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July 28, 2023

VIA ELECTRONIC FILING

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

Re: *Environmental Cost Recovery Clause*; Docket No. 20230007-EI

Dear Mr. Teitzman:

On behalf of Duke Energy Florida, LLC ("DEF"), please find enclosed for electronic filing in the above-referenced docket, DEF's 2023 Actual/Estimated True-Up Report. The filing includes the following:

- DEF's Petition for Approval of Environmental Cost Recovery Actual/Estimated True-Up for the period January 2023 to December 2023;
- Direct Testimony of Gary P. Dean, Exhibit No. ___ (GPD-3);
- Direct Testimony of Reginald Anderson;
- Direct Testimony of Eric Szkolnyj; and
- Direct Testimony of Patricia West.

Thank you for your assistance in this matter and if you have any questions, please feel free to contact me at (850) 521-1425.

Sincerely,

s/ Stephanie A. Cuello

Stephanie A. Cuello

SAC/mw
Attachments

BEFORE THE PUBLIC SERVICE COMMISSION

In re: Environmental Cost Recovery Clause

Docket No. 20230007-EI

Filed: July 28, 2023

**DUKE ENERGY FLORIDA'S PETITION FOR APPROVAL OF 2023
ENVIRONMENTAL COST RECOVERY ACTUAL/ESTIMATED TRUE-UP**

Duke Energy Florida, LLC (“the Company”), hereby petitions for approval of its Environmental Cost Recovery Clause (“ECRC”) actual/estimated true-up for the period January 2023 to December 2023. In support of this Petition, the Company states:

1. As discussed in the testimony of Gary P. Dean filed contemporaneously with this Petition, the Company’s total actual/estimated true-up for this period is an under-recovery, including interest, of \$3,091,285.

2. The amount will have added to it the final true-up over-recovery of \$309,443 for 2022 discussed in Mr. Dean’s March 31, 2023, Direct Testimony filed in this docket, resulting in a net under-recovery of \$2,781,842. Documentation supporting the actual/estimated and net true-up over-recovery is contained in Commission Schedules 42-1E through 42-9E, which are provided as Exhibit No. __ (GPD-2) to Mr. Dean’s testimony of today’s date. Additional cost information for specific ECRC programs is presented in the testimonies of Reginald Anderson, Eric Szkolnyj, and Patricia West, which also are being filed contemporaneously with this Petition.

2. The ECRC actual/estimated true-up presented in Mr. Dean’s testimony and exhibits are consistent with the provisions of Section 366.8255, Florida Statute, and with prior rulings by the Florida Public Service Commission (“the Commission”).

WHEREFORE, the Company, respectfully requests that the Commission approve the Company’s ECRC actual/estimated true-up under-recovery of \$2,781,842 for the period January

2023 through December 2023 as set forth herein and in the Direct Testimony and supporting Exhibits of Mr. Dean.

This 28th day of July, 2023.

Respectfully submitted,

/s/ Stephanie A. Cuello

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

GARY P. DEAN

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

July 28, 2023

1 **Q. Please state your name and business address.**

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

4

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

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

8

9 **Q. Have you previously filed testimony before this Commission in Docket No.**

10 **20230007-EI?**

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

12

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

15 A. No.

16

1 **Q. What is the purpose of your testimony?**

2 A. The purpose of my testimony is to present, for Commission review and approval,
3 Duke Energy Florida, LLC's ("DEF") actual/estimated true-up costs associated
4 with environmental compliance activities for the period January 2023 through
5 December 2023. I also explain the variance between 2023 actual/estimated cost
6 projections versus original 2023 cost projections for SO₂/NO_x Emission
7 Allowances (Project 5).

8

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

11 A. Yes. I am sponsoring the following exhibit:

12 1. Exhibit No. __ (GPD-2), which consists of PSC Forms 42-1E through 42-
13 9E.

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

17

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

20 A. The 2023 actual/estimated true-up is an under-recovery, including interest, of
21 \$3,091,285 as shown on Form 42-1E, line 4. The final 2022 true-up over-recovery
22 of \$309,443 as shown on Form 42-2E, Line 7a, is added to this total, resulting in
23 a net under-recovery of \$2,781,842 as shown on Form 42-2E, Line 11. The

1 calculations supporting the 2023 actual/estimated true-up are on Forms 42-1E
2 through 42-9E.

