-EI. The NESHAP provision was approved in Order No. PSC-2022-0424-FOF-EI.

The Arsenic Groundwater Standard Program (Project 8), Sea Turtle Lighting Program (Project 9) and Underground Storage Tanks Program (Project 10) were previously approved in Order No. PSC-2005-1251-FOF-EI.

The Modular Cooling Tower Project (Project 11) was previously approved in Order No. PSC-2007-0722-FOF-EI.

The Crystal River Thermal Discharge Compliance Project (Project 11.1) and Greenhouse Gas Inventory and Reporting Project (Project 12) were previously approved in Order No. PSC-2008-0775-FOF-EI.

The Mercury Total Maximum Loads Monitoring Program (Project 13) was previously approved in Order No. PSC-2009-0759-FOF-EI.

The Hazardous Air Pollutants (HAPs) ICR Program (Project 14) was previously approved in Order No. PSC-2010-0099-PAA-EI.

The Effluent Limitations Guidelines ICR Program (Project 15) was previously approved in Order No. PSC-2010-0683-PAA-EI.

The Effluent Limitations Guidelines Program (Project 15.1) was previously approved in Order No. PSC-2013-0606-FOF-EI.

The National Pollutant Discharge Elimination System (NPDES) Program (Project 16) was previously approved in Order No. PSC-2011-0553-FOF-EI.

The Mercury & Air Toxic Standards (MATS) Program (Project 17) which replaces Maximum Achievable Control Technology (MACT) was previously approved in Order Nos. PSC-2011-0553-FOF-EI, PSC-2012-0432-PAA-EI and PSC-2014-0173-PAA-EI.

The Coal Combustion Residual (CCR) Rule (Project 18) was previously approved in Order No. PSC-2015-0536-FOF-EI, Order No. PSC-2018-0594-FOF-EI, and Order No. PSC-2019-0500-FOF-EI.

Q. How will Reclaimed Water Interconnection costs (Reclaimed Water Interconnection (Project 19) be allocated to rate classes?

A: DEF proposes that O&M costs associated with the Reclaimed Water Interconnection be allocated to rate classes on an Energy basis, and Capital be allocated to rate classes on a Demand basis.

Q. How will Lead & Copper Rule (Lead & Copper Rule (Project 20) be allocated to rate classes?

A: DEF proposes that O&M and capital costs associated with the Lead and Copper Rule be allocated to rate classes on a Demand basis.

Q. Have you prepared schedules showing the calculation of the recoverable O&M project costs for 2024?

A. Yes. Form 42-2P of Exhibit No. __ (GPD-3) summarizes recoverable jurisdictional O&M cost estimates for these projects of approximately $10.3 million.

Q. Have you prepared schedules showing the calculation of the recoverable capital project costs for 2024?

A. Yes. Form 42-3P of Exhibit No. __ (GPD-3) summarizes recoverable jurisdictional capital cost estimates for these projects of approximately $4.5 million. Form 42-4P pages 1 through 10 show detailed calculations of these costs.

Q. Have you prepared schedules providing progress reports for all environmental compliance projects?

A. Yes. Form 42-5P pages 1 through 25 of Exhibit No. __ (GPD-3) provide a description, progress summary and recoverable cost estimates for each project.

Q. What are the total projected recoverable jurisdictional costs for environmental compliance projects for the year 2024?

A. The total jurisdictional capital and O&M costs to be recovered through the ECRC are approximately $14.8 million. The costs are calculated on Form 42-1P line 1c of Exhibit No. __ (GPD-3).

Q. Please describe how the proposed ECRC factors are developed.

A. The ECRC factors are calculated on Forms 42-6P and 42-7P of Exhibit No. __(GPD-3). The demand component of class allocation factors is calculated by determining the percentage each rate class contributes to monthly system peaks adjusted for losses for each rate class which is obtained from DEF's load research study filed with the Commission on April 28, 2023. The energy allocation factors are calculated by determining the percentage each rate class contributes to total kilowatt-hour sales adjusted for losses for each rate class. Form 42-7P presents the calculation of the proposed ECRC billing factors by rate class.

Q. What are DEF's proposed 2024 ECRC billing factors by the various rate

classes and delivery voltages?

A. The calculation of DEF's proposed ECRC factors for 2024 customer billings is shown on Form 42-7P in Exhibit No. __(GPD-3) as follows:

RATE CLASS	ECRC FACTORS
Residential	0.046 cents/kWh
General Service Non-Demand	
@ Secondary Voltage	0.044 cents/kWh
@ Primary Voltage	0.044 cents/kWh
@ Transmission Voltage	0.043 cents/kWh
General Service 100% Load Factor	0.042 cents/kWh
General Service Demand	
@ Secondary Voltage	0.043 cents/kWh
@ Primary Voltage	0.043 cents/kWh
@ Transmission Voltage	0.042 cents/kWh
Curtailable	
@ Secondary Voltage	0.041 cents/kWh
@ Primary Voltage	0.041 cents/kWh
@ Transmission Voltage	0.040 cents/kWh
Interruptible	
@ Secondary Voltage	0.041 cents/kWh
@ Primary Voltage	0.041 cents/kWh
@ Transmission Voltage	0.040 cents/kWh
Lighting	0.037 cents/kWh

Q. When is DEF requesting that the proposed ECRC billing factors be effective?

A. DEF is requesting that its proposed ECRC billing factors be effective with the first billing cycle of January 2024 and continue through the last billing cycle of December 2024.

Q. Does this conclude your testimony?

A. Yes.

(Whereupon, prefiled direct testimony of Eric Szkolnyj was inserted.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

ERIC SZKOLNYJ

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC.

DOCKET NO. 20230007-EI

March 31, 2023

Q. Please state your name and business address.

A. My name is Eric Szkolnyj. My business address is 400 South Tryon Street, Charlotte, NC 28202.

Q: By whom are you employed and in what capacity?

A: I am employed by Duke Energy Corporation ("Duke Energy") as General Manager for the Coal Combustion Products ("CCP") Group - Operations & Maintenance. Duke Energy Florida, LLC ("DEF" or the "Company") is a fully owned subsidiary of Duke Energy.

Q: What are your responsibilities in that position?

A: I am responsible for oversight of the operation and maintenance of the majority of CCP facilities in the Carolinas and Florida, including the CCP facility at the Crystal River Energy Center. This includes operating and maintaining all CCP facilities in compliance with state and federal regulations. The Operations and Maintenance group at each station maintains accountability for overall CCP facility performance which requires close collaboration with other Duke Energy CCP organizations such as Project Implementation, Engineering, and Facility Closure. The Company relies on my opinions and information I provide when making decisions regarding the CCP facilities under my supervision.

Q: Please describe your educational background and professional experience.

A: I have a Bachelor of Science degree in Mechanical Engineering from North Carolina State University. I have 18 years of experience in the power generation industry including positions as a Nuclear Control Room Supervisor, Lead Engineer, and Nuclear Oversight Lead Assessor within Duke Energy's Nuclear fleet at Harris Nuclear Plant, and as the Director of Operational Excellence Assessments & Oversight for Duke Energy's Enterprise. Prior to joining Duke Energy, I was employed by the Department of Defense as a civilian Shift Test Engineer for the U.S. Navy. In June of 2021, I began my current role as CCP Regional General Manager.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to explain material variances between actual and actual/estimated project expenditures for environmental compliance costs associated with DEF's Coal Combustion Residual ("CCR") Rule for the period January 2021 - December 2021. DEF did not have any material variances for the period January 2022 – December 2022.

Q. How did actual O&M project expenditures for the period January 2022 – December 2022 compare to actual/estimated O&M projections for the CCR Rule (Project 18)?

A. The CCR Rule O&M variance is $4,210 or 1% lower than projected.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

ERIC SZKOLNYJ

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

July 28, 2023

Q. Please state your name and business address.

A. My name is Eric Szkolnyj. My business address is 526 South Church Street, Charlotte, NC 28202.

Q. By whom are you employed?

A. I am employed by Duke Energy Corporation ("Duke Energy") as General Manager for the Coal Combustion Products ("CCP") Group - Operations & Maintenance. Duke Energy Florida, LLC ("DEF" or the "Company") is a fully owned subsidiary of Duke Energy.

Q. Have you previously filed testimony before this Commission in Docket No. 20230007-EI?

A. Yes, I provided direct testimony on March 31, 2023.

Q. Has your job description, education, background, and professional experience changed since that time?

A. No.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to explain material variances between 2023 actual/estimated cost projections and original 2023 cost projections for environmental compliance costs associated with DEF's Coal Combustion Residual ("CCR") Rule compliance project.

Q. Please explain the O&M variance between actual/estimated project expenditures and original projections for CCR (Project 18) O&M for the period January 2023 through December 2023.

A. O&M expenditures for CCR are expected to be $26,142, or 7% higher than projected.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

ERIC SZKOLNYJ

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

August 25, 2023

Q. Please state your name and business address.

A. My name is Eric Szkolnyj. My business address is 526 South Church Street, Charlotte, NC 28202.

Q. Have you previously filed testimony before this Commission in Docket No. 20230007-EI?

A. Yes. I provided direct testimony on March 31, 2023, and July 28, 2023.

Q. Has your job description, education, background, or professional experience changed since that time?

A. No.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide an update on Duke Energy Florida, LLC's ("DEF" or "Company") proposed compliance activities and related 2024 estimated costs associated with the Coal Combustion Residual ("CCR") Rule for which the Company seeks recovery under the Environmental Cost Recovery Clause ("ECRC").

Q. Have you prepared or caused to be prepared under your direction, supervision or control any exhibits in this proceeding?

A. Yes. I am co-sponsoring the following portion of Exhibit No. __ (GPD-3) to Gary P. Dean's direct testimony:

- 42-5P page 23 – Coal Combustion Residual Rule

Q. What O&M costs does DEF expect to incur in 2024 for the Coal Combustion Residual Rule Program (Project No. 18)?

A. DEF is forecasting $521k in O&M costs for 2024.

Various maintenance and repair work is required for the ash landfill to comply with the rule. This includes maintenance of the landfill cover, vegetation management, fugitive dust mitigation, weekly and annual inspections, and cleanout of the lined sedimentation pond and perimeter ditches which were installed as groundwater corrective measures. DEF will also continue to perform the required groundwater monitoring for ash management units, which includes engineering, sampling, analysis, and reporting.

Q. What Capital costs does DEF expect to incur in 2024 for the Coal Combustion Residual Rule Program (Project No. 18)?

A. DEF does not expect capital expenditures in 2024.

Q. Does this conclude your testimony?

A. Yes.

(Whereupon, prefiled direct testimony of Reginald Anderson was inserted.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

REGINALD ANDERSON

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

March 31, 2023

Q. Please state your name and business address.

A. My name is Reginald Anderson. My business address is 299 First Avenue North, St. Petersburg, FL 33701.

Q. By whom are you employed and in what capacity?

A. I am employed by Duke Energy Florida, LLC ("DEF" or the "Company") as Vice President – Regulated & Renewable Energy Florida.

Q. What are your responsibilities in that position?

A. As Vice President of DEF's Regulated & Renewable Energy organization, my responsibilities include overall leadership and strategic direction of DEF's power generation fleet. My responsibilities include strategic and tactical planning to operate and maintain DEF's non-nuclear generation fleet; generation fleet project and addition recommendations; major maintenance programs; outage and project management; generation facilities retirement; asset allocation; workforce planning and staffing; organizational alignment and design; continuous business improvement; retention and inclusion; succession planning; and oversight of numerous employees and hundreds of millions of dollars in assets and capital and O&M budgets.

Q. Please describe your educational background and professional experience.

A. I earned a Bachelor of Science degree in Electrical Engineering Technology and Master of Business from the University of Central Florida in 1996 and 2008 respectively. I have 23 years of power plant production experience at DEF in various operational, managerial and leadership positions in fossil steam and combustion turbine plant operations. I also managed the new construction and O&M projects team. I have contract negotiation and management experience. My prior experience includes leadership roles in municipal utilities, manufacturing, and the United States Marine Corps.

Q. Have you previously filed testimony before this Commission in connection with DEF's Environmental Cost Recovery Clause ("ECRC")?

A. Yes.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to explain material variances between actual and actual/estimated project expenditures for environmental compliance costs associated with DEF's Integrated Clean Air Compliance Program (Project 7.4), Mercury and Air Toxics Standards (MATS) – Crystal River (CR) 4&5 (Project 17), Mercury and Air Toxics Standards ("MATS") - Anclote Gas Conversion Project (Project 17.1), and Mercury & Air Toxics Standards (MATS) – CR 1&2 (Project 17.2) for the period January 2022 - December 2022.

Q: Please explain the O&M variance between actual project expenditures and actual/estimated projections for the CAIR Crystal River Project – Energy (Reagents) (Project 7.4) for January 2022 - December 2022?

A: O&M costs for CAIR Crystal River Project – Energy (Reagents) were $59,944 or 0.9% higher than projected. Variance for the individual reagents were $521k (18%) lower for Ammonia Expense, $1.4M (40%) higher for Limestone Expense, $907k (33%) lower for Gypsum Disposal/Sale (credit), $456k (16%) lower for Hydrated Lime Expense, and $579k (118%) higher Caustic Expense.

