BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

DOCKET NO. 20200007-EI

ENVIRONMENTAL COST RECOVERY
CLAUSE.
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VOLUME 1
PAGES 1 through 250

PROCEEDINGS: HEARING

COMMISSIONERS
PARTICIPATING: CHAIRMAN GARY F. CLARK
COMMISSIONER ART GRAHAM
COMMISSIONER JULIE I. BROWN
COMMISSIONER DONALD J. POLMANN
COMMISSIONER ANDREW GILES FAY

DATE: Tuesday, November 3, 2020

TIME: Commenced: 10:42 a.m.
Concluded: 10:46 a.m.

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

REPORTED BY: DEBRA R. KRICK
Court Reporter

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

APPEARANCES:

MARIA JOSE MONCADA, WADE R. LITCHFIELD, and DAVID M. LEE, ESQUIRES, 700 Universe Boulevard, Juno Beach, Florida 33408-0420, appearing on behalf of Florida Power & Light Company.

RUSSELL A. BADDERS, ESQUIRE, One Energy Place, Pensacola, Florida 32520-0100; and MARIA J. MONCADA, ESQUIRE, 700 Universe Boulevard, Juno Beach, Florida 33408-0420, appearing on behalf of Gulf Power Company.

DIANNE M. TRIPLETT, ESQUIRE, 299 First Avenue North, St. Petersburg, Florida 33701; and MATTHEW R. BERNIER, ESQUIRE, 106 East College Avenue, Suite 800, Tallahassee, Florida 32301-7740, appearing on behalf of Duke Energy Florida, LLC.

JAMES D. BEASLEY, J. JEFFRY WAHLEN, and MALCOLM N. MEANS, ESQUIRES, Ausley & McMullen, Post Office Box 391, Tallahassee, Florida 32302, appearing on behalf of Tampa Electric Company.

JON C. MOYLE, JR., and KAREN A. PUTNAL, ESQUIRES, Moyle Law Firm, P.A., The Perkins House, 118 North Gadsden Street, Tallahassee, Florida 32301, appearing on behalf of Florida Industrial Power Users Group.

APPEARANCES (CONTINUED):

JAMES W. BREW and LAURA WYNN BAKER, ESQUIRES, Stone Mattheis Xenopoulos & Brew, PC, 1025 Thomas Jefferson Street, NW, Eighth Floor, West Tower, Washington, DC 20007, appearing on behalf of White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate - White Springs.

J.R. KELLY, PUBLIC COUNSEL; CHARLES REHWINKEL, DEPUTY PUBLIC COUNSEL; and PATRICIA A. CHRISTENSEN, STEPHANIE A. MORSE, THOMAS (TAD) DAVID, and A. MIREILLE FALL-FRY, ESQUIRES, Office of Public Counsel, c/o The Florida Legislature, 111 W. Madison Street, Room 812, Tallahassee, Florida 32399-1400, appearing on behalf of the Citizens of the State of Florida.

CHARLES MURPHY, ESQUIRE, FPSC General Counsel's Office, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, appearing on behalf of the Florida Public Service Commission Staff.

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

I N D E X

WITNESSES

EXHIBITS

NUMBER:		ID	ADMITTED
1	Comprehensive Exhibit List	247	247
2-49	As identified in the CEL	247	248

P R O C E E D I N G S

CHAIRMAN CLARK: All right. Good morning again. We are going to call the November 3rd clause docket hearing to order.

I would ask staff, if they would, please read the notice.

MS. WEISENFELD: By notice issued on October 7th, 2020, this time and place has been set for hearings in Docket Nos. 20200001-EI, 20200002-EG, 20200003-GU, 20200004-GU and 20200007-EI. The purpose of these hearings is set out more fully in the notice.

CHAIRMAN CLARK: All right. Thank you, Ms. Weisenfeld.

Let me just give kind of a quick overview of what I think -- how I think things are going to go today.

We had scheduled this for today, tomorrow and Thursday. It looks like we are going to be able to consolidate things pretty rapidly. We are not going to try to rush anything through, but my plan this morning is to get through the first -- the 02, 03, 04 and 07 dockets even prior to lunch today.

If the timing hits us right, we are going to take a lunch break at 12 o'clock. We are going to probably take about 45 minutes for lunch. Those of you that are sitting at your kitchen table, it should not be too difficult for you to grab a quick sandwich, but the rest of us have got to go out and scrape something up. So we are going to probably take about 45 minutes for lunch. Then we will come back, and if we don't get to the 01 prior to lunch, we will take it up immediately after.

My anticipation, based on the number of witnesses and what we have seen so far, is that we are going to try to finish it up today. If it doesn't look like it's going to push much past 5:00 p.m., we will stay and wrap everything up today. If it does look like it's going to go quite a bit further, then we certainly have tomorrow scheduled, and we will reconvene tomorrow morning. Maybe we can make a little bit better call on that issue somewhere around 3:30 or four o'clock this afternoon.

So with that said, we are going to take appearances with all of the dockets to begin with.

Ms. Weisenfeld.

MS. WEISENFELD: There are five dockets to address today. We suggest that all appearances be taken at once.

All parties should enter their appearances and declare the dockets that they are entering an appearance for. Several parties will make appearances, and after the parties make their appearances, staff will need to make theirs.

CHAIRMAN CLARK: All right. Thank you.

All right. So we are going to take appearances beginning with Florida Power & Light. If you would, please state the docket that you are going to be appearing in when you give your appearance, please.

FPL.

MS. MONCADA: Good morning, Mr. Chairman. Can you hear me?

CHAIRMAN CLARK: Yes, we can hear you.

MS. MONCADA: Wonderful.

Maria Moncada on behalf of Florida Power & Light Company in the 01, 02 and 07 dockets. In each of those dockets, I would like to also enter an appearance for our general counsel, Wade Litchfield. In the 01 and 07 dockets, I will also enter an appearance for David Lee, and in the 02 docket, for Joel Baker.

Mr. Chairman, I am also here today on behalf of Gulf Power Company in the 01 and the 07 dockets.

And in those two dockets, I would like to also enter an appearance for Russell Badders.

Thank you.

CHAIRMAN CLARK: All right. Any other -- any other appearances for Gulf Power?

MR. GRIFFIN: Yes, Mr. Chairman. Thank you. Good morning, Commissioners.

This is Steven Griffin with the Beggs & Lane law firm in Pensacola. I will be entering an appearance for Gulf Power Company in the 02 docket, and would also like to enter an appearance for Russell Badders with Gulf Power Company in the 02 docket as well.

Thank you.

CHAIRMAN CLARK: All right. Thank you very much.

Duke Energy, Mr. Bernier.

MR. BERNIER: Good morning, Mr. Chairman, Commissioners. Matt Bernier from Duke Energy. I will be appearing in the 01, 02 and 07 dockets. I would also like to enter an appearance for Dianne Triplett in the same dockets.

Thank you.

CHAIRMAN CLARK: Thank you very much.

TECO.

MR. MEANS: Good morning, Mr. Chairman, Commissioners. This is Malcolm Means with the Ausley McMullen law firm in Tallahassee. I would also like to enter appearances for Jim Beasley and Jeff Wahlen with the Ausley McMullen law firm. We are appearing on behalf of Tampa Electric in the 02, 07 and 01 dockets.

Thank you.

CHAIRMAN CLARK: Thank you very much.

Florida Public Utilities, Ms. Keating.

MS. KEATING: Good morning, Mr. Chairman, Commissioners. Beth Keating with the Gunster Law Firm appearing today on behalf of FPUC in the 01, 02, 03 and 04 dockets. I will also be making an appearance for Chesapeake and Sebring in the 04 docket, and I will also be appearing for Florida City Gas in the 03 and 04 dockets. And in those dockets, I would like to also enter appearance for Greg Munson with the Gunster Law Firm, as well as Chris Wright with FPL.

CHAIRMAN CLARK: All right. Thank you very much.

That takes care of Florida City Gas and Sebring Gas. Anybody else under those two?

All right moving to Peoples Gas.

MR. BROWN: Thank you, Mr. Chairman, Andy Brown of the law firm of Macfarlane Ferguson & McMullen. I am appearing on behalf of Peoples Gas in the 03 and 04 dockets.

CHAIRMAN CLARK: All right. St. Joe Natural Gas Company. They were requested to be excused? Okay.

MS. WEISENFELD: They should be on the line. They should be on the line. St. Joe should be on the line, Mr. Chairman.

CHAIRMAN CLARK: Okay. Is there anyone from St. Joe? Anyone from St. Joe? Stuart Shoaf?

All right. Move right along to the Office of Public Counsel.

MS. FALL-FRYE: Good morning. A. Mireille Fall-Fry. I will be appearing for the Office of Public Counsel in the 02, 03, 04 and 07 dockets, and also would like to enter an appearance for Charles Rehwinkel and Stephanie Morse in the 01 docket, and J.R. Kelly in all of the dockets.

CHAIRMAN CLARK: All right. Thank you, Ms. Fall-Fry.

FIPUG.

MS. PUTNAL: Good morning, Mr. Chairman, Commissioners. Karen Putnal with the Moyle Law

Firm appearing on behalf of Florida Industrial Power Users Group in the 01, 02 and 07 dockets. And I would also like to enter an appearance for Jon Moyle in all three.

CHAIRMAN CLARK: All right. Thank you, Ms. Putnal.

PCS Phosphate.

MR. BREW: Good morning, Chairman and Commissioners. For White Springs Agricultural Chemicals, PCS Phosphate, with the law firm of Stone Mattheis Xenopoulos & Brew, in the 01, 02 and 07 dockets, I am James Brew, and I would like to note the appearance of Laura Baker and as well.

CHAIRMAN CLARK: All right. Great. Thank you very much, Mr. Brew.

Commission staff.

MS. WEISENFELD: Ashley Weisenfeld in the 02 docket. I would also like to enter appearances for Kurt Schrader in the 03, Gabriella Passidomo in the 04, Charles Murphy in the 07 and Suzanne Brownless in the 01.

MS. HELTON: And finally, Mr. Chairman, Mary Anne Helton is here as your Advisor today, as well as for the other Commissioners, along with your General Counsel, Keith Hetrick.

CHAIRMAN CLARK: Thank you, Ms. Helton.

Okay, let's move to preliminary matters, Ms. Weisenfeld.

MS. WEISENFELD: State buildings are currently closed to the public, and other restrictions on gatherings remain in place due to COVID-19. Accordingly, this hearing is being conducted remotely with the parties participating by communications media technology.

Members of the public who want to observe or listen to this hearing may do so by accessing the live video broadcast which is available from the Commission website. Upon completion of the hearing, the archived video will also be available.

Each person participating today needs to keep their phone or device muted when they are not speaking, and only unmute when they are called upon to speak. If they do not keep their phone muted, or put their phone on hold, they may be disconnected from the proceeding and will need to call back in.

Also, telephonic participants should speak directly into their phone and not use their speaker function.

CHAIRMAN CLARK: All right. Thank you, Ms.

Weisenfeld.

All right. The order of the dockets we are going to take up today, we are going to begin with the 02 docket, the 03, the 04 and the 07, and then we will conclude the day with the 01 docket.

(Whereupon, other matters were held before the Commission, and Docket No. 20200003-EI proceedings are as follows:)

CHAIRMAN CLARK: We are ready to move into the 07 docket. I know we are probably going to have a few little adjustments -- everybody is already in place here.

Before we begin the 07 docket, let me just take one moment. I can't recall, I have not been here a long time, but we certainly went through four exhaustive dockets pretty quick there, probably in record time. We are going to give a little bit of credit to the Prehearing Officer who did an outstanding job of putting everything together. Commissioner Fay, thank you for the hard work that you did on the clause dockets getting everything in order and set for us. This has been a very, very easy process so far. Y'all don't mess it up on the 07 now. It's been easy and good so far, so let's see where this thing goes from here.

But thank you, Commissioner Fay, I appreciate your hard work on that.
All right. Let's --
COMMISSIONER FAY: Thank you, Mr. Chairman. Just to for the record, a different Andrew Fay worked on the 01 docket.
CHAIRMAN CLARK: Oh, okay.
COMMISSIONER FAY: Thank you.
CHAIRMAN CLARK: Understood.
All right. Let's move into the 07 docket.
Mr. Murphy.
MR. MURPHY: Yes. Preliminary matters, there are proposed Type 2 stipulations of all issues for all companies. All parties either agree or take no position on the proposed stipulations that are before the Commission today.
Proposed Type 2 stipulations anticipate the inclusion of all testimony and exhibits in the record.
All witnesses have been excused.
CHAIRMAN CLARK: All right. Prefiled testimony.
MR. MURPHY: Staff asks that the prefiled testimony of the following witnesses be entered into the record as though read: FPL witnesses

Deaton and Sole. Gulf witnesses Hume and Sole. Please note that Witness Sole adopted the April 1, 2020, testimony of witness Richard Markey, which should also be included in the record. DEF witnesses Menendez, Hill, Schwartz and McDaniel. And TECO witnesses Sizemore and Burrows.

CHAIRMAN CLARK: All right.

(Whereupon, prefiled direct testimony of Renae B. Deaton was inserted.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF RENAE B. DEATON

DOCKET NO. 20200007-EI

APRIL 1, 2020

Q. Please state your name and address.

A. My name is Renae B. Deaton. My business address is Florida Power & Light Company, 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 Director of Clause Recovery and Wholesale Rates, in the Regulatory & State Governmental Affairs Department.

Q. Please describe your educational background and professional experience.

A. I hold a Bachelor of Science in Business Administration and a Master of Business Administration from Charleston Southern University. Since joining FPL in 1998, I have held various positions in the rates and regulatory areas. Prior to my current position, I held the positions of Senior Manager of Cost of Service and Load Research and Senior Manager of Rate Design in the Rates and Tariffs Department. I am a member of the Edison Electric Institute ("EEI") Rates and Regulatory Affairs Committee, and I have completed the EEI Advanced Rate Design Course. I have been a guest speaker at Public Utility Research Center/World Bank International

Training Programs on Utility Regulation and Strategy. In 2016, I assumed my current position, where my duties include providing direction as to the appropriateness of inclusion of costs through a cost recovery clause and the overall preparation and filing of all cost recovery clause documents including testimony and discovery. As part of the various roles I have held with the Company, I have testified before this Commission in base rate and clause recovery dockets.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present for Commission review and approval the Environmental Cost Recovery Clause ("ECRC") final true-up amount associated with FPL's environmental compliance activities for the period January 2019 through December 2019.

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 RBD-1 consists of nine forms.

- Form 42-1A reflects the final true-up for the period January 2019 through December 2019.
- 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 actual/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 expense and return on capital investment for each capital investment project. Pages 66 through 69 provide 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 are taken from the books and records of FPL. The books and records 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.

Q. Please explain the calculation of the net true-up amount.

A. Form 42-1A, entitled "Calculation of the Final True-up Amount" shows the calculation of the net true-up for the period January 2019 through December 2019, an over-recovery of $14,087,943, which FPL is requesting be included in the calculation of the ECRC factors for the January 2021 through December 2021 period.

The actual end-of-period over-recovery for the period January 2019 through December 2019 of $21,205,754 (shown on Form 42-1A, Line 3) minus the actual/estimated end-of-period over-recovery for the same period of $7,117,811 (shown on Form 42-1A, Line 6) results in the net true-up over-recovery for the period January 2019 through December 2019 (shown on Form 42-1A, Line 7) of $14,087,943.

Q. Have you provided a schedule showing the calculation of the end-of-period true-up amount?

A. Yes. Form 42-2A, entitled "Calculation of the Final True-up Amount," shows the calculation of the end-of-period true-up over-recovery amount of $21,205,754 for the period January 2019 through December 2019. The $20,291,401 over-recovery shown on line 5 plus the interest provision of $914,353 shown on line 6, which is calculated on Form 42-3A, results in the final over-recovery of $21,205,754 shown on line 11.

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

A. Yes, they are.

Q. How did actual project O&M and capital revenue requirements for January 2019 through December 2019 compare with FPL's actual/estimated amounts as presented in previous testimony and exhibits?

A. Form 42-4A shows that the variance in total actual project O&M was $9,791,983 or 23.9% lower than projected, and Form 42-6A shows that the variance in total actual revenue requirements (return on capital investments, depreciation and income taxes) associated with the project capital investments were $1,229,243 or 1.0% lower 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 2019 through December 2019 are provided on Form 42-8A, pages 14 through 63.

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

A. The significant variances in FPL's 2019 actual O&M expenses and capital revenue requirements from actual/estimated amounts are associated with the following projects:

O&M Variance Explanations

Project 1 Air Operating Permit Fees

Project expenditures were $49,115 or 21.8% higher than previously projected. The annual Title V fee projection calculation is based on fuel consumption projections and the Department of Environmental Protection's ("DEP") fee for pollutant tons emitted. FPL pays permit fees based on the actual tons of pollutants emitted. The variance is primarily due to higher than originally projected gas and oil fuel usage that results in increased permit fees.

Project 5 Maintenance of Stationary Above Ground Fuel Storage Tanks

Project expenditures were $83,814 or 13.1% higher than previously projected. The variance is primarily due to costs associated with required maintenance of the Lauderdale tanks 2 & 3, which were initially incorrectly charged to base and subsequently corrected and charged to ECRC in December 2019. This variance was partially offset by savings resulting from the use of robotic inspections rather than tank draining.

Project 8a Oil Spill Clean-up

Project expenditures were $439,743 or 241.1% lower than previously projected. The variance is primarily due to a credit for the sale of excess oil spill response equipment in 2019 that was originally projected to occur over the 2019 – 2021 period.

Project 19a Substation Pollutant Discharge Prevention and Removal – Distribution

Project expenditures were $1,236,415 or 41.0% higher than projected. The variance is primarily due to the ability to obtain more equipment clearances (i.e., de-energize equipment) than planned, which resulted in a higher than projected number of transformers being repaired.

Project 19b Substation Pollutant Discharge Prevention and Removal – Transmission

Project expenditures were $227,995 or 27.4% higher than projected. The variance is primarily due to the ability to obtain more equipment clearances (i.e., de-energize equipment) than planned, which resulted in a higher than projected number of transformers being repaired.

Project 21 St. Lucie Turtle Nets

Project expenditures were $66,142 or 18.6% higher than previously projected. The variance is primarily due to increased costs associated with inspections and net cleaning related to higher than anticipated amounts of algae at the St. Lucie Plant. The higher amounts of algae required the implementation of new protocols for more frequent cleaning and quicker response to high net loading to reduce potential sea turtle injury or mortality.

Project 23 SPCC – Spill Prevention, Control and Countermeasure

Project expenditures were $82,846 or 10.8% higher than previously projected. The variance is primarily due to estimates for June-December 2019 not being included in the actual/estimated filings for 2019. The estimates were primarily related to SPCC quarterly inspections and diversionary structure (curb) repairs.

Project 24 Manatee Plant Reburn

Project expenditures were $77,760 or 35.5% lower than previously projected. The variance is primarily due to the postponement of the completion of Manatee Unit 1 inspection and maintenance work, which was originally planned to occur during an October 2019 outage. The required inspection and maintenance work on the Manatee Unit 1 reburn system will now be performed during the unit's planned outage scheduled to begin in March of 2020.

Project 28 CWA 316(b) Phase II Rule

Project expenditures were $119,307 or 10.5% lower than previously projected. The variance is primarily due to reductions in the required horseshoe crab monitoring and release program, which became effective in the second half of 2019, after FPL had filed its 2019 Actual/Estimated True-Up filing. Additionally, required studies at Fort Myers Plant were postponed until 2020 due to permitting delays.

Project 29 SCR Consumables

Project expenditures were $57,490 or 10.4% lower than previously projected. The variance is associated with the anhydrous ammonia tank maintenance at the Martin site originally planned for 2019 being deferred to 2020. Additionally, the anhydrous ammonia use was lower than projected due to reduced plant operations. These reductions were partially offset by additional valve work performed at the Manatee site.

Project 37 DeSoto Solar

Project expenditures were $137,643 or 22.2% higher than previously projected. The variance is primarily due to additional reliability improvement and maintenance activities at the site.

Project 39 Martin Solar

Project expenditures were $520,698 or 15.5% higher than previously projected. The variance is primarily due to the unplanned corrective maintenance issues in the solar tracking assemblies and for the heat transfer fluid pump rotating elements maintenance in 2019.

Project 42 Turkey Point Cooling Canal Monitoring Plan

Project expenditures were $10,762,593 or 53.8% lower than previously projected. The variance is primarily due to lower than projected costs associated with a new lower cost strategy for cooling canal maintenance, which involved dredging using FPL equipment on an "as needed" basis, rather than the entire system being dredged every four years. Additionally, a new system associated with remote monitoring equipment was installed, which switched from satellite communications to cellular equipment, resulting in lower O&M costs. Other activities that contributed to the variance included lower than projected costs associated with underground injection well testing, modifications to the nutrient management process and hiring field staff to replace contractors for monitoring and reporting.

Project 45 800MW ESP

Project expenditures were $151,915 or 57.3% lower than previously projected. The variance is primarily due to deferring ESP work at Manatee Plant Unit 1 from 2019 to 2020, concurrent with the rescheduling of the Manatee plant outage.

Project 54 Coal Combustion Residuals (CCR)

Project expenditures were $261,852 lower than previously projected. The variance is primarily due to costs associated with the replacement of a wet bottom ash system with a dry bottom ash system that should not have been included in the 2019 Actual/Estimated filing.

Capital Variance Explanations

Project 8a Oil Spill Clean-up/Response Equipment

Project costs are $48,212 or 24.5% lower than previously projected. The variance is related to Manatee oil boom project not being put into service in 2019 due to permitting delays. The oil boom is expected to be put into service in July 2020.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF RENAE B. DEATON

DOCKET NO. 20200007-EI

AUGUST 28, 2020

Q. Please state your name and address.

A. My name is Renae B. Deaton. My business address is Florida Power & Light Company, 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 Director of Clause Recovery and Wholesale Rates in the Regulatory & State Governmental Affairs 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 2021 through December 2021 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 2021 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 Exhibit RBD-3, which consists of Appendices I and II. Appendix I provides the calculation of FPL's proposed ECRC factors for the period January 2021 through December 2021 and includes PSC Forms 42-1P through 42-8P. Appendix II provides the calculation of the stratified separation factors. FPL witness Michael W. Sole is co-sponsoring Form 42-5P (Project Progress Reports).

Q. Have you provided a schedule showing the calculation of projected environmental costs being requested for recovery for the period January 2021 through December 2021?

A. Yes. Form 42-1P (page 1) in Exhibit RBD-3 provides a summary of projected environmental costs being requested for recovery for the period January 2021 through December 2021. Total jurisdictional revenue requirements including true-up amounts and revenue taxes, are $157,436,210 (page 1, line 5). This amount includes the jurisdictional revenue requirements projected for the January 2021 through December 2021 period, which are $176,174,665 (page 1, line 1c), the actual/estimated true-up over-recovery of $4,763,785 for the January 2020 through December 2020 period (page 1, line 2) and the final true-up over-recovery of $14,087,943 for the January 2019 through December 2019 period (page 1, line 3). The detailed calculations supporting the 2020 actual/estimated and 2019 final true-ups were provided in Exhibit RBD-1 and Exhibit RBD-2 filed in this docket on April

1, 2020 and July 31, 2020, respectively.