3

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

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

13

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

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

20

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

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

7
8 **Q. Please explain the O&M variance between actual project expenditures and**
9 **the Actual/Estimated projections for the SO₂/NO_x Emissions Allowance**
10 **(Project 5).**

11 A. The O&M variance is \$277, or 12% lower than projected, due to lower-than-
12 projected SO₂ allowance expense.

13
14 **Q. Does this conclude your testimony?**

15 A. Yes.

16

17

18

19

20

21

**DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Commission Forms 42-1E Through 42-9E**

**January 2023 - December 2023
Calculation for the Current Period Actual / Estimated Amount
Actuals for the Period January 2023 - June 2023
Estimates for the Period July 2023 - December 2023**

Docket No. 20230007-EI

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
January 2023 - December 2023
(in Dollars)

Form 42-1E

Docket No. 20230007-EI
Duke Energy Florida
Witness: G. P. Dean
Exh. No. __ (GPD-2)
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<u>Line</u>	<u>Period Amount</u>
1 Over/(Under) Recovery for the Period (Form 42-2E, Line 5)	\$ (3,089,129)
2 Interest Provision (Form 42-2E, Line 6)	(2,156)
3 Sum of Current Period Adjustments (Form 42-2E, Line 10)	<u>0</u>
4 Final True-Up Amount to be Refunded/(Recovered) in the Projection Period January 2024 to December 2024 (Lines 1 + 2 + 3)	<u>\$ (3,091,285)</u>

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
January 2023 - December 2023

Form 42-2E

Docket No. 20230007-EI
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End-of-Period True-Up Amount
(in Dollars)

Line	Description	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Estimated Jul-23	Estimated Aug-23	Estimated Sep-23	Estimated Oct-23	Estimated Nov-23	Estimated Dec-23	End of Period Total
1	ECRC Revenues (net of Revenue Taxes)	\$649,956	\$543,425	\$629,244	\$650,637	\$665,437	\$802,272	\$813,607	\$845,632	\$835,550	\$753,840	\$613,999	\$577,777	\$8,381,378
2	True-Up Provision (Order No. PSC-2022-0424-FOF-EI)	141,501	141,501	141,501	141,501	141,501	141,501	141,501	141,501	141,501	141,501	141,501	141,501	1,698,006
3	ECRC Revenues Applicable to Period (Lines 1 + 2)	\$791,456	684,926	770,745	792,137	806,938	943,773	955,108	987,133	977,050	895,340	755,500	719,278	10,079,384
4	Jurisdictional ECRC Costs													
	a. O & M Activities (Form 42-5E, Line 9)	(\$36,139)	154,435	1,391,857	1,138,234	88,853	678,418	1,049,668	1,063,410	1,031,269	722,946	556,021	845,059	8,684,031
	b. Capital Investment Projects (Form 42-7E, Line 9)	378,655	378,276	375,858	373,416	373,775	372,939	370,922	370,655	371,269	373,470	373,415	371,831	4,484,482
	c. Other	0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Total Jurisdictional ECRC Costs	\$342,516	\$532,711	\$1,767,715	\$1,511,650	\$462,628	\$1,051,357	\$1,420,590	\$1,434,065	\$1,402,538	\$1,096,416	\$929,436	\$1,216,890	\$13,168,513
5	Over/(Under) Recovery (Line 3 - Line 4d)	\$448,941	152,215	(996,970)	(719,513)	344,309	(107,585)	(465,482)	(446,932)	(425,487)	(201,076)	(173,936)	(497,613)	(\$3,089,129)
6	Interest Provision (Form 42-3E, Line 10)	8,083	8,987	7,023	3,209	1,924	1,852	32	(2,514)	(4,986)	(6,945)	(8,376)	(10,445)	(2,156)
7	Beginning Balance True-Up & Interest Provision	1,698,006	2,013,529	2,033,231	901,783	43,979	248,712	1,479	(605,472)	(1,196,419)	(1,768,393)	(2,117,914)	(2,441,727)	1,698,006
	a. Deferred True-Up - January 2022 to December 2022 (2022 TU filing dated March 31, 2023)	309,443	309,443	309,443	309,443	309,443	309,443	309,443	309,443	309,443	309,443	309,443	309,443	309,443
8	True-Up Collected/(Refunded) (Line 2)	(141,501)	(141,501)	(141,501)	(141,501)	(141,501)	(141,501)	(141,501)	(141,501)	(141,501)	(141,501)	(141,501)	(141,501)	(1,698,006)
9	End of Period Total True-Up (Lines 5+6+7+7a+8)	\$2,322,972	2,342,674	1,211,226	353,422	558,155	310,922	(296,029)	(886,976)	(1,458,950)	(1,808,471)	(2,132,284)	(2,781,842)	(\$2,781,842)
10	Adjustments to Period Total True-Up Including Interest	0	0	0	0	0	0	0	0	0	0	0	0	0
11	End of Period Total True-Up (Over/(Under) (Lines 9 + 10)	\$2,322,972	\$2,342,674	\$1,211,226	\$353,422	\$558,155	\$310,922	(296,029)	(\$886,976)	(\$1,458,950)	(\$1,808,471)	(\$2,132,284)	(\$2,781,842)	(\$2,781,842)