Q. Does this conclude your testimony?

A. Yes.

C5-702

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

REGINALD ANDERSON

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

July 28, 2023

Q. Please state your name and business address.

A. My name is Reginald Anderson. My business address is 299 First Avenue North, St. Petersburg, FL 33701.

Q. By whom are you employed and in what capacity?

A. I am employed by Duke Energy Florida, LLC ("DEF" or the "Company") as Vice President – Regulated & Renewable Energy Florida.

Q. Have you previously filed testimony before this Commission in Docket No. 20230007-EI?

A. Yes, I provided direct testimony on March 31, 2023.

Q. Has your job description, education, background, and professional experience changed since that time?

A. No.

C5-703

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to explain material variances between 2023 actual/estimated cost projections and original 2023 cost projections for environmental compliance costs associated with FPSC-approved environmental programs under my responsibility. These programs include the CAIR/CAMR Crystal River ("CR") Program (Project 7.4), Mercury and Air Toxics Standards (MATS) – Crystal River (CR) 4&5 (Project 17), Mercury and Air Toxics Standards ("MATS") - Anclote Gas Conversion Project (Project 17.1), and Mercury & Air Toxics Standards (MATS) – CR 1&2 (Project 17.2).

Q. Please explain the variance between actual/estimated O&M expenditures and the original projections for O&M expenditures for the CAIR/CAMR CR-Energy (Reagents) Program (Project 7.4) for the period January 2023 through December 2023?

A**.** O&M expenditures for the CAIR/CAMR CR-Energy (Reagents) Program are forecasted to be $3,592,655, or 82% higher than originally forecasted.

This variance is attributable to a forecasted $300k decrease in Dibasic Acid expense, offset by forecasted increases of $24k for Ammonia expense, $1.8M increase in Limestone expense, $99k increase in Hydrated Lime expense, and a $784k increase in Caustic expense. In addition, Gypsum Sales Credit is $1.2M less than originally forecasted, which offsets some of the cost of the other reagents.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

REGINALD ANDERSON

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

August 25, 2023

Q. Please state your name and business address.

A. My name is Reginald Anderson. My business address is 299 1st Avenue North, St. Petersburg, FL 33701.

Q. Have you previously filed testimony before this Commission in Docket No. 20230007-EI?

A. Yes. I provided direct testimony on March 31, 2023, and July 28, 2023.

Q. Has your job description, education, background, or professional experience changed since that time?

A. No.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide estimates of ECRC-recoverable costs that will be incurred in 2024 for Duke Energy Florida, LLC's ("DEF" or "Company") environmental compliance programs under my responsibility.

These programs include the CAIR/CAMR Crystal River ("CR") Program (Project 7.4), Mercury and Air Toxics Standards (MATS) – Crystal River (CR) 4&5 (Project 17), Mercury and Air Toxics Standards (MATS) – Anclote Gas Conversion (Project 17.1), and Mercury & Air Toxics Standards (MATS) – Crystal River 1&2 Program (Project 17.2).

Q. Have you prepared or caused to be prepared under your direction, supervision or control any exhibits in this proceeding?

A. Yes. I am co-sponsoring the following portions of Exhibit No. __ (GPD-3) to Gary P. Dean's direct testimony:

- 42-5P page 7 of 25 – Clean Air Interstate Rule (CAIR)
- 42-5P page 20 of 25 - MATS – CR4&5
- 42-5P page 21 of 25 - MATS – Anclote Gas Conversion
- 42-5P page 22 of 25 - MATS – CR1&2

Q. What O&M costs does DEF expect to incur in 2024 for the CAIR/CAMR Crystal River – Energy Program (Project 7.4)?

A. DEF estimates O&M costs of approximately $9.2M to support reagent and bi-product costs (ammonia, limestone, hydrated lime, caustic, dibasic acid, and net gypsum sales/disposal) for use at the CR Energy Complex ("CREC") as outlined in DEF's Integrated Clean Air Compliance Plan.

Q. What O&M costs does DEF expect to incur in 2024 for the MATS Program – CR 4&5 (Project No. 17)?

A. DEF estimates O&M costs of approximately $200k for CR 4&5 MATS compliance. This estimate includes emissions testing, burner inspections, maintenance of emissions monitoring and control technologies, and reagent costs.

Q. Does this conclude your testimony?

A. Yes.

(Whereupon, prefiled direct testimony of Patricia Q. West was inserted.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

KIM SPENCE McDANIEL

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

March 31, 2023

Q. Please state your name and business address.

A. My name is Kim S. McDaniel. My business address is 299 First Avenue North, St. Petersburg, FL 33701.

Q. By whom are you employed and in what capacity?

A. I am employed by Duke Energy Florida, LLC ("DEF" or the "Company") as Manager of Environmental Services.

Q. What are your responsibilities in that position?

A. My responsibilities include managing the work of environmental professionals who are responsible for environmental, technical, and regulatory support during the development and implementation of environmental compliance strategies for regulated power generation facilities and electrical transmission and distribution facilities in Florida.

Q. Please describe your educational background and professional experience.

A. I obtained my Bachelor of Science degree in Wildlife and Fisheries Sciences from Texas A&M University, College Station, Texas. I was employed by the Arizona Department of Environmental Quality ("ADEQ") between 1996 and 2007. At the ADEQ, I managed compliance and enforcement efforts associated with water quality and waste handling activities. During my tenure there I was also responsible for managing the site investigations under state superfund program and writing new regulations governing the management of wastes. I joined Progress Energy, now DEF, in 2008 as the manager of Florida Permitting and Compliance and am currently in this role.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to explain material variances between actual and actual/estimated project expenditures for environmental compliance costs associated with FPSC-approved programs under my responsibility. These programs include the T&D Substation Environmental Investigation, Remediation and Pollution Prevention Program (Projects 1 & 1a), Distribution Environmental Investigation, Remediation and Pollution Prevention Program (Project 2), Pipeline Integrity Management ("PIM") Program (Project 3), Above Ground Storage Tanks ("AST") Program (Project 4), Phase II Cooling Water Intake 316(b) Program (Project 6), CAIR/CAMR Continuous Mercury Monitoring System ("CMMS") Program (Projects 7.2 & 7.3), Best Available Retrofit Technology ("BART") Program (Project 7.5), National Emission Standards for

Hazardous Air Pollutants (NESHAP – Base (Project 7.6, Arsenic Groundwater Standard Program (Project 8), Sea Turtle – Coastal Street Lighting Program (Project 9), Underground Storage Tanks ("UST") Program (Project 10), Modular Cooling Towers (Project 11), Thermal Discharge Permanent Compliance (Project 11.1), Greenhouse Gas Inventory and Reporting (Project 12), Mercury Total Maximum Loads Monitoring ("TMDL") (Project 13), Hazardous Air Pollutants ("HAPs") Information Collection Request ("ICR") (Project 14), Effluent Limitation Guidelines CRN (Project 15.1), and National Pollutant Discharge Elimination System ("NPDES") Program (Project 16).

Q. How did actual O&M expenditures for January 2022 - December 2022 compare with DEF's actual/estimated projections for the Phase II Cooling Water Intake - 316(b) Project (Projects 6 & 6a)?

A. The Phase II Cooling Water Intake - 316(b) (Projects 6 & 6a) O&M variance is 53%, or $99,172 lower than projected.

This variance is primarily due to the fact that we were not billed for costs associated with the rental crane used for removing and cleaning the 316(b) compliant screens until January 2023. Additional favorability is due to the delay in permit issuance for Anclote Station. Initial estimates anticipated the permit to be issued during the fourth quarter of 2022. The permit has not been issued at this time.

Q. How did actual Capital expenditures for January 2022 - December 2022 compare with DEF's actual/estimated projections for the Cooling Water Intake - 316(b) Crystal River Project (Project 6)?

A. The Cooling Water Intake - 316(b) (Crystal River Complex) capital variance is 26% or $112,665 lower than projected. This is partially due to December 2021 actual contract amounts for time and material contract coming in $28,718 lower than the December 2021 accrual which was reversed in 2022. In addition, DEF was able to avoid $83,951 in crane delivery fees and rental costs by coordinating lifting activities with other construction at Crystal River.

Q. How did actual Capital expenditures for January 2022 - December 2022 compare with DEF's actual/estimated projections for the Cooling Water Intake - 316(b) Bartow Project (Project 6.1)?

A. The Cooling Water Intake - 316(b) (Bartow) capital variance is 100% or $145,277 lower than projected. This is primarily due to the delay in permit issuance from the Florida Department of Environmental Projection for the Bartow Station. The NPDES permit was issued on January 12, 2023.

Q. How did actual O&M expenditures for January 2022 - December 2022 compare with DEF's actual/estimated projections for the National Emission Standards for Hazardous Air Pollutants (NESHAP) – Base Project (Project 7.6)?

A. The National Emission Standards for Hazardous Air Pollutants (NESHAP) - Base (Project 7.6) O&M variance is 14%, or $23,443 lower than projected.

This variance is primarily due to actual testing costs coming in lower than estimated.

Q. How did actual O&M expenditures for January 2022 - December 2022 compare with DEF's actual/estimated projections for the National Pollutant Discharge Elimination System (NPDES) - Energy Project (Project 16)?

A. The National Pollutant Discharge Elimination System ("NPDES") - Energy (Project 16) O&M variance is 18%, or $6,858 higher than projected.

This variance is primarily due to additional WET testing at Anclote Station that was not included in the estimates.

Q. In Order No. PSC-2010-0683-FOF-EI issued in Docket No. 20100007-EI on November 15, 2010, the Commission directed DEF to file as part of its ECRC true-up testimony a yearly review of the efficacy of its Plan D and the cost-effectiveness of DEF's retrofit options for each generating unit in relation to expected changes in environmental regulations. Has DEF conducted such a review?

A. Yes. DEF's yearly review of the Integrated Clean Air Compliance Plan is provided as Exhibit No. __ (KSM-1).

Q. What is the status of the Clean Water Rule?

A. On June 29, 2015, the Environmental Protection Agency ("EPA") and the Army Corps of Engineers ("Corps") published the final Clean Water Rule that significantly expanded the definition of the Waters of the United States ("WOTUS"). On October 9, 2015 the U.S. Court of Appeals for the Sixth Circuit granted a nationwide stay of the rule effective through the conclusion of the judicial review process. On February 22, 2016 the Sixth Circuit issued an opinion that it has jurisdiction and is the appropriate venue to hear the merits of legal challenges to the rule; however, that decision was contested, and on January 22, 2018, the U.S. Supreme Court issued its decision stating federal district courts, instead of federal appellate courts, have jurisdiction over challenges to the rule defining waters of the United States Consistent with the U.S. Supreme Court decision, the U.S. Court of Appeals for the Sixth Circuit lifted its nationwide stay on February 28, 2018. The stay issued by the North Dakota District Court remains in effect, but only within the thirteen counties within the North Dakota District. On February 28, 2017, President Trump signed an executive order laying out a new policy direction for how "Waters of the United States" should be defined and directing the EPA and the Corps to initiate a rulemaking to either rescind or revise the 2015 Clean Water Rule developed by the Obama administration. Subsequently, the EPA Administrator signed a pre-publication notice reflecting the intent to move forward with rulemaking in response to this directive. In addition, the executive order seeks to have the Department of Justice determine the path forward on the Clean Water Rule litigation as a result of the new policy direction.

On January 31, 2018, the EPA and Corps announced a final rule adding an applicability date to the 2015 rule defining "Waters of the United States," thereby deferring implementation of the 2015 WOTUS Rule until early 2020. This rule has no immediate impact to Duke Energy, and the agencies will continue to apply the pre-existing WOTUS definition in place prior to the 2015 rule until 2020.

On February 14, 2019, the EPA and the Corps published in the Federal Register, the "Revised Definition of 'Waters of the United States,'" which proposed to narrow the extent of the Clean Water Act jurisdiction as compared to the 2015 definition adopted by the Obama Administration (Proposed Rule). On January 23, 2020, the EPA and the Corps released a pre-publication version of *The Navigable Waters Protection Rule: Definition of "Waters of the United States." (NWPR Rule)*. On April 21, 2020, the EPA and the Corps published the modified definition of the WOTUS in the Federal Register. DEF has reviewed the final rule and determined there are no impacts associated with the 2020 WOTUS Rule with respect to the operation of our existing generation facilities.