Q. Please describe the schedules that are provided in Appendix I of Exhibit RBD-3.

A. Forms 42-1P through 42-8P provide the calculation of ECRC factors for the period January 2021 through December 2021 that FPL is requesting this Commission to approve.

Form 42-1P (page 1) provides a summary of projected environmental costs being requested for recovery for the period January 2021 through December 2021.

Form 42-2P (pages 2 through 4) presents the O&M costs associated with FPL's environmental projects for the projected period, along with the calculation of the total jurisdictional amount of $28,456,861 for these projects.

Form 42-3P (pages 5 through 7) presents the recoverable amounts associated with capital costs for FPL's environmental projects for the projected period, along with the calculation of the total jurisdictional recoverable amount of $147,717,804.

Form 42-4P (pages 8 through 61) presents the detailed calculation of the capital recoverable amounts by project for the projected period. Pages 62 through 64 provide 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.

Form 42-5P (pages 65 through 125) provides the description and progress of approved environmental projects included in the projected period.

Form 42-6P (page 126) calculates the allocation factors for demand and energy at generation. The demand allocation factors are calculated by determining the percentage each rate class contributes to the average of the twelve monthly system 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 (page 127) presents the calculation of the proposed 2021 ECRC factors by rate class.

Form 42-8P (page 128) 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 2021 through December 2021.

Q. Please describe the weighted average cost of capital ("WACC") that is used in the calculation of the return on the 2021 capital investments included for recovery.

A. FPL calculated and applied a projected 2021 WACC in accordance with the methodology established in Commission Order No. PSC-2020-0165-PAA-EU, Docket No. 20200118-EU, issued on May 20, 2020 ("2020 WACC Order"). Pursuant to the 2020 WACC Order, the WACC was calculated using the currently approved mid-point return on equity and the proration formula prescribed by Treasury Regulation §1.167(l)-1(h)(6)(i) applied to the plant only depreciation-related Accumulated Deferred Federal Income Tax balances included in the capital structure. This projected WACC is used to calculate the rate of return applied to the 2021 ECRC capital investments. The projected capital structure, components and cost rates used to calculate the rate of return are provided on page 128 of Exhibit RBD-3, Appendix I.

Q. Are all costs listed in Forms 42-1P through 42-8P included in Exhibit RBD-3, Appendix I 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. 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 RBD-3, Appendix II.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF RENAE B. DEATON

DOCKET NO. 20200007-EI

JULY 31, 2020

Q. Please state your name and address.

A. My name is Renae B. Deaton. My business address is Florida Power & Light Company, 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 Director of Clause Recovery and Wholesale Rates, in the Regulatory & State Governmental Affairs 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 the Actual/Estimated True-up associated with FPL's environmental compliance activities for the period January 2020 through December 2020.

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 RBD-2 consists of nine forms, PSC Forms 42-1E through 42-9E, included in Appendix I.

- Form 42-1E provides a summary of the Actual/Estimated True-up amount for the period January 2020 through December 2020.
- 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 (pages 14 through 67) reflects return on capital investments and depreciation by project. Pages 68 through 70 provide 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 2020 through December 2020.

Q. Please explain the calculation of the Environmental Cost Recovery Clause ("ECRC") Actual/Estimated True-Up amount FPL is requesting this Commission to approve.

A. The Actual/Estimated True-Up amount for the period January 2020 through

December 2020 is an over-recovery, including interest, of $4,763,785 (Appendix I, page 1, line 4). The Actual/Estimated True-Up amount is calculated on Form 42-2E by comparing actual data for January 2020 through May 2020 and revised estimates for June 2020 through December 2020 to original projections for the same period. The over-recovery of $4,556,972 shown on line 5 plus the interest provision of $206,813 shown on line 6, which is calculated on Form 42-3E, results in the final over-recovery of $4,763,785 shown on line 11.

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

A. Yes.

Q. How do the actual/estimated project costs for January 2020 through December 2020 compare with original projections for the same period?

A. Form 42-4E (Appendix I, page 4) shows that total O&M project costs are $2,126,831 lower than projected, and Form 42-6E (Appendix I, page 9) shows that total capital project revenue requirements are $1,926,885 lower than projected. Individual project variances are provided on Forms 42-4E and 42-6E. Revenue requirements for each capital project for the 2020 actual/estimated period are provided on Form 42-8E (Appendix I, pages 14 through 67).

Q. Please explain the reasons for any significant variance in costs associated with O&M and capital investments.

A. The significant variances in FPL's 2020 recoverable O&M expenses and capital revenue requirements from projection amounts are associated with the following projects:

O&M Variance Explanations

Project 1. Air Operating Permit Fees

Project expenditures are $57,998 or 26.9% lower than previously projected. The variance is primarily due to lower than originally projected gas and oil fuel usage, which resulted in decreased permit fees for 2019. The annual Title V fee projection calculation is based on fuel consumption projections and the Department of Environmental Protection's ("DEP") fee for pollutant tons emitted. Because 2019 fees are calculated and paid in the first quarter of 2020, this difference financially impacts 2020's true-up as an under-run. FPL pays permit fees based on the actual tons of pollutants emitted.

Project 3a. Continuous Emission Monitoring Systems ("CEMS")

Project expenditures are $40,832 or 11.9% higher than previously projected. The variance is primarily a result of two unplanned maintenance tasks at Plant Fort Myers ("PFM"): (1) additional maintenance required on aging CEMS equipment at PFM, and (2) pre-buying calibration gases in anticipation of COVID-19 related delays in securing the gases.

Project 5a. Maintenance of Stationary Above Ground Fuel Storage Tanks

Project expenditures are $85,005 or 14.3% lower than previously projected. The variance is primarily due to the fact that the Port Everglades Touch Up Re-coating Project that was originally planned for 2020, was completed in 2018 but was not removed from the 2020 projections.

Project 8a. Oil Spill Clean-up/Response Equipment

Project expenditures are $187,496 or 108.2% higher than previously projected. The variance is a result of increased oil spill response contractor costs in the form of a retainer associated with staging sufficient contractor-owned spill response equipment to meet FPL's worst case discharge requirements under Oil Pollution Act of 1990 regulations.

Project 19a. Substation Pollutant Discharge Prevention & Removal – Distribution

Project expenditures are $866,547 or 32.2% higher than previously projected. The variance is primarily due to FPL obtaining more equipment clearances (i.e., de-energize installed equipment) than expected, which are required for equipment repair. This resulted in a higher than projected number of transformers being repaired during the first half of 2020.

Project 19b. Substation Pollutant Discharge Prevention & Removal – Transmission

Project expenditures are $277,405 or 27.5% higher than previously projected. The variance is primarily due to FPL obtaining more equipment clearances than expected, which are required for equipment repair. This resulted in a higher than projected number of transformers being repaired during the first half of 2020.

Project 21. St. Lucie Turtle Nets

Project expenditures are $69,118 or 18.8% lower than previously projected. The variance is primarily due to less significant and fewer than anticipated aquatic organism intrusion events, which resulted in lower turtle net cleaning costs.

Project 24. Manatee Plant Reburn

Project expenditures are $89,845 or 79.1% lower than previously projected. The variance is primarily due to a shift in the outage schedule causing the majority of the reburn work planned on Unit 1 in March to be postponed until 2021.

Project 27. Lowest Quality Water Source

Project expenditures are $48,325 or 31.0% lower than previously projected. The variance is primarily due to the purchase of a new reverse osmosis system resulting in reductions to O&M.

Project 28. CWA 316(b) Phase II Rule

Project expenditures are $113,051 or 11.8% higher than previously projected.

The variance is primarily due to contractor work associated with required studies for Fort Myers, Cape Canaveral, and St. Lucie plants being moved from 2019 into 2020 in order to prioritize the completion of studies associated with other facilities that had earlier permit application deadlines.

Project 29. Selective Catalytic Reduction (SCR) Consumables

Project expenditures are $105,721 or 19.9% higher than previously projected. The variance is primarily due to deferring ammonia system work at Manatee Unit 3 from 2019 to 2020.

Project 31. Clean Air Interstate Rule (CAIR) Compliance

Project expenditures are $1,808,686 or 32.1% lower than previously projected. The variance is primarily due to lower than projected unit dispatch of Scherer Unit 4, which resulted in lower consumption of ammonia and limestone in the treatment process.

Project 33. Mercury and Air Toxics Standards (MATS) Project

Project expenditures are $759,795 or 28.7% lower than previously projected. The variance is primarily due to lower than projected unit dispatch of Scherer Unit 4, which resulted in lower consumption of powdered activated carbon in the treatment process.

Project 35. Martin Plant Drinking Water System Compliance

Project expenditures are $10,492 more than the projection of $0. While Martin Units 1 and 2 were shut down in 2018, the drinking water system associated with Units 1 and 2 remained in operation to supply drinking water to the entire Martin plant site. In its ECRC Projections filing, FPL projected costs for shutdown of the existing system and conversion to local potable water supply would be completed in 2019. As a result of unanticipated delays in engineering and permitting, the project was not completed until May 8, 2020, resulting in an unplanned impact to 2020 expenditures. The drinking water plant has been shut down and drinking water for the site is now supplied by the Village of Indiantown.

Project 37. DeSoto Next Generation Solar Energy Center

Project expenditures are $169,545 or 20.2% lower than previously projected. The variance is primarily due to less full-time employee support to the Desoto site. Additionally, the forecast included costs for previously completed maintenance on a container breaker. Lastly, field work that was charged to the Desoto site in 2019 should have been charged to the Citrus site. This error was found in a 2019 variance review and was corrected in May 2020.

Project 41. Manatee Temporary Heating System

Project expenditures are $43,830 or 22.4% lower than previously projected. The variance is primarily due to lower than projected costs related to required monitoring at the Dania Beach Energy Center.

Project 45. 800 MW Unit Electrostatic Precipitators (ESP)

Project expenditures are $105,720 or 40.6% lower than previously projected. The variance is primarily due to a shift in the outage schedule causing the majority of the work planned on Manatee Unit 1 in March to be postponed until 2021.

Project 50. Steam Electric Effluent Guidelines Revised Rules

Project expenditures are $4,608 more than the projection of $0. The variance is primarily due to study related costs, which were originally anticipated to be capitalized. Delays associated with the issuance of a final, revised Steam Electric Effluent Limitations Guidelines Rule delayed capitalization.

Project 54. Coal Combustion Residuals (CCR)

Project expenditures are $0 compared to $1,600,768 previously projected. The variance is due to costs associated with the replacement of a wet bottom ash system with a dry bottom ash system that should not have been included in the 2020 Projections filing.

Capital Variance Explanations

Project 8a. Oil Spill Clean-up / Response Equipment

Project costs are $140,703 or 42% lower than previously projected. This variance is primarily a result of the cancellation of the oil boom project due to the planned retirement of Manatee Units 1 and 2.

Project 28. CWA 316(b) Phase II Rule

Project expenditures are $217,305 or 74% lower than previously projected. This is primarily a result of the cancellation of the Cape Canaveral Horseshoe Crab Return System Project. Based on the success of the horseshoe crab barrier installed in 2017, the Florida Department of Environmental Protection and the Florida Fish and Wildlife Conservation Commission agreed that the construction of a horseshoe crab return system is no longer required.

Project 34. St Lucie Cooling Water System Inspection & Maintenance

Project expenditures are $100,190 or 22% lower than previously projected. The variance is due to the original projection assuming a January 2020 in-service date for $4.5 million. The current projection assumes an in-service date in 2021.

Q. Does this conclude your testimony?

A. Yes.

(Whereupon, prefiled direct testimony of Michael W. Sole was inserted.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF MICHAEL W. SOLE

DOCKET NO. 20200007-EI

APRIL 1, 2020

Q. Please state your name and address.

A. My name is Michael W. Sole 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. ("NEE") as Vice President of Environmental Services.

Q. Please describe your educational background and professional experience.

A. I received a Bachelor of Science degree in Marine Biology from the Florida Institute of Technology in 1986. I served as an Officer in the United States Marine Corps from 1985 through 1990, attaining the rank of Captain. I was employed by the Florida Department of Environmental Protection ("FDEP") in multiple roles from 1990 to 2010 and served as the Secretary of the FDEP from 2007-2010. I have been employed by NEE or its subsidiary Florida Power & Light Company ("FPL" or the "Company") since 2010. In November 2016, I assumed the position of Vice President of Environmental Services for NEE. In that role, I am responsible for FPL's environmental licensing and compliance efforts for the Company. In May

2017, I was appointed by Governor Scott to the Florida Fish and Wildlife Conservation Commission ("FWC").

Q. What is the purpose of the testimony that you are filing at this time?

A. The purpose of my testimony is to present for Commission review and approval FPL's request for recovery through the Environmental Cost Recovery Clause ("ECRC") of a new project, the Power Plant Intake Protected Species Project ("the Protected Species Project"). Additionally, my testimony presents for Commission review and approval FPL's 2020 Supplemental CAIR/MATS/CAVR Filing.

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 exhibits:

- Exhibit MWS-1 – FPL Supplemental CAIR/MATS/CAVR Filing
- Exhibit MWS-2 – June 12, 2019 NOAA Letter to FPL
- Exhibit MWS-3 – March 25, 2020 USFWS Letter to FPL

Q. Please briefly describe your Exhibit MWS-1.

A. Exhibit MWS-1 provides FPL's 2020 Supplemental CAIR/MATS/CAVR Filing. Per Order No. PSC-07-0922-FOF-EI, issued in Docket No. 070007-EI on November 16, 2007, this filing provides FPL's current estimates of project activities and associated costs related to its Clean Air Interstate Rule ("CAIR"), now the Cross State Air Pollution Rule ("CSAPR"), Mercury and Air Toxics Standards ("MATS"), which was formerly the Clean Air Mercury Rule ("CAMR") and Clean Air Visibility Rule ("CAVR")/ Best Available Retrofit Technology

("BART") projects. In Exhibit MWS-1, FPL provides a summary of the activities and costs approved by the commission for CAIR (Project 31), MATS/CAMR (Projects 33 and 45) and CAVR (Project 32). FPL has completed all capital projects associated with installation of controls for compliance with these rules. Ongoing O&M and Capital parts replacement for these projects on existing units will continue in order to ensure compliance. Accordingly, FPL requests authority to address all ongoing CAIR/CAMR/CAVR projected and actual costs in FPL's annual ECRC filings, similar to all other environmental projects approved by the Commission, rather than filing a Supplemental CAIR/CAMR/CAVR report.

Q. Please briefly describe FPL's proposed Protected Species Project.

A. Under the United States Endangered Species Act ("ESA") (16 U.S.C. § 1531 et seq.), FPL is required to avoid the "take" of species listed as endangered or threatened. FPL is also required to avoid the "take" of a species listed as threatened under Chapter 68A-27 of the Florida Administrative Code. In the event FPL "takes" a species without authorization provided by the appropriate federal regulatory authority, it constitutes an unauthorized take. In the event of an unauthorized take, the appropriate federal and state wildlife agencies may require FPL to develop solutions that avoid interaction between listed species and intake structures, or apply for an incidental take permit that would require FPL to minimize or mitigate interaction between listed species and intake structures. Once a solution is developed, FPL is required to implement the solution at the designated facility.

Q. Please describe the environmental law or regulation requiring the Protected Species Project.

A. At the Federal level, the ESA prohibits any action that causes the "taking" of any species of fish or wildlife listed as threatened or endangered. (16 U.S.C. §1538(a)(1)). A "take" under the ESA means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. (16 U.S.C. § 1532 (19)). The Marine Mammal Protection Act ("MMPA") also prohibits the "take" of marine mammals, such as the Florida manatee, in U.S. waters (16 U.S.C. § 1361-1407).

Additionally, at the state level, Chapter 68A-27, Florida Administrative Code (F.A.C.), prohibits the "take" of any federally-designated endangered and threatened species listed pursuant to the ESA, as well as state-designated threatened species listed pursuant to the Florida Endangered and Threatened Species Act (Section 379.2291, Fla. Stat.).

Q. Please describe why FPL needs to initiate activities to prevent the interaction of ESA listed species with power plant intake structures.

A. FPL is required to prevent any further take of smalltooth sawfish at its Fort Myers Plant. The specific solution has not yet been determined, and will first require FPL to hire a consultant to develop the best approach to prevent entrapment and/or injury of this species. Once an approach has been selected and approved by the National Oceanic and Atmospheric Administration National Marine Fisheries Service

("NOAA Fisheries"), FPL will be required to implement the approved project at the facility.

FPL has also experienced interactions with the Florida manatee at its Cape Canaveral Energy Center's intake facilities. FPL has had discussions with the United States Fish & Wildlife Service ("USFWS") and FWC concerning these interactions and FPL is required to take steps to avoid further take of this species.

Q. Please describe why FPL has to conduct activities to stop interaction of the smalltooth sawfish with the Fort Myers intake canal.

A. Recently, FPL's Fort Myers Plant has had interactions with the smalltooth sawfish at the Plant's intake facilities. Because the smalltooth sawfish is listed under the ESA as an endangered species, FPL notified NOAA Fisheries, which has federal jurisdiction to enforce the ESA. FPL also notified FWC, which is the state agency NOAA Fisheries consults concerning smalltooth sawfish in Florida. On March 7, 2019, FPL met with those agencies on-site to initiate discussions on the smalltooth sawfish interaction with the operations of FPL's Fort Myers Plant. On June 12, 2019, FPL received a letter from NOAA Fisheries stating that pursuant to the ESA, FPL must undertake measures to address the unauthorized take of the smalltooth sawfish at FPL's Fort Myers Plant. In its letter, NOAA Fisheries recommends that FPL address the take by installing a physical structure that would exclude smalltooth sawfish from entering the plant's intake canal. While this is an option that will be explored, FPL will also consider other non-traditional "barriers," such as visual or auditory deterrents, that may be effective in keeping smalltooth sawfish from entering the intake canal. The June 12, 2019 letter is included with my testimony as Exhibit MWS-2.

Q. Please describe why FPL has to conduct activities to stop interaction of the Florida manatee with the intake structure at FPL's Cape Canaveral Plant.

A. FPL has experienced interactions with the Florida manatee at its Cape Canaveral Energy Center's intake facilities. The Florida manatee is listed under the ESA as a threatened species and is protected under the Marine Mammal Protection Act. On February 11, 2020, FPL hosted a site visit with USFWS, which has federal jurisdiction to enforce the ESA and the Marine Mammal Protection Act, and with the FWC, which is the state agency USFWS consults concerning manatees in Florida. During this visit, FPL and the agencies discussed options that could reduce or avoid interactions with manatees and the plant's intake facilities. On March 25, 2020, the USFWS sent a letter to FPL stating that pursuant to the ESA, FPL must undertake measures to avoid further takes of the threatened Florida manatee. The March 25, 2020 letter is included with my testimony as Exhibit MWS-3.

Q. What activities related to the Protected Species Project does FPL need to conduct?

A. FPL needs to evaluate options for preventing any further take of the smalltooth sawfish at FPL's Fort Myers Plant. In order to prevent further take of the species, FPL needs to hire a consultant to evaluate and recommend design solutions. Once FPL has completed an evaluation of various options, FPL will consult with NOAA

Fisheries to discuss future activities including implementation of the agreed upon solution.

FPL also needs to evaluate options for preventing any further take of the Florida manatee at FPL's Cape Canaveral Energy Center. In order to prevent further take of the species, FPL needs to hire a consultant to evaluate and recommend design solutions. Once FPL has completed an evaluation of various options, FPL will consult with USFWS and FWC to discuss options and the implementation of the agreed upon solution.

Q. Is FPL currently required to conduct this type of project at any of its other facilities?

A. Yes. At the St. Lucie Nuclear Power Plant ("PSL"), FPL was required to design, test and install an excluder device to keep large marine animals, including sea turtles, out of the intake canal. This was required, per a Biological Opinion that NOAA Fisheries directed to PSL after consultation with the Nuclear Regulatory Commission. These costs are being recovered under FPL's PSC approved Project 34 - the St. Lucie Cooling Water System Inspection & Maintenance Project. The projects discussed in this testimony are different from the St. Lucie Cooling Water System Inspection & Maintenance Project because the facilities listed as part of the Protected Species Project are not covered under the Biological Opinion.

Q. Has FPL estimated how much will be spent on the proposed Protected Species Project in 2020?

A. FPL estimates that, following the filing of this petition, approximately $75,000 to $150,000 of O&M expenses will be incurred in 2020 for consultant fees related to the analysis, evaluation, recommendations and preliminary design of proposed solutions for the Fort Myers Plant and Cape Canaveral Energy Center.

Q. Has FPL estimated the total cost of the proposed Protected Species Project?

A. Since the ultimate solution is yet to be determined, total projected costs are not known. The associated agencies will review proposals developed by FPL's consultants. FPL and the agencies will work together to determine which solution and design is appropriate at each facility. Once that is determined, additional Capital investment costs and O&M expenses will be incurred. FPL will provide updated estimates in its regular filings once they are available.

If a physical structure is selected as the most appropriate solution at either facility, it is anticipated that FPL will incur capital costs associated with design, permitting, testing, and construction of such a structure. Preliminary estimates of capital costs associated with such a structure range from $500,000 to $2 million at Plant Fort Myers and from $2.0 million to $7.0 million at Cape Canaveral Energy Center. These estimates are based on costs expended for the horseshoe crab wall constructed at the Cape Canaveral Energy Center. This is a very preliminary estimate of total capital expenses.

Depending on what solution is selected, FPL may incur additional O&M expenses associated with the design, permitting, testing, and implementation of that solution.

Q. Please describe the measures FPL is taking to ensure that the costs of the Protected Species Project are reasonable.

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 practices and procedures, single or sole source procurement may also be used. All initial commitments and contract change orders will be appropriately authorized. FPL's Project Controls group maintains the project scope, budget, and schedule and tracks project costs through various approval processes, procedures, and databases. FPL will also use its prior experience and lessons learned with wildlife protection and construction of intake structures to ensure a cost-effective procurement selection and implementation process.

Q. Did FPL anticipate that it would need to conduct these activities at the time it prepared the Minimum Filing Requirements for its 2016 rate case?

A. No. Those MFRs were prepared in late 2015 and early 2016. As noted above, the letter from NOAA Fisheries was received in 2019 and the letter from the USFWS in 2020.

Q. Is FPL recovering through any other mechanism the costs for the Protected Species Project for which it is petitioning for ECRC recovery?

A. No.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF MICHAEL W. SOLE

DOCKET NO. 20200007- EI

JULY 31, 2020

Q. Please state your name and address.

A. My name is Michael W. Sole and my business address is 700 Universe Boulevard, Juno Beach, Florida 33408.

Q. Have you previously filed testimony in this docket?

A. Yes.

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

A. The purpose of my testimony is to provide a status update for the Turkey Point Cooling Canal Monitoring Plan ("Cooling Canal") Project, addressing recent regulatory actions and environmental compliance activities undertaken by FPL pursuant to this Project. My testimony also presents for Commission review and approval a modification to the Cooling Canal Project.