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
January 2023 - December 2023

Form 42-3E

Docket No. 20230007-EI

Duke Energy Florida

Witness: G. P. Dean

Exh. No. __ (GPD-2)

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Interest Provision
(in Dollars)

End of
Period
Total

Line	Description	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Estimated Jul-23	Estimated Aug-23	Estimated Sep-23	Estimated Oct-23	Estimated Nov-23	Estimated Dec-23	End of Period Total
1	Beginning True-Up Amount (Form 42-2E, Lines 7 + 7a + 10)	\$2,007,449	\$2,322,972	\$2,342,674	\$1,211,226	\$353,422	\$558,155	\$310,922	(\$296,029)	(\$886,976)	(\$1,458,950)	(\$1,808,471)	(\$2,132,284)	
2	Ending True-Up Amount Before Interest (Line 1 + Form 42-2E, Lines 5 + 8)	2,314,889	2,333,687	1,204,203	350,213	556,231	309,070	(296,061)	(884,462)	(1,453,964)	(1,801,526)	(2,123,908)	(2,771,397)	
3	Total of Beginning & Ending True-Up (Lines 1 + 2)	4,322,339	4,656,659	3,546,877	1,561,439	909,653	867,225	14,861	(1,180,490)	(2,340,939)	(3,260,476)	(3,932,379)	(4,903,681)	
4	Average True-Up Amount (Line 3 x 1/2)	2,161,170	2,328,330	1,773,439	780,720	454,827	433,613	7,431	(590,245)	(1,170,470)	(1,630,238)	(1,966,190)	(2,451,841)	
5	Interest Rate (First Business Day of Current Month)	4.37%	4.61%	4.66%	4.85%	5.02%	5.14%	5.11%	5.11%	5.11%	5.11%	5.11%	5.11%	
6	Interest Rate (First Business Day of Subsequent Month)	4.61%	4.66%	4.85%	5.02%	5.14%	5.11%	5.11%	5.11%	5.11%	5.11%	5.11%	5.11%	
7	Total of Beginning & Ending Interest Rates (Lines 5 + 6)	8.98%	9.27%	9.51%	9.87%	10.16%	10.25%	10.22%	10.22%	10.22%	10.22%	10.22%	10.22%	
8	Average Interest Rate (Line 7 x 1/2)	4.490%	4.635%	4.755%	4.935%	5.080%	5.125%	5.110%	5.110%	5.110%	5.110%	5.110%	5.110%	
9	Monthly Average Interest Rate (Line 8 x 1/12)	0.374%	0.386%	0.396%	0.411%	0.423%	0.427%	0.426%	0.426%	0.426%	0.426%	0.426%	0.426%	
10	Interest Provision for the Month (Line 4 x Line 9)	\$8,083	\$8,987	\$7,023	\$3,209	\$1,924	\$1,852	\$32	(\$2,514)	(\$4,986)	(\$6,945)	(\$8,376)	(\$10,445)	(2,156)

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
January 2023 - December 2023

Form 42-4E

Docket No. 20230007-EI
Duke Energy Florida
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Variance Report of O&M Activities
(In Dollars)