On January 20, 2021, through Executive Order 13990, the Biden Administration directed the EPA and the Corps to review the NWPR Rule. The US District Court for the District of Arizona vacated and remanded the NWPR Rule on August 30, 2021, which vacated and remanded the rule nationwide. The EPA and the Corps announced on September 3, 2021 that efforts to implement the NWPR Rule had ceased and on December 7, 2021, the EPA published a proposed rule to officially repeal the NWPR Rule and replace it with the 1986 WOTUS rule. The public comment period for this proposed rule closed on February 7, 2022. On January 18, 2023, the EPA and Corps' published in the Federal Register the final rule revising the definition of "Waters of the United States" (the "WOTUS Final Rule"). The WOTUS Final Rule sets forth which surface waters and wetlands are jurisdictional for section 404 wetland permitting, NPDES, and other Clean Water Act ("CWA") regulatory programs. The WOTUS Final Rule became effective on March 20, 2023. DEF is evaluating the rule to ascertain whether any further compliance steps are required.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

PATRICIA Q. WEST

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

July 28, 2023

Q. Please state your name and business address.

A. My name is Patricia Q. West. My business address is 299 First Avenue North, St. Petersburg, FL 33701.

Q. By whom are you employed and in what capacity?

A. I am employed by Duke Energy Florida, LLC ("DEF" or the "Company") as Director Environmental Field Support – Florida.

Q. What are your responsibilities in that position?

A. My responsibilities include managing the work of environmental field professionals who are responsible for environmental, technical, and regulatory support during the development and implementation of environmental compliance strategies for regulated power generation facilities and electrical transmission and distribution facilities in Florida. This includes daily compliance activities in support of operations.

Q. Please describe your educational background and professional experience.

A. I obtained my Bachelor of Arts degree in Biology from New College of the University of South Florida in 1983. I was employed by the Polk County Health Department between 1983 and 1986 and by the Florida Department of Environmental Protection ("FDEP") from 1986 - 1990. At the FDEP, I was involved in compliance and enforcement efforts associated with petroleum storage facilities. I joined Florida Power Corporation in 1990 as an Environmental Project Manager and then held progressively more responsible positions through the merger with Carolina Power and Light, and more recently through the merger with Duke Energy in my role as the Director Environmental Field Support – FL.

Q. Have you previously filed testimony before this Commission in connection with DEF's Environmental Cost Recovery Clause ("ECRC")?

A. Yes.

Q. Have you previously filed testimony before this Commission in Docket No. 20230007-EI?

A. No. I will be adopting the direct testimony of Kim Spence McDaniel filed on March 31, 2023.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to explain material variances between 2023 actual/estimated cost projections and original 2023 cost projections for environmental compliance costs associated with FPSC-approved programs under my responsibility. These programs include the Substation Environmental Investigation, Remediation and Pollution Prevention Program (Project 1 & 1a), Distribution System Environmental Investigation, Remediation and Pollution Prevention Program (Project 2), Pipeline Integrity Management (PIM) (Project 3), Above Ground Secondary Containment (Project 4), Phase II Cooling Water Intake – 316(b) (Project 6), CAIR/CAMR - Peaking (Project 7.2), Best Available Retrofit Technology (BART) (Project 7.5), Arsenic Groundwater Standard (Project 8), Sea Turtle Coastal Street Lighting Program (Project 9), Underground Storage Tanks (Project 10), Modular Cooling Towers (Project 11), Thermal Discharge Permanent Cooling Tower (Project 11.1), Greenhouse Gas Inventory and Reporting (Project 12), Mercury Total Daily Maximum Loads Monitoring (Project 13), Hazardous Air Pollutants Information Collection Request (ICR) Program (Project 14), Effluent Limitation Guidelines Program (Project 15.1), and National Pollutant Discharge Elimination System (NPDES) (Project 16), for the period January 2023 through December 2023.

Q. Please explain the variance between actual/estimated O&M project expenditures and original projections for Phase II Cooling Water Intake 316(b) (Projects 6 & 6a) for the period January 2023 through December 2023.

A. O&M expenditures for Phase II Cooling Water Intake 316(b) are expected to be $231,814 (39%) lower than originally forecasted.

Project 6, 316(b) – Base, is forecasted to be $24k (8%) lower than forecasted. This variance is due to actual costs coming in slightly lower than originally forecasted.

Project 6a, 316(b) – Intermediate, is forecasted to be $208k (77%) lower than originally forecasted. This variance is primarily due to the permit not being issued.

Q. Please explain the variance between actual/estimated Capital project expenditures and original projections for Phase II Cooling Water Intake 316(b) – Base (Project 6) for the period January 2023 through December 2023.

A. Capital expenditures for Phase II Cooling Water Intake 316(b) Base are expected to be a credit of $15,595; no spend was originally projected. This is due to final invoices coming in slightly lower than what was originally accrued. This project is complete and in-service.

Q. Please explain the variance between actual/estimated Capital project expenditures and original projections for Phase II Cooling Water Intake 316(b) – Base - Bartow, (Project 6.1) for the period January 2023 through December 2023.

A. Capital expenditures for Phase II Cooling Water Intake 316(b) Base – Bartow, are expected to be $301,156 (44%) lower than originally forecasted. This variance is primarily due to the timing of implementing the compliance strategies following receipt of the NDPES permit on January 12, 2023. The exact work scope for this project will be determined during the detailed engineering phase which is projected to begin this year.

Q. Please explain the variance between actual/estimated O&M project expenditures and original projections for Arsenic Groundwater Standard - Base (Project 8) for the period January 2023 through December 2023.

A. O&M expenditures for Arsenic Groundwater Standard - Base are expected to be $45,715 (103%) higher than forecasted. This is primarily due to costs associated with additional Natural Attenuation Monitoring ("NAM") sampling being required as part of the Groundwater Monitoring Plan ("GWMP") .

Q. Please explain the variance between actual/estimated O&M project expenditures and original projections for National Pollutant Discharge Elimination System ("NPDES") (Project 16) for the period January 2023 through December 2023.

A. O&M expenditures for NPDES are expected to be $7,707 (20%) higher than forecasted. This is primarily due to 2022 charges that were not applied to the project until 2023.

Q. Please provide an update of 316(b) regulations.

A. The 316(b) rule became effective October 15, 2014, to minimize impingement and entrainment of fish and aquatic life drawn into cooling systems at power plants and factories. There are seven pre-approved impingement options. Entrainment compliance is site-specific (mesh screen or closed-cycle cooling).

Legal challenges to the 316(b) rule have so far been unsuccessful. The U.S. Court of Appeals for the Second Circuit issued an opinion on the consolidated challenges to the 316(b) Rule for Existing Facilities. The court upheld the Rule, the National Marine Fisheries Service and the U.S. Fish and Wildlife Service biological opinions, and the incidental take statement, concluding that each action was based on reasonable interpretations of the applicable statutes and sufficiently supported by the adequate record. The court also found the Environmental Protection Agency ("EPA") complied with applicable procedures, including by giving adequate notice of the final rule's provisions to the public.

The regulation primarily applies to facilities that commenced construction on or before January 17, 2002, and to new units at existing facilities that are built to increase the generating capacity of the facility. All facilities that withdraw greater than 2 million gallons per day from waters of the U.S. and where twenty-five percent (25%) of the withdrawn water is used for cooling purposes are subject to the regulation.

Per the final rule, required 316(b) studies and information submittals will be tied to NPDES permit renewals. For permits that expire within 45 months of the effective date of the final rule, certain information must be submitted with the renewal application. Other information, including field study results, are required to be submitted pursuant to a schedule included in the re-issued NPDES permit. Both the Anclote and Bartow stations are within this schedule and the NPDES permit renewal applications, including the studies and information required under 40 CFR 122.21(r)(2-13) as required by the 316(b) rule of the Clean Water Act, were submitted to FDEP for Anclote and Bartow in July and August 2020 respectively. A 316(b) Compliance Plan for Crystal River Units 4&5 utilizing the cooling water blowdown from the Citrus Combined Cycle Station as the source of make-up water for Crystal River Units 4&5 is being implemented as part of the current permit renewal for those units.

For NPDES permits that expire more than 45 months from the effective date of the rule, all information, including study results, is required to be submitted as part of the renewal application.

The Bartow NPDES permit was issued on January 12, 2023 and requires modifications to comply with the 316(b) Rule. The exact work scope for this project will be determined during the detailed engineering phase which is currently projected to begin during 2023. DEF is proposing that the Anclote station can meet 316(b) requirements with existing infrastructure, but additional studies to demonstrate compliance will likely be required by the permit. DEF has been conducting 316(b) studies at the Anclote and Bartow stations, and study results along with proposed compliance strategies were filed with the FDEP in July and August 2020, respectively as part of the NPDES renewal process. Proposed compliance strategies for Anclote are being evaluated by FDEP as part of the NPDES permit renewal.

The full extent of the Anclote compliance activities and associated expenditures cannot be determined until review of the proposed options by FDEP has been completed and the NPDES permit renewal issued with new compliance requirements and schedules. While unlikely, it is possible preliminary studies could begin as early as the fourth quarter of 2023 if the final NPDES renewal is issued by FDEP by early fourth quarter of this year. Due to the complexity of the

316(b) studies and proposals under review by the agency, it is difficult to assess the timing or the outcome of the final NPDES permit renewal. DEF will provide the Commission an update on the status of the 316(b) Rule compliance strategies for the Anclote station in the next available ECRC filing following issuance of the NPDES permit renewal.

Q. Please provide an update on the Waters of the United States ("WOTUS") Rule.

A. On June 29, 2015 the EPA and the Army Corps of Engineers ("Corps") published the final Clean Water Rule that significantly expanded the definition of the Waters of the United States ("WOTUS"). On October 9, 2015 the U.S. Court of Appeals for the Sixth Circuit granted a nationwide stay of the rule effective through the conclusion of the judicial review process. On February 22, 2016 the Sixth Circuit issued an opinion that it has jurisdiction and is the appropriate venue to hear the merits of legal challenges to the rule; however, that decision was contested, and on January 22, 2018, the U.S. Supreme Court issued its decision stating federal district courts, instead of federal appellate courts, have jurisdiction over challenges to the rule defining waters of the United States Consistent with the U.S. Supreme Court decision, the U.S. Court of Appeals for the Sixth Circuit lifted its nationwide stay on February 28, 2018. The stay issued by the North Dakota District Court remains in effect, but only within the thirteen states within the North Dakota District. On February 28, 2017, President Trump signed an executive order laying out a new policy direction for how "Waters of the United States" should be defined and directing the EPA and the Corps to initiate a rulemaking to either rescind or revise the 2015 Clean Water Rule developed by the Obama administration. Subsequently, the EPA Administrator signed a pre-publication notice reflecting the intent to move forward with rulemaking in response to this directive. In addition, the executive order seeks to have the Department of Justice determine the path forward on the Clean Water Rule litigation in light of the new policy direction.

On January 31, 2018, the EPA and Corps announced a final rule adding an applicability date to the 2015 rule defining "waters of the United States," thereby deferring implementation of the 2015 WOTUS Rule until early 2020. This rule has no immediate impact to Duke Energy, and the agencies will continue to apply the pre-existing WOTUS definition in place prior to the 2015 rule until 2020.

On February 14, 2019, the EPA and Corps published in the Federal Register, the "Revised Definition of 'Waters of the United States,'" which proposed to narrow the extent of Clean Water Act jurisdiction as compared to the 2015 definition adopted by the Obama Administration (Proposed Rule). On January 23, 2020, the EPA and Corps released a pre-publication version of *The Navigable Waters Protection Rule: Definition of "Waters of the United States." (NWPR Rule)*. On April 21, 2020, the EPA and Corps published the modified definition of the WOTUS in the Federal Register. DEF has reviewed the final rule and determined there are no impacts associated with the 2020 WOTUS Rule with respect to the operation of our existing generation facilities.

On January 20, 2021, through Executive Order 13990, the Biden Administration directed the EPA and the Corps to review the NWPR Rule. The US District

Court for the District of Arizona vacated and remanded the NWPR Rule on August 30, 2021, which vacated and remanded the rule nationwide. The EPA and Corps announced on September 3, 2021 that efforts to implement the NWPR Rule had ceased and on December 7, 2021, the EPA published a proposed rule to officially repeal the NWPR Rule and replace it with the 1986 WOTUS rule. The public comment period for this proposed rule closed on February 7, 2022.

On January 18, 2023, the EPA and Corps' published in the Federal Register the final rule revising the definition of "Waters of the United States" (the "WOTUS Final Rule"). The WOTUS Final Rule sets forth which surface waters and wetlands are jurisdictional for section 404 wetland permitting, NPDES, and other Clean Water Act ("CWA") regulatory programs. The WOTUS Final Rule became effective on March 20, 2023. On May 25, 2023 The U.S. Supreme Court (the Court) unanimously rejected the significant nexus test as a basis for determining whether "adjacent" wetlands are considered waters of the United States (WOTUS). On June 26, 2023 EPA announced that they and the Corps are promulgating a new WOTUS rule based on the court's decision and "intend to issue a final rule by September 1, 2023

DEF will evaluate the rule to ascertain whether any further compliance steps are required.