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 exhibits:

- MWS-4 – 2015 Consent Agreement
- MWS-5 – June 2016 FDEP Consent Order
- MWS-6 – 2016 Consent Agreement Addendum

- MWS-7 - July 2020 Plan Submitted to FDEP
- MWS-8 - NPDES/IWW Permit Number FL0001562
- MWS-9 - April 13, 2020 Notice of Intent to Issue Permit

Q. Please summarize your testimony.

A. FPL continues to implement Commission-approved Cooling Canal Project activities and remains in compliance with all regulatory requirements. The 2016 Consent Order ("2016 CO") with the Florida Department of Environmental Protection ("FDEP") includes an annual average salinity threshold for the Turkey Point Cooling Canal System ("CCS") surface waters at or below 34 practical salinity units ("PSU") to be achieved by November 28, 2020. Although FPL's freshening actions have been effective in moderating CCS salinity, we expect the average annual salinity to be above 34 PSU by November 28, 2020. The 2016 CO contemplates additional measures might be needed to achieve the salinity threshold and provides a process for FPL to submit a plan detailing those measures by December 28, 2020. Ahead of that date, FPL has submitted a plan to FDEP detailing additional actions to achieve the 34 PSU threshold. FPL is also currently in the process of renewing its NPDES/IWW Permit for the Turkey Point facility. FDEP has noticed an intent to issue a permit, but two parties have filed administrative challenges, resulting in litigation concerning the issuance of the final permit. Since the NPDES/IWW permit is an integral piece of FPL's compliance with the 2016 CO, FPL is requesting the Commission approve a modification to the Cooling Canal project to include costs associated with litigating the NPDES/IWW permit challenges.

Cooling Canal Project Regulatory Compliance

Q. Please summarize FPL's regulatory compliance related to the Cooling Canal Project since your testimony in Docket No. 20170007-EI.

A. FPL has continued to move forward with compliance and implementation of actions associated with activities required under the 2015 Consent Agreement ("CA") with Miami-Dade County Department of Environmental Resource Management ("MDC DERM"), the 2016 CO, and the 2016 addendum to the CA. A copy of the CA is attached as Exhibit MWS-4, a copy of the 2016 CO is attached as Exhibit MWS-5, and a copy of the 2016 addendum to the CA is attached as Exhibit MWS-6. FPL has remained in compliance with all regulatory environmental requirements imposed by these agreements.

Q. What are the specific environmental objectives of the 2016 CO?

A. The three objectives of the 2016 CO are to cease discharges from the Cooling Canal System ("CCS") that impair the reasonable beneficial use of adjacent G-II groundwater to the west of the CCS, prevent releases of groundwater from the CCS to surface waters connected to Biscayne Bay that result in exceedances of surface water quality standards, and mitigate impacts related to historic operation of the CCS.

Q. Is FPL in compliance with all actionable items required in the 2016 CO?

A. Yes. FPL has substantially accomplished the objectives of the 2016 CO and continues successful execution on all requirements within it.

Q. Please describe the activities FPL has taken since 2016 to achieve compliance with the 2016 CO's objective to cease discharges from the CCS that impair the reasonable and beneficial use of adjacent G-II groundwaters.

A. Under the 2016 CO, FPL is required to achieve an average annual salinity of the CCS surface waters at or below 34 PSU by November 28, 2020, develop and submit a thermal efficiency plan, and implement a Recovery Well System ("RWS"). FPL has undertaken significant activities since 2016 to achieve compliance. FPL has licensed and constructed five low salinity Floridan aquifer freshening wells, including the water allocation, that add up to 14 million gallons per day ("MGD") of brackish water to the CCS to replace water lost to evaporation and reduce CCS salinity. These wells have positively impacted the CCS by moderating salinity concentrations. FPL has also taken actions to optimize our existing Floridan allocation, as allowed under the site license, by diverting up to 7 MGD of the unutilized portion of Turkey Point Units 1-5 Floridan process water allocation to the CCS to aid in salinity reduction. As a result of FPL's actions, including the freshening that began in 2016, salinity has been moderated in the CCS and the average annual salinity has been reduced by 31% since 2014.

In addition, FPL has been implementing the Thermal Efficiency Plan as required by the 2016 CO since it received FDEP's approval on July 7, 2017. The annual average thermal efficiency has been maintained above the target level of 70% since implementing the plan. The annual average thermal efficiency was 84.6%, 85.0% and 85.1% for years 2017, 2018 and 2019, respectively.

As required by the 2016 CO, FPL permitted and constructed a RWS, which became operational on May 15, 2018. After the first year of operations and based on the results of the first Continuous Surface Electromagnetic Mapping survey, the RWS reduced the hypersaline plume volume by 22%. The results indicate the RWS is functioning as designed and is on track to achieve the objectives outlined in the CO.

Q. The 2016 CO includes an average annual salinity threshold for the CCS surface waters at or below 34 PSU to be achieved by November 28, 2020. Does FPL expect to achieve this salinity threshold by that date?

A. No. While CCS annual salinity levels have been moderated due to freshening activities, at the current time, cooling canal salinity is not projected to meet the average annual salinity threshold of 34 PSU by November 28, 2020. The average annual salinity for the period June 1, 2019 through May 31, 2020 was 56.8 PSU. Currently, the average weekly salinity is 42.4 PSU for the week of July 19, 2020 - July 26, 2020 and the average salinity for the compliance year is 55.6 PSU (November 28, 2019 – July 26, 2020).

Q. Why is the salinity threshold not expected to be met?

A. Cooling canal salinity is affected by many factors. During the freshening timeframe since 2016, the cooling canals experienced lower than average rainfall, which resulted in CCS evaporation exceeding freshwater inputs (rainfall plus freshening) for numerous months each year. When evaporation exceeds freshwater inputs, CCS salinity increases.

Q. Are there other factors impacting the ability to meet the salinity threshold?

A. Yes, the original freshening model utilized data collected from 2010-2012, which was the best available data at the time the salinity management plan was developed. FPL now has a longer data record (2010-2019) that represents a wider range of hydrologic conditions. CCS salinity responses have shown that offsetting evaporative losses is more beneficial on a monthly basis, rather than on an annual average basis. Sufficient freshening volumes need to be provided to prevent dry season CCS salinity increases in order for wet season surpluses to decrease the net annual salinity.

Q. Does the 2016 CO address what FPL is required to do if the average annual salinity of the CCS surface waters is not at or below 34 PSU at the completion of the fourth year of freshening activities?

A. Yes. The CO recognizes that additional measures might be needed and provides a process to supplement CCS salinity reduction measures to achieve the salinity threshold. As set forth in the 2016 CO, within 30 days of the date to reach the required threshold (November 28, 2020), FPL must submit a plan to the FDEP detailing additional measures, and a timeframe for those measures, that FPL will implement to achieve the required salinity threshold.

Q. Since the salinity threshold is not expected to be met, what actions is FPL taking pursuant to the 2016 CO?

A. Ahead of the December 28, 2020 deadline, FPL has submitted a plan to FDEP outlining the actions FPL will take to achieve the threshold. The proposed activities include optimizing FPL's existing freshening wellfield operations and seeking an increase to the wellfield's water use allocation. As part of this process, FPL will continue to work with FDEP and other agencies to further reduce CCS salinity, and additional measures may be developed as a result of this coordination. A copy of the plan is included as Exhibit MWS-7.

Q. Is it common for environmental remediation activities and costs to evolve over time?

A. Yes. Remediation practices rely on monitoring the actual responses in the environment to identify the level of success and, where applicable, when appropriate adjustments are needed. The ability to monitor and adjust remediation activities is an integral activity in ensuring projects meet environmental goals considering the numerous variables and assumptions inherent in the initial design.

<u>Cooling Canal Project Background</u>

Q. Has FPL submitted updates to the Commission regarding the scope and costs of the Cooling Canal Project since it was approved in Order No. PSC-2009-0759-FOF-EI?

A. Yes. Throughout the period since the Cooling Canal Project was approved, including in my current testimony, FPL has filed updates concerning the Cooling Canal Project. As required, FPL has annually filed all cost data concerning the project, including information relating to actual and estimated costs, and final true-up amounts. FPL has also filed project description and progress reports annually to provide the Commission with information concerning project accomplishments and expenditures. FPL also discussed regulatory actions and compliance activities related to the Cooling Canal Project at length in testimony filed in Docket Nos.

160007-EI and 20170007-EI. Finally, FPL provided an update to project costs and expenditures in Docket No. 20180007-EI.

Q. What is FPL's current estimate of 2020 costs associated with required Cooling Canal Project activities?

A. In 2020, FPL is projected to incur approximately $6.1 million in capital expenditures and $19.7 million in O&M expenses for the Cooling Canal Project.

Q. How much does FPL expect to spend on Cooling Canal Project compliance related to the additional actions needed to achieve the CCS salinity threshold?

A. Since the ultimate solution is yet to be determined, total projected costs are not known. The associated agencies will review proposals developed by FPL's consultants, and FPL and the agencies will work together to determine which plan is appropriate.

However, based on the actions identified in FPL's July 30, 2020 letter to DEP, preliminary estimates of capital investment costs associated with optimizing the existing freshening wellfield are $1.25 million. Preliminary estimates of capital investment costs associated with increasing the wellfield's water use allocation are $1.45 million. Preliminary O&M expenses are $10.5 million over the remaining approximately 30-year expected operation of the wellfield. Depending on what solution is ultimately selected and approved, FPL may incur additional costs associated with the design, permitting, testing, and implementation of that solution. FPL will provide updated estimates in its regular filings once they are available.

Q. Does the addition of costs related to activities linked to the plan increase the net overall projected cost of the Cooling Canal Project?

A. No, the net overall projected cost of the Cooling Canal Project as approved in Order No. PSC-2018-0014-FOF-EI has not increased.

National Pollution Discharge Elimination System/Industrial Wastewater Permit Renewal

Q. Does FPL hold environmental permits that apply to operation of the CCS?

A. Yes, the CCS is a permitted industrial wastewater ("IWW") facility. FPL is the permittee and operates the CCS under National Pollution Discharge Elimination System ("NPDES")/IWW Permit Number FL0001562. The Environmental Protection Agency ("EPA") issued the facility's initial permit on June 14, 1978. The Florida Department of Environmental Regulation (now FDEP) issued an IWW permit on October 15, 1982. These permits were combined following the delegation of the NPDES program to the FDEP on May 1, 1995. The permit has been timely renewed by the facility, as required, and the most current version of the permit was approved in 2005. A copy of the current permit is attached as Exhibit MWS-8.

Q. Is FPL currently in the process of applying for renewal of the NPDES/IWW permit for Turkey Point?

A. Yes, FPL is currently in the process of renewing its NPDES/IWW Permit for the Turkey Point facility. On October 22, 2009, prior to the expiration of the current permit, FPL timely filed its application for renewal of the permit. The permit approved in 2005 has been administratively extended since 2010 while FPL's application for renewal is pending approval by FDEP.

Q. Please describe the status of the application.

A. On April 13, 2020 the FDEP noticed an intent to issue a permit for the Turkey Point facility, finding that, based upon the application and supplemental information, FPL provided reasonable assurances that the wastewater treatment and effluent disposal facilities at Turkey Point complied with the appropriate provisions of Chapter 403 of the Florida Statutes and Title 62 of the Florida Administrative Code (F.A.C.). A copy of the notice of intent to issue a permit is attached as Exhibit MWS-9. These provisions include a determination that the issuance of the permit will not impair the designated use of contiguous surface waters (see Exhibit MWS-8, Condition I.2).

On June 4, 2020, the Florida Keys Aqueduct Authority ("FKAA") and the Florida Keys Fishing Guides Association ("FKFGA") filed administrative petitions challenging the permit and requesting formal administrative hearing and denial of the permit. A hearing on those petitions is set for the two-week period starting January 19, 2021.

Q. Does the challenge of the NPDES/IWW Permit impact FPL's ability to comply with the 2016 CO?

A. Yes. The NPDES/IWW permit is an integral piece of FPL's compliance with the 2016 CO. The 2016 CO presumes continued authorization of the CCS. The proposed NPDES/IWW permit incorporates the 2016 CO remedial actions and timelines related to retraction of the hypersaline plume as well as monitoring and reporting requirements. Specifically, the 2016 CO is the basis of the following conditions in the proposed NPDES/IWW permit being challenged:

- Condition I.1. cites 2016 CO requirements related to remedial actions and timelines for achieving compliance with groundwater minimum criteria of Rule 62-520.400, F.A.C.
- Condition I.2. cites 2016 CO requirements related to actions and timelines to prevent violations of subsection 62-520.310(2), F.A.C.
- Conditions II.B.4 and II.D.20 relate to monitoring requirements that are based on the methodology established in the 2016 CO
- Conditions VI.8, VI.9, and VI.10 require FPL to halt the westward migration of the hypersaline plume within three years and retract the plume to the L-31E canal within ten years as required by the 2016 CO
- Condition VIII.D.4 provides a reopener clause that allows FDEP to revise the permit to include certain provisions of the 2016 CO upon its completion

Q. Please describe the administrative challenges filed by FKAA and FKFGA.

A. FKAA and FKFGA are essentially attempting to re-litigate the 2016 CO. A finding by an administrative law judge in the pending permit challenge that FPL is impairing the beneficial use of surface water would impede FPL's ability to comply with the 2016 CO by opening up and allowing for a renewed legal challenge to and potential modification of the 2016 CO. The re-litigation of the 2016 CO could in turn result in the imposition of additional requirements on FPL under an "Amended CO" to perform additional actions associated with the CCS. This could result in regulatory conflicts with the 2016 CO, which in turn could result in additional requirements and costs associated with the CCS and the Cooling Canal Project. Therefore, litigating the NPDES/IWW permit challenges is required in order to ensure compliance with the 2016 CO, while reducing risk for unnecessary and costly new requirements.

Q. Is FPL requesting a modification to the CCS Project?

A. Yes. Since litigating the NPDES/IWW permit challenges is required in order to remain in compliance with the 2016 CO, FPL is requesting the Commission approve a modification to the CCS project, to include costs associated with litigating the NPDES/IWW permit challenges.

Q. How much does FPL expect to spend on costs associated with the NPDES/IWW permit litigation?

A. FPL expects to incur approximately $1.8 million in O&M costs related to the NPDES/IWW permit litigation.

Q. Has FPL incurred any costs associated with the NPDES/IWW permit litigation?

A. Yes. FPL has incurred fees associated with the preparation for the litigation. However, FPL is seeking ECRC recovery only for costs associated with litigation activities performed after the date of this filing.

Q. Is FPL recovering the costs associated with the NPDES/IWW permit litigation activities through any other mechanism?

A. No.

Q. Does the addition of costs related to this litigation increase the net overall projected cost of the Cooling Canal Project?

A. No, the net overall projected cost of the Cooling Canal Project as approved in Order No. PSC-2018-0014-FOF-EI, has not increased.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF MICHAEL W. SOLE

DOCKET NO. 20200007- EI

AUGUST 28, 2020

Q. Please state your name and address.

A. My name is Michael W. Sole and my business address is 700 Universe Boulevard, Juno Beach, Florida 33408.

Q. Have you previously filed testimony in this docket?

A. Yes.

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

A. The purpose of my testimony is to provide an update concerning Florida Power & Light Company's ("FPL" or the "Company") proposed Power Plant Intake Protected Species Project ("the Protected Species Project"), originally filed in this docket on April 1, 2020.

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 exhibits:

- MWS-10 – Photo of Manatee Calf at Sea World Rehabilitation Center
- Together with FPL witness Renae B. Deaton, I am co-sponsoring FPL's Project Progress Report, which is included in Exhibit RBD-3 as Form 42-5P.

Q. Please briefly describe FPL's filing dated April 1, 2020 requesting approval of the Projected Species Project.

A. On April 1, 2020, FPL petitioned and filed testimony in this docket requesting cost recovery for the Protected Species Project. As noted in that testimony, FPL is required to avoid the "take" of species listed as endangered or threatened under the United States Endangered Species Act ("ESA"). FPL is also required to avoid the take of a species listed as threatened under Chapter 68A-27 of the Florida Administrative Code. In the event of an unauthorized take, the appropriate federal and state wildlife agencies may require FPL to develop solutions that avoid interaction between listed species and intake structures.

Q. Why is FPL providing an update concerning the Protected Species Project?

A. As noted in my April testimony, FPL has experienced interactions with the Florida manatee, which is listed under the ESA as a threatened species and is protected under the federal Marine Mammal Protection Act ("MMPA"), at its Cape Canaveral Energy Center's intake facilities. FPL is providing this update to inform the Commission of a recent interaction that has occurred between a Florida manatee and the Cape Canaveral Energy Center's intake facilities.

Q. While FPL is working with the United States Fish and Wildlife Service ("USFWS") to develop solutions at the Cape Canaveral Energy Center, is FPL still required to avoid the take of Florida manatees?

A. Yes. While FPL is developing potential solutions to reduce or avoid interactions at the Cape Canaveral Energy Center, FPL is still required to comply with the ESA and MMPA, and any unauthorized take can result in enforcement by the USFWS in the form of direct financial penalties.

Q. Have there been interactions with a Florida manatee and Cape Canaveral Energy Center's intake facilities since April?

A. Yes. On July 15, 2020, at FPL's Cape Canaveral Energy Center, a live Florida manatee calf was discovered in the plant's intake facilities.

Q. What actions did FPL take after discovering the manatee calf in the plant's intake facility?

A. FPL personnel inspected the intake well prior to operating the cleaning rake and determined that it was appropriate to operate. Once the rake reached the water's surface, the manatee calf became visible and the operators immediately stopped the rake and contacted the site's lead environmental specialist and the Florida Fish and Wildlife Commission ("FWC"). The FWC requested that the manatee remain at the waterline until they arrived on site.

Q. Please describe what occurred when FWC arrived on site.

A. Once FWC was at the site, at FWC's direction, FPL removed the manatee calf from the intake well.

Q. What actions are FWC/USFWS authorized to take once the manatee calf is removed from the intake well?

A. Once the manatee calf is removed from the intake well, FWC evaluates the health of the manatee calf. Based on the evaluation, FWC determines if the calf should be placed back in adjacent waters with the known mother or transported to an organization authorized by the FWC/USFWS to perform manatee rehabilitation.

The FWC and USFWS are part of the Manatee Rescue & Rehabilitation Partnership, which is a cooperative of federal and state agencies, organizations, and oceanaria that rescue, rehabilitate, release and monitor Florida manatees. Under Section 11 of the ESA, the USFWS may also choose to take enforcement action following an incidental take.

Q. What action did the USFWS take in response to the interaction with the manatee calf?

A. The FWC/USFWS determined the manatee calf involved in this interaction was separated from its mother and the mother was unable to be located at the time of release. The manatee calf would need to be transferred to an appropriate rehabilitation center for further evaluation and care. Accordingly, the FWC/USFWS chose to take the calf to the federally permitted rehabilitation facilties at Sea World for rehabilitation, so that the calf may meet the necessary health requirements to be released back to the wild. See Exhibit MWS-10.

The interaction in question here was incidental, not willful or deliberate. FWC/USFWS is exercising its enforcement discretion, and USFWS has requested that the Company assist with the costs of rehabilitating the manatee calf. This cooperation between FWC/USFWS and FPL is consistent with FPL's collaborative work on developing solutions to reduce interactions between the Florida manatee and intake facilities, and reduce the risk of enforcement actions for unauthorized takes.

Q. Does FPL know the estimated cost for the rehabilitation of the Florida manatee calf?

A. Yes. Total costs associated with the rehabilitation of the Florida manatee calf are estimated at $250,000, which will be incurred over a three-year period.

Q. Does FPL expect to incur costs in 2020 and 2021 associated with the rehabilitation of the manatee calf?

A. Yes. FPL expects to spend $25,000 in O&M costs in December of 2020 associated with the rehabilitation of the Florida manatee. This amount will be reflected in the 2020 final true-up. FPL has projected $100,000 of O&M costs for 2021.

Q. Is FPL recovering through any other mechanism the costs for the Protected Species Project which are proposed in this testimony?

A. No.

Q. Does this conclude your testimony?

A. Yes.

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

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

GULF POWER COMPANY

TESTIMONY OF RICHARD L. HUME

DOCKET NO. 20200007-EI

JULY 31, 2020

Q. Please state your name and address.

A. My name is Richard Hume. My business address is Gulf Power Company, 700 Universe Boulevard, Juno Beach, FL 33408.

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

A. I am employed by Gulf Power Company ("Gulf" or the "Company") as Manager of Regulatory Issues, in the Regulatory & State Governmental Affairs 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 the Actual/Estimated True-up associated with Gulf's environmental compliance activities for the period January 2020 through December 2020.

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, included in Appendix I.

- Form 42-1E provides a summary of the Actual/Estimated True-up amount for the period January 2020 through December 2020.

- 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 (pages 8 through 42) reflect the monthly calculations of recoverable costs associated with each capital project for the current recovery period.
- 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 2020 through December 2020.

Q. Please explain the calculation of the Environmental Cost Recovery Clause ("ECRC") Actual/Estimated True-Up amount Gulf is requesting this Commission to approve.

A. The Actual/Estimated True-Up amount for the period January 2020 through December 2020 is an over-recovery, including adjustments and interest, of $2,837,159 (Appendix I, page 1, line 4). The Actual/Estimated True-Up amount is calculated on Form 42-2E by comparing actual data for January 2020 through May 2020 and revised estimates for June 2020 through December 2020 to original projections for the same period. The over-recovery of $2,788,240 shown on page 2, line 5 plus the interest provision of $47,030 shown on line 6, which is calculated on Form 42-3E, plus adjustment of $1,889 shown on line 10, results in the final over-recovery of $2,837,159, shown on line 11. The adjustment of $1,889 represents carrying costs related to the deferred amortization for the reclassification associated with Plant Smith and Plant Scholz pond closure projects which were moved from capital accounts to deferred FERC 182 regulatory asset accounts during the fall of 2019. This was discussed in Witness Hume's 2019 ECRC Final True-up testimony, filed on April 1, 2020.

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

A. Yes.

Q. What jurisdictional factors were used to calculate projected recoverable costs for the period January 2020 through December 2020?

A. The demand jurisdictional factors applied in the calculation of retail revenue requirements is 97.23427 percent, which is based upon Gulf's 2018 Cost of Service Load Research Study results filed with the Commission in accordance with Rule 25-6.0437, F.A.C. The energy jurisdictional factors for each month are the same as those used in the fuel clause, or 100%, pending final calculation of the stratified jurisdictional energy factors. Due to new stratified wholesale agreement with Florida Public Utilities Company ("FPU"), Gulf is in process of determining the appropriate stratified jurisdictional factors to be completed before the end of the year. Any eventual over or under-recovery of costs due to changes in jurisdictional allocations will be handled through the final true-up process.

Q. How do the actual/estimated project costs for January 2020 through December 2020 compare with original projections for the same period?

A. Form 42-4E (Appendix I, page 4) shows that total O&M project costs are $7,831,254 lower than projected and Form 42-6E (Appendix I, page 6) shows that total capital project revenue requirements are $1,305,837 lower than projected. Significant project variances are explained in Gulf Witness Sole's testimony.

Q. Please explain the variance associated with the Scherer/Flint credit?

A. The Flint contract and resulting Scherer credit expired on December 31, 2019. The final December 2019 credit booked in January 2020 was not included in the 2020 projection filing, resulting in a variance of $127,104.

Q. Does this conclude your testimony?

A. Yes.

AFFIDAVIT

STATE OF FLORIDA)
) Docket No. 20200007-EI
COUNTY OF ESCAMBIA)

Before me, the undersigned authority, personally appeared Richard L. Hume, who being first duly sworn, deposes and says that he is the Regulatory Issues Manager of Gulf Power Company, a Florida corporation, that the foregoing is true and correct to the best of his knowledge and belief. He is personally known to me.