Line	Description	(1) Actual / Estimated	(2) Projection Filing	(3) Variance Amount	(4) Percent
1	O&M Activities - System				
1	Transmission Substation Environmental Investigation, Remediation and Pollution Prevention	\$0	\$0	\$0	0%
1a	Distribution Substation Environmental Investigation, Remediation and Pollution Prevention	0	0	0	0%
2	Distribution System Environmental Investigation, Remediation and Pollution Prevention	0	0	0	0%
3	Pipeline Integrity Management - Bartow / Anclote Pipeline - Intm	0	0	0	0%
4	Above Ground Tank Secondary Containment	0	0	0	0%
5	SO2/NOx Emissions Allowances - Energy	2,069	2,346	(277)	-12%
6	Phase II Cooling Water Intake 316(b) - Base	294,886	319,200	(24,314)	-8%
6.a	Phase II Cooling Water Intake 316(b) - Intm	62,500	270,000	(207,500)	-77%
7.2	CAIR/CAMR - Peaking	0	0	0	0%
7.4	CAIR/CAMR Crystal River - Base	0	0	0	0%
7.4	CAIR/CAMR Crystal River - Energy	7,963,242	4,370,588	3,592,655	82%
7.4	CAIR/CAMR Crystal River - A&G	0	0	0	0%
7.4	CAIR/CAMR Crystal River - Conditions of Certification - Energy	0	0	0	0%
7.5	Best Available Retrofit Technology (BART) - Energy	0	0	0	0%
7.6	National Emission Standards for Hazardous Air Pollutants (NESHAP) - Base	61,177	60,000	1,177	2%
8	Arsenic Groundwater Standard - Base	90,075	44,360	45,715	103%
9	Sea Turtle - Coastal Street Lighting - Distrib	0	0	0	0%
11	Modular Cooling Towers - Base	0	0	0	0%
12	Greenhouse Gas Inventory and Reporting - Energy	0	0	0	0%
13	Mercury Total Daily Maximum Loads Monitoring - Energy	0	0	0	0%
14	Hazardous Air Pollutants (HAPs) ICR Program - Energy	0	0	0	0%
15	Effluent Limitation Guidelines ICR Program - Energy	0	0	0	0%
15.1	Effluent Limitation Guidelines Program CRN - Energy	0	0	0	0%
16	National Pollutant Discharge Elimination System (NPDES) - Energy	46,410	38,703	7,707	20%
17	Mercury & Air Toxic Standards (MATS) CR4 & CR5 - Energy	194,912	194,182	730	0%
17.1	Mercury & Air Toxic Standards (MATS) Anclote Gas Conversion - Energy	0	0	0	0%
17.2	Mercury & Air Toxic Standards (MATS) CR1 & CR2 - Energy	0	0	0	0%
18	Coal Combustion Residual (CCR) Rule - Energy	424,755	398,613	26,142	7%
2	Total O&M Activities - Recoverable Costs	\$9,140,026	\$5,697,992	\$3,442,034	60%
3	Recoverable Costs Allocated to Energy	8,631,388	5,004,432	3,626,956	72%
4	Recoverable Costs Allocated to Demand	\$508,638	\$693,560	(\$184,922)	-27%

Notes:

Column (1) End of Period Totals on Form 42-5E
Column (2) 2023 Projection Filing Form 42-2P
Column (3) = Column (1) - Column (2)
Column (4) = Column (3) / Column (2)

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
January 2023 - December 2023

Form 42-5E

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O&M Activities
(in Dollars)