DEF will continue to monitor the status of the rule and any proposed changes to ascertain any further compliance steps that may be required.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

PATRICIA Q. WEST

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

August 25, 2023

Q. Please state your name and business address.

A. My name is Patricia Q. West. My business address is 299 First Avenue North, St. Petersburg, FL 33701.

Q. Have you previously filed testimony before this Commission in Docket No. 20230007-EI?

A. Yes. I provided direct testimony on July 28, 2023.

Q. Has your job description, education, background or professional experience changed since that time?

A. No.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide estimates of the costs that will be incurred in 2024 for Duke Energy Florida, LLC's ("DEF" or "Company") Substation Environmental Investigation, Remediation and Pollution Prevention

Program (Projects 1 & 1a), Distribution Environmental Investigation, Remediation and Pollution Prevention Program (Project 2), Pipeline Integrity Management ("PIM") Program (Project 3), Above Ground Storage Tanks ("AST") Program (Project 4), Phase II Cooling Water Intake 316(b) Program (Project 6), CAIR/CAMR Continuous Mercury Monitoring System ("CMMS") Program (Projects 7.2 & 7.3), Best Available Retrofit Technology ("BART") Program (Project 7.5), National Emission Standards for Hazardous Air Pollutants (NESHAP – Base (Project 7.6), Arsenic Groundwater Standard Program (Project 8), Sea Turtle – Coastal Street Lighting Program (Project 9), Underground Storage Tanks ("UST") Program (Project 10), Modular Cooling Towers (Project 11), Thermal Discharge Permanent Compliance (Project 11.1), Greenhouse Gas Inventory and Reporting (Project 12), Mercury Total Maximum Loads Monitoring ("TMDL") (Project 13), Hazardous Air Pollutants ("HAPs") Information Collection Request ("ICR") (Project 14), Effluent Limitation Guidelines CRN (Project 15.1), National Pollutant Discharge Elimination System ("NPDES") Program (Project 16), Reclaimed Water Interconnection (Project 19), and Lead and Copper Rule (Project 20).

Q. Have you prepared or caused to be prepared under your direction, supervision or control any exhibits in this proceeding?

A. Yes. I am co-sponsoring the following portions of Exhibit No. __(GPD-3) to Gary P. Dean's direct testimony:

- 42-5P page 1 of 25 – Substation Environmental Investigation, Remediation and Pollution Prevention Program

- 42-5P page 2 of 25 - Distribution System Environmental Investigation, Remediation and Pollution Prevention Program
- 42-5P page 3 of 25 – PIM
- 42-5P page 4 of 25 - AST
- 42-5P page 6 of 25 - Phase II Cooling Water Intake
- 42-5P page 7 of 25 – Clean Air Interstate Rule ("CAIR")
- 42-5P page 8 of 25 – BART
- 42-5P page 9 of 25 - Arsenic Groundwater Standard
- 42-5P page 10 of 25 – Sea Turtle – Coastal Street Lighting Program
- 42-5P page 11 of 25 - UST
- 42-5P page 12 of 25 - Modular Cooling Towers
- 42-5P page 13 of 25 - Thermal Discharge Permanent Cooling Tower
- 42-5P page 14 of 25 - Greenhouse Gas Inventory and Reporting
- 42-5P page 15 of 25 - Mercury TMDL
- 42-5P page 16 of 25 - HAPs ICR
- 42-5P page 17 of 25 - Effluent Limitation Guidelines ICR Program
- 42-5P page 18 of 25 - Effluent Limitation Guidelines CRN Program
- 42-5P page 19 of 25 – NPDES
- 42-5P Page 24 of 25 – Reclaimed Water Interconnection
- 42-5P Page 25 of 25 – Lead and Copper Rule

Q. What O&M costs does DEF expect to incur in 2024 for the Phase II Cooling Water Intake 316(b) Program (Projects 6 and 6a)?

A. DEF is forecasting a total of $550k in O&M costs for the Phase II Cooling Water Intake Program 316(b) projects in 2024.

DEF estimates approximately $272k of O&M for Crystal River North, Project 6 - Base, for the routine inspection and cleaning of the 316(b) compliant screens.

DEF estimates approximately $278k of O&M costs for the Anclote Station, Project 6a – Intermediate, for the development and implementation of the impingement mortality study plan.

Q. What Capital costs does DEF expect to incur in 2024 for the Phase II Cooling Water Intake 316(b) Program for Bartow CC station (Project 6.1)?

A. DEF estimates approximately $600k of capital costs in 2024 for Bartow station 316(b) (Project 6.1).

These costs are for the preliminary engineering and design of modified traveling screens and an organism return system.

Q. What costs does DEF expect to incur in 2024 for the National Emission Standards for Hazardous Air Pollutants ("NESHAP") – Base (Project 7.6)?

A. DEF is forecasting $40k in O&M costs for the NESHAP project in 2024 for annual compliance testing at Citrus Combined Cycle Station ("CCC"). DEF is required to conduct annual compliance tests to demonstrate continued compliance with the formaldehyde limit.

Q. What costs does DEF expect to incur in 2024 for the Arsenic Groundwater Standard Program (Project 8)?

A. DEF forecasts 2024 O&M expenditures to be $40k. Anticipated costs are associated with maintenance of the soils cap (engineering control) installed in the former north ash pond, institutional controls checklist and draft declaration of restrictive covenant followed by the final declaration of restrictive covenant.

Q. What costs does DEF expect to incur in 2024 for the NPDES Program (Project No. 16)?

A. DEF estimates $36k of O&M costs for Whole Effluent Toxicity ("WET") testing as required at DEF stations with NPDES permits.

Q. What costs does DEF expect to incur in 2024 for the Reclaimed Water Interconnection Program (Project No. 19)?

A. DEF estimates $260k of Capital costs for the preliminary engineering and design of the new treatment system and piping appurtenance.

Q. What costs does DEF expect to incur in 2024 for the Lead and Copper Rule (Project No. 20)?

A. DEF estimates $30k of O&M costs to conduct the lead service line inventory and prepare the inspection report for agency submittal.

Q. Please provide an update on the Reclaimed Water Interconnection Program (Project No. 19).

A. DEF is currently obtaining engineering quotes to design the new treatment system. The final contract is expected to be issued later this year after the reviews are complete.

Q: Do DEF's expected Reclaimed Water Interconnection Program (Project No. 19) compliance activity costs meet the recovery criteria established by Order No. 94-0044-FOF-EI?

A: Yes. The proposed Water Interconnection Program meets the recovery for ECRC cost recovery established by Order No. PEC-94-0044-FOF-EI in that:

a) All expenditures will be prudently incurred after April 13, 1993;
b) The activities are legally required to comply with a governmentally imposed environmental regulation enacted, became effective, or whose effect was triggered after the Company's last test year upon which rates are based; and
c) The expenditures are not being recovered through some other cost recovery mechanism or through base rates.

Q. Please provide an update on the Lead and Copper Rule Program (Project No. 20)?

A. DEF will be obtaining quotes to conduct the lead service line inventory later this year. We anticipate issuing the contract by the end of 2023 and have a preliminary inventory completion target date of May 2024.

Q: Do DEF's expected Lead and Copper Rule Program (Project No. 20) compliance activity costs meet the recovery criteria established by Order No. 94-0044-FOF-EI?

A: Yes. The proposed Lead and Copper Rule program meets the recovery for ECRC cost recovery established by Order No. PEC-94-0044-FOF-EI in that:

d) All expenditures will be prudently incurred after April 13, 1993;

e) The activities are legally required to comply with a governmentally imposed environmental regulation enacted, became effective, or whose effect was triggered after the Company's last test year upon which rates are based; and

f) The expenditures are not being recovered through some other cost recovery mechanism or through base rates.

Q. Does this conclude your testimony?

A. Yes.

(Whereupon, prefiled direct testimony of M. Ashley Sizemore was inserted.)

TECO
TAMPA ELECTRIC
AN EMERA COMPANY

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20230007-EI

IN RE: ENVIRONMENTAL COST RECOVERY FACTORS

2022 FINAL TRUE-UP

TESTIMONY AND EXHIBIT

M. ASHLEY SIZEMORE

FILED: MARCH 31, 2023

C7-750

C7-751

BEFORE THE PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

M. ASHLEY SIZEMORE

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

A. My name is M. Ashley Sizemore. My business address is 702 N. Franklin Street, Tampa, Florida 33602. I am employed by Tampa Electric Company ("Tampa Electric" or "Company") in the position of Manager, Rates in the Regulatory Affairs department.

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

A. I received a Bachelor of Arts degree in Political Science and a Master of Business Administration from the University of South Florida in 2005 and 2008, respectively. I joined Tampa Electric in 2010 as a Customer Service Professional. In 2011, I joined the Regulatory Affairs Department as a Rate Analyst. I spent six years in the Regulatory Affairs Department working on environmental and fuel and capacity cost recovery clauses. For the following three years, as a Program Manager in Customer Experience, I managed billing and payment customer solutions, products and services. I returned to the Regulatory Affairs Department in 2020 as Manager, Rates. My duties entail managing cost recovery for fuel and purchased power, interchange sales, capacity payments, and approved environmental projects. I have over ten years of electric utility experience in the areas of customer experience and project management as well as the management of fuel clause and purchased power, capacity, and environmental cost recovery clauses.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to present, for Commission review and approval, the actual true-up amount for the Environmental Cost Recovery Clause ("Environmental Clause") and the calculations associated with the environmental compliance activities for the period January 2022 through December 2022.

Q. Did you prepare any exhibits in support of your testimony?

A. Yes. Exhibit No. MAS-1 consists of nine documents prepared under my direction and supervision.

- Form 42-1A, Document No. 1, provides the final true-up for the January 2022 through December 2022 period;
- Form 42-2A, Document No. 2, provides the detailed calculation of the actual true-up for the period;
- Form 42-3A, Document No. 3, shows the interest provision calculation for the period;
- Form 42-4A, Document No. 4, provides the variances between actual and actual/estimated costs for O&M activities;
- Form 42-5A, Document No. 5, provides a summary of actual monthly O&M activity costs for the period;
- Form 42-6A, Document No. 6, provides the variances between actual and actual/estimated costs for capital investment projects;
- Form 42-7A, Document No. 7, presents a summary of actual monthly costs for capital investment projects for the period;
- Form 42-8A, Document No. 8, pages 1 through 31, illustrates the calculation of depreciation expense and return on capital investment for each project recovered through the Environmental Clause.
- Form 42-9A, Document No. 9, details Tampa Electric's revenue requirement rate of return for capital projects recovered through the Environmental Clause.

Q. What is the source of the data presented in your testimony and exhibits?

A. Unless otherwise indicated, the actual data is taken from the books and records of Tampa Electric. The books and records are kept in the regular course of business in accordance with generally accepted accounting principles and practices, and provisions of the Uniform System of Accounts as prescribed by this Commission.

Q. What is the final true-up amount for the Environmental Clause for the period January 2022 through December 2022?

A. The final true-up amount for the Environmental Clause for the period January 2022 through December 2022 is an over-recovery of $3,288,223. The actual environmental cost over-recovery, including interest, is $8,671,125 for the period January 2022 through December 2022, as identified in Form 42-1A. This amount, less the $5,382,902 over-recovery approved in Commission Order No. PSC-2022-0424-FOF-EI, issued December 14, 2022, in Docket No. 20220007-EI, results in a final over-recovery of $3,288,223, as shown on Form 42-1A. This over-recovery amount will be applied in the calculation of the environmental cost recovery factors for the period January 2024 through December 2024.

Q. Are all costs listed in Forms 42-4A through 42-8A incurred for environmental compliance projects approved by the Commission?

A. Yes. All costs listed in Forms 42-4A through 42-8A for which Tampa Electric is seeking recovery are incurred for environmental compliance projects approved by the Commission.

Q. Did Tampa Electric include costs in its 2022 final Environmental Clause true-up filing for any environmental projects that were not anticipated and included in its 2022 factors?

A. Yes, Tampa Electric included costs associated with Tampa Electric's National Emission Standard for Hazardous Air Pollutants ("NESHAP") project. These costs are outlined on Form 42-6A. This project was approved for cost recovery by Commission Order No. PSC-2022-0286-PAA-EI, issued July 22, 2022.

Q. How do actual expenditures for the period January 2022 through December 2022 compare with Tampa Electric's actual/estimated projections as presented in previous testimony and exhibits?

A. As shown on Form 42-4A, total costs for O&M activities are $2,858,085, or 69 percent less than the actual/estimated projection costs. Form 42-6A shows the total capital investment costs are $19,902, or 0.1 percent more than the actual/estimated projection costs. Additional information regarding substantial variances is provided below.

O&M Project Variances

O&M expense projections related to planned maintenance work are typically spread across the period in question. However, the company always inspects the units to ensure that the maintenance is needed, before beginning the work. The need varies according to the actual usage and associated "wear and tear" on the units. If an inspection indicates that the maintenance is not yet needed or if additional work is needed, then the company will have a variance when actual amounts expended are compared to the projection. When inspections indicate that work is not needed now, then maintenance expense will be incurred in a future period when warranted by the condition of the unit.

- **Big Bend PM Minimization and Monitoring:** The Big Bend Minimization and Monitoring project variance is $100,223, or 46.2 percent greater than projected. The variance is due to higher contract costs for Carbon

Equipment Monitoring System maintenance than originally estimated.

- **Big Bend NO_x Emission Reduction:** The Big Bend NO_x Emission Reduction variance is $1,636 or 91.6 percent less than projected. The variance is due to less damper equipment maintenance required than originally estimated.