Richard L. Hume
Richard L. Hume
Regulatory Issues Manager

Sworn to and subscribed before me by means of ✓ physical presence or ____ online notarization this 31st day of July, 2020.

Melissa Darnes
Notary Public, State of Florida at Large

NOTARY PUBLIC STATE OF FLORIDA
MELISSA A DARNES
Commission # GG 366942
Expires December 17, 2023
Bonded Thru Budget Notary Services

GULF POWER COMPANY

Before the Florida Public Service Commission
Prepared Direct Testimony
Richard L. Hume
Docket No. 20200007-EI
Date of Filing: April 1, 2020

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

A. My name is Richard Hume. My business address is 700 Universe Blvd Juno Beach, FL 33408. I am the Regulatory Issues Manager for Gulf Power Company (Gulf or the Company).

Q. Please briefly describe your educational background and business 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. In 1998, I worked for NewEnergy Associates, (which became a subsidiary of Siemens Power Generation), a consulting firm that worked with Electric and Gas Utilities across the United States. During that time, I consulted in the area of financial forecasting budgeting as well as cost of service and rate forecasting. 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 plan. In 2012, I joined Florida Power and Light as Manager of Cost and Performance, managing a data analytics team. In that position, my responsibilities included leading the customer rate and bill impact analysis in partnership with the Regulatory Affairs team. In 2019, I joined Gulf Power as the Regulatory Issues Manager where my current responsibilities include oversight of the Company's cost recovery clauses, calculation of cost recovery factors and the related regulatory filing function of Gulf Power Company.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present the final true-up amount for the period January 2019 through December 2019 for the Environmental Cost Recovery Clause (ECRC).

Q. Have you prepared an exhibit that contains information to which you will refer in your testimony?

A. Yes, I am sponsoring one exhibit. My exhibit consists of ten schedules, nine of which are environmental cost recovery final true-up schedules and one schedule containing the Scherer/Flint credit calculation, as described later in my testimony. This exhibit was prepared under my direction, supervision, and review.

Counsel: We ask that Mr. Hume's exhibit consisting of ten schedules be marked as Exhibit No. _____ (RLH-1)

Q. Are you familiar with the ECRC true-up calculation for the period January through December 2019 set forth in your exhibit?

A. Yes. These documents were prepared under my supervision.

Q. Have you verified that, to the best of your knowledge and belief, the information contained in these documents is correct?

A. Yes, I have. Unless otherwise indicated, the actual data in these documents is taken from the books and records of Gulf Power Company. 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 the Florida Public Service Commission (FPSC or Commission).

Q. What is the final ECRC true-up amount for the period ending December 2019, to be addressed in the recovery period beginning January 2021?

A. An over-recovery in the amount of $5,891,843 was calculated and is reflected on line 3 of Schedule 1A of my exhibit.

Q. How was this amount calculated?

A. The $5,891,843 over-recovery was calculated by taking the difference between the estimated January 2019 through December 2019 over-recovery of $4,609,567 as approved in FPSC Order No. PSC-2019-0500-FOF-EI, dated November 22, 2019, and the actual 2019 over-recovery of

$10,501,410 which is the sum of lines 5, 6 and 9 on Schedule 2A of my exhibit.

Q. Please describe Schedules 2A and 3A of your exhibit.

A. Schedule 2A shows the calculation of the actual over-recovery of environmental costs for the period January 2019 through December 2019. Schedule 3A of my exhibit is the calculation of the interest provision on the average true-up balance. This method is the same method of calculating interest that is used in the Fuel Cost Recovery and Purchased Power Capacity Cost Recovery clauses.

Q. Please describe Schedules 4A and 5A of your exhibit.

A. Schedule 4A compares the actual O&M expenses for the period January 2019 through December 2019 with the estimated/actual O&M expenses as filed on July 26, 2019, in Docket No. 20190007-EI. Schedule 5A shows the monthly O&M expenses by activity, including the offsetting Scherer/Flint credit, along with the calculation of jurisdictional O&M expenses for the recovery period. Emission allowance expenses and the amortization of gains on emission allowances are included with O&M expenses. Any material variances in O&M expenses are discussed in Gulf Witness Markey's final true-up testimony.

Q. Please describe Schedules 6A and 7A of your exhibit.

A. Schedule 6A for the period January 2019 through December 2019 compares the actual recoverable costs related to investment with the estimated/actual amount as filed on July 26, 2019, in Docket No. 20190007-EI. The recoverable costs include the return on investment, depreciation and amortization expense, dismantlement accrual, and property taxes associated with each environmental capital project for the recovery period. Recoverable costs also include a return on working capital associated with emission allowances and the regulatory asset associated with the retirement of Smith Units 1 and 2 established by Commission Order No. PSC-16-0361-PAA-EI in Docket No. 20160039-EI dated August 29, 2016. Schedule 7A provides the monthly recoverable costs associated with each project, including the offsetting Scherer/Flint credit, along with the calculation of the jurisdictional recoverable costs. Any material variances in recoverable costs related to the environmental investment for this period are discussed in Mr. Markey's final true-up testimony.

Q. Please describe Schedule 8A of your exhibit.

A. Schedule 8A includes 35 pages that provide the monthly calculations of the recoverable costs associated with each approved capital project for the recovery period. As I stated earlier, these costs include return on investment, depreciation and amortization expense, dismantlement accrual, property taxes, cost of emission allowances and the regulatory asset. Pages 1 through 30 of Schedule 8A show the investment and associated costs related to capital projects, while pages 31 through 34 show the investment and costs related to emission allowances, and page

35 shows the costs related to the regulatory asset for retired Plant Smith Units 1 and 2.

Q. Mr. Hume, what capital structure, components and cost rates did Gulf use to calculate the revenue requirement rate of return?

A. Consistent with Commission Order No. PSC-12-0425-PAA-EU dated August 16, 2012, in Docket No. 20120007-EI, the capital structure used in calculating the rate of return for recovery clause purposes for January 2019 through June 2019 is based on the weighted average cost of capital (WACC) presented in Gulf's May 2018 Earnings Surveillance Report (ESR). For the period July 2019 through November 2019, the capital structure and cost rates used for cost recovery clause purposes is based on the WACC presented in Gulf's Revised May 2019 ESR. For December 2019, the WACC used is based on the Revised May 2019 adjusted for the implementation of the reduced corporate income/franchise tax, issued by Florida Department of Revenue, Tax Information Publication (TIP) No. 19C01-04, dated September 12, 2019. The rate of return for all periods was adjusted to achieve the 53.5 percent equity ratio as approved by 2018 Tax Reform Settlement and Stipulation Agreement, approved by FPSC Order No. PSC-2018-0180-FOF-EI in Docket No. 20180039-EI, dated April 12, 2018. The WACC for all periods includes a return on equity of 10.25% as reflected on Schedule 9A.

Q. Please describe Schedule 10A.

A. Schedule 10A provides the monthly calculation of the total ECRC revenue requirements of Gulf's ownership in Scherer Unit 3 (Scherer 3) and quantifies the portion of Scherer 3 incremental revenue requirements that continues to be committed to a wholesale customer through a long-term contract (Scherer/Flint credit), which expired December 2019. In accordance with the provisions of the 2017 Settlement Agreement, Gulf included the Scherer/Flint credit as an offset to recoverable O&M and capital investment costs through December 2019. The Scherer/Flint credits appear on Lines 1.29 and 1.30 of Schedules 4A and 5A and on Lines 1.36 and 1.37 of Schedules 6A and 7A of my Exhibit RLH-1. The inclusion of the Scherer/Flint credit, as calculated, resulted in ECRC being revenue-neutral regarding the incremental portion of Scherer 3 investment and expenses.

Q. Please describe the adjustments to the recoverable costs due to the reduction to the Florida corporate income/franchise tax.

A. As previously mentioned, the Florida Department of Revenue issued a TIP in September 2019, notifying companies of the reduction to the Florida corporate income tax rate retroactive to January 1, 2019. To reflect the lower state corporate income tax rate for that period, Gulf adjusted the over/under balance in November 2019 in the amount of $701,304. In January 2020, Gulf discovered an error in the calculated adjustment and made an additional adjustment of $254,861 in December's business.

Q. Have there been any other notable changes to the recoverable costs for the period January 2019 through December 2019?

A. Yes. Plant in service and expenditures associated with the Plant Smith and Plant Scholz pond closure projects were moved from capital accounts to deferred FERC 182 regulatory asset accounts during the fall of 2019. Costs associated with the Plant Scholz pond closure and portions of the Plant Smith pond closure were recorded to regulatory asset accounts and will be amortized to expense since the costs are not associated with an operating asset that will incur future benefit. The regulatory asset costs will continue to be recovered through ECRC and will be amortized at that same depreciable rate previously used for the assets. Amortization of the regulatory asset will begin by the second quarter of 2020.

Additionally, due to Gulf's move to Nextera accounting systems, there was a need for Gulf to change its process for tracking clause capital investment from an overall project level to a much lower retirement unit level. This was a beneficial change to our process that allows a much higher degree of automation. The historical data dated back to the earliest days of the clause and was handled through several generations of accounting systems. Gulf was unable to identify a small part of the investment, which was unidentified and removed from the clause in June 2019. The adjustment amount for each program is footnoted in the capital schedules.

Q. Mr. Hume, does this conclude your testimony?

A. Yes

AFFIDAVIT

STATE OF FLORIDA)
)
COUNTY OF ESCAMBIA)

Docket No. 20200007-EI

Before me, the undersigned authority, personally appeared Richard L. Hume, who being first duly sworn, deposes and says that he is the Regulatory Issues Manager of Gulf Power Company, a Florida corporation, that the foregoing is true and correct to the best of his knowledge and belief. He is personally known to me.

Richard L. Hume

Richard L. Hume
Regulatory Issues Manager

Sworn to and subscribed before me by means of ✓ physical presence or ____ online notarization this 1st day of April, 2020.

Melissa Darnes

Notary Public, State of Florida at Large

NOTARY PUBLIC STATE OF FLORIDA

MELISSA A DARNES
Commission # GG 366942
Expires December 17, 2023
Bonded Thru Budget Notary Services

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

GULF POWER COMPANY

TESTIMONY OF RICHARD L. HUME

DOCKET NO. 20200007-EI

AUGUST 28, 2020

Q. Please state your name and address.

A. My name is Richard Hume. My business address is Gulf Power Company, 700 Universe Boulevard, Juno Beach, FL 33408.

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

A. I am employed by Gulf Power Company ("Gulf" or the "Company") as Manager of Regulatory Issues, in the Regulatory & State Governmental Affairs 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 Gulf's Environmental Cost Recovery Clause ("ECRC") projections and factors for the January 2021 through December 2021 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 2021 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 the following exhibits:

- Exhibit RLH-3 provides the calculation of Gulf's proposed ECRC factors for the period January 2021 through December 2021 and includes PSC Forms 42-1P through 42-8P.
  - Gulf witness Michael W. Sole is co-sponsoring Form 42-5P (Project Progress Reports).
- Exhibit RLH-4 provides the calculation of the stratified separation factors.

Q. Have you provided a schedule showing the calculation of projected environmental costs being requested for recovery for the period January 2021 through December 2021?

A. Yes. Form 42-1P (page 1) in Exhibit RLH-3 provides a summary of projected environmental costs being requested for recovery for the period January 2021 through December 2021. Total jurisdictional revenue requirements including true-up amounts and revenue taxes, are $189,042,018 (page 1, line 5). This amount includes the jurisdictional revenue requirements projected for the January 2021 through December 2021 period, which are $197,635,007 (page 1, line 1c), the actual/estimated true-up over-recovery of $2,837,159 for the January 2020 through December 2020 period (page 1, line 2) and the final true-up over-recovery of $5,891,843 for the January 2019 through December 2019 period (page 1, line 3). The detailed calculations supporting the 2020 actual/estimated and 2019 final true-ups were provided in Exhibit RLH-1 and Exhibit RLH-2 filed in this docket on April 1, 2020 and July 31, 2020, 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 2021 through December 2021 that Gulf is requesting this Commission to approve.

Form 42-1P (page 1) provides a summary of projected environmental costs being requested for recovery for the period January 2021 through December 2021.

Form 42-2P (pages 2 through 4) presents the O&M costs associated with Gulf's environmental projects for the projected period along with the calculation of the total jurisdictional amount of $31,868,419 for these projects.

Form 42-3P (pages 5 through 7) presents the recoverable amounts associated with capital costs for Gulf's environmental projects for the projected period, along with the calculation of the total jurisdictional recoverable amount of $165,721,477.

Form 42-4P (pages 8 through 46) presents the detailed calculation of the capital recoverable amounts by project for the projected period. Pages 47 through 49 provide 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.

Form 42-5P (pages 50 through 102) provides the description and progress of approved environmental projects included in the projected period.

Form 42-6P (page 103) calculates the allocation factors for demand and energy at generation. The demand allocation factors are calculated by determining the percentage each rate class contributes to the average of the twelve monthly system 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 (page 104) presents the calculation of the proposed 2021 ECRC factors by rate class.

Form 42-8P (page 105) 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 2021 through December 2021.

Q. Has Gulf accounted for a stratified wholesale power sales contract in the jurisdictional separation of the environmental costs?

A. Yes. Gulf has separated the production-related environmental costs based on stratified separation factors that better reflect the types of generation required to serve load under the stratified wholesale power sales contract. The use of stratified separation factors thus results in a more accurate separation of environmental costs between the retail and wholesale jurisdictions.

Gulf has two stratified wholesale power sales contracts in effect in 2020, an intermediate and a peaking contract with Florida Public Utility Corporation. The separation factors for the intermediate and peaking strata was calculated in a manner consistent with the method used by Florida Power & Light Company and Duke Energy Florida using Gulf Power's 2018 Cost of Service Load Research Study filed with this Commission in accordance with Rule 25-6.0437, F.A.C. The calculations of the stratified separation factors are provided in RLH-4.

Q. Please describe the Weighted Average Cost of Capital ("WACC") that is used in the calculation of the return on the 2021 capital investments included for recovery.

A. Gulf calculated and applied a projected 2021 WACC in accordance with the methodology established in Commission Order No. PSC-2020-0165-PAA-EU, Docket No. 20200118-EU, issued on May 20, 2020 ("2020 WACC Order"). Pursuant to the 2020 WACC Order, the WACC was calculated using the currently approved mid-point return on equity and the proration formula prescribed by Treasury Regulation §1.167(l)-1(h)(6)(i) applied to the plant only depreciation-related Accumulated Deferred Federal Income Tax balances included in the capital structure. This projected WACC is used to calculate the rate of return applied to the 2021 ECRC capital investments. The projected capital structure, components and cost rates used to calculate the rate of return are provided on page 105 of 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?

A. Yes.

Q. Does this conclude your testimony?

A. Yes, it does.

AFFIDAVIT

STATE OF FLORIDA)
)
COUNTY OF ESCAMBIA)

Docket No. 20200007-EI

Before me, the undersigned authority, personally appeared Richard L. Hume, who being first duly sworn, deposes and says that he is the Regulatory Issues Manager of Gulf Power Company, a Florida corporation, that the foregoing is true and correct to the best of his knowledge and belief. He is personally known to me.

Richard L Hume

Richard L. Hume
Regulatory Issues Manager

Sworn to and subscribed before me by means of ✓ physical presence or ____ online notarization this 28th day of August, 2020.

Melissa Darnes

Notary Public, State of Florida at Large

NOTARY PUBLIC STATE OF FLORIDA
MELISSA A DARNES
Commission # GG 366942
Expires December 17, 2023
Bonded Thru Budget Notary Services

(Whereupon, prefiled direct testimony of Richard Markey adopted by Michael W. Sole and the prefiled direct testimony of Charles Rote was inserted.)

GULF POWER COMPANY

Before the Florida Public Service Commission
Prepared Direct Testimony of
Richard M. Markey
Docket No. 20200007-EI
Date of Filing: April 1, 2020

Q. Please state your name and business address.

A. My name is Richard M. Markey, and my business address is One Energy Place, Pensacola, Florida, 32520.

Q. Mr. Markey, will you please describe your education and experience?

A. I graduated from Oklahoma State University in 1983 with a Bachelor of Science degree in Geology and a minor in Petroleum Engineering Technology. I also hold a Master's degree in Civil Engineering from Florida State University. Prior to joining Gulf Power, I worked in the Oil & Gas industry, Environmental Consulting and Florida Department of Environmental Regulation. In October 1994, I joined Gulf Power Company as a Geologist and have since held various positions with increasing responsibilities such as Air Quality Engineer, Supervisor of Land & Water Programs, and Manager of Land and Water Programs. In 2016, I assumed my present position as Director of Environmental Services.

Q. What are your responsibilities with Gulf Power Company?

A. As Director of Environmental Services, my primary responsibility is overseeing the activities of the Environmental Services section to ensure the Company is, and remains, in compliance with environmental laws and regulations, i.e., both existing laws and laws and regulations that may be enacted or amended in the future. In performing this function, I have the responsibility for numerous environmental activities.

Q. Mr. Markey, what is the purpose of your testimony?

A. The purpose of my testimony is to support Gulf Power Company's Environmental Cost Recovery Clause (ECRC) final true-up for the period January 2019 through December 2019.

Q. Mr. Markey, please compare Gulf's recoverable environmental capital costs included in the final true-up calculation for the period January 2019 through December 2019 with the approved estimated true-up amounts.

A. As reflected in Mr. Hume's Schedule 6A, the actual recoverable capital costs were $154,785,887 as compared to $155,146,676 included in the Estimated True-up filing. This difference resulted in a net variance of ($360,790) or (0.2%) under the estimated true-up projection. A breakdown of the variance by program is provided in Mr. Hume's Schedule 6A.

Q. How do the actual O&M expenses for the period January 2019 to December 2019 compare to the amounts included in the Estimated True-up filing?

A. Mr. Hume's Schedule 4A reflects that Gulf's recoverable environmental O&M expenses for the current period were $27,413,252**,** as compared to the estimated true-up of $30,651,813. This difference resulted in a variance of $(3,238,561) or 10.6% under the estimated true-up. I will address seven O&M projects and/or programs that, collectively, contribute to this variance: Title V, General Water Quality, Groundwater Contamination Investigation, FDEP NOx Reduction Agreement, Air Quality Compliance Program, Crist Water Conservation, and Coal Combustion Residual (CCR).

Q. Please explain the variance of ($92,931) or (35.7%) in (Line item 1.3), Title V.

A. This line item includes expenses associated with preparation of Gulf's Title V air permit renewal applications as well as implementation of Title V permits. The variance is primarily due to associated support costs being less than originally anticipated due to fewer requests for information and studies or other proceedings.

Q. Please explain the variance of ($252,409) or (12.8%) in (Line item 1.6), General Water Quality.

A. This line item includes expenses related to National Pollutant Discharge Elimination System (NPDES) permit compliance, Dechlorination, Groundwater Monitoring and Assessment, Surface Water Studies, the Cooling Water Intake Program, the Impoundment Integrity Program, and Stormwater Maintenance. The line item variance is primarily due to costs for the Plant Crist thermal study and surface water studies being less than projected and the Plant Daniel groundwater sampling requirements being less than anticipated for 2019.

Q. Please explain the variance of ($445,570) or (19.6%) in (Line item 1.7), Groundwater Contamination Investigation.

A. This line item includes expenses related to substation investigation and remediation activities. The line item variance is primarily due to three factors: (1) lower than expected O&M expenses for the Ft. Walton Beach groundwater remediation system due to the new treatment system that was recently installed, (2) FDEP revising the schedule for several substation projects, and (3) reducing costs by conducting more report preparation in house which had been planned to be conducted by outside consultants.

Q. Please explain the variance of ($251,739) or (49.8%) in (Line item 1.19), FDEP NOx Reduction Agreement.

A. This line item includes costs associated with the Plant Crist Unit 7 Selective Catalytic Reduction (SCR) and the Plant Crist Units 4 and 5 Selective Non-Catalytic Reduction (SNCR) projects that were included as part of the 2002 agreement with FDEP for ozone attainment. It includes the cost of anhydrous ammonia, urea, air monitoring, and general O&M

expenses related to activities undertaken in connection with the agreement. The variance is primarily due to maintenance costs associated with the Crist Unit 7 SCR being less than originally projected.

Q. Please explain the O&M variance of $(2,281,425) or (11.9%) in the Air Quality Compliance Program, (Line item 1.20).

A. The Air Quality Compliance Program line item primarily includes O&M expenses associated with the Plant Daniel Units 1 and 2 scrubbers, Plant Crist Units 4 through 7 scrubber, Plant Scherer Unit 3 scrubber, Plant Crist Unit 6 SCR, and Plant Scherer Unit 3 SCR and baghouse. More specifically, this line item includes the cost of ammonia, limestone, and general operation and maintenance activities associated with Gulf's Air Quality Compliance Program. The variance is primarily due to maintenance cost associated with the Plant Crist and Plant Daniel scrubbers and the Crist Unit 6 SCR being less than originally projected. Maintenance costs for the Plant Crist scrubber and SCRs have been reduced due to Gulf's plans to increase gas generation capability. In addition, the Plant Crist hydrated lime costs were less than originally anticipated.

Q. Please explain the variance of ($376,873) or (96.4%) in (Line item 1.22), Crist Water Conservation.

A. This line item includes general O&M expenses associated with the Plant Crist reclaimed water systems, such as piping and valve maintenance. During the majority of 2019, Unit 6 utilized river water for its cooling water supply which resulted in maintenance and chemical costs for the reclaimed water system being less than originally projected. In addition, maintenance work originally scheduled for the Fall 2019 was postponed to the Spring 2020 due to a long lead time on parts for the acid injection system. Chemical costs were less than originally projected during this time due to the acid system being out of service for maintenance.

Q. Please explain the O&M variance of $609,810 or 14.5% in the Coal Combustion Residual, (Line item 1.23).

A. The CCR program includes O&M costs associated with the regulation of Coal Combustion Residuals by United States Environmental Protection Agency and the Florida Department of Environmental Protection. More specifically, the CCR program includes requirements to close the existing on-site ash ponds at Plant Scholz and Plant Smith, and to regulate CCR units at Gulf's Plants Crist, Scherer, Smith and Daniel. The CCR line item variance is primarily due to several Plant Scholz pond closure invoices being inadvertently omitted from the July 2019 cost projection. The invoices were being processed at the time the Estimated True-Up filing was prepared but had not yet been booked through Gulf's accounting system.

Q. Mr. Markey, does this conclude your testimony?

A. Yes.

AFFIDAVIT

STATE OF FLORIDA)
)
COUNTY OF ESCAMBIA)

Docket No. 20200007-EI

Before me, the undersigned authority, personally appeared Richard M. Markey, who being first duly sworn, deposes and says that he is the Environmental Services Director of Gulf Power Company, a Florida corporation, that the foregoing is true and correct to the best of his knowledge and belief. He is personally known to me.

Richard M. Markey

Richard M. Markey
Environmental Services Director

Sworn to and subscribed before me by means of ✓ physical presence or ____ online notarization this 1st day of April, 2020.

Melissa Darnes

Notary Public, State of Florida at Large

NOTARY PUBLIC STATE OF FLORIDA
MELISSA A DARNES
Commission # GG 366942
Expires December 17, 2023
Bonded Thru Budget Notary Services

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

GULF POWER COMPANY

TESTIMONY OF MICHAEL W. SOLE

DOCKET NO. 20200007-EI

JULY 31, 2020

Q. Please state your name and address.

A. My name is Michael W. Sole 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. ("NEE") as Vice President of Environmental Services.