Line	Description	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Estimated Jul-23	Estimated Aug-23	Estimated Sep-23	Estimated Oct-23	Estimated Nov-23	Estimated Dec-23	End of Period Total
1	O&M Activities - System													
1	Transmission Substation Environmental Investigation, Remediation, and Pollution Prevention	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1a	Distribution Substation Environmental Investigation, Remediation, and Pollution Prevention	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Distribution System Environmental Investigation, Remediation, and Pollution Prevention	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Pipeline Integrity Management - Bartow/Anclote Pipeline - Intm	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Above Ground Tank Secondary Containment - Peaking	0	0	0	0	0	0	0	0	0	0	0	0	0
5	SO2/NOx Emissions Allowances - Energy	0	0	0	0	0	0	458	484	444	177	165	341	2,069
6	Phase II Cooling Water Intake 316(b) - Base	74,930	26,448	8,431	20,466	26,843	14,535	19,513	26,424	16,824	26,824	16,824	16,824	294,886
6a	Phase II Cooling Water Intake 316(b) - Intm	0	0	0	0	0	0	0	0	0	20,833	20,833	20,834	62,500
7.2	CAIR/CAMR - Peaking	0	0	0	0	0	0	0	0	0	0	0	0	0
7.4	CAIR/CAMR Crystal River - Base	0	0	0	0	0	0	0	0	0	0	0	0	0
7.4	CAIR/CAMR Crystal River - Energy	(131,246)	62,280	1,403,924	1,078,081	20,030	699,264	1,027,461	1,066,859	965,212	571,706	462,792	736,880	7,963,242
7.4	CAIR/CAMR Crystal River - A&G	0	0	0	0	0	0	0	0	0	0	0	0	0
7.4	CAIR/CAMR Crystal River - Conditions of Certification - Energy	0	0	0	0	0	0	0	0	0	0	0	0	0
7.5	Best Available Retrofit Technology (BART) - Energy	0	0	0	0	0	0	0	0	0	0	0	0	0
7.6	National Emission Standards for Hazardous Air Pollutants (NESHAP) - Base	0	0	0	0	0	0	41,177	0	0	0	0	20,000	61,177
8	Arsenic Groundwater Standard - Base	469	(271)	13,450	(1,488)	12,245	6,940	8,885	8,169	8,169	11,169	11,169	11,169	90,075
9	Sea Turtle - Coastal Street Lighting - Distrib	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Modular Cooling Towers - Base	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Greenhouse Gas Inventory and Reporting - Energy	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Mercury Total Daily Maximum Loads Monitoring - Energy	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Hazardous Air Pollutants (HAPs) ICR Program - Energy	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Effluent Limitation Guidelines ICR Program - Energy	0	0	0	0	0	0	0	0	0	0	0	0	0
15.1	Effluent Limitation Guidelines Program CRN - Energy	0	0	0	0	0	0	0	0	0	0	0	0	0
16	National Pollutant Discharge Elimination System (NPDES) - Energy	0	9,530	7,012	5,556	0	(551)	0	0	11,023	6,641	7,199	0	46,410
17	Mercury & Air Toxic Standards (MATS) CR4 & CR5 - Energy	242	184	(366)	65,048	568	730	0	0	50,000	78,506	0	0	194,912
17.1	Mercury & Air Toxic Standards (MATS) Anclote Gas Conversion - Energy	0	0	0	0	0	0	0	0	0	0	0	0	0
17.2	Mercury & Air Toxic Standards (MATS) CR1 & CR2 - Energy	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Coal Combustion Residual (CCR) Rule - Energy	18,094	60,713	23,054	38,748	32,889	(49)	27,884	32,884	37,884	27,884	51,884	72,884	424,755
2	Total O&M Activities - Recoverable Costs	(\$37,512)	\$158,884	\$1,455,505	\$1,206,410	\$92,575	\$720,869	\$1,125,379	\$1,134,820	\$1,089,557	\$743,740	\$570,867	\$878,932	\$9,140,026
3	Recoverable Costs Allocated to Energy	(112,911)	132,707	1,433,625	1,187,433	53,486	699,394	1,055,804	1,100,227	1,064,564	684,914	522,041	810,105	8,631,388
4	Recoverable Costs Allocated to Demand - Transm	0	0	0	0	0	0	0	0	0	0	0	0	0
	Recoverable Costs Allocated to Demand - Distrib	0	0	0	0	0	0	0	0	0	0	0	0	0
	Recoverable Costs Allocated to Demand - Prod-Base	75,399	26,177	21,881	18,978	39,089	21,475	69,575	34,593	24,993	37,993	27,993	47,993	446,138
	Recoverable Costs Allocated to Demand - Prod-Intm	0	0	0	0	0	0	0	0	0	20,833	20,833	20,834	62,500
	Recoverable Costs Allocated to Demand - Prod-Peaking	0	0	0	0	0	0	0	0	0	0	0	0	0
	Recoverable Costs Allocated to Demand - A&G	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Retail Energy Jurisdictional Factor	0.97050	0.97160	0.95600	0.94300	0.94940	0.94010	0.93000	0.93591	0.94586	0.97332	0.97589	0.96162	
6	Retail Transmission Demand Jurisdictional Factor	0.72042	0.72042	0.72042	0.72042	0.72042	0.72042	0.72042	0.72042	0.72042	0.72042	0.72042	0.72042	
	Retail Distribution Demand Jurisdictional Factor	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	
	Retail Production Demand Jurisdictional Factor - Base	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	
	Retail Production Demand Jurisdictional Factor - Intm	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	
	Retail Production Demand Jurisdictional Factor - Peaking	0.95110	0.95110	0.95110	0.95110	0.95110	0.95110	0.95110	0.95110	0.95110	0.95110	0.95110	0.95110	
	Retail Production Demand Jurisdictional Factor - A&G	0.96779	0.96779	0.96779	0.96779	0.96779	0.96779	0.96779	0.96779	0.96779	0.96779	0.96779	0.96779	
7	Jurisdictional Energy Recoverable Costs (A)	(109,580)	128,938	1,370,545	1,119,749	50,780	657,501	981,900	1,029,715	1,006,925	666,641	509,456	779,012	8,191,582
8	Jurisdictional Demand Recoverable Costs - Transm (B)	0	0	0	0	0	0	0	0	0	0	0	0	0
	Jurisdictional Demand Recoverable Costs - Distrib (B)	0	0	0	0	0	0	0	0	0	0	0	0	0
	Jurisdictional Demand Recoverable Costs - Prod-Base (B)	73,441	25,497	21,312	18,485	38,073	20,917	67,768	33,695	24,344	37,006	27,266	46,747	434,551
	Jurisdictional Demand Recoverable Costs - Prod-Intm (B)	0	0	0	0	0	0	0	0	0	19,299	19,299	19,300	57,898
	Jurisdictional Demand Recoverable Costs - Prod-Peaking (B)	0	0	0	0	0	0	0	0	0	0	0	0	0
	Jurisdictional Demand Recoverable Costs - A&G (B)	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Total Jurisdictional Recoverable Costs - O&M Activities (Lines 7 + 8)	(\$36,139)	\$154,435	\$1,391,857	\$1,138,234	\$88,853	\$678,418	\$1,049,668	\$1,063,410	\$1,031,269	\$722,946	\$556,021	\$845,059	\$8,684,031