- **Clean Water Act Section 316(b) Phase II Study:** The Clean Water Act Section 316(b) Phase II Study project variance is $100, or 100 percent greater than projected. The variance is due to receiving the NPDES permit earlier than anticipated which allowed planned project activities to begin sooner than projected.

- **Big Bend Unit 1 SCR and Big Bend Unit 2 SCR:** The Big Bend Unit 1 SCR and Big Bend Unit 2 SCR project variances are $46, or 100 percent less and $7, or 100 percent less, respectively. The project variances are due to the recording of reversing accounting entries in September 2022, just after the Actual/Estimate projection was filed in July 2022, removing overhead allocations inadvertently charged to the two projects in January 2022.

- **Big Bend Unit 3 SCR:** The Big Bend Unit 3 SCR project variance is $169,804, or 49 percent less than projected. The variance is due to Big Bend Unit 3 SCR maintenance costs, while generating on natural gas, being lower than originally projected, along with less total generation than projected.

- **Big Bend Unit 4 SCR:** The Big Bend Unit 4 SCR project variance is $1,123,061, or 85.8 percent less than projected. The variance is due largely to Big Bend Unit 4 running less than projected resulting in lower SCR maintenance cost.

- **Mercury Air Toxics Standard:** The Mercury Toxics Air Standards project variance is $1,935, or 100 percent greater than projected. The variance relates to cost associated with the purchase of sorbent traps for mercury testing. These costs were included in the original projection for 2022, prepared in August of 2021, but were inadvertently excluded in the 2022 actual/estimate reprojection, prepared in July 2022. The costs were incurred in 2022.

- **Big Bend Gypsum Storage Facility:** The Big Bend Gypsum Storage Facility project variance is $868,950, or 76.6

percent less than projected. The variance is due to less facility yard maintenance being required as generation by coal was less than projected.

- **Big Bend Coal Combustion Residuals Rule:** The Big Bend Coal Combustion Residuals ("CCR") Rule project variance is $789,046, or 99 percent less than projected. This variance is due to final project costs being less than projected.

- **Big Bend ELG Compliance:** The Big Bend ELG Compliance project variance is $4,238, or 100 percent less than projected. This variance is due to project schedule delays. O&M expenses will occur later than originally projected.

<u>Capital Investment Project Variances</u>

- **Big Bend Unit 4 SCR:** The Big Bend Unit 4 SCR project variance is $68,690, or 1.4 percent greater than projected. The variance is due to more materials being purchased for the SCR catalyst layer in 2022 than originally projected.

- **Big Bend ELG Compliance:** The Big Bend ELG Compliance project variance is $169,168, or 17.2 percent less than projected. The variance is due schedule delays resulting from hard rock encountered at the drill site.

- **Bayside 316(b) Compliance:** The Bayside 316(b) Compliance project variance is $41,491, or 14.3 percent greater than projected. This variance is due to additional costs resulting from supply chain issues and additional structural costs for the intake structure that were not anticipated.

- **Big Bend NESHAP Subpart YYYY:** The Big Bend NESHAP Subpart YYYY project variance is $5,767, or 51.6 percent greater than projected. This variance is due to contract labor, materials, and rental equipment costs being higher than projected as the original projection was based on a preliminary engineering design.

Q. Does this conclude your testimony?

A. Yes, it does.

TECO
TAMPA ELECTRIC
AN EMERA COMPANY

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20230007-EI
IN RE: TAMPA ELECTRIC'S ENVIRONMENTAL
COST RECOVERY

ACTUAL/ESTIMATED TRUE-UP
JANUARY 2023 THROUGH DECEMBER 2023

TESTIMONY AND EXHIBIT

OF

M. ASHLEY SIZEMORE

FILED: JULY 28, 2023

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

M. ASHLEY SIZEMORE

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

A. My name is M. Ashley Sizemore. My business address is 702 North Franklin Street, Tampa, Florida 33602. I am employed by Tampa Electric Company ("Tampa Electric" or "company") in the position of Director, Rates in the Regulatory Affairs department.

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

A. I received a Bachelor of Arts degree in Political Science and a Master of Business Administration degree from the University of South Florida in 2005 and 2008, respectively. I joined Tampa Electric in 2010 as a Customer Service Professional. In 2011, I joined the Regulatory Affairs department as a Rate Analyst. I spent six years in the Regulatory Affairs department working on environmental, fuel, and capacity cost recovery clauses. During the following three years as a Program Manager in Customer Experience, I managed billing and payment customer solutions, products, and services. I returned to the Regulatory Affairs department in 2020 as Manager, Rates. I was promoted to my current position in May 2023. My duties entail overseeing the cost recovery for fuel and purchased power, interchange sales, capacity payments, and approved environmental, conservation and storm protection plan projects. I have over 11 years of electric utility experience in the areas of customer experience and project management as well as the management of fuel and purchased power, capacity, and environmental cost recovery clauses.

Q. What is the purpose of your direct testimony?

A. The purpose of my testimony is to present, for Commission review and approval, the calculation of the January 2023 through December 2023 actual/estimated true-up amount to be refunded or recovered through the Environmental Cost Recovery Clause ("ECRC") during the period January 2024 through December 2024. My testimony addresses the recovery of capital and operations and maintenance ("O&M") costs associated with environmental compliance activities for 2023, based on six months of actual data and six months of estimated data. This information will be used in the determination of the environmental cost recovery factors for January 2024 through December 2024.

Q. Have you prepared an exhibit that shows the recoverable environmental costs for the actual/estimated period of January 2023 through December 2023?

A. Yes, Exhibit No. MAS-2 was prepared under my direction and supervision. Document No. 1 contains nine schedules, Forms 42-1E through 42-9E, which show the current period actual/estimated true-up amount to be used in calculating the cost recovery factors for January 2024 through December 2024.

Q. What has Tampa Electric calculated as the actual/estimated true-up for the current period to be applied during the period January 2024 through December 2024?

A. The actual/estimated true-up applicable for the current period, January 2023 through December 2023, is an over-recovery of $3,180,723. A detailed calculation supporting the true-up amount is shown on Forms 42-1E through 42-9E of my exhibit.

Q. Is Tampa Electric including costs in the actual/estimated true-up filing for any new environmental projects that were not anticipated and included in its 2023 ECRC factors?

A. No.

Q. Is Tampa Electric including any other adjustments in this 2023 actual/estimated true-up?

A. Yes. Tampa Electric performed a reclassification of expenditures initially assigned to the Big Bend NESHAP Subpart YYYY project that have subsequently been assigned to base rate operations and maintenance expense for the Big Bend 4 CT generating unit. The cumulative impact of the reclass on the ECRC activity for 2022, is a reduction of $108,665.

Q. What depreciation rates were utilized for the capital projects contained in the 2023 actual/estimated true-up?

A. Tampa Electric utilized the depreciation rates approved in Order No. PSC-2021-0423-S-EI, issued on November 10, 2021, in Docket No. 20210034-EI.

C7-806

Q. Are there any adjustments to retirements that you would like to discuss.

A. Yes, the Big Bend Unit 4 Continuous Emissions Monitors ("CEM") project, the company has utilized depreciation rates calculated to recover the remaining net investment balance, $162,934, of a now-retired CEM asset, over the remainder of the year, July 2023 through December 2023. Tampa Electric requests approval for this treatment as it is consistent with Commission-approved treatment for other assets retired before the end of their projected depreciable life. For example, the accelerated recovery of the remaining net investment balance of the Gannon Ignition Oil Tank project over a five-year period was authorized by Commission Order No. PSC-2000-2391-FOF-EI, issued December 13, 2000 in Docket No. 20000007-EI. Similar treatment was also authorized for Big Bend Fuel Oil Tank projects in Commission Order No. PSC-2018-0594-FOF-EI, issued December 20, 2018 in Docket No. 20180007-EI.

Q. What capital structure components and cost rates did Tampa Electric rely on to calculate the revenue requirement rate of return for January 2023 through December 2023?

A. Tampa Electric's midpoint Return on Equity ("ROE") is 10.20 percent as approved by Commission Order No. PSC-2022-0322-FOF-EI, issued on September 12, 2022, in Docket No. 20220122-EI.

Q. Have there been any changes regarding the calculation of revenue requirement Rate of Return?

A. Yes, the company implemented a change in methodology based on a conference call with Commission Staff held on June 28, 2023. As a result of the call, the company agreed to exclude Bad Debt Expense and Regulatory Assessment Fee from the determination of the times tax multiplier used for the revenue requirement Rate of Return for all clauses effective July of this year.

The calculation of the revenue requirement rate of return is shown on Form 42-9E.

Q. How did the actual/estimated project expenditures for the January 2023 through December 2023 period compare with the company's original projections?

A. As shown on Form 42-4E, total O&M costs are expected to be $1,775,488 less than originally projected. The total capital expenditures itemized on Form 42-6E, are expected to be $913,298 less than originally projected. Significant variances for O&M costs and capital project amounts are explained below.

O&M Project Variances

O&M expense projections related to planned maintenance work are typically spread across the period in question. However, the company always inspects the units to ensure that the maintenance is needed, before beginning work. The need varies according to the actual usage and associated "wear and tear" on the units. If inspection indicates that the maintenance is not yet needed or if additional work is needed, then the company will have a variance compared to the projection. When inspections indicate that work is not needed now, that maintenance expense will be incurred in a future period when warranted by the condition of the unit.

- **SO_2 Emissions Allowances:** The SO_2 Emissions Allowances project variance is estimated to be $52 or 513.8 percent less than projected. The variance is due to fewer cogeneration purchases than projected, the application of a lower SO_2 emission allowance rate than originally projected, and an SO_2 emission allowance gain of $53.40

that was not anticipated.

- **Big Bend PM Minimization & Monitoring:** The Big Bend PM Minimization & Monitoring project variance is estimated to be $64,002 or 26.7 percent greater than originally projected. This variance is largely due to an increase in CEM maintenance contract costs.

- **Bayside SCR and Ammonia:** The Bayside Selective Catalytic Reduction ("SCR") and Ammonia project variance is $32,062 or 10.9 percent less than originally projected. This variance is due to Bayside Station generation being less than originally projected, leading to the need for fewer consumables.

- **Big Bend Unit 4 SOFA:** The Big Bend Unit 4 SOFA project variance is $50,000 or 100 percent less than originally projected. The variance relates to a change from the original projection. The original projection assumed that O&M costs for the Big Bend Unit 4 SOFA joint replacement capital project, placed in service, would be incurred in 2023. This assumption has changed, there is no O&M expected in 2023 related to this project.

- **Clean Water Act Section 316(b) Phase II Study:** The Clean

Water Act Section 316(b) Phase II Study project variance is $10,150 or 100 percent less than originally projected. This variance is due to the delay in receiving the NPDES permit. Once the permit is received, and a determination is made regarding the requirement for entrainment reductions, the costs will be incurred.

- **Big Bend Unit 3 SCR:** The Big Bend Unit 3 SCR project variance is $269,158 or 75.8 percent less than originally projected. Less maintenance was required for Big Bend Unit 3 as the unit was retired in May 2023 and the original projection included SCR maintenance costs for all of 2023.

- **Big Bend Unit 4 SCR:** The Big Bend Unit 4 SCR project variance is $692,330 or 49.1 percent less than originally projected. Less maintenance is required for Big Bend Unit 4 as it is running on natural gas and operating less than originally projected.

- **Mercury Air Toxics Standards:** The Mercury Air Toxics Standards (“MATS”) project variance is $1,000 or 100 percent less than originally projected. The Sorbent trap replenishment associated with mercury stack testing on Big Bend Unit 4 has not yet occurred. Stack testing and replenishment are expected to occur in 2024.

- **Greenhouse Gas Reduction Program:** The Greenhouse Gas Reduction Program variance is $2,658 or 13.9 percent greater than originally projected. The variance is due to higher service provider costs than originally expected.

- **Big Bend Gypsum Storage Facility:** The Big Bend Gypsum Storage Facility project variance is $67,481 or 23.9 percent less than originally projected. The variance is due to a reduction in coal generation, compared to the original projection, reducing the amount of gypsum storage processing required.

- **Big Bend ELG Compliance:** The Big Bend Effluent Limitation Guidelines ("ELG") Compliance project variance is $250,000 or 83.3 percent less than originally projected. This variance is due to timing differences in the project schedule when compared to the original projection. The costs will be incurred in the future.

- **Big Bend CCR Rule – Phase II:** The Big Bend Coal Combustion Residual ("CCR") Rule – Phase I project variance is $200,004, or 100 percent less than originally projected. The variance is due to timing differences in project schedules when compared to original projections. The project was completed in 2022.

- **Big Bend Unit 1 316(b) Impingement Mortality:** The Big Bend Unit 1 316(b) Impingement Mortality project variance is $240,000, or 80 percent less than originally projected. The variance is due to the new system requiring less operating and maintenance costs than originally projected.