Q. Please describe your educational background and professional experience.

A. I received a Bachelor of Science degree in Marine Biology from the Florida Institute of Technology in 1986. I served as an Officer in the United States Marine Corps from 1985 through 1990, attaining the rank of Captain. I was employed by the Florida Department of Environmental Protection ("FDEP") in multiple roles from 1990 to 2010 and served as the Secretary of the FDEP from 2007-2010. I have been employed by NEE or its subsidiary Florida Power & Light Company ("FPL") since 2010. In November 2016, I assumed the position of Vice President of Environmental Services for NEE and its subsidiaries including Gulf Power Company ("Gulf") which was acquired by NEE in 2019. In that role, I am responsible for FPL's and Gulf's environmental licensing and compliance efforts. In May 2017, I was appointed by Governor Scott to the Florida Fish and Wildlife Conservation Commission ("FWC").

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

A. The purpose of my testimony is to explain the reasons for significant variances in costs associated with O&M expenses and capital investments which support Gulf's Environmental Cost Recovery Clause ("ECRC") actual/estimated true-up filing for the period January through December 2020. This true-up is based on five months of actual data and seven months of estimated data.

Q. Have you provided an exhibit that contains information to which you will refer in your testimony?

A. Yes, I am sponsoring the following exhibits:

- MWS-1 - Federal Coal Combustion Residuals Rule and 2018 Amendment (40 CFR Parts 257 and 261)
- MWS-2 - Mississippi PSC Order dated October 28, 2019

Q. Please explain the reasons for any significant variance in costs associated with O&M expenses and capital investments.

A. The significant variances in Gulf's 2020 recoverable O&M expenses and capital revenue requirements from projection amounts are associated with the following projects:

Capital Variance Explanations

Project 6. Substation Contamination Remediation

Project revenue requirements are $60,133, or 12.6% lower than previously projected. The variance is primarily attributed to the retirement of the Ft. Walton substation groundwater remediation system. The retirement balance was inadvertently omitted in 2019 causing an overstatement in the revenue requirement that carried forward in the 2020 Projection Filing. In addition, 2019 costs for construction of the new remediation system were lower than estimated, which impacted the revenue requirement in 2020.

Project 17. Smith Water Conservation Program

Project revenue requirements are $849,203 or 26.9% lower than previously projected. The variance is primarily due to postponing construction of the Plant Smith Underground Injection Control ("UIC") wastewater treatment system and its associated pump station from the Fall of 2020 to early 2021 due to additional time required to finalize the reclaimed water supply contract negotiations. The new treatment system and permanent pump station are required to begin using reclaimed water for Unit 3's cooling tower water supply. Gulf has completed installation of three deep injection wells, piping, and initial equipment needed for the reclaimed water pump station.

Project 28. Coal Combustion Residuals ("CCR")

Project revenue requirements are $1,658,908 or 22.1% higher than previously projected. The variance is primarily due to the addition of costs for CCR activities at Plant Daniel which were deferred from the 2020 Projection Filing pending further review and approval from the Mississippi Public Service Commission ("MPSC"). In addition, approximately $5.9 million of costs associated with ash excavation and placement for the Smith and Scholz ash pond closure projects were reclassified from O&M to capital to properly account for the deferred regulatory asset. These ash handling costs are appropriate for inclusion in the total ash pond closure costs to be amortized over the life of the project.

As noted in Gulf's 2019 and 2020 ECRC Projection Filings filed August 24, 2018 and August 30, 2019, respectively, Plant Daniel is required to construct new wastewater treatment and ash handling systems for the wastewater streams being routed to the pond (bottom ash and low volume wastewater) prior to beginning ash pond closure activities. Plant Daniel is installing a temporary wastewater treatment system for low volume wastewater streams while the plant closes and repurposes the bottom ash pond to serve as a low volume wastewater treatment pond. The Unit 1 and Unit 2 dry bottom ash conversion projects are scheduled to be placed in-service in 2020 to meet the Federal requirements provided by the Coal Combustion Residual rule located in Title 40 Code of Federal Regulations ("CFR") Parts 257 and 261 or "CCR Rule" adopted in April of 2015 and amended in July of 2018. A copy of the CCR Rule is attached as MWS-1.

Plant Daniel must cease placing CCR and non-CCR wastewater streams into the ash pond, in accordance with the CCR Rule unless Mississippi Power Company ("MPC") commits to permanent cessation of coal operations at Plant Daniel under the alternative closure requirements in 40 CFR Part 257.103. MPC has determined that early retirement of the Daniel Units 1 and 2 is not a viable compliance option due to transmission constraints and the reliability risk in the region. In addition, early retirement would require acceleration of other closure obligations.

On October 28, 2019 the MPSC issued an order finding that public convenience and necessity require the proposed Plant Daniel CCR projects. A copy of the MPSC Order, dated October 28, 2019, is attached as Exhibit MWS-2. As documented in the MPSC Order, Plant Daniel must complete the following CCR projects in sequential order to comply with the Federal CCR requirements; 1) conversion of the bottom ash collection systems to new systems that will not require use of the ash pond for the discharge of any CCR waste stream, 2) closure of the ash pond by removing all CCR material, and 3) construction of a new low-volume wastewater treatment system on the site of the former ash pond. The ash pond closure must be completed within five years of the commencement of closure activities pursuant to 40 CFR Part 257.102 unless the facility demonstrates that it was not feasible to complete closure within the required timeframes due to factors beyond the facility's control.

The Gulf Power CCR Program was approved for recovery through the ECRC in PSC Order No. 15-0536-FOF-EI, with the reasonableness and prudence of individual project expenditures subject to the Commission's review in future proceedings. The Daniel CCR wastewater treatment and bottom ash handling costs originally projected for the 2019 timeframe were included in Gulf's ECRC jurisdictional revenue requirements approved in PSC Order No. 2018-0594-FOF-EI. As noted in Gulf Witness Markey's 2019 ECRC Projection testimony, Plant Daniel will need "to construct a new wastewater treatment and ash handling system" prior to beginning closure activities. Gulf included capital expenditures for the Daniel CCR projects in its 2019 Projection Filing; however, the projects were subsequently delayed until 2020 due to timing of vendor selection and equipment fabrication.

As explained in Gulf Witness Markey's 2020 ECRC Projection Testimony, Plant Daniel dry bottom ash handling projects are scheduled to be placed in-service in

2020 in order to meet the Federal CCR requirement to cease receipt of CCR and non-CCR wastestreams (40 CFR Part 257.101). Gulf has projected $19.1 million of ECRC capital expenditures for the Daniel CCR projects and $3.3 million for cost of removal for the Daniel ash pond closure in the 2020 Actual/Estimated filing. The Daniel CCR project meets the criteria for cost recovery established by the Commission in Order No. PSC-94-0044-FOF-EI in that the costs associated with it are not recovered through any other cost recovery mechanism or through base rates and will be incurred after April 13, 1993. In addition, the Daniel CCR projects are necessary to ensure compliance with the Federal CCR Rule, which is legally mandated under a governmentally imposed environmental regulation.

Project 30. 316(b) Cooling Water Intake Structure Regulation

Project revenue requirements are $97,137 or 45.9% lower than previously projected. The variance is primarily due to delays associated with replacing the Plant Smith intake pumps with new lower capacity pumps. Gulf initially planned to place the new pumps in-service in March 2020; however, the replacement was re-scheduled to January 2021 in order to coordinate with other projects.

O&M Variance Explanations

Project 6. General Water Quality

Project expenditures are $284,645 or 18.5% lower than previously projected. The variance is primarily due to costs for Plant Smith's industrial wastewater permit renewal being less than originally projected and costs for Plant Daniel's groundwater monitoring being lower than previously projected. In addition, Plant Crist was not able to complete the Spring 2020 thermal study due to Units 4 and 5 being offline during the sampling period. The variance was partially offset by costs projected for modification of the Plant Scholz stormwater pond and additional Plant Scholz wastewater sampling expenses.

Project 19. FDEP NOx Reduction Agreement

Project expenditures are $333,411 or 59.5% lower than previously projected. The variance is primarily due to maintenance costs associated with the Crist Unit 7 Selective Catalytic Reduction ("SCR") project being less than originally projected.

Project 22. Crist Water Conservation

Project expenditures are $162,508 or 353.4% higher than previously projected. The variance is due to chemical and maintenance costs associated with Plant Crist's reclaimed water system being greater than originally projected. These costs are associated with replacing the reclaimed water line air relief valves, dispersant tank, as well as acid lines which were originally scheduled to be replaced during the Fall 2019.

Project 23. Coal Combustion Residuals

Project expenditures are $5,865,228 or 85.4% lower than previously projected. The variance is primarily due to reclassification of ash handling costs required for the Smith and Scholz ash pond closure projects as discussed above.

Q. Does this conclude your testimony?

A. Yes.

AFFIDAVIT

STATE OF FLORIDA)
)
COUNTY OF ESCAMBIA)

Docket No. 20200007-EI

Before me, the undersigned authority, personally appeared Michael W. Sole, who being first duly sworn, deposes and says that he is the Vice President of Environmental Services of Gulf Power Company, a Florida corporation, that the foregoing is true and correct to the best of his knowledge and belief. He is personally known to me.

Michael W. Sole
Vice President, Environmental Services

Sworn to and subscribed before me by means of ✓ physical presence or ____ online notarization this 30th day of July, 2020.

Laura Beth McCarthy
Notary Public, State of Florida at Large

LAURA BETH MCCARTHY
Notary Public - State of Florida
Commission # GG 938319
My Comm. Expires Dec 9, 2023
Bonded through National Notary Assn.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

GULF POWER COMPANY

TESTIMONY OF MICHAEL W. SOLE

DOCKET NO. 20200007-EI

AUGUST 28, 2020

Q. Please state your name and address.

A. My name is Michael W. Sole 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 filed testimony in this docket?

A. Yes.

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 exhibit I am co-sponsoring in this docket.

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

A. I am co-sponsoring Gulf's Project Progress Reports, which are also co-sponsored by Gulf witness Richard L. Hume and are included in Exhibit RLH-3 as Form 42-5P.

Q. Please briefly describe Form 42-5P.

A. Form 42-5P provides the description and progress of Gulf's Commission-approved ECRC projects.

Q. Does this conclude your testimony?

A. Yes, it does.

AFFIDAVIT

STATE OF FLORIDA)
)
COUNTY OF ESCAMBIA)

Docket No. 20200007-EI

Before me, the undersigned authority, personally appeared Michael W. Sole, who being first duly sworn, deposes and says that he is the Vice President of Environmental Services of Gulf Power Company, a Florida corporation, that the foregoing is true and correct to the best of his knowledge and belief. He is personally known to me.

Michael W. Sole
Vice President, Environmental Services

Sworn to and subscribed before me by means of ✓ physical presence or ____ online notarization this 27th day of august, 2020.

Laura Beth McCarthy
Notary Public, State of Florida at Large

LAURA BETH MCCARTHY
Notary Public - State of Florida
Commission # GG 938319
My Comm. Expires Dec 9, 2023
Bonded through National Notary Assn.

(Whereupon, prefiled direct testimony of Christopher Menendez was inserted.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

CHRISTOPHER MENENDEZ

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20200007-EI

April 1, 2020

Q. Please state your name and business address.

A. My name is Christopher Menendez. 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 Director.

Q. What are your responsibilities in that position?

A. I am responsible for regulatory planning and cost recovery for DEF as well as Open Access Transmission Tariff ("OATT") filings with the Federal Energy Regulatory Commission ("FERC"). These responsibilities include: regulatory financial reports and analysis of state, federal and local regulations and their impact on DEF. In this capacity, I am also responsible for DEF's True-up, Actual/Estimated and Projection filings in the Environmental Cost Recovery Clause docket ("ECRC").

Q. Please describe your educational background and professional experience.

A. I joined the Company on April 7, 2008 as a Senior Financial Specialist in the Florida Planning & Strategy group. In that capacity, I supported the development of long-term financial forecasts and the development of current-year monthly earnings and cash flow projections. In 2011, I accepted a position as a Senior Business Financial Analyst in the Power Generation Florida Finance organization. In that capacity, I provided accounting and financial analysis support to various generation facilities in DEF's Fossil fleet. In 2013, I accepted a position as a Senior Regulatory Specialist. In that capacity, I supported the preparation of testimony and exhibits for the Fuel Docket as well as other Commission Dockets. In October 2014, I was promoted to Rates and Regulatory Strategy Manager, and in February 2020, I was promoted to my current position. Prior to working at DEF, I was the Manager of Inventory Accounting and Control for North American Operations at Cott Beverages. In this role, I was responsible for inventory-related accounting and inventory control functions for Cott-owned manufacturing plants in the United States and Canada. I received a Bachelor of Science degree in Accounting from the University of South Florida, and I am a Certified Public Accountant in the State of Florida.

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 2019 - December 2019.

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

A. Yes. I am sponsoring Exhibit No.___ CAM-1, that consists of nine forms, and Exhibit No.___ CAM-2, that provides details of four capital projects by site.

Exhibit No.___ CAM-1 consists of the following:

- Form 42-1A: Final true-up for the period January 2019 - December 2019.
- 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 1-18: Calculation of return on capital investment, depreciation expense and property tax expense for each project recovered through the ECRC.

- Form 42-9A: DEF's capital structure and cost rates.

Exhibit No.___ CAM-2 consists of detailed support for the following capital projects:

- Pipeline Integrity Management (Capital Program Detail (CPD), pages 2-3)
- Above Ground Storage Tank Secondary Containment (CPD, pages 4-9)
- Clean Air Interstate Rule (CAIR) Combustion Turbines (CTs)(CPD, pages 10-13)
- CAIR-Crystal River Units 4 & 5 (CPD, pages 14-15)

These exhibits were developed under my supervision and they are true and accurate.

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

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

Q. What is the final true-up amount DEF is requesting for the period January 2019 - December 2019?

A. DEF requests approval of an over-recovery amount of $14,873,567 for the year ending December 31, 2019. 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 2019 - December 2019 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 under-recovery amount of $1,792,439 for the period January 2019 - December 2019 reflected on Line 3 of Form 42-1A. This amount is the difference between an actual over-recovery amount of $14,873,567 and an actual/estimated over-recovery of $16,666,006 for the period January 2019 - December 2019, as approved in Order PSC-2019-0500-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 2019 - December 2019 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 $407,790 or 1% lower than projected. Individual O&M project variances are on Form 42-4A. Explanations associated with variances are contained in the direct testimonies of Timothy Hill, Kim McDaniel, and Jeffrey Swartz.

Q. How did actual capital recoverable expenditures for January 2019 - December 2019 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 $192,971 or 1% lower 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 1-18. Explanations associated with variances are contained in the direct testimonies of Timothy Hill, Kim McDaniel, and Jeffrey Swartz.

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 $5,718 or 36% lower than projected. This is primarily due to lower than expected SO_2 Allowance expense.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

CHRISTOPHER A. MENENDEZ

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20200007-EI

July 31, 2020

Q. Please state your name and business address.

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

Q. Have you previously filed testimony before this Commission in Docket No. 20200007-EI?

A. Yes, I provided direct testimony on April 1, 2020.

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's ("DEF") actual/estimated true-up costs associated with environmental compliance activities for the period January 2020 through December 2020. I also explain the variance between 2020 actual/estimated cost projections versus original 2020 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 exhibits:

1. Exhibit No. __CAM-3, which consists of PSC Forms 42-1E through 42-9E; and
2. Exhibit No. __CAM-4, which provides details of capital projects by site.

These exhibits provide detail on DEF's actual/estimated true-up capital and O&M environmental costs and revenue requirements for the period January 2020 through December 2020.

Q. What is the actual/estimated true-up amount for which DEF is requesting recovery for the period of January 2020 through December 2020?

A. The 2020 actual/estimated true-up is an over-recovery, including interest, of $8,097,179 as shown on Form 42-1E, line 4. The final 2019 true-up under-recovery of $1,792,439 as shown on Form 42-2E, Line 7a, is subtracted from this total, resulting in a net over-recovery of $6,304,739 as shown on Form 42-2E, Line 11. The calculations supporting the 2020 actual/estimated true-up are on Forms 42-1E through 42-8E.

Q. What capital structure, components and cost rates did DEF rely on to calculate the revenue requirement rate of return for the period January 2020 through December 2020?

A. The capital structure, components and cost rates relied on to calculate the revenue requirement rate of return for the period January 2020 through December 2020 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 2020 through December 2020 compare with original projections?

A. Form 42-4E shows that total O&M project costs are estimated to be $18,876,329. This is $6.1M, or 24% lower than originally projected. This form also lists individual O&M project variances. Explanations for these variances are included in the direct testimonies of Timothy Hill, Kim McDaniel, and Jeffrey Swartz.

Q. How do estimated/actual capital recoverable costs for January 2020 through December 2020 compare with DEF's original projections?

A. Form 42-6E shows that total recoverable capital costs are estimated to be $26,624,734. This is $854k or 3% lower 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 17. Explanations for these variances are included in the direct testimonies of Mr. Hill, Ms. McDaniel, and Mr. Swartz.

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 $11,252 or 76% lower than projected due to lower than projected SO2 allowance expense.

Q. Please describe DEF's treatment of the Crystal River South ECRC assets.

A. In December 2020, DEF reflects the retirement of these assets in Project 4.2 (Above Ground Tank Secondary Containment) and Project 17.2 (Mercury & Air Toxic Standards – Crystal River 1&2). This is consistent with the treatment of Crystal River South assets in DEF's 2017 Settlement, as approved in Order No. PSC-2017-0451-AS-EU. Per DEF's 2017 Settlement, "…DEF shall be permitted to continue the annual depreciation expense and depreciation rate associated with CRS based on the last Commission-approved depreciation study, which assumed a 2020 CRS retirement date. DEF shall be permitted to recover in 2021, unless a different time for recovery is agreed to by the Original Parties, any remaining CRS net book value existing as of December 31, 2020 through the CCR Clause." DEF therefore reflects the retirement of these assets in the

December 2020 ECRC schedules, which will facilitate the transition of these ECRC unrecovered costs to the net book value regulatory asset to be collected through the Capacity Cost Recovery Clause and included in the 2021 Projection Filing, consistent with DEFs 2017 Settlement as described above.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

CHRISTOPHER A. MENENDEZ

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20200007-EI

August 28, 2020

Q. Please state your name and business address.

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

Q. Have you previously filed testimony before this Commission in Docket No. 20200007-EI?

A. Yes. I provided direct testimony on April 1, 2020, and July 31, 2020.

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 2021 through December 2021. My testimony also addresses capital and O&M expenses for DEF's environmental compliance activities for the year 2021.

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 exhibits:

1. Exhibit No. __(CAM-5), which consists of PSC Forms 42-1P through 42-8P; and
2. Exhibit No. __(CAM-6), which provides details of capital projects.

The individuals listed below are co-sponsors of Forms 42-5P pages 1-4 and 6-23 as indicated in their direct testimony. I am sponsoring Form 42-5P page 5.

- Ms. McDaniel will co-sponsor Forms 42-5P pages 1-4, 6 and 8-20.
- Mr. Swartz and Ms. McDaniel will co-sponsor Form 42-5P page 7.
- Mr. Swartz will co-sponsor Form 42-5P pages 21 and 22.
- Mr. Hill will co-sponsor Form 42-5P page 23.

Q. Please summarize your testimony.

A. My testimony supports the approval of an average ECRC billing factor of 0.097 cents per kWh which includes projected jurisdictional capital and O&M revenue requirements for the period January 2021 through December 2021 of approximately $44.7 million associated with a total of 18 environmental projects, and a true-up over-recovery provision of approximately $6.3 million from prior periods. My testimony also supports that projected environmental expenditures for 2021 are appropriate for recovery through the ECRC.

Q. What is the total recoverable revenue requirement for the period January 2021 through December 2021?

A. The total recoverable revenue requirement including true-up amounts and revenue taxes is approximately $38.4 million as shown on Form 42-1P line 5 of Exhibit No. __(CAM-5).

Q. What is the total true-up to be applied for the period January 2021 through December 2021?

A. The total true-up applicable to this period is an over-recovery of approximately $6.3 million. This amount consists of the final true-up under-recovery of approximately $1.8 million for the period January 2019 through December 2019, and an estimated true-up over-recovery of approximately $8.1 million for the current period of January 2020 through December 2020. The detailed calculation supporting the 2020 estimated true-up was provided on Forms 42-1E through 42-8E of Exhibit No. __ (CAM-3) filed with the Commission on July 31, 2020.

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, the following ECRC programs were previously approved by the Commission:

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 and PSC-2018-0014-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 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 Nos. 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. Does DEF's Weighted Average Cost of Capital ("WACC") comply with Order No. PSC-2020-0165-PAA-EU?

A. Yes. The WACC complies with the Amended Unopposed Joint Motion to Modify Order No. PSC-2012-0425-PAA-EU regarding Weighted Average Cost of Capital Methodology approved May 20, 2020 in Docket No. 20200118-EU, Order No. PSC-2020-0165-PAA-EU.

Q. Have you prepared schedules showing the calculation of the recoverable O&M project costs for 2021?

A. Yes. Form 42-2P of Exhibit No. __ (CAM-5) summarizes recoverable jurisdictional O&M cost estimates for these projects of approximately $21.2 million.

Q. Have you prepared schedules showing the calculation of the recoverable capital project costs for 2021?

A. Yes. Form 42-3P of Exhibit No. __ (CAM-5) summarizes recoverable jurisdictional capital cost estimates for these projects of approximately $23.5 million. Form 42-4P pages 1 through 18 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 23 of Exhibit No. __ (CAM-5) provide a description, progress summary and recoverable cost estimates for each project.

Q. What are the total projected jurisdictional costs for environmental compliance projects for the year 2021?

A. The total jurisdictional capital and O&M costs to be recovered through the ECRC are approximately $44.7 million. The costs are calculated on Form 42-1P line 1c of Exhibit No. __ (CAM-5).

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. __(CAM-5). 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 in July 2018. 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 2021 ECRC billing factors by the various rate classes and delivery voltages?

A. The calculation of DEF's proposed ECRC factors for 2021 customer billings is shown on Form 42-7P in Exhibit No. __(CAM-5) as follows:

RATE CLASS	ECRC FACTORS
Residential	0.099 cents/kWh
General Service Non-Demand	
@ Secondary Voltage	0.098 cents/kWh
@ Primary Voltage	0.097 cents/kWh
@ Transmission Voltage	0.096 cents/kWh
General Service 100% Load Factor	0.095 cents/kWh
General Service Demand	
@ Secondary Voltage	0.096 cents/kWh
@ Primary Voltage	0.095 cents/kWh
@ Transmission Voltage	0.094 cents/kWh
Curtailable	
@ Secondary Voltage	0.091 cents/kWh
@ Primary Voltage	0.090 cents/kWh
@ Transmission Voltage	0.089 cents/kWh
Interruptible	
@ Secondary Voltage	0.093 cents/kWh
@ Primary Voltage	0.092 cents/kWh
@ Transmission Voltage	0.091 cents/kWh
Lighting	0.091 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 bill group for January 2021 and continue through the last bill group for December 2021.