Notes:

- (A) Line 3 x Line 5
- (B) Line 4 x Line 6

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
January 2023 - December 2023

Form 42-6E

Docket No. 20230007-EI
Duke Energy Florida
Witness: G. P. Dean
Exh. No. ___ (GPD-2)
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Variance Report of Capital Investment Activities
(in Dollars)

Line	Description	(1) Actual / Estimated	(2) Projection Filing	(3) Variance Amount	(4) Percent
1	Capital Investment Activities - System				
3.1	Pipeline Integrity Management - Bartow/Anclote Pipeline	\$0	\$0	\$0	0%
4.x	Above Ground Tank Secondary Containment	0	0	0	0%
5	SO2/NOx Emissions Allowances	255,793	249,228	6,565	3%
6	Phase II Cooling Water Intake 316(b)	1,518,154	1,527,769	(9,615)	-1%
7.x	CAIR/CAMR	420,533	329,456	91,077	28%
9	Sea Turtle - Coastal Street Lighting	0	0	0	0%
10.x	Underground Storage Tanks	0	0	0	0%
11	Modular Cooling Towers	0	0	0	0%
11.1	Crystal River Thermal Discharge Compliance Project	0	0	0	0%
15.1	Effluent Limitation Guidelines CRN (ELG)	314,489	311,114	3,375	1%
16	National Pollutant Discharge Elimination System (NPDES)	1,233,676	1,228,328	5,348	0%
17x	Mercury & Air Toxics Standards (MATS)	415,487	411,451	4,036	1%
18	Coal Combustion Residual (CCR) Rule	528,269	522,491	5,778	1%
2	Total Capital Investment Activities - Recoverable Costs	\$4,686,401	\$4,579,837	\$106,564	2%
3	Recoverable Costs Allocated to Energy	\$1,091,813	\$990,135	\$101,678	10%
4	Recoverable Costs Allocated to Demand	\$3,594,588	\$3,589,702	\$4,886	0%