- **Big Bend NESHAP Subpart YYYY Compliance:** The Big Bend NESHAP Subpart YYYY Compliance project variance is $30,000, or 40 percent less than originally projected. The variance is due to timing differences in project schedules when compared to original projections. Catalyst and CO Monitoring maintenance originally projected for 2023 is now expected to be occur in 2024.

Capital Project Variances

- **Big Bend Continuous Emissions Monitors:** The Big Bend Continuous Emissions and Monitors project variance is $159,901, or 405.1 percent greater than originally projected. The variance is due to the accelerated depreciation associated with the retired asset discussed earlier in my testimony.

- **Big Bend Unit 4 SOFA:** The Big Bend Unit 4 SOFA project variance is $25,311, or 13.8 percent greater than originally projected. The variance is due to the cost of expansion joint replacement being more than originally projected.

- **Big Bend 4 SCR:** The Big Bend 4 SCR project variance is $96,541, or 1.9 percent greater than originally projected. The variance is due to catalyst replacement cost being higher than originally projected.

- **Big Bend Coal Combustion Residual Rule ("CCR") Phases I & II:** The Big Bend CCR Phase I & II project variances are $75,133 and $15,317, or 14.4 and 10.3 percent less, respectively, than originally projected. The variances for Phase I and Phase II are due to reclassifying costs associated with the relocation of berm material to the south Gypsum area from installed cost, recoverable through this clause, to cost of removal, which is recoverable through base rates.

- **Big Bend ELG Compliance:** The Big Bend ELG Compliance project variance is $1,230,561 or 43.1 percent less than originally projected. This variance is due to timing differences in the project schedule when compared to the original projection. While drilling the first injection well, the underground rock formation was more dense than anticipated and caused the drilling effort to move more slowly than expected. The project expenditures are still needed and will be incurred in the future.

- **Big Bend Unit 1 Section 316(b) Impingement Mortality:** The Big Bend Unit 1 Section 316(b) Impingement Mortality project variance is $120,396 or 7.9 percent less than originally projected. The cost to finalize installation was less than expected.

- **Bayside 316(b)Compliance:** The Bayside 316(b) Compliance project variance is $112,718 or 13.2 percent greater than originally projected as costs associated with the fabrication and delivery of the fish return piping was higher than originally estimated due to additional technical specifications required to achieve project objectives.

- **Big Bend NESHAP Subpart YYYY Compliance:** The Big Bend NESHAP Subpart YYYY Compliance project variance is $9,664 or 22.6 percent greater than originally projected due to catalyst installation costs on CT 4 being higher than originally estimated.

Q. Does this conclude your direct testimony?

A. Yes, it does.

TECO
TAMPA ELECTRIC
AN EMERA COMPANY

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20230007-EI
IN RE: TAMPA ELECTRIC'S ENVIRONMENTAL COST RECOVERY

PROJECTION
JANUARY 2024 THROUGH DECEMBER 2024

TESTIMONY AND EXHIBIT

OF

M. ASHLEY SIZEMORE

FILED: AUGUST 25, 2023

TAMPA ELECTRIC COMPANY
DOCKET NO. 20230007-EI
FILED: 08/25/2023

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

M. ASHLEY SIZEMORE

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

A. My name is M. Ashley Sizemore. My business address is 702 North Franklin Street, Tampa, Florida 33602. I am employed by Tampa Electric Company ("Tampa Electric" or "company") in the position of Director, Rates in the Regulatory Affairs Department.

Q. Have you previously filed testimony in Docket No. 20230007-EI?

A. Yes, I submitted direct testimony on March 31, 2023, and July 28, 2023.

Q. Has your job description, education, or professional experience changed since you last filed testimony?

A. No, it has not.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to present, for Commission review and approval, the calculation of the revenue requirements and the projected Environmental Cost Recovery Clause ("ECRC") factors for the period of January 2024 through December 2024. The projected ECRC factors have been calculated based on the current allocation methodology. In support of the projected ECRC factors, my testimony identifies the capital and operating & maintenance ("O&M") costs associated with environmental compliance activities for the year 2024.

Q. Have you prepared an exhibit that shows the determination of recoverable environmental costs for the period of January 2024 through December 2024?

A. Yes. Exhibit No. MAS-3, containing eight documents, was prepared under my direction and supervision. Document Nos. 1 through 8 contain Forms 42-1P through 42-8P, which show the calculation and summary of the O&M and capital expenditures that support the development of the environmental cost recovery factors for 2024.

Q. Are you requesting Commission approval of the projected environmental cost recovery factors for the company's various rate schedules?

A. Yes. The company requests approval of the ECRC factors provided in Exhibit No. MAS-3, Document No. 7, on Form 42-7P. The factors were prepared under my direction and supervision. These annualized factors will apply for the period January 2024 through December 2024.

Q. How were the environmental cost recovery clause factors calculated?

A. The environmental cost recovery factors were calculated based on the current approved cost allocation methodology and equity ratio as set out in the 2021 Stipulation and Settlement Agreement ("2021 Agreement"), approved in Order No. PSC-2021-0423-S-EI and issued on November 10, 2021, in Docket No. 20210034-EI.

On August 16, 2022, the Commission approved the company's petition to increase its mid-point return on equity from 9.95 percent to 10.20 percent based on provisions in its 2021 Agreement. As a result, the cost recovery factors were calculated using the revised authorized return on equity.

C7-850

Q. What is the 2021 baseline amount that Tampa Electric is using to compare its 2024 total revenue requirement?

A. Tampa Electric's baseline, as filed in its October 1, 2021 filing for the proposed 2024 ECRC cost recovery factors, is $27,891,196.

Q. What did Tampa Electric calculate as its 2024 revenue requirement and how does that compare against the 2021 baseline amount?

A. Tampa Electric 2024 revenue requirement is $17,128,401. This amount was compared to the 2021 baseline amount of $27,891,196, resulting in an incremental amount of ($10,762,795). In accordance with the 2021 Agreement, since the increment is negative, no changes to the allocation methodology need to be made in allocating revenues by class for the 2024 projected period.

Q. What has Tampa Electric calculated as the net true-up to be applied in the period January 2024 to December 2024?

A. The net true-up applicable for this period is an over-recovery of $6,468,946. This consists of a final true-up over-recovery of $3,288,223 for the period of January 2022

C7-851

through December 2022 and an estimated true-up over-recovery of $3,180,723 for the current period of January 2023 through December 2023. The detailed calculation supporting the estimated net true-up was provided on Forms 42-1E through 42-9E of Exhibit No. MAS-2 filed with the Commission on July 28, 2023.

Q. Did Tampa Electric include any new environmental compliance projects for ECRC cost recovery for the period of January 2024 through December 2024?

A. No, Tampa Electric did not include costs for any new environmental projects in the factors presented in this testimony.

Q. What are the capital projects included in the calculation of the ECRC factors for 2024?

A. Tampa Electric proposes to include for ECRC recovery, costs for 19 previously approved capital projects in the calculation of the 2024 ECRC factors. These projects are listed below.

1) Big Bend Unit 3 Flue Gas Desulfurization (“FGD”) Integration
2) Big Bend Unit 4 Continuous Emissions Monitors

3) Big Bend Section 114 Mercury Testing Platform
4) Big Bend Units 1 and 2 FGD
5) Big Bend FGD Optimization and Utilization
6) Big Bend Particulate Matter ("PM") Minimization and Monitoring
7) Polk NO_x Emissions Reduction
8) Big Bend Unit 4 SOFA
9) Big Bend Unit 4 SCR
10) Big Bend FGD System Reliability
11) Mercury Air Toxics Standards ("MATS")
12) SO_2 Emission Allowances
13) Big Bend Gypsum Storage Facility
14) Big Bend Coal Combustion Residuals ("CCR") Rule – Phase I
15) Big Bend CCR Rule - Phase II
16) Big Bend Unit 1 Section 316(b)Impingement Mortality
17) Big Bend Effluent Limitations Guidelines ("ELG") Rule Compliance
18) Bayside 316(b) Compliance
19) Big Bend NESHAP Subpart YYYY Compliance

Q. Have you prepared schedules showing the calculation of the recoverable capital project costs for 2024?

A. Yes. Form 42-3P contained in Exhibit No. MAS-3 summarizes the cost estimates for these projects. Form 42-4P, pages 1 through 19, provides the calculations resulting in recoverable jurisdictional capital costs of $21,568,754.

Q. What O&M projects are included in the calculation of the ECRC factors for 2024?

A. Tampa Electric proposes to include for ECRC recovery O&M costs for 22 approved O&M projects in the calculation of the ECRC factors for 2024. These projects are listed below.

1) Big Bend Unit 3 FGD Integration
2) SO_2 Emission Allowances
3) Big Bend Units 1 and 2 FGD
4) Big Bend PM Minimization and Monitoring
5) National Pollutant Discharge Elimination System (“NPDES”) Annual Surveillance Fees
6) Gannon Thermal Discharge Study
7) Polk NO_x Emissions Reduction
8) Bayside SCR Consumables
9) Big Bend Unit 4 Separated Overfired Air (“SOFA”)
10) Clean Water Act Section 316(b) Phase II Study
11) Arsenic Groundwater Standard Program
12) Big Bend Unit 3 SCR
13) Big Bend Unit 4 SCR

14) Mercury Air Toxics Standards
15) Greenhouse Gas Reduction Program
16) Big Bend Gypsum Storage Facility
17) Big Bend CCR Rule - Phase I
18) Big Bend CCR Rule - Phase II
19) Big Bend Unit 1 Section 316(b) Impingement Mortality
20) Big Bend ELG Rule Compliance
21) Bayside 316(b) Compliance
22) Big Bend NESHAP Subpart YYYY Compliance

Q. Have you prepared a schedule showing the calculation of the recoverable O&M project costs for 2024?

A. Yes. Form 42-2P contained in Exhibit No. MAS-3 presents the recoverable jurisdictional O&M costs for these projects, which total $2,016,269 for 2024.

Q. Did you prepare a schedule providing the description and progress reports for all environmental compliance activities and projects?

A. Yes. Project descriptions and progress reports are provided in Form 42-5P, pages 1 through 25.

Q. What are the total projected jurisdictional costs for environmental compliance in the year 2024?

A. The total jurisdictional O&M and capital expenditures to be recovered through the ECRC are calculated on Form 42-1P of Exhibit No. MAS-3. These expenditures total $17,128,401.

Q. How were environmental cost recovery factors calculated?

A. The environmental cost recovery factors were calculated as shown on Schedules 42-6P and 42-7P. The demand and energy allocation factors were determined by calculating the percentage that each rate class contributes to the total demand or energy and then adjusted for line losses for each rate class. This information was calculated by applying historical rate class load research to 2024 projected system demand and energy. Form 42-7P presents the calculation of the proposed ECRC factors by rate class.

Q. What are the ECRC billing factors for the period January 2024 through December 2024 for which Tampa Electric is seeking approval?

A. The computation of the billing factors is shown in Exhibit

No. MAS-3, Document No. 7, Form 42-7P. The proposed ECRC billing factors are summarized below.

Rate Class	**Factors by Voltage Level (¢/kWh)**
RS Secondary	0.089
GS, CS Secondary	0.084
GSD/GSDT, SBD/SBDT, GSD Optional	
Secondary	0.081
Primary	0.080
Transmission	0.080
GSLDPR/GSLDTPR/SBLDPR/SBLDTPR	0.071
GSLDSU/GSLDTSU/SBLDPR/SBLDTPR	0.074
LS1, LS2	0.060
Average Factor	0.084

Q. When does Tampa Electric propose to begin applying these environmental cost recovery factors?

A. The environmental cost recovery factors will be effective concurrent with the first billing cycle for January 2024.

Q. What capital structure components and cost rates did Tampa Electric rely on to calculate the revenue requirement rate of return for January 2024 through December 2024?

A. To calculate the revenue requirement rate of return found on Form 42-8P, Tampa Electric used the weighted average cost of capital ("WACC") methodology approved by the Commission in Order No. PSC-2020-0165-PAA-EU, approving Amended Joint Motion Modifying Weighted Average Costs of Capital Methodology, issued on May 20, 2020.

Q. Are the costs Tampa Electric is requesting for recovery through the ECRC for the period beginning in January 2024 consistent with the criteria established for ECRC recovery in Order No. PSC-1994-0044-FOF-EI?

A. Yes. The costs for which ECRC recovery is requested meet the following criteria:

1) Such costs were prudently incurred after April 13, 1993;
2) The activities are legally required to comply with a governmentally imposed environmental regulation enacted, became effective or whose effect was triggered after the company's last test year upon which rates were based; and,
3) Such costs are not recovered through some other cost recovery mechanism or through base rates.

Q. Please summarize your direct testimony.

A. My testimony supports the approval of an average ECRC billing factor of 0.084 cents per kWh. This includes the projected capital and O&M revenue requirements of $17,128,401 associated with the company's 25 ECRC projects and a net true-up over-recovery provision of $6,468,946. My testimony also explains that the projected environmental expenditure for 2024 are appropriate for recovery through the ECRC.

Q. Does this conclude your testimony?

A. Yes, it does.

(Whereupon, prefiled direct testimony of Byron T. Burrows was inserted.)