Q. Does this conclude your testimony?

A. Yes.

(Whereupon, prefiled direct testimony of Timothy Hill was inserted.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

TIMOTHY HILL

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC.

DOCKET NO. 20200007-EI

April 1, 2020

Q. Please state your name and business address.

A. My name is Timothy Hill. 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 Regional 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 all CCP facilities in the Western 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 Nuclear Engineering from the University of Florida and a Master of Science degree from the University of Central Florida. I have 17 years of experience in the power generation industry including positions as an Engineering Manager, a Maintenance Manager, and a Plant Manager within Duke Energy's fossil fleet, and as Fleet and Harris Station Maintenance Manager in Duke Energy's nuclear fleet. Prior to joining Duke Energy I was employed by Delta Air Lines as a General Manager in Engineering and Maintenance, and prior to that I served 21 years as a commissioned officer in the U.S. Navy, serving in the nuclear fleet. In November of 2014, 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 provide an update on DEF's 2019 Coal Combustion Residual ("CCR") Rule compliance activities and associated 2019 compliance costs for which the Company seeks recovery through the Environmental Cost Recovery Clause ("ECRC").

Q. How did actual O&M project expenditures for the period January 2019 – December 2019 compare to actual/estimated O&M projections for the CCR Rule (Project 18)?

A. The CCR Rule O&M variance is $102,200 or 5% higher than projected. This is primarily due to higher than expected costs for the final grading and drainage required to complete the FGD pond closure project.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

TIMOTHY HILL

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20200007-EI

August 28, 2020

Q. Please state your name and business address.

A. My name is Timothy Hill. My business address is 400 South Tryon Street, Charlotte, NC 28202.

Q. Have you previously filed testimony before this Commission in Docket No. 20200007-EI?

A. Yes. I provided direct testimony on April 1, 2020 and July 31, 2020.

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 2021 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. __ (CAM-5) to Christopher A. Menendez's direct testimony:

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

Q. What are the CCR rule compliance activities and associated costs for which DEF is seeking recovery in 2021?

A. Ash Landfill O&M Costs

DEF is forecasting $278,000 in O&M costs for 2021.

Various maintenance and repair work are required for the ash landfill to comply with the rule. These include fixing ruts and animal burrows, vegetation management, erosion repairs, fugitive dust mitigation, and routine weekly inspections. DEF will also continue to perform the required groundwater monitoring for ash management units, which includes engineering, sampling, analysis, and reporting.

Ash Landfill Capital Costs

DEF is forecasting $250,000 in capital costs for completion of the construction of a new lined basin / ditch area as a corrective measure to address groundwater quality impacts. This work will begin in 2020 and should be complete in the first quarter of 2021.

Q. Are there any other CCR rule compliance activities and costs for which DEF expects to seek recovery in 2021?

A. DEF continues to evaluate the CCR rule to determine operating and cost impacts and expects to incur costs in 2021 and beyond. Additional compliance activities may be required as a result of ongoing groundwater quality monitoring to evaluate the effectiveness of the corrective measures implemented in 2020 and completed in 2021. As these monitoring and evaluation activities are completed, and if any additional compliance activities and costs become known, DEF will update the Commission and provide the costs for recovery, as appropriate, in later ECRC filings.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

TIMOTHY HILL

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20200007-EI

July 31, 2020

Q. Please state your name and business address.

A. My name is Timothy Hill. My business address is 400 South Tryon Street, Charlotte, NC 28202.

Q. By whom are you employed?

A. I am employed by Duke Energy Corporation ("Duke Energy") as Regional 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. 20200007-EI?

A. Yes, I provided direct testimony on April 1, 2020.

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 2020 actual/estimated cost projections and original 2020 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 2020 through December 2020.

A. O&M expenditures for CCR are expected to be $676,328 or 281% higher than projected. This is primarily due to remediating the ash landfill ditches and stormwater ponds by removing sediment CCR contributing to groundwater exceedances, as required by the 2019 Assessment of Corrective Measures ("ACM") per the Federal CCR Rule. This work is part of DEF's Ash Landfill project, which is discussed more fully below.

Q. Please explain the Capital variance between actual/estimated project expenditures and original projections for CCR (Project 18) Capital for the period January 2020 through December 2020.

A. Capital expenditures for CCR are expected to be $1,299,780 higher than projected. This is primarily due to the start of engineering and construction of a lined sedimentation basin and stormwater conveyance ditch for the ash landfill. This will substantially reduce further sedimentation of CCR into the ash landfill ditches and stormwater ponds, as required by the 2019 ACM per the Federal CCR Rule. As noted in previous testimonies and approved in Order PSC-2019-0500-FOF-EI, DEF was waiting for a feasibility study of options covered by the ACM and is now moving forward with implementation of the selected corrective action measures. This work is part of DEF's Ash Landfill project, which is discussed more fully below.

Q. Please provide an update on the CCR Ash Landfill project

A. On July 3, 2019, DEF notified the Commission of a new ECRC project for the CCR Ash Landfill. In Order PSC-2019-0500-FOF-EI, the Commission approved the Ash Landfill project as recoverable through ECRC. In 2020, DEF will remediate the perimeter ditch to remove accumulated CCR materials. This includes the construction of a new lined basin / ditch area that would prevent future material accumulation. DEF expects to complete this work in 2020. DEFs initial cost estimates to implement this work are approximately $617k in O&M and $1.3M capital. These are based on preliminary engineering and design and may change as additional engineering and design work is completed.

In addition to the work above, DEF will continue to monitor natural attenuation of the constituents of interest. DEF will continue to monitor the success of current remediation efforts and will update this project should additional remediation activities be required to meet compliance.

Q. Does this conclude your testimony?

A. Yes.

(Whereupon, prefiled direct testimony of Jeffrey Swartz was inserted.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

JEFFREY SWARTZ

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20200007-EI

April 1, 2020

Q. Please state your name and business address.

A. My name is Jeffrey Swartz. My business address is 8202 W. Venable St, Crystal River, FL 34429.

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 – Fossil/Hydro Operations Florida.

Q. What are your responsibilities in that position?

A. As Vice President of DEF's Fossil/Hydro 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 Mechanical Engineering from the United States Naval Academy in 1985. I have 19 years of power plant and production experience at Duke Energy in various managerial and executive positions in fossil steam, combustion turbine and nuclear plant operations. I also managed new construction and O&M projects. I have extensive contract negotiation and management experience. My prior experience includes nuclear engineering and operations experience in the United States Navy, and project management, engineering, supervisory and management oversight experience with a pulp, paper and chemical manufacturing company.

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") - Anclote Gas Conversion Project (Project 17.1), and Mercury & Air Toxics Standards (MATS) – CR 1&2 (Project 17.2) for the period January 2019 - December 2019.

Q. How do actual O&M expenditures for January 2019 - December 2019 compare with DEF's actual/estimated projections for the Clean Air Interstate Rule/Clean Air Mercury Rule (CAIR/CAMR) Crystal River Program (Project 7.4)?

A. The CAIR/CAMR Crystal River O&M variance is $523,683 or 2% lower than projected. This variance is primarily attributable to $926k lower than expected CAIR Crystal River – Base, and a $149k lower than expected CAIR Crystal River – Energy (Reagents). This was partially offset by a $559k higher than expected CAIR Crystal River – Conditions of Certification Energy costs.

Q. Please explain the O&M variance between actual project expenditures and actual/estimated projections for the CAIR Crystal River Project – Base for January 2019 - December 2019?

A. O&M costs for CAIR Crystal River Project – Base were $926,227 or 6% lower than projected. This was primarily due to approximately $430k in lower than projected expenses for contracts primarily related to limestone handling, monitor/control equipment repairs, gypsum dewatering, and ammonia system repairs. Approximately $296k was due to the timing of filling labor vacancies and approximately $200k from material expenses due to reduced part repairs.

Q: Please explain the O&M variance between actual project expenditures and actual/estimated projections for the CAIR Crystal River Project – Conditions of Certification (Project 7.4) for January 2019 - December 2019?

A: O&M costs for CAIR Crystal River Project – Conditions of Certification were $559,410 or 61% higher than projected. This was primarily due to higher waste water disposal and bulk chemical costs.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

JEFFREY SWARTZ

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20200007-EI

July 31, 2020

Q. Please state your name and business address.

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

Q. Have you previously filed testimony before this Commission in Docket No. 20200007-EI?

A. Yes, I provided direct testimony on April 1, 2020.

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 2020 actual/estimated cost projections and original 2020 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) and Mercury & Air Toxics Standards (MATS) – Crystal River 1&2 Program (Project 17.2).

Q. How do actual/estimated O&M project expenditures compare with original projections for the CAIR/CAMR CR Program (Project 7.4) for the period January 2020 through December 2020?

A. O&M expenditures are expected to be $6,393,400 or 28% lower than originally projected. This projected variance is primarily due to $3M lower than originally projected CAIR-Base costs, $1.4M lower than originally projected CAIR-Energy (Reagents), and $1.9M lower than originally projected CAIR-Conditions of Certification (Energy).

Q. Please explain the variance between actual/estimated O&M expenditures and the original projections for O&M expenditures for the CAIR/CAMR CR-Base Program (Project 7.4) for the period January 2020 through December 2020?

A. O&M expenditures for the CAIR/CAMR CR-Base Program are expected to be $3,032,195 or 22% lower than originally forecasted. This is primarily due to generation run times at CR 4 and 5 forecasted to be lower than originally projected.

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 2020 through December 2020?

A. O&M expenditures for the CAIR/CAMR CR-Energy (Reagents) Program are expected to be $1,416,520 or 25% lower than originally forecasted. This variance consists of lower expenses for Ammonia ($378k), Limestone ($316k), Gypsum Sale/Disposal ($477k) and Hydrated Lime ($239k). These are all primarily due to lower than projected generation at CR units 4 and 5.

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 A&G Program (Project 7.4) for the period January 2020 through December 2020?

A. O&M expenditures for the CAIR/CAMR CR – A&G Program are expected to be $27,879 or 29% lower than originally forecasted. This is primarily due to less A&G time being charged to ECRC than originally forecasted.

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 (Conditions of Certification) Program (Project 7.4) for the period January 2020 through December 2020?

A. O&M expenditures for the CAIR/CAMR CR-Energy (Conditions of Certification) Program are expected to be $1,916,806 or 66% lower than originally forecasted. This is primarily due to lower than projected generation at CR units 4 and 5.

Q. How do actual/estimated Capital project expenditures compare with original projections for the CAIR/CAMR CR (Conditions of Certification) Program (Project 7.4q) for the period January 2020 through December 2020?

A. Capital expenditures for the CAIR/CAMR CR (Conditions of Certification) Program are expected to be $157,716 higher than originally projected. There were no charges forecasted for 2020, but due to wildlife issues (alligator in and around the tank) and a 2019 invoice payment occurring in January 2020, there were some final 2020 costs. No further charges are expected.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

JEFFREY SWARTZ

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20200007-EI

August 28, 2020

Q. Please state your name and business address.

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

Q. Have you previously filed testimony before this Commission in Docket No. 20200007-EI?

A. Yes. I provided direct testimony on April 1, 2020 and July 31, 2020.

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 costs that will be incurred in 2021 for Duke Energy Florida LLC's ("DEF" or "Company") Integrated Clean Air Compliance Program (Project 7.4), Mercury and Air Toxics Standards

(MATS) Program – Anclote Gas Conversion (Project 17.1), and Mercury and Air Toxics Standards (MATS) Program – Crystal River Units 1 & 2 (CR1&2) (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 sponsoring Exhibit No.__ (JS-1), which is an organization chart for DEF's Crystal River Clean Air Projects. I am also co-sponsoring the following portions of Exhibit No. __ (CAM-5) to Christopher A. Menendez's direct testimony:

- 42-5P page 7 of 23 – Clean Air Interstate Rule (CAIR)
- 42-5P page 21 of 23 – MATS Anclote Gas Conversion
- 42-5P page 22 of 23 – MATS Program – CR1&2

Q. What O&M costs does DEF expect to incur in 2021 for air emission controls at Crystal River Units 4 and 5 (CR4&5) as part of the Integrated Clean Air Compliance Program (Project 7.4)?

A. DEF estimates O&M costs of approximately $21.6M to support the operation and maintenance of air emissions controls that were installed at the CR Energy Complex ("CREC") as outlined in DEF's Integrated Clean Air Compliance Plan as follows:

- Labor costs are estimated at $6.6M based on current staffing levels, including labor for the CRN FGD Wastewater Treatment ("WWT") project.

- Contractor expenses are estimated at $4.5M for various services and include contractor costs associated with the WWT.
- Parts and materials are estimated at $1.9M.
- CR5 outage costs are estimated at $1.8M.
- Reagent and bi-product costs (ammonia, limestone, hydrated lime, caustic, dibasic acid and net gypsum sales/disposal) are estimated to total $6.8M.

Q. What steps does DEF take to ensure that the level of expenditures for the operation of CR4&5 controls is reasonable and prudent?

A. Plant management controls and monitors operations and costs using several methods. Work is scheduled and conducted proactively and efficiently. Costs are approved by the appropriate level of management per existing Company policies. All expenditures are monitored on a monthly basis, and budget variances are analyzed for accuracy and appropriateness.

Q. Please discuss the organization being used to operate and maintain the CAIR and WWT equipment?

A. The Company established a dedicated unit to manage, operate and maintain the CAIR equipment as shown by the effective organizational staffing chart on Exhibit__(JS-1). This exhibit illustrates the 45 equivalent positions that report to the Crystal River North Station Manager and 1 that reports to the Director-Florida Fossil-Hydro-Finance. There are 5 manager positions and 40 maintenance, operations and support positions, reflecting DEF's staffing efficiency improvements. The operators work rotating shifts in order to staff the operations of CREC 24 hours per day. The maintenance staff primarily work days, but shift positions are available to work when needed. In an effort to keep regular staffing levels low, contractors are used for specialized or lower-skilled work which minimizes overall operation and maintenance costs.

Q. Are there policies and procedures in place to efficiently operate and maintain the CAIR equipment?

A. Yes. There are several different policies and procedures used to efficiently operate and maintain the CAIR equipment. First and foremost, the plant adheres to all OSHA and Company safety-related policies and procedures. It also follows operations and maintenance procedures during startups, shutdowns, steady state situations and transient scenarios. All employees are trained to respond effectively to many different operating scenarios as part of these procedures. The procedures were developed during construction and startup and continues to be revised as more experience and expertise is gained with the equipment.

The plant uses existing corporate-wide policies and procedures to efficiently conduct business such as human resources (hiring, compensation, and performance management), supply chain management (purchasing, contracting, and inventory) and information technology (NERC Critical Infrastructure Protection).

Q. Are personnel operating and maintaining this equipment trained in these policies and procedures?

A. Yes. Personnel selected to operate and maintain CAIR equipment are required to meet job-related qualifications for specific positions. Some operation employees are hired from outside companies and have previous experience operating this type of equipment at other utilities. Other operation employees are selected to participate in an in-house apprentice program. These employees must complete a 2 to 4-year training program before they are fully qualified workers. This training includes a mix of classroom and hands-on training that helps employees progress through different levels of task proficiency. Maintenance employees are selected based on their skills and experience and are provided equipment-specific training to optimize equipment maintenance.

Equipment-specific training was conducted during the construction and start-up phase of the project and continues as major equipment overhauls are performed. This training included equipment walk-downs, discussions with vendor representatives and hands-on operating and maintenance work performed under the supervision of qualified individuals.

From a business process standpoint, CAIR employees are trained on policies and procedures using several different methods that include required reading and review of the policies and procedures, small group discussions, one-on-one interaction with subject matter experts, computer-based training and on-the-job task training.

Q. Does the Company have controls in place to ensure these policies and procedures are followed?

A. DEF ensures compliance with policies and procedures through management controls, equipment round checklists, procedure signoffs and internal audits. The level of controls is based on the particular policy or procedure.

Q. Are there any other mechanisms in place to ensure proper operation and maintenance of CAIR equipment?

A. Along with the above methods, prudent engineering judgment and industry standards are used to ensure proper operation and maintenance of CAIR equipment. The FGD Engineer (System Owner) works directly with operations and maintenance personnel to ensure that systems are working in accordance with design parameters.

Routine maintenance is performed on a regular and on-going basis. In addition, specialized inspection and maintenance work is conducted during scheduled unit and equipment outages. These specialized work activities are identified and refined as the Company gains more operational experience with the equipment.

Q. Does this conclude your testimony?

A. Yes.

(Whereupon, prefiled direct testimony of Kim Spence McDaniel was inserted.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

KIM SPENCE McDANIEL

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20200007-EI

April 1, 2020

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 (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) (Projects 6 & 6a), 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), National Pollutant Discharge Elimination System ("NPDES") (Project 16) and Mercury and Air Toxics Standards ("MATS") – Crystal River ("CR") Units 4&5 (Project 17) for the period January 2018 through December 2018.

Q. How did actual O&M expenditures for January 2019 - December 2019 compare with DEF's actual/estimated projections for the Transmission & Distribution Substation Environmental Investigation, Remediation, and Pollution Prevention Projects (Projects 1 & 1a)?

A. The Substation System Program variance is $118,903 or 19% higher than projected. The Transmission portion (Project 1) is $113k or 18% higher than forecasted primarily due to costs associated with the East Clearwater, Central Florida, Holder, Tarpon Springs, and Windermere Substations. These costs are for final remediation, additional groundwater testing, final reports preparation and submittals. Additional costs were also incurred due to a new request by FDEP to collect two additional groundwater samples for two consecutive clean test results for every well at the remaining sites with groundwater impacts.

A Declaration of Restrictive Covenant was prepared and submitted for Central Florida Substation.

The Distribution portion (Project 1a) is $6k or 46% higher than forecasted primarily due to final remediation work, additional groundwater testing, report preparation and submittal for the Wekiva Substation.

Q. How did actual O&M expenditures for January 2019 - December 2019 compare with DEF's actual/estimated projections for the Distribution System Environmental Investigation, Remediation, and Pollution Prevention Project (Project 2)?

A. The Distribution System Environmental Investigation, Remediation, and Pollution Prevention Project variance is $2,461 or 33% higher than projected. This is due to the delayed receipt of invoices for final report and closure document preparation that occurred in 2018; causing charges for the work to hit in 2019.

Q. How did actual O&M expenditures for January 2019 - December 2019 compare with DEF's actual/estimated projections for the Cooling Water Intake - 316(b) Project (Projects 6 & 6a)?

A. The Cooling Water Intake - 316(b) (Projects 6 & 6a) O&M variance is $98,231 or 14% higher than projected. Cooling Water Intake 316(b) – Base (Project 6), which had a $68k or 21% higher than projected variance primarily due to expanded analysis and 316(b) modeling requirements associated with the Bartow Station.

Q. How did actual O&M expenditures for January 2019 - December 2019 compare with DEF's actual/estimated projections for the Arsenic Groundwater Standard – Base - Project (Project 8)?

A. The Arsenic Groundwater Standard O&M variance is $50,085 or 33% lower than projected primarily due to the installation of two additional monitoring wells which, following FDEP comments, resulted in a schedule and cost shift for some tasks originally scheduled for 2019 into 2020.

Q. How did actual Capital expenditures for January 2019 - December 2019 compare with DEF's actual/estimated projections for the Sea Turtle – Coastal Street Lighting Project (Project 9)?

A. The Sea Turtle – Coastal Street Lighting Project capital variance is $400, or 100% lower than forecasted. No municipalities requested Sea-Turtle Lighting in 2019.

Q. How did actual Capital expenditures for January 2019 - December 2019 compare with DEF's actual/estimated projections for the Effluent Limitations Guideline Project (Project 15.1)?

A. The ELG Capital variance is $235,602, or 13% higher than originally forecasted. This is primarily due to actual bids that came in higher than originally estimated, and additional costs due to several storms passing through as new trenches were being constructed, causing work to be expedited to meet year-end FDEP compliance requirements.

Q. How did actual O&M expenditures for January 2019 - December 2019 compare with DEF's actual/estimated projections for the National Pollutant Discharge Elimination System (NPDES) Project (Project 16)?

A. The NPDES variance is $3,529 or 13% higher than forecasted, primarily due to a charge inadvertently hitting the project in 2019, which was caught and reversed February 2020. Bartow WET testing was conducted in early 2019 in order to obtain FDEP approval for the use of an antifouling agent. These costs totaling $7,733 were charged to ECRC in 2019. It was subsequently determined that the initial WET tests costs of $7,733 required to obtain approval for the use of the antifouling agent should not have been charged to ECRC due to the fact that they were not part of the routine annual WET testing. DEF identified the erroneous charge in February 2020 and a credit of $7,733 was applied to NPDES Project (Project 16).

Q. How did actual O&M expenditures for January 2019 - December 2019 compare with DEF's actual/estimated projections for the MATS – CR 4&5 Project (Project 17)?

A. The MATS – CR 4&5 O&M variance is $153,628 or 94% lower than forecasted, primarily due to units running less than projected.

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. Please summarize the conclusions of DEF's review of its Integrated Clean Air Compliance Plan.

A. DEF installed emission controls contemplated in its Integrated Clean Air Compliance Plan on time and within budget. The Flue Gas Desulfurization (wet scrubbers) and Selective Catalytic Reduction systems on CR 4&5 have enabled DEF to comply with Clean Air Interstate Rule ("CAIR") requirements and will continue to be the cornerstone of DEF's integrated air quality compliance strategy. DEF is confident that the Integrated Clean Air Compliance Plan, along with compliance strategies under development, will enable it to achieve and maintain compliance with applicable regulations, including MATS, in a cost-effective manner.

Q. What is the status of the ELG (Project 15.1)?

A. On November 23, 2015, the Environmental Protection Agency ("EPA") published the final revision to the ELG establishing technology-based national standards for effluent waste streams. The rule went into effect on January 4, 2016 and applies to all steam electric generating stations. The new limits were to have been incorporated into affected stations' NPDES permits with a compliance timeframe between November 1, 2018 and December 31, 2023; however, on September 18, 2017, EPA issued a final rule postponing the compliance deadlines of FGD wastewater and bottom ash transport water for two years. On November 22, 2019, EPA published a revised ELG rule with proposed changes to the FGD effluent and bottom ash transport water limits. EPA is in the process of reviewing comments received. DEF continues to work with the FDEP to address these ELG requirements in its Crystal River Units 4 and 5 as part of the NPDES permit renewal process. Modifications to address discharges of demineralization reject water into the Bottom Ash Dewatering System Surge Tanks and directing draining of the system for maintenance to the flue gas desulfurization ("FGD") scrubbers as the primary flow path, with backup/emergency discharge to Percolation Pond 5 as approved by the Conditions of Certification, was initiated in 2019 and it is scheduled to be completed August 2020.

Q. What is the status of the Clean Water 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 13, 2017 the U.S. Supreme Court decided to review the jurisdictional question. Oral arguments in the U.S. Supreme Court case were conducted in October 2017. 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 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, EPA and Corps published in the Federal Register, the "Revised Definition of 'Waters of the United States,'" which proposes 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, EPA and Corps released a pre-publication version of *The Navigable Waters Protection Rule: Definition of "Waters of the United States."* The final rule has not yet been published in the Federal Register.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

KIM SPENCE McDANIEL

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20200007-EI

July 31, 2020

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. Have you previously filed testimony before this Commission in Docket No. 20200007-EI?