Notes:

Column (1) End of Period Totals on Form 42-7E
Column (2) 2023 Projection Filing Form 42-3P
Column (3) = Column (1) - Column (2)
Column (4) = Column (3) / Column (2)

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
January 2023 - December 2023

Form 42-7E

Docket No. 20230007-EI
 Duke Energy Florida
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Capital Investment Projects-Recoverable Costs
(in Dollars)

Line	Description	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Estimated Jul-23	Estimated Aug-23	Estimated Sep-23	Estimated Oct-23	Estimated Nov-23	Estimated Dec-23	End of Period Total
1	Investment Projects - System (A)													
3.1	Pipeline Integrity Management - Bartow/Anclote Pipeline - Intermediate	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4.1	Above Ground Tank Secondary Containment - Peaking	0	0	0	0	0	0	0	0	0	0	0	0	0
4.2	Above Ground Tank Secondary Containment - Base	0	0	0	0	0	0	0	0	0	0	0	0	0
4.3	Above Ground Tank Secondary Containment - Intermediate	0	0	0	0	0	0	0	0	0	0	0	0	0
5	SO2/NOX Emissions Allowances - Energy	21,320	21,320	21,320	21,320	21,320	21,320	21,319	21,315	21,312	21,310	21,310	21,307	255,793
6	Phase II Cooling Water Intake 316(b) - Base	127,644	127,347	126,942	126,624	126,342	126,061	125,779	125,497	125,215	124,934	124,652	124,370	1,511,407
6.1	Phase II Cooling Water Intake 316(b) - Base - Bartow	0	0	0	0	0	0	49	348	844	1,340	1,835	2,331	6,747
6.2	Phase II Cooling Water Intake 316(b) - Intermediate - Anclote	0	0	0	0	0	0	0	0	0	0	0	0	0
7.1	CAIR/CAMR Anclote- Intermediate	0	0	0	0	0	0	0	0	0	0	0	0	0
7.2	CAIR/CAMR - Peaking	0	0	0	0	0	0	0	0	0	0	0	0	0
7.3	CAMR Crystal River - Base	0	0	0	0	0	0	0	0	0	0	0	0	0
7.4	CAIR/CAMR Crystal River AFUDC - Base	0	0	0	0	0	0	0	0	0	0	0	0	0
7.4	CAIR/CAMR Crystal River AFUDC - Energy	34,676	34,993	34,887	34,405	34,986	35,815	35,417	35,071	35,071	35,071	35,071	35,071	420,533
7.5	Best Available Retrofit Technology (BART) - Energy	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Sea Turtle - Coastal Street Lighting -Distribution	0	0	0	0	0	0	0	0	0	0	0	0	0
10.1	Underground Storage Tanks - Base	0	0	0	0	0	0	0	0	0	0	0	0	0
10.2	Underground Storage Tanks - Intermediate	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Modular Cooling Towers - Base	0	0	0	0	0	0	0	0	0	0	0	0	0
11.1	Crystal River Thermal Discharge Compliance Project - Base (Post 2012)	0	0	0	0	0	0	0	0	0	0	0	0	0
11.1	Crystal River Thermal Discharge Compliance Project - Base (2012)	0	0	0	0	0	0	0	0	0	0	0	0	0
15.1	Effluent Limitation Guidelines CRN (ELG) - Base	26,603	26,531	26,459	26,388	26,315	26,243	26,172	26,099	26,028	25,955	25,884	25,812	314,489
16	National Pollutant Discharge Elimination System (NPDES) - Intermediate	104,073	103,843	103,612	103,382	103,152	102,921	102,691	102,461	102,230	102,000	101,771	101,540	1,233,676
17	Mercury & Air Toxic Standards (MATS) CR4 & CR5 - Energy	35,182	35,080	34,979	34,878	34,776	34,675	34,573	34,472	34,370	34,269	34,167	34,066	415,487
17.1	Mercury & Air Toxic Standards (MATS) Anclote Gas Conversion - Energy	0	0	0	0	0	0	0	0	0	0	0	0	0
17.2	Mercury & Air Toxic Standards (MATS) CR1 & CR2 - Energy	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Coal Combustion Residual (CCR) Rule - Base	