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BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20230007-EI

ENVIRONMENTAL COST RECOVERY FACTORS

PROJECTIONS

JANUARY 2024 THROUGH DECEMBER 2024

TESTIMONY
OF
BYRON T. BURROWS

FILED: AUGUST 25, 2023

TAMPA ELECTRIC COMPANY
DOCKET NO. 20230007-EI
FILED: 08/25/2023

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

BYRON T. BURROWS

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

A. My name is Byron T. Burrows. My business address is 702 North Franklin Street, Tampa, Florida 33602. I am employed by Tampa Electric Company ("Tampa Electric" or "company") as Director, Environmental Services Department.

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

A. I received a Bachelor of Science degree in Civil Engineering from the University of South Florida in 1995. I have been a Registered Professional Engineer in the state of Florida since 1999. Prior to joining Tampa Electric, I worked in environmental consulting for sixteen years. In January 2001, I joined TECO Power Services as Manager-Environmental with primary responsibility for all power plant environmental permitting, and I have primarily worked in the areas of environmental, health and safety. In 2005, I became Manager of Air Programs. My responsibilities included air permitting and compliance related matters. In 2020, I was promoted to my current position. My responsibilities include the development and administration of the company’s environmental policies and goals. I am also responsible for ensuring resources, procedures, and programs comply with applicable environmental requirements, and that rules and polices are in place, function properly, and are consistently applied throughout the company.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to demonstrate that the activities for which Tampa Electric seeks cost recovery through the Environmental Cost Recovery Clause (“ECRC”) for the January 2024 through December 2024 projection period are activities related to programs previously approved by the Commission for recovery through the ECRC and also consistent with Tampa Electric’s 2021 base rate settlement agreement approved in Order No. PSC-2021-0423-S-EI and issued on November 10, 2021, in Docket No. 20210034-EI (“2021 Agreement”).

Q. Please provide an overview of the environmental compliance requirements of the Clean Air Act, Title V Operating Permit for the Big Bend Station that are recoverable through the ECRC.

A. The Big Bend plant is required to obtain and operate in accordance with a comprehensive air permit that incorporates all applicable air quality requirements including federal, state, and local regulations. This permit is known as a "Title V Operating Permit." Environmental Compliance Requirements of the Clean Air Act, Title V Operating permit (0570039-150-AV) for the Big Bend Station provide for reductions of sulfur dioxide ("SO_2"), particulate matter ("PM") and nitrogen oxides ("NO_x") emissions at the Station. The projects that are required under the current operating permit and are currently being recovered through the ECRC are listed below.

- Big Bend Particulate Matter ("PM") Minimization Program
- Big Bend Unit 3 SCR Project (O&M only)
- Big Bend Unit 4 SCR Project

In accordance with the 2021 Agreement, Tampa Electric removed certain assets related to Big Bend Units 1, 2, and 3 from the ECRC and transferred to the company's Clean

Energy Transition Mechanism ("CETM"), effective January 1, 2022. The Title V projects associated with those assets include the following: Big Bend Units 1-3 Pre-SCRs, Big Bend 1-3 SCRs, Big Bend NO_x Emission Reduction, and a portion of Big Bend PM Minimization Program. Big Bend Unit 3 SCR incurred O&M expenditures through May 2023 to ensure compliance with emission reduction standards. Big Bend Unit 3 was retired in May 2023.

Q. Please describe the Big Bend PM Minimization and Monitoring program activities and provide the estimated capital and O&M expenditures for the period of January 2024 through December 2024.

A. The Big Bend PM Minimization and Monitoring Program was approved by the Commission in Docket No. 20001186-EI, Order No. PSC-2000-2104-PAA-EI, issued November 6, 2000. In the order, the Commission found that the program met the requirements for recovery through the ECRC. Tampa Electric had previously identified various projects to improve precipitator performance and reduce PM emissions as required by the Orders. Tampa Electric does not anticipate any capital expenditures for this program during 2024; however, the O&M expenditures associated with Best Operating Practice ("BOP") and Best Available

C8-916

Control Technology ("BACT") equipment and BOP procedures are expected to be $312,000.

Q. Please describe the Big Bend Unit 3 SCR project and provide estimated O&M expenditures for the period of January 2024 through December 2024.

A. The Big Bend Unit 3 SCR project was approved by the Commission in Docket No. 20041376-EI, Order No. PSC-2005-0502-PAA-EI, issued May 9, 2005. The SCR for Big Bend Unit 3 was placed in service in July 2008 and was retired along with Big Bend Unit 3 in May 2023. To that end, there are no O&M expenditures projected for the period of January 2024 through December 2024.

Q. Please describe the Big Bend Unit 4 SCR project and provide estimated capital and O&M expenditures for the period of January 2024 through December 2024.

A. The Big Bend Unit 4 SCR project was approved by the Commission in Docket No. 20040750-EI, Order No. PSC-2004-0986-PAA-EI, issued October 11, 2004. The SCR project at Big Bend Unit 4 encompasses the design, procurement, installation, and annual O&M expenditures associated with an SCR system for the generating unit. The SCR for Big

Bend Unit 4 was placed in service in May 2007.

Tampa Electric does not anticipate any capital expenditures for this program during 2024 and the O&M expenditures are projected to be $780,000 for Big Bend Unit 4 SCR. These expenses are primarily associated with ammonia purchases and maintenance.

Q. Are there other retiring Big Bend projects that will no longer be recovered through the ECRC; but through the CETM (consistent with the 2021 Settlement Agreement), and have they been removed from consideration in this filing?

A. Yes. In accordance with the 2021 Settlement, certain Big Bend Units 1-3 assets were retired and removed in 2022 and recovery of expenditures related thereto have not been included in this ECRC filing since that time. Other Big Bend 1-3 assets, retired in 2023, include the following projects: Big Bend Units 1 and 2 Flue Gas Conditioning, Big Bend Units 1 and 2 Classifier Replacements, and certain assets of both Big Bend FGD Optimization and Utilization and Mercury Air Toxics Standards. These assets have also been removed and will not be included in this ECRC filing, nor with they be included in any future ECRC filing.

Q. Please identify and describe the other Commission-approved programs that you will discuss.

A. The programs previously approved by the Commission and included for expenditure recovery in this filing, that I will discuss, include the following projects:

1) Big Bend Unit 3 Flue Gas Desulfurization ("FGD") Integration
2) Big Bend Units 1 and 2 FGD
3) Gannon Thermal Discharge Study
4) Bayside SCR Consumables
5) Clean Water Act Section 316(b) Phase II Study
6) Big Bend FGD System Reliability
7) Arsenic Groundwater Standard
8) Mercury and Air Toxics Standards ("MATS")
9) Greenhouse Gas ("GHG") Reduction Program
10) Big Bend Gypsum Storage Facility
11) Coal Combustion Residuals ("CCR") Rule
12) Big Bend Unit 1 Section 316(b) Impingement Mortality
13) Big Bend Effluent Limitations Guidelines ("ELG") Rule Compliance
14) Bayside Section 316(b) Compliance
15) Big Bend NESHAP Subpart YYYY Compliance

Q. Please describe the Big Bend Unit 3 FGD Integration and the Big Bend Units 1 and 2 FGD activities and provide the estimated capital and O&M expenditures for the period of January 2024 through December 2024.

A. The Big Bend Unit 3 FGD Integration program was approved by the Commission in Docket No. 19960688-EI, Order No. PSC-1996-1048-FOF-EI, issued August 14, 1996. The Big Bend Units 1 and 2 FGD program was approved by the Commission in Docket No. 19980693-EI, Order No. PSC-1999-0075-FOF-EI, issued January 11, 1999. In these orders, the Commission found that the programs met the requirements for recovery through the ECRC. The programs were implemented to meet the SO_2 emission requirements of the Phase I and II Clean Air Act Amendments ("CAAA") of 1990.

The company does not anticipate any capital or O&M expenditures during the period of January 2024 through December 2024 for the Big Bend Unit 3 FGD Integration project or the Big Bend Units 1 & 2 FGD project remaining assets.

Q. Please describe the Gannon Thermal Discharge Study program activities and provide the estimated O&M

expenditures for the period of January 2024 through December 2024.

A. The Gannon Thermal Discharge Study program was approved by the Commission in Docket No. 20010593-EI, Order No. PSC-2001-1847-PAA-EI, issued September 14, 2001. In that order, the Commission found that the program met the requirements for recovery through the ECRC. For the period of January 2024 through December 2024, Tampa Electric does not anticipate any O&M expenditures for this program.

Bayside Power Station was granted a new National Pollutant Discharge Elimination System ("NPDES") Permit in December 2022. The new permit requires the submittal of a plan of study by December 2023 for the completion of a new thermal study. A cost estimate for the thermal study will be developed in conjunction with this plan of study. Tampa Electric will submit a petition to the Commission requesting cost recovery of the thermal study once the plan of study is approved by FDEP and will provide project details at that time.

Q. Please describe the Bayside SCR Consumables program activities and provide the estimated O&M expenditures for the period of January 2024 through December 2024.

A. The Bayside SCR Consumables program was approved by the Commission in Docket No. 20021255-EI, Order No. PSC-2003-0469-PAA-EI, issued April 4, 2003. For the period of January 2024 through December 2024, Tampa Electric projects O&M expenditures associated with the consumable goods, primarily anhydrous ammonia, to be approximately $303,777.

Q. Please describe the Clean Water Act Section 316(b) Phase II Study Program activities and provide the estimated O&M expenditures for the period of January 2024 through December 2024.

A. The Clean Water Act Section 316(b) ("Section 316(b)") Phase II Study program was approved by the Commission in Docket No. 20041300-EI, Order No. PSC-2005-0164-PAA-EI, issued February 10, 2005. The final rule adopted under Section 316(b), the Cooling Water Intake Structures ("CWIS") Rule, became effective October 14, 2014. The rule establishes requirements for CWIS at existing facilities. Section 316(b) requires that the location, design, construction, and capacity of CWIS reflect the best technology available ("BTA") for minimizing adverse environmental impacts. Tampa Electric has installed or initiated the installation of measures that are necessary for compliance with the impingement mortality reduction part of the rule for Big Bend Unit 1 and Bayside Units 1 & 2. For Big Bend Units 1 & 4, Tampa Electric will complete the biological, financial, and technical study elements necessary to comply with the rule and submit with the next NPDES permit renewal. These elements will ultimately be used by the regulating authority to determine the necessity of cooling water system retrofits for Big Bend Unit 1 for entrainment reduction and Big Bend Unit 4 for impingement and entrainment reduction.

The estimated Clean Water Act Section 316(b) Phase II Study related O&M expenditures for Big Bend Station and Bayside Power Station for the period January 2024 through December 2024 are $5,000.

For Big Bend Unit 1, which was repowered to a clean, natural gas-fired combined cycle unit in 2022, Tampa Electric has installed the impingement mortality controls as required by the FDEP operating permit. The Commission approved cost recovery for the Big Bend Unit 1 Section 316(b) Impingement Mortality project in Order No. PSC-2018-0594-FOF-EI, issued on December 20, 2018.

Bayside Power Station is in the process of installing

C8-923

traveling screens to reduce impingement mortality to comply with Section 316(b). Tampa Electric's petition filed with the Commission in Docket No. 20210087-EI, was approved by Commission Order No. PSC-2021-0356-PAA-EI, issued on September 15, 2021.

The estimated O&M expenditures for NPDES Annual Surveillance Fees for Big Bend, Bayside, and Polk generating plants for the period January 2024 through December 2024 are $34,500.

Q. Please describe the Big Bend Unit 1 Section 316(b) Impingement Mortality project activities and provide the estimated capital and O&M expenditures for the period of January 2024 through December 2024.

A. The Big Bend Unit 1 Section 316(b) Impingement Mortality project was approved by the Commission in Docket No. 20180007-EI, Order No. PSC-2018-0594-FOF-EI, issued December 20, 2018. In that order, the Commission found that the program met the requirements for recovery through the ECRC and granted Tampa Electric cost recovery for prudently incurred costs. For the period of January 2024 through December 2024, Tampa Electric does not anticipate any capital expenditures for the Big Bend Unit 1 Section 316(b)

Impingement Mortality Project and the O&M expenditures are estimated to be $240,000.

Q. Please describe the Bayside Section 316(b) Compliance project activities and provide the estimated capital and O&M expenditures for the period of January 2024 through December 2024.

A. The Bayside Section 316(b) Compliance project was approved by the Commission in Docket No. 20210087-EI, Order No. PSC-2018-0356-PAA-EI, issued September 15, 2021. In that order, the Commission found that the program met the requirements for recovery through the ECRC and granted Tampa Electric cost recovery for prudently incurred costs. For the period of January 2024 through December 2024, Tampa Electric does not anticipate any O&M expenditures for the Bayside Section 316(b)project. Tampa Electric anticipates the capital expenditures for the Bayside Section 316(b) Compliance Project to be $1,529,625 in 2024.

Q. Please describe the Big Bend FGD System Reliability program activities and provide the estimated capital expenditures for the period of January 2024 through December 2024.