A. Yes, I provided direct testimony on April 1, 2020.

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 2020 actual/estimated cost projections and original 2020 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), National Pollutant Discharge Elimination System (NPDES) (Project 16) and Mercury and Air Toxics Standards (MATS) – Crystal River (CR) 4&5 (Project 17) for the period January 2020 through December 2020.

Q. Please explain the variance between actual/estimated O&M project expenditures and original projections for Substation Environmental Investigation, Remediation and Pollution Prevention Program (Projects 1 & 1a) for the period January 2020 through December 2020.

A. Total O&M expenditures for the Transmission and Distribution Substation Remediation Projects are estimated to be $12,199 or 49% lower than originally projected. Project 1, Transmission Substation Remediation, is forecasted to be

$12,356, or 49% lower than originally projected, primarily due to final remediation work being completed sooner than expected. Duke Energy expects to incur costs for one remaining site for which Duke Energy is working with FDEP to receive approval of the deed restriction. Project 1a, Distribution Substation Remediation, is forecasted to be $157, or 100% higher than originally projected. The distribution portion of this program is now complete, and the variance is primarily attributable to final reconciling of remediation invoices. Upon completion of obligations around the remaining site, costs may be incurred associated with any final actions or reports the FDEP may require for the closure of the Consent Order.

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 2020 through December 2020.

A. O&M expenditures for Phase II Cooling Water Intake 316(b) are expected to be $169,327 or 125% higher than originally forecasted.

Project 6, 316(b) – Base, is forecasted to be $89k or 130% higher than forecasted. Project 6a, 316(b) – Intermediate, is forecasted to be $81k, or 120% higher than originally forecasted. These variances are primarily due to modifications of the 316(b) reports that were required following peer review comments received by DEF. DEF incurred additional consultant time to ensure the responses satisfied peer reviewer questions, and that calculations and evaluations were updated to address peer review comments prior to submittal of the technical reports to FDEP.

Q. Please explain the variance between actual/estimated Capital project expenditures and original projections for Phase II Cooling Water Intake 316(b) (Project 6) for the period January 2020 through December 2020.

A. Capital expenditures for Phase II Cooling Water Intake 316(b) are expected to be $862,245 or 18% higher than originally forecasted. This is primarily due to an additional pump and variable frequency drive motor being required at Crystal River North. The computer model DEF utilized to develop the original design did not accurately estimate the expected water flows. Therefore, DEF must install an additional pump and variable frequency drive motor to achieve the necessary water flow to meet 316(b) requirements. Work is expected to be complete this year, but may extend into 2021 depending on lead time to acquire the equipment and installation times.

Q. Please explain the variance between actual/estimated O&M project expenditures and original projections for Sea Turtle – Coastal Street Lighting (Project 9) for the period January 2020 through December 2020.

A. O&M expenditures for Sea Turtle – Coastal Street Lighting are expected to be $300 lower than forecasted. Turtle nesting season has recently begun and DEF has not received any new requests from Gulf County or Pinellas County Code Enforcement for any issues regarding new lighting fixtures, therefore the $300 forecasted is not expected to be spent.

Q. Please explain the variance between actual/estimated Capital project expenditures and original projections for Sea Turtle – Coastal Street Lighting (Project 9) for the period January 2020 through December 2020.

A. Capital expenditures for Sea Turtle – Coastal Street Lighting are expected to be $300 lower than forecasted. Turtle nesting season has recently begun and DEF has not received any new requests from Gulf County or Pinellas County Code Enforcement for any issues regarding new lighting fixtures, therefore the $300 forecasted is not expected to be spent.

Q. Please explain the variance between actual/estimated Capital project expenditures and original projections for the Effluent Limitation Guidelines CRN (Project 15.1) for the period January 2020 through December 2020.

A. Capital expenditures are forecasted to be $134,427 or 168% higher than originally forecasted. This is primarily due to timing, as four pumps scheduled for delivery October 2019 arrived late, one in late November and the other three arrived mid-December. This also delayed purchase and installation of the seals associated with the pump. Final analysis and testing of the completed project were pushed into 2020. No further expenditures are expected.

Q. Please explain the variance between actual/estimated O&M project expenditures and original projections for the Effluent Limitation

Guidelines CRN (Project 15.1) for the period January 2020 through December 2020.

A. O&M expenditures are forecasted to be $40,000 lower, reflecting a variance of 100% lower than originally forecasted. There is no O&M anticipated to be spent on this project in 2020.

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 2020 through December 2020.

A. O&M expenditures for National Pollutant Discharge Elimination System ("NPDES") are expected to be $4,440 or 17% higher than forecasted. This is primarily due to a price increase for the Whole Effluent Toxicity ("WET") testing provided by the contract laboratory. Additionally, one of the two required semi-annual tests for Crystal River North was inadvertently not included in original estimates.

Q. Please explain the variance between actual/estimated O&M project expenditures and original projections for MATS CR4&5 (Project 17) for the period January 2020 through December 2020.

A. O&M expenditures for MATS CR 4&5 are expected to be $476,457 or 80% lower than forecasted. This is primarily due to lower than originally forecasted run times on CR 4&5.

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 Services' biological opinion, and the incidental take statement, concluding the each action was based on reasonable interpretations of the applicable statutes and sufficiently supported by the adequate record. The court also found that 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, will be 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 required information is being prepared for submittal with the renewal applications due July 2020 and August 2020, respectively. Retirement of Crystal River Units 1 & 2 in 2018 satisfied 316(b) requirements for those units. 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 Station will require modifications to comply with the 316(b) Rule. DEF is proposing Anclote station can meet 316(b) requirements with existing infrastructure but additional studies to demonstrate compliance will likely be required. DEF has been conducting 316(b) studies at the Anclote and Bartow stations and study results along with proposed compliance strategies will be filed with the Florida Department of Environmental Protection ("FDEP") in July and August 2020, respectively as part of the NPDES renewal process. Proposed compliance strategies for both will be evaluated by FDEP as part of the NPDES permit renewal.

The full extent of 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 engineering and design activities could begin as early as the fourth quarter of 2021 if final NPDES renewal is issued by FDEP next 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. Once the NPDES permit renewal is issued with the required 316(b) Rule compliance strategies, DEF will provide the Commission an update on the status of the 316(b) Rule compliance strategies for Anclote and Bartow stations in Docket 20210007-EI.

Q. Please provide an update on Carbon Regulations.

A. For existing Units, on October 23, 2015, EPA published the final New Source Performance Standards ("NSPS") for CO2 emissions from existing fossil fuel-fired electric generating units (also known as the "Clean Power Plan" or "CPP"). The final CPP was challenged by 27 states and a number of industry groups, with oral arguments held before the D.C. Circuit Court of Appeals on September 27, 2016. In addition, on February 8, 2016, the U.S. Supreme Court placed a stay on the CPP until all litigation is completed.

Also, on October 23, 2015, EPA published the final NSPS for CO2 emissions for new, modified, and reconstructed fossil fuel-fired EGUs. The rule includes emission limits of 1,400 lb. CO2/MWh for new coal-fired units and 1,000 lb. CO2/MWh for new natural gas combined-cycle units. This rule has also been challenged and is currently on appeal to the D.C. Circuit Court of Appeals.

On March 28, 2017, President Trump signed an Executive Order ("EO") entitled "Promoting Energy Independence and Economic Growth." The EO directs federal agencies to "immediately review existing regulations that potentially burden the development or use of domestically produced energy resources and appropriately suspend, revise, or rescind those that unduly burden the development of domestic energy resources." The EO specifically directs the EPA to review the following rules and determine whether to suspend, revise, or rescind those rules:

- The final CO2 emission standards for existing power plants (CPP);
- The final CO2 emission standards for new power plants (CO2 NSPS);
- The proposed Federal Plan and Model Trading Rules that accompanied the CPP.

In response to the EO, the Department of Justice filed motions with the D.C. Circuit Court to stay the litigation of both the CPP and the CO2 NSPS rules while each is reviewed by EPA. As a result, the D.C. Circuit has granted a number of 60-day extensions holding the CPP litigation in abeyance. The most recent extension was issued on June 20, 2019. Neither the EO nor the abeyance change the current status of the CPP which is under a legal hold by the U.S. Supreme Court. With regard to the CO2 NSPS, that rule will remain in effect pending the outcome of EPA's review.

On June 19, 2019, EPA signed a final rule informally referred to as the Affordable Clean Energy ("ACE") Rule, which repeals and replaces the CPP. In the ACE Rule, EPA finalized revised guidelines to replace the CPP and inform the development of state plans to reduce GHG emissions from existing coal-fired electric generating units ("EGUs"). EPA has determined that heat rate improvement measures are the best system of emission reduction ("BESR") for reducing GHG emissions from existing coal-fired EGUs. The rule requires states to develop their individual state plan within three years of the effective date of the ACE Rule.

DEF is currently evaluating the potential impacts from the final ACE Rule, but does not expect to incur ECRC costs in 2020 related to carbon regulations.

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 expands 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 court 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 13, 2017 the U.S. Supreme Court decided to review the jurisdictional question. Oral arguments in the U.S. Supreme Court were conducted in October 2017. On January 22, 2018 the U.S. Supreme Court issued its decision stating federal courts, rather than 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 June 8, 2018, the Southern District Georgia Court entered a Preliminary Injunction enjoining implementation of the WOTUS rule in eleven states including Florida.

On June 27, 2017, the EPA and the Corps published a proposed rule to repeal the 2015 WOTUS rule and re-codify the definition of WOTUS which is currently in place. On January 31, 2018 the EPA and Corps announced a final rule adding an applicability date to the 2015 rule, thereby deferring implementation to early 2020. This rule has no immediate impact to Duke Energy. The agencies will continue to apply the pre-existing WOTUS definition that was in place prior to 2015 rule until 2020. EPA and Corps published a final rule, "Navigable Waters Protection Rule: Definition of 'Waters of the United States', On April 21, 2020, which became in effect on June 22, 2020. This final rule has no immediate impact to Duke Energy.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

KIM SPENCE McDANIEL

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20200007-EI

August 28, 2020

Q. Please state your name and business address.

A. My name is Kim Spence McDaniel. My business address is 299 1st Avenue North, St. Petersburg, FL 33701.

Q. Have you previously filed testimony before this Commission in Docket No. 20200007-EI?

A. Yes. I provided direct testimony on April 1, 2020 and July 31, 2020.

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 2021 for Duke Energy Florida LLC's ("DEF" or "Company") Substation Environmental Investigation, Remediation and Pollution Prevention

Program (Project 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), 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) and Mercury & Air Toxics Standards ("MATS") Program – Crystal River Units 4 & 5 ("CR4&5") (Project 17).

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. __(CAM-5) to Christopher A. Menendez's direct testimony:

- 42-5P page 1 of 23 – Substation Environmental Investigation, Remediation and Pollution Prevention Program

- 42-5P page 2 of 23 - Distribution System Environmental Investigation, Remediation and Pollution Prevention Program
- 42-5P page 3 of 23 – PIM
- 42-5P page 4 of 23 - AST
- 42-5P page 6 of 23 - Phase II Cooling Water Intake
- 42-5P page 7 of 23 – Clean Air Interstate Rule (“CAIR”)
- 42-5P page 8 of 23 – BART
- 42-5P page 9 of 23 - Arsenic Groundwater Standard
- 42-5P page 10 of 23 – Sea Turtle – Coastal Street Lighting Program
- 42-5P page 11 of 23 - UST
- 42-5P page 12 of 23 - Modular Cooling Towers
- 42-5P page 13 of 23 - Thermal Discharge Permanent Cooling Tower
- 42-5P page 14 of 23 - Greenhouse Gas Inventory and Reporting
- 42-5P page 15 of 23 - Mercury TMDL
- 42-5P page 16 of 23 - HAPs ICR
- 42-5P page 17 of 23 - Effluent Limitation Guidelines ICR Program
- 42-5P page 18 of 23 - Effluent Limitation Guidelines CRN Program
- 42-5P page 19 of 23 - NPDES
- 42-5P page 20 of 23 - MATS – CR4&5

Q. What costs does DEF expect to incur in 2021 for the Substation Environmental Investigation, Remediation and Pollution Prevention Program (Project 1 & 1a)?

A. DEF estimates approximately $3k in O&M costs for 2021 from Project 1, Transmission Substation Environmental Investigation, Remediation and Pollution Prevention. The transmission portion of this program (Project 1) is complete, and DEF continues to provide documentation to the Florida Department of Environmental Protection ("FDEP") pending approval of final closure. The distribution portion of this program (Project 1a) is complete.

Q. What costs does DEF expect to incur in 2021 for the Distribution System Environmental Investigation, Remediation and Pollution Prevention Program (Project 2)?

A. DEF does not expect to incur any O&M costs in 2021.

Q. What costs does DEF expect to incur in 2021 for the PIM Program (Project 3)?

A. DEF does not expect to incur any capital expenditures or O&M costs in 2021.

Q. What costs does DEF expect to incur in 2021 for the Aboveground Storage Tank ("AST") Program (Project 4)?

A. DEF does not expect to incur any capital expenditures or O&M costs in 2021.

Q. What capital costs does DEF expect to incur in 2021 for the Phase II Cooling Water Intake Program (Project 6)?

A. DEF continues to actively investigate engineering and design solutions at Crystal River North to identify available means of addressing water flow deficiencies.

Work is expected to be complete this year, but may extend into 2021 depending on identified solutions, lead time to acquire the equipment and installation times.

Q. What O&M costs does DEF expect to incur in 2021 for the Phase II Cooling Water Intake Program for Anclote and Bartow CC stations?

A. As stated in Kim McDaniel's July 31, 2020 testimony (Docket 20200007-EI), DEF submitted NPDES permit renewal applications, including 122.21 (r) study results, to FDEP for Anclote July 2020 and Bartow August 2020. DEF may incur $35k in O&M costs (consulting fees) in 2021 to address any requests for additional information received from FDEP regarding these applications.

Q. What costs does DEF expect to incur in 2021 for the CAIR/CAMR Program (Project 7.2)?

A. DEF does not expect to incur any capital expenditures or O&M costs in 2021.

Q. What costs does DEF expect to incur in 2021 for the BART Program (Project 7.5)?

A. DEF does not expect to incur any costs in 2021.

Q. What costs does DEF expect to incur in 2021 for the Arsenic Groundwater Standard Program (Project 8)?

A. DEF forecasts 2021 O&M expenditures to be $275k. Anticipated costs are associated with post remediation groundwater monitoring, implementation of a deed restriction for affected area, and final analysis and reporting of results to the agency.

In accordance with FDEP Consent Order No. 09-3463D executed on March 22, 2016 and FDEP Consent Order No. 09-3463E executed on November 17, 2017, DEF's investigation has identified potential sources of arsenic exceedances in groundwater monitoring wells addressed in the Consent Order. The original Consent Order was issued by the FDEP for exceedance of the arsenic groundwater limit following the 2005 revision of the state's groundwater standard that lowered the arsenic maximum contaminant level from 50 ppb to 10 ppb. As discussed in the prior testimony of DEF Witness Patricia Q. West[1], the results of DEF's monitoring and assessment have identified the need for additional compliance activities. On July 26, 2019, DEF submitted a Site Assessment Report Addendum ("SARA") addressing FDEP comments to the Site Assessment Report ("SAR") submitted on August 31, 2018. The SAR and SARA document all assessment work done under the Consent Order to identify the nature and extent of arsenic in groundwater. On October 15, 2019, FDEP notified DEF that sediment and soil assessment was completed and that additional groundwater delineation was needed. On June 9, 2020, DEF submitted to FDEP a Site Assessment Status Report ("SASR") with additional groundwater sampling results to complete the groundwater delineation and a Soils and Sediment Management Plan to be implemented for remediation of soils and sediments in the former North Ash Pond

[1] Please see Ms. West's direct testimony provided in Docket 2005007-EI, 20080007-EI, 20090007-EI and 20150007-EI.

area. FDEP approved the plan on August 4, 2020, and DEF is in the process of implementation, which is expected to be completed in 2020. Following completion of remediation of soils and sediment in 2020, DEF will conduct additional groundwater monitoring to confirm final groundwater delineation. This additional monitoring is expected to take place during the first two quarters of 2021.

Q. What costs does DEF expect to incur in 2021 for the Sea Turtle – Coastal Street Lighting Program (Project 9)?

A. DEF estimates $600 in O&M and $600 in capital costs for the Sea Turtle – Coastal Street Lighting Program. The O&M costs are to install mitigation on any existing streetlights during nesting season that may interfere with sea turtle nesting for Gulf County, Mexico Beach and Pinellas County, or to repair existing sea turtle lights. Capital costs are projected to install new streetlights if required in Gulf County, Mexico Beach and Pinellas County and any lighting required for the Don Cesar project in Pinellas County.

Q. What costs does DEF expect to incur in 2021 for the Underground Storage Tanks ("UST") Program (Project 10)?

A. DEF does not expect to incur any capital expenditures or O&M costs in 2021.

Q. What costs does DEF expect to incur in 2021 for the Modular Cooling Tower (Project 11)?

A. DEF does not expect to incur any costs in 2021.

Q. What costs does DEF expect to incur in 2021 for the Thermal Discharge Permanent Cooling Tower (Project 11.1)?

A. DEF does not expect to incur any costs in 2021.

Q. What costs does DEF expect to incur in 2021 for the Greenhouse Gas Inventory and Reporting Program (Project 12)?

A. DEF does not expect to incur any costs in 2021.

Q. What costs does DEF expect to incur in 2021 for the Mercury TMDL Program (Project 13)?

A. DEF does not expect to incur any costs in 2021.

Q. What costs does DEF expect to incur in 2021 in for the HAPs ICR Program (Project No. 14)?

A. DEF does not expect to incur any costs in 2021.

Q. What costs does DEF expect to incur in 2021 for the Effluent Limitation Guidelines ICR Program (Project No. 15)?

A. DEF does not expect to incur any costs in 2021.

Q. What costs does DEF expect to incur in 2021 for the Effluent Limitation Guidelines CRN Program (Project No. 15.1)?

A. DEF does not expect to incur any costs in 2021.

Q. What costs does DEF expect to incur in 2021 for the NPDES Program (Project No. 16)?

A. DEF estimates approximately $32k of O&M costs for Whole Effluent Toxicity ("WET") testing as required at DEF stations with NPDES permits.

Q. What O&M costs does DEF expect to incur in 2021 for the MATS Program – CR 4&5 (Project No. 17)?

A. DEF estimates O&M costs of approximately $360k for CR 4&5 MATS compliance. This estimate includes emissions testing, burner inspections, maintenance of emissions monitoring and control technologies and reagent costs.

Q. What capital costs does DEF expect to incur in 2021 for the MATS Program – CR 4&5 (Project No. 17)?

A. DEF does not expect capital expenditures in 2021.

Q. Does this conclude your testimony?

A. Yes.

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

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 Manager, Rates in the Regulatory Affairs department.

Q. Have you previously filed testimony in Docket No. 20200007-EI?

A. Yes. On June 3, 2020, I submitted my direct testimony and a Notice of Witness Substitution for the Direct Testimony of Penelope A. Rusk, which was originally filed on the company's behalf on April 1, 2020.

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, fuel, and capacity cost recovery clauses. During the last 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 ten 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 2020 through December 2020 actual/estimated true-up amount to be refunded or recovered through the Environmental Cost

Recovery Clause ("ECRC") during the period January 2021 through December 2021. My testimony addresses the recovery of capital and operations and maintenance ("O&M") costs associated with environmental compliance activities for 2020, 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 2021 through December 2021.

Q. Have you prepared an exhibit that shows the recoverable environmental costs for the actual/estimated period of January 2020 through December 2020?

A. Yes, Exhibit No. MAS-2, containing nine documents, was prepared under my direction and supervision. It includes 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 2021 through December 2021.

Q. What has Tampa Electric calculated as the actual/estimated true-up for the current period to be applied during the period January 2021 through December 2021?

A. The actual/estimated true-up applicable for the current period, January 2020 through December 2020, is an under-recovery of $7,841,176. 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 2020 ECRC factors?

A. No. Tampa Electric is not including costs for any new environmental projects that were not anticipated or included in its 2020 ECRC factors.

Q. What depreciation rates were utilized for the capital projects contained in the 2020 actual/estimated true-up?

A. Tampa Electric utilized the depreciation rates approved in Order No. PSC-2012-0175-PAA-EI, issued on April 3, 2012, in Docket No. 20110131-EI, with two exceptions. For the Big Bend Fuel Oil Tank No. 1 Upgrade and Big Bend Fuel Oil Tank No. 2 Upgrade projects, the company has utilized depreciation rates approved in Order No. PSC-2018-0594-FOF-EI, issued on December 20, 2018.

Q. What capital structure components and cost rates did Tampa Electric rely on to calculate the revenue requirement rate of return for January 2020 through December 2020?

A. Tampa Electric's revenue requirement rate of return for January 2020 through December 2020 is calculated based on the capital structure components and current period cost rates as approved in Order No. PSC-2012-0425-PAA-EU, issued on August 16, 2012 in Docket No. 20120007-EI. 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 2020 through December 2020 period compare with the company's original projections?

A. As shown on Form 42-4E, total O&M costs are expected to be $8,155,287 more than the amount that was originally projected. The total capital expenditures itemized on Form 42-6E, are expected to be $180,371 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.

- **Big Bend Unit 3 Flue Gas Desulfurization ("FGD") Integration:** The Big Bend Unit 3 FGD Integration project variance is estimated to be $110,415 or 28.3 percent less than projected. The variance is due to Big Bend Unit 3 operating less than originally projected. As a result, less maintenance is required.

- **Big Bend Units 1 & 2 FGD:** The Big Bend Units 1 & 2 FGD project variance is estimated to be $111,195 or 44.5 percent less than projected. The variance is due to Big Bend Units 1 & 2 operating less than originally projected. As a result, less maintenance is required.

- **Big Bend PM Minimization & Monitoring:** The Big Bend PM Minimization & Monitoring project variance is estimated to be $97,359 or 24.4 percent less than projected. This variance is due to the Big Bend units operating for fewer hours than originally projected. As a result, less maintenance is required.

- **Big Bend Unit 1 SCR:** The Big Bend Unit 1 SCR project variance is $77,139 or 46.8 percent less than originally projected. This variance is due to Big Bend Unit 1 operating for fewer hours than originally projected. As a result, less maintenance is required.

- **Big Bend Unit 2 SCR:** The Big Bend Unit 2 SCR project variance is $77,437 or 23.5 percent less than originally projected. This variance is due to Big Bend Unit 2 operating for fewer hours than originally projected. As a result, less maintenance is required.

- **Big Bend Unit 3 SCR:** The Big Bend Unit 3 SCR project variance is $258,932 or 36.2 percent less than projected. This variance is due to Big Bend Unit 3 operating for fewer hours than originally projected. As a result, less maintenance is required.

- **Big Bend Unit 4 SCR:** The Big Bend Unit 4 SCR project variance is $241,496 or 24.9 percent less than projected. This variance is due to Big Bend Unit 4 operating for fewer hours than originally projected. As a result, less maintenance is required.

- **Mercury Air Toxics Standards:** The Mercury Air Toxics Standards ("MATS") project variance is $25,127 or 93.1 percent less than projected. This variance is due to less contractor services required for MATS monitoring activity than originally projected.

- **Big Bend Gypsum Storage Facility:** The Big Bend Gypsum Storage Facility project variance is $150,887 or 15.9 percent less than projected. The variance is due to a reduction in coal generation, compared to the original projection, so the amount of gypsum storage processing required is reduced.

- **Big Bend CCR Rule – Phase II:** The Big Bend Coal Combustion Residual ("CCR") Rule – Phase II project variance is $9,341,519 or 190.0 percent more than projected. This variance is due to timing differences in the project schedule when compared to the original projection. Earlier delays in project activity associated with landfill availability issues were resolved, and the company was able to secure favorable terms for an expedited CCR disposal transportation schedule, resulting in increased disposal activity and greater cost compared to the original projection.

Capital Project Variances

- **Big Bend ELG Compliance:** The Big Bend ELG Compliance project variance is $66,530 or 45.6 percent less than projected. This variance is due to timing differences in the project schedule when compared to the original projection. Project activities have occurred more slowly than originally projected due to permitting delays. FDEP issued its permit regarding the project on April 10, 2020. 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 $87,399 or 73.4 percent less than projected. This variance is due to timing differences in the project schedule when compared to the original projection. Project activities have occurred more slowly than originally projected due to permitting delays. The project expenditures are still needed and will be incurred in the future.

Q. Does this conclude your direct testimony?

A. Yes, it does.

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. During the last 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 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. Other than describing your background and qualifications, is the remainder of your testimony the same as that set forth in the testimony of Ms. Rusk filed April 1, 2020.

A. Yes, it is.

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 January 2019 through December 2019 period.

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 2019 through December 2019 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 29, 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. Have you incorporated the Florida Corporate Income Tax Reduction, effective January 1, 2019, into the company's calculated revenue requirement?

A. Yes. The change in the corporate income tax rate, announced in September 2019 and retroactive to January 1, 2019 resulted in an adjustment to the capital cost recovery rate for ECRC projects. The update was made to Form 42-9A, pages 1 and 2, Calculation of Revenue Requirement Rate of Return, and flows through to the capital projects shown on Form 42-8A, pages 1 through 29, Return on Capital Investments, Depreciation and Taxes schedules.

Q. What is the final true-up amount for the Environmental Clause for the period January 2019 through December 2019?

A. The final true-up amount for the Environmental Clause for the period January 2019 through December 2019 is an over-recovery of $3,987,915. The actual environmental cost over-recovery, including interest, is $8,096,350 for the period January 2019 through December 2019, as identified in Form 42-1A. This amount, less the $4,108,435 over-recovery approved in Commission Order No. PSC-2019-0500-FOF-EI, issued November 22, 2019, in Docket No. 20190007-EI, results in a final over-recovery of $3,987,915, 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 2021 through December 2021.

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. How do actual expenditures for the January 2019 through December 2019 period 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 $3,415,300, or 37.5 percent less than the actual/estimated projection costs. Form 42-6A shows the total capital investment costs are $228,728, or 0.5 percent less 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 Unit 3 Flue Gas Desulfurization Integration:** The Big Bend Unit 3 Flue Gas Desulfurization Integration project variance is $79,647 or 16.5 percent less than projected. The variance is due to less maintenance costs incurred than expected during the Unit 3 planned outage and less maintenance required while operating the unit on natural gas instead of coal.

- **Big Bend Unit 2 SCR:** The Big Bend Unit 2 SCR project variance is $87,272, or 52.7 percent greater than projected. The variance is due to greater than expected maintenance costs related to the replacement of SCR power cells.

- **Big Bend Unit 3 SCR:** The Big Bend Unit 3 SCR project variance is $143,390, or 28.9 percent less than projected. The variance is due to fewer unit operating hours and greater use of natural gas rather than coal, resulting in lower expenditures for SCR consumables and maintenance than projected.

- **Big Bend Unit 4 SCR:** The Big Bend Unit 4 SCR project variance is $173,440, or 12.5 percent less than projected. The variance is due to fewer unit operating hours and greater use of natural gas rather than coal, resulting in lower expenditures for SCR consumables and maintenance than projected.

- **Big Bend Gypsum Storage Facility:** The Big Bend Gypsum Storage Facility project variance is $152,311, or 12.1 percent less than projected. The variance is due to less facility yard maintenance being required than expected.

- **Big Bend Coal Combustion Residuals Rule Phase II:** The Big Bend Coal Combustion Residuals ("CCR") Rule Phase II project variance is $2,881,228, or 65.5 percent less than projected. This variance is due to timing differences in the project schedule when compared to the original projection. Project disposal activities have occurred more slowly than originally projected due to weather-related delays and land fill availability. The project expenditures are still needed and will be incurred in the future.

There were no substantial cost variances related to capital investment projects.

Q. Does this conclude your testimony?

A. Yes, it does.

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 Manager, Rates in the Regulatory Affairs Department.

Q. Have you previously filed testimony in Docket No. 20200007-EI?

A. Yes, I submitted direct testimony on June 3, 2020 and July 31, 2020.

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 2021 through December 2021. 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 2021.

Q. Have you prepared an exhibit that shows the determination of recoverable environmental costs for the period of January 2021 through December 2021?

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 2021.

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 2021 through December 2021.

Q. What has Tampa Electric calculated as the net true-up to be applied in the period January 2021 to December 2021?

A. The net true-up applicable for this period is an under-recovery of $3,853,261. This consists of a final true-up over-recovery of $3,987,915 for the period of January 2019 through December 2019 and an estimated true-up under-recovery of $7,841,176 for the current period of January 2020 through December 2020. 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 31, 2020.

Q. Did Tampa Electric include any new environmental compliance projects for ECRC cost recovery for the period from January 2021 through December 2021?

A. No, Tampa Electric is not including costs for any new environmental projects.

Q. What are the capital projects included in the calculation of the ECRC factors for 2021?

A. Tampa Electric proposes to include for ECRC recovery costs for the 29 approved capital projects in the calculation of the 2021 ECRC factors. These projects are listed below.

1) Big Bend Unit 3 Flue Gas Desulfurization ("FGD") Integration
2) Big Bend Units 1 and 2 Flue Gas Conditioning
3) Big Bend Unit 4 Continuous Emissions Monitors
4) Big Bend Fuel Oil Tank No. 1 Upgrade
5) Big Bend Fuel Oil Tank No. 2 Upgrade
6) Big Bend Unit 1 Classifier Replacement
7) Big Bend Unit 2 Classifier Replacement
8) Big Bend Section 114 Mercury Testing Platform
9) Big Bend Units 1 and 2 FGD
10) Big Bend FGD Optimization and Utilization
11) Big Bend NOx Emissions Reduction
12) Big Bend Particulate Matter ("PM") Minimization and Monitoring
13) Polk NO_x Emissions Reduction

14) Big Bend Unit 4 SOFA
15) Big Bend Unit 1 Pre-SCR
16) Big Bend Unit 2 Pre-SCR
17) Big Bend Unit 3 Pre-SCR
18) Big Bend Unit 1 SCR
19) Big Bend Unit 2 SCR
20) Big Bend Unit 3 SCR
21) Big Bend Unit 4 SCR
22) Big Bend FGD System Reliability
23) Mercury Air Toxics Standards ("MATS")
24) SO_2 Emission Allowances
25) Big Bend Gypsum Storage Facility
26) Big Bend Coal Combustion Residuals ("CCR") Rule – Phase I
27) Big Bend CCR Rule - Phase II
28) Big Bend Unit 1 Section 316(b)Impingement Mortality
29) Big Bend Effluent Limitations Guidelines ("ELG") Rule Compliance

Q. Have you prepared schedules showing the calculation of the recoverable capital project costs for 2021?

A. Yes. Form 42-3P contained in Exhibit No. MAS-3 summarizes the cost estimates for these projects. Form 42-4P, pages 1 through 29, provides the calculations resulting in recoverable jurisdictional capital costs of $44,712,788.

Q. What O&M projects are included in the calculation of the ECRC factors for 2021?

A. Tampa Electric proposes to include for ECRC recovery O&M costs for 27 approved O&M projects in the calculation of the ECRC factors for 2021. These projects are listed below.

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

16) Arsenic Groundwater Standard Program
17) Big Bend Unit 1 SCR
18) Big Bend Unit 2 SCR
19) Big Bend Unit 3 SCR
20) Big Bend Unit 4 SCR
21) Mercury Air Toxics Standards
22) Greenhouse Gas Reduction Program
23) Big Bend Gypsum Storage Facility
24) Big Bend CCR Rule - Phase I
25) Big Bend CCR Rule - Phase II
26) Big Bend Unit 1 Section 316(b) Impingement Mortality
27) Big Bend ELG Rule Compliance

Q. Have you prepared a schedule showing the calculation of the recoverable O&M project costs for 2021?

A. Yes. Form 42-2P contained in Exhibit No. MAS-3 presents the recoverable jurisdictional O&M costs for these projects, which total $3,480,118 for 2021.

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 34.

Q. What are the total projected jurisdictional costs for environmental compliance in the year 2021?

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 $52,046,167.

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 2021 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 2021 through December 2021, 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	0.269
GS, CS Secondary	0.269
GSD, SBF	
Secondary	0.265
Primary	0.262
Transmission	0.260
IS	
Secondary	0.257
Primary	0.254
Transmission	0.252
LS1	0.258
Average Factor	0.267

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 2021.

Q. What capital structure components and cost rates did Tampa Electric rely on to calculate the revenue requirement rate of return for January 2021 through December 2021?

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 Nos. PSC-2012-0425-PAA-EU, PSC-2017-0456-S-EI, and recently issued PSC-2020-0165-PAA-EU, approving Amended Joint Motion Modifying Weighted Average Costs of Capital Methodology, issued on May 20, 2020. The recent order amends the 2012 Order as it authorized the application of a historical WACC to calculate the rate of return in a projected future clause recovery period and this no longer comports with the IRS Normalization Rules regarding the calculation of the depreciation-related Accumulated Deferred Income Tax ("ADIT") balance in the capital structure. As a result, a new methodology was approved by the Commission whereby a formula more reflective of the projected period is applied to derive the WACC for projected period depreciation related ADIT. Per the recent order, the change is effective with the 2021 projection filing.

Q. Are the costs Tampa Electric is requesting for recovery through the ECRC for the period January 2021 through December 2021 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 a final average ECRC billing factor of 0.267 cents per kWh. This includes the projected capital and O&M revenue requirements of $48,192,906 associated with the company's 35 ECRC projects and a net true-up under-recovery provision of $3,853,261. My testimony also explains that the projected environmental expenditures for 2021 are appropriate for recovery through the ECRC.

Q. Does this conclude your direct testimony?

A. Yes, it does.

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

TAMPA ELECTRIC COMPANY
DOCKET NO. 20200007-EI
FILED: 08/28/2020

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 Manager, Air Programs in the 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 include air permitting and compliance as well as 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 2021 through December 2021 projection period are activities related to programs previously approved by the Commission for recovery through the ECRC.

Q. Please provide an overview of the environmental compliance requirements that are the result of the Consent Final Judgment (“CFJ”) entered into with the Florida Department of Environmental Protection (“FDEP”) and the Consent Decree (”CD”) lodged with the U.S. Environmental

Protection Agency ("EPA") and the Department of Justice ("the Orders").

A. The general requirements of the Orders provide for further reductions of sulfur dioxide ("SO_2"), particulate matter ("PM") and nitrogen oxides ("NO_x") emissions at Big Bend Station. Tampa Electric has implemented the requirements of the Orders, and now these agreements have been terminated by the corresponding court systems. The ongoing requirements of these projects, which are further described later in my testimony, are now part of the Big Bend Title V operating permit (0570039-128-AV). The projects that are now required under the operating permit are listed below.

- Big Bend PM Minimization Program
- Big Bend NO_x Emission Reduction Program
- Big Bend Units 1 – 3 Pre-Selective Catalytic Reduction ("SCR") Projects
- Big Bend Units 1 – 4 SCR Projects

Q. Does the termination of the Orders change any of the environmental compliance requirements applicable to the company's generating units?

A. No, the termination of the Orders does not change any of the environmental compliance requirements applicable to the company's generating units. The requirements of the Orders are now part of the Title V operating permit.

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 2021 through December 2021.

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 2021; however, the O&M expenses associated with existing and recently installed Best Operating Practice ("BOP") and best available control technology ("BACT") equipment and continued implementation of the BOP procedures are expected to be $252,000.

Q. Please describe the Big Bend NO_x Emission Reduction program activities and provide the estimated capital and O&M expenses for the period of January 2021 through December 2021.

A. The Big Bend NO_x Emission Reduction 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 does not anticipate any capital expenditures in 2021; however, the company will perform maintenance on the previously approved and installed NO_x reduction equipment. This activity is expected to result in approximately $2,028 of O&M expenses during 2021.

Q. Please describe the Big Bend Units 1 through 3 Pre-SCR and the Big Bend Units 1 through 4 SCR projects and provide estimated capital and O&M expenditures for the period of January 2021 through December 2021.

A. In Docket No. 20040750-EI, Order No. PSC-2004-0986-PAA-EI, issued October 11, 2004, the Commission approved cost recovery of the Big Bend Units 1 through 3 Pre-SCR and the Big Bend Unit 4 SCR projects. The Big Bend Units 1 through 3 SCR projects were approved by the Commission in Docket No. 20041376-EI, Order No. PSC-2005-0502-PAA-EI, issued May 9, 2005. The purpose of the Pre-SCR technologies is to reduce inlet NO_x concentrations to the SCR systems, thereby mitigating overall SCR capital and O&M expenses. Those Pre-SCR technologies include windbox modifications, secondary air controls, and coal/air flow controls. The SCR projects at Big Bend Unit 1 through 4 encompass the design, procurement, installation, and annual O&M expenses associated with an SCR system for each unit. The SCRs for Big Bend Units 1 through 4 were placed in-service April 2010, September 2009, July 2008, and May 2007, respectively.

For the period of January 2021 through December 2021, there are not any capital or O&M expenditures anticipated for the Big Bend Units 1 through 3 Pre-SCR projects. There are not any anticipated capital expenditures for Big Bend Units 1 through 3 SCRs. For the Big Bend Unit 4 SCR, capital expenditures of $795,000, associated with expansion joint replacement, are expected to be incurred. There are no O&M expenses anticipated for Big Bend Unit 1 SCR. The O&M expenses are projected to be $122,020 for Big Bend Unit 2 SCR, $524,097 for Big Bend Unit 3 SCR, and $1,077,230 for Big Bend Unit 4 SCR. These expenses are primarily associated with ammonia purchases and maintenance.

Q. Please identify and describe the other Commission-approved programs, or those pending Commission approval, that you will discuss.

A. The programs previously approved by the Commission 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

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 2021 through December 2021.

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 January 2021 through December 2021 for the Big Bend Unit 3 FGD Integration project. There are not any anticipated capital or O&M expenditures for the Big Bend Units 1 & 2 FGD project during January 2021 through December 2021.

Q. Please describe the Gannon Thermal Discharge Study program activities and provide the estimated O&M expenditures for the period of January 2021 through December 2021.

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 2021 through December 2021, there are not any projected O&M expenditures for this program. In the intent to issue the permit renewal, dated August 9, 2013, FDEP indicated that the proposed NPDES permit authorizes a thermal variance under Section 316(a) of the Clean Water Act for the permit period. Bayside Power Station applied for renewal of the National Pollutant Discharge Elimination System ("NPDES") Permit in February 2018, and the permit is still pending. At this time, the company anticipates that an additional thermal study will not be required. If a thermal study is required, Tampa Electric will incur O&M expenses and will include them in the true-up filing.

Q. Please describe the Bayside SCR Consumables program activities and provide the estimated O&M expenditures for the period of January 2021 through December 2021.

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 2021 through December 2021, Tampa Electric projects O&M expenses associated with the consumable goods, primarily anhydrous ammonia, to be approximately $119,000.

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 2021 through December 2021.

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 is currently finalizing its compliance strategy for the CWIS Rule at Big Bend Station and is working with the regulating authority to determine the need and scheduling for biological, financial, and technical study elements necessary to comply with the rule. These elements will ultimately be used by the regulating authority to determine the necessity of cooling water system retrofits.

At this time, CWIS Rule compliance alternatives for Bayside Power Station are also being evaluated. The biological, financial, and technical study elements have been identified for Bayside Power Station and submitted with the station’s NPDES permit renewal application in February 2018. Retrofits could include the installation of cooling towers or screening facilities.

The estimated Clean Water Act Section 316(b) Phase II Study related O&M expenses for Big Bend Station and Bayside Power Station for the period January 2021 through December 2021 are $45,000.

For Big Bend Unit 1, which will be repowered to a clean, natural gas-fired combined cycle unit, the permit will require installation of impingement mortality controls as part of the Big Bend Unit 1 Modernization. Therefore, in

Order No. PSC-2018-0594-FOF-EI, issued on December 20, 2018, the Commission approved cost recovery for the Big Bend Unit 1 Section 316(b) Impingement Mortality project.

The estimated O&M expense for NPDES Annual Surveillance Fees for Big Bend, Bayside, and Polk generating plants for the period January 2021 through December 2021 are $23,500.

Q. Are other plants expected to require retrofits to comply with Section 316(b)?

A. As stated earlier, compliance alternatives for the Bayside Power Station are also being evaluated.

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 2021 through December 2021.

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 2021 through December 2021, Tampa Electric projects capital expenditures for the Big Bend Unit 1 Section 316(b) Impingement Mortality Project to be $10,457,000. There are no O&M expenses anticipated during 2021.

Q. Please describe the Big Bend FGD System Reliability program activities and provide the estimated capital expenditures for the period of January 2021 through December 2021.

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 cost recovery approval for prudent costs associated with this project. For the period of January 2021 through December 2021, 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 2021 through December 2021.

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. For the period of January 2021 through December 2021, the anticipated O&M expenses associated with the program are $36,000.

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 2021 through December 2021.

A. For 2021, Tampa Electric does not anticipate capital expenditures under the MATS program in 2021. O&M expenditures are projected to be approximately $3,000 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 2021 through December 2021.

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 2021. For 2021, this activity is projected to result in approximately $93,528 of O&M expenditures.

Q. Please describe the Big Bend Gypsum Storage Facility activities and provide the estimated capital and O&M expenditures for the period of January 2021 through December 2021.

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. The project was placed in service in November 2014. For 2021, Tampa Electric does not anticipate any capital expenditures; however, the projected O&M expenses for this program during 2021 are $1,177,899.

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 2021 through December 2021.

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 expenses 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, for Phase II of the project, 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 includes removal and offsite disposal of all CCR and restoration of the area to original grade, 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 which will need to be dewatered and shipped to the landfill, this project is expected to continue through 2021. The East Coalfield Stormwater Runoff Pond (slag pond) closure and retrofit were originally scheduled to be completed in 2019 but were delayed due to unusually high rainfall amounts throughout the year. The project has now commenced and is scheduled to be completed in early 2021. The North Gypsum Stackout Area Drainage Improvements Project was also delayed, but is now underway, with completion also expected in 2021.

Tampa Electric expects to incur $1,025,000 and $471,368 in 2021 capital expenditures for CCR Rule - Phase I and Phase II projects, respectively. The company does not expect to incur O&M expenses for the CCR Rule – Phase I or Phase II programs in 2021.

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 2021 through December 2021.

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-downstream 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 rule requires compliance after November 1, 2018, but no later than December 31, 2023. EPA issued a temporary stay of these compliance deadlines beginning April 25, 2017 for certain waste streams, including FGD wastewater.

The Big Bend ELG Study Program (“Study”) was approved by the Commission in Docket No. 20160027-EI, Order No. PSC-2016-0248-PAA-EI, issued June 28, 2016, and confirmed in Consummating Order No. PSC-2016-0290-CO-EI issued July 25, 2016 in the same docket.

The Study, which was completed in 2018, identified viable technologies to treat the Tampa Electric Big Bend Station combined effluent streams in order 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.

On June 6, 2017, the EPA issued proposed rulemaking to postpone these deadlines until it has completed reconsideration of the 2015 rule. On August 11, 2017, EPA issued a letter to the Utility Water Act Group ("UWAG") and the U.S. Small Business Association regarding petitions received by the EPA requesting reconsideration of the rule. In this letter, EPA stated that it would be appropriate to conduct rulemaking to "potentially revise" the limitations for bottom ash transport water and FGD wastewater. The compliance deadlines for these waste streams were revised to be as soon as possible after November 1, 2021, but no later than December 31, 2023. Tampa Electric expects that the selected compliance option will continue to be required as the best option for customers even if some changes are made to the rule. For the year January 2021 through December 2021, Tampa Electric projects capital expenditures to be $12,817,041. The company projects $4,800 in O&M expenditures for this project for the period.

Q. Please summarize your testimony.

A. The settlement agreements Tampa Electric had with FDEP and EPA required significant reductions in emissions from Big Bend and Gannon Power Stations. These settlement agreements have been terminated due to the company having satisfied all requirements as set forth by the CFJ and CD. Ongoing requirements for projects originating with the CFJ and CD have been incorporated into Big Bend's Title V Operating permit (0570039-128-AV) and are discussed throughout my testimony. I described the progress Tampa Electric has made to achieve the more stringent environmental standards. I identified estimated costs, by project, which the company expects to incur in 2021. Additionally, my testimony identified other projects that are required for Tampa Electric to meet environmental requirements, and I provided the associated 2021 activities and projected expenditures.

Q. Does this conclude your direct testimony?

A. Yes, it does.

CHAIRMAN CLARK: Let's move to exhibits.

MR. MURPHY: Staff has compiled a Type 2 stipulated comprehensive exhibit list, which includes the prefiled exhibits attached to the witnesses' testimony in this case, and staff's exhibits. The list has been provided to the parties, the Commissioners and the court reporter. Staff asks that the list be marked as the first hearing exhibit, and the other exhibits be marked as set forth in the list.

CHAIRMAN CLARK: So ordered.

(Whereupon, Exhibit Nos. 1-49 were marked for identification.)

MR. MURPHY: At this time, staff asks that the Comprehensive Exhibit List, marked as Exhibit 1, be entered into the record.

CHAIRMAN CLARK: Exhibit No. 1 is entered into the record.

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

MR. MURPHY: Staff asks that all prefiled exhibits and staff's exhibits be included in the record as set forth in the comprehensive exhibit list, numbered Exhibits 2 through 49.

CHAIRMAN CLARK: Exhibits 2 through 49 are entered.

(Whereupon, Exhibit No. 2-49 were received into evidence.)

CHAIRMAN CLARK: All right. Before we vote on the stipulations, does any party wish to make a statement?

All right. Staff, is the docket ready for a bench decision?

MR. MURPHY: Yes, Chairman.

If the Commission decides that a bench decision is appropriate, staff recommends that the proposed stipulation of all issues should be approved by the Commission. All parties either support or do not oppose the proposed stipulations.

CHAIRMAN CLARK: All right. Commissioners, do you have any questions?

I will entertain a motion to approve the proposed stipulations on all issues.

Commissioner Fay.

COMMISSIONER FAY: Thank you, Mr. Chairman. I would move that the Commission approve all stipulations on all issues in the 07 docket.

COMMISSIONER POLMANN: Second.

CHAIRMAN CLARK: I have a motion and a second.

Is there any discussion?

On the motion, all in favor say aye.
(Chorus of ayes.)
CHAIRMAN CLARK: Opposed?
(No response.)
CHAIRMAN CLARK: And the motion carries.
All right, that concludes the 07 docket. We will now move into the 01 docket.
(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 9th day of November, 2020.

Debbie R Krick

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