A. Tampa Electric's Big Bend FGD System Reliability program was approved by the Commission in Docket No. 20050958-EI, Order No. PSC-2006-0602-PAA-EI, issued July 10, 2006. The Commission granted approval for prudent costs associated with this project. For the period of January 2024 through December 2024, there are no anticipated capital expenditures for this project.

Q. Please describe the Arsenic Groundwater Standard program activities and provide the estimated O&M expenditures for the period of January 2024 through December 2024.

A. The Arsenic Groundwater Standard program was approved by the Commission in Docket No. 20050683-EI, Order No. PSC-2006-0138-PAA-EI, issued February 23, 2006. In that order, the Commission found that the program met the requirements for recovery through the ECRC and granted Tampa Electric cost recovery for prudently incurred costs. This groundwater standard applies to Tampa Electric's Bayside, Big Bend, and Polk Power Stations. A detailed plan of study was submitted to the FDEP, and after reviewing the study, FDEP requested a site wide groundwater evaluation. Tampa Electric submitted the results of this evaluation in 2020 and a proposal for modification of the site groundwater monitoring network to evaluate ongoing compliance. The proposal is under review by FDEP. Once FDEP completes its review, additional O&M expenditures may be incurred if additional monitoring and assessment are required. For the period of January 2024 through December 2024, there are no anticipated O&M expenditures associated with the program.

Q. Please describe the MATS program activities.

A. The MATS program was approved by the Commission in Docket No. 20120302-EI, Order No. PSC-2013-0191-PAA-EI, issued May 6, 2013. In that order, the Commission found that the program met the requirements for recovery through the ECRC and granted Tampa Electric approval for cost recovery of prudently incurred costs. Additionally, the Commission granted the subsumption of the previously approved CAMR program into the MATS program.

On February 8, 2008, the Washington D.C. Circuit Court vacated EPA's rule removing power plants from the Clean Air Act list of regulated sources of hazardous air pollutants under Section 112. At the same time, the court vacated the Clean Air Mercury Rule. On May 3, 2011, the EPA published a new proposed rule for mercury and other hazardous air pollutants according to the National

Emissions Standards for Hazardous Air Pollutants section of the Clean Air Act. On February 16, 2012, the EPA published the final rule for MATS. The rule revised the mercury limits and provided more flexible monitoring and record keeping requirements. Additionally, monitoring of acid gases and particulate matter is required. Compliance with the rule began on April 16, 2015. Tampa Electric is currently meeting or exceeding the standards required by the MATS rule for mercury, particulate matter, and acid gases at Polk Power Station and Big Bend Power Station.

Q. Please provide MATS program estimated capital and O&M expenditures for the period of January 2024 through December 2024.

A. For the period January 2024 through December 2024, Tampa Electric does not anticipate any capital expenditures under the MATS program. O&M expenditures are projected to be approximately $1,000 for testing requirements and equipment maintenance.

Q. Please describe the GHG Reduction program activities and provide the estimated O&M expenditures for the period of January 2024 through December 2024.

A. Tampa Electric's GHG Reduction program, which was approved by the Commission in Docket No. 20090508-EI, Order No. PSC-2010-0157-PAA-EI, issued March 22, 2010, is a result of the EPA's GHG Mandatory Reporting Rule requiring annual reporting of greenhouse gas emissions. Tampa Electric was required to report greenhouse gas emissions for the first time in 2011. Reporting for the EPA's GHG Mandatory Reporting Rule will continue in 2024. For the period January 2024 through December 2024, O&M expenditures are projected to be approximately $25,000.

Q. Please describe the Big Bend Gypsum Storage Facility activities and provide the estimated capital and O&M expenditures for the period of January 2024 through December 2024.

A. The Big Bend Gypsum Storage Facility program was approved by the Commission in Docket No. 20110262-EI, Order No. PSC-2012-0493-PAA-EI, issued September 26, 2012. In that order, the Commission found that the program meets the requirements for recovery through the ECRC. For 2024, Tampa Electric does not anticipate capital expenditures; however, the projected O&M expenditures for this program are expected to be $240,000.

Q. Please describe the company's EPA CCR Rule compliance activities and provide the estimated capital and O&M expenditures for the period of January 2024 through December 2024.

A. On April 17, 2015, the EPA issued a final rule to regulate CCR as non-hazardous waste under Subtitle D of the Resource Conservation and Recovery Act ("RCRA"). The rule, which became effective on October 19, 2015, covers all operational CCR disposal facilities, as well as inactive impoundments which contain CCR and liquids. The Big Bend Unit 4 Economizer Ash Ponds, the East Coalfield Stormwater Pond (converted former slag fines pond), and the North Gypsum Stackout Area are regulated under the rule.

The initial phase of the company's CCR compliance was approved by the Commission in Docket No. 20150223-EI, Order No. PSC-2016-0068-PAA-EI, issued February 9, 2016. In that order, the Commission found that the CCR Rule – Phase I program met the requirements for recovery through the ECRC. Incremental ongoing O&M expenditures resulting from the groundwater monitoring program, berm inspections, and general maintenance of regulated units were approved under the Order. In order to determine the best option to remain in compliance with the new rule, the company evaluated whether to continue operation of the regulated CCR units or close them. Tampa Electric chose a combination of closure and retrofit projects to remain in compliance with the CCR Rule, as discussed later in this section.

Two CCR retrofit projects were also approved for Tampa Electric’s CCR Rule – Phase I program under Order No. PSC-2016-0068-PAA-EI. These included: 1) removal of remaining residual slag from the East Coalfield Stormwater Runoff Pond and lining the pond to continue operating it as part of the station’s stormwater system; and 2) installing secondary stormwater containment facilities and lining drainage ditches for the North Gypsum Stackout Area to make it fully compliant with the rule’s requirements.

Phase II of Tampa Electric’s CCR Rule program was approved by the Commission in Docket No. 20170168-EI, Order No. 2017-0483-PAA-EI, issued December 22, 2017. In that Order, the Commission found that the Phase II program met the requirements for recovery through the ECRC. Expenses for the Economizer Ash Pond System Closure project, which included removal and offsite disposal of all CCR and restoration of the area, were approved by the Commission’s Order.

The Economizer Ash Pond System Closure began in the fourth quarter of 2018 with initial dewatering and removal of CCR for disposal. Due to the large amount of CCR in the Economizer Ash Ponds that needed to be dewatered and shipped to the landfill, this project continued until completion in late 2021. The East Coalfield Stormwater Runoff Pond (slag pond) closure and retrofit project was originally scheduled to be completed in 2019 but was delayed due to unusually high rainfall amounts throughout that year. As a result, this project was initiated in 2020 and completed in early 2021, in accordance with state regulatory requirements. The North Gypsum Stackout Area Drainage Improvements Project was also delayed to allow for finalization of the engineering and construction scope details, but the final phase of the project is currently underway, with completion expected in 2024.

For the period January 2024 through December 2024, Tampa Electric expects to incur capital expenditures of $697,171 for CCR Rule Phase I, North Gypsum Stackout Area Drainage Improvements. There are no capital expenditures anticipated for the CCR Rule Phase II projects for the period and no O&M expenditures anticipated for either CCR Rule Phase I or Phase II for 2024.

Q. Please describe Tampa Electric's ELG Rule activities, both study and compliance related and provide the estimated capital and O&M expenditures for the period of January 2024 through December 2024.

A. On November 3, 2015, the EPA published the final Steam Electric Power Generating ELG Rule, with an effective date of January 4, 2016. The ELG establish limits for wastewater discharges from FGD processes, fly ash, and bottom ash transport water, leachate from ponds and landfills containing CCR, gasification processes, and flue gas mercury controls. Big Bend Station's FGD system is affected by this rule. The blow-down stream from the FGD system is currently sent to a physical chemical treatment system to remove solids, some metals, and ammonia and adjust pH prior to discharge to Tampa Bay via the once through condenser cooling system water. This treatment system will need to be modified or replaced to achieve compliance with the new EPA regulations. The regulating authority requires compliance no later than December 31, 2023.

The Big Bend ELG Study Program ("ELG Study") was approved by the Commission in Docket No. 20160027-EI, Order No. PSC-2016-0248-PAA-EI, issued June 28, 2016.

The ELG Study, which was completed in 2018, identified viable technologies to treat the Tampa Electric Big Bend Station combined effluent streams to bring the streams into compliance with the more stringent requirements under the ELG Rule and resulted in the selection of the deep well injection solution.

The Big Bend ELG Compliance project was approved by the Commission in Docket No. 20180007-EI, Order No. PSC-2018-0594-FOF-EI, issued December 20, 2018. In that order, the Commission found that the program met the requirements for recovery through the ECRC and granted Tampa Electric cost recovery for prudently incurred costs.

For the period January 2024 through December 2024, Tampa Electric projects capital expenditures to be $95,745 and projects $60,000 in O&M expenditures.

Q. Please describe Tampa Electric's National Emission Standards Hazardous Air Pollutants ("NESHAP") Subpart YYYY Compliance Project activities and provide the

C8-934

estimated capital and O&M expenditures for the period of January 2024 through December 2024.

A. Tampa Electric's Clean Air Act, NESHAP Subpart YYYY Compliance Project was approved by the Commission in Order No. PSC-2022-0286-PAA-EI issued on July 22, 2022, in Docket No. 20220055-EI. The project is required to comply with the Environmental Protection Agency's ("EPA") formaldehyde emission standard set for stationary, gas-fired combustion turbines. For the period January 2024 through December 2024, Tampa Electric does not anticipate any capital expenditures. The project's O&M expenditures are expected to be $15,000 in 2024.

Q. Please summarize your testimony.

A. I described ongoing environmental compliance requirements of the Clean Air Act, Title V Operating permit (0570039-150-AV) for the Big Bend Station. I described the progress Tampa Electric has made to achieve the more stringent environmental standards. Big Bend 1-3 retired assets, the balances of which were transferred to the company's CETM in 2022 and 2023 upon retirement, have been excluded from this clause in accordance with the company's 2021 Settlement Agreement. For the other projects, I identified estimated costs, by project, which the company expects to incur in 2024. Additionally, my testimony identified additional projects that are required for Tampa Electric to meet environmental requirements, and I provided the associated 2024 activities and projected expenditures.

Q. Does this conclude your direct testimony?

A. Yes, it does.

CHAIRMAN FAY: Exhibits?

MR. IMIG: Staff has compiled a stipulated comprehensive exhibit list, which includes the prefiled exhibits attached to the witnesses' testimony in this case, and a number of staff exhibits. The list has been provided to the parties, the Commissioners and the court reporter. The list is marked as the first hearing exhibit, and the other exhibits should be marked as set forth in the comprehensive exhibit list.

CHAIRMAN FAY: Okay. Great. Show those exhibits marked.

(Whereupon, Exhibit Nos. 1-24 were marked for identification.)

MR. IMIG: Staff requests that the comprehensive exhibit list, marked as Exhibit No. 1, be entered into the record.

CHAIRMAN FAY: Okay. Exhibit 1 is entered.

(Whereupon, Exhibit No. 1 was received into evidence.)

MR. IMIG: Staff asks that Exhibits 2 through 24 be included in the record.

CHAIRMAN FAY: Okay. Great. For the parties, any objections to entering 2 through 24?

Okay. Commissioners, without objection, show

Exhibits 20 through -- excuse me, 2 through 24 entered into the record.

(Whereupon, Exhibit Nos. 2-24 were received into evidence.)

MR. IMIG: Because the parties have reached Type 2 stipulations, with the intervenors not objecting to the Commission considering the stipulations on all the issues in the case, staff suggests that the Commission may make a bench decision in this docket because the parties have agreed to waive post-hearing briefs. Staff is also available to answer any questions.

CHAIRMAN FAY: Okay. Great. Thank you, Mr. Imig.

All right. Commissioners, we have Issues 1 through 16 in the 07 docket, so if there are any questions.

Showing no questions, we will take up a motion on Issues 1 through 16.

COMMISSIONER CLARK: Move to approve the Type 2 stipulations in the 07 docket, Mr. Chairman.

COMMISSIONER PASSIDOMO: Second.

CHAIRMAN FAY: Okay. We have a motion and a second.

All that approve say aye.

(Chorus of ayes.)

CHAIRMAN FAY: All right. Show Commissioner Clark motioned Issues 1 through 16 as Type 2 stipulations approved unanimously by the Commission.

All right. Any other concluding matters on this -- on the 07 docket?

MR. IMIG: All issues, testimony and exhibits have been stipulated to. All stipulations have been approved by the Commission. Staff has no additional matters at this time.

CHAIRMAN FAY: Okay. Great.

Any from the parties? Nope.

All right. That will conclude the 07 docket and we will move back to the 01 docket as our final clause docket this morning, so whenever you are ready, staff, to present, Ms. Brownless.

(Proceedings concluded.)

CERTIFICATE OF REPORTER

STATE OF FLORIDA)
COUNTY OF LEON)

I, DEBRA KRICK, Court Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED this 13th day of November, 2023.

DEBRA R. KRICK
NOTARY PUBLIC
COMMISSION #HH31926
EXPIRES AUGUST 13, 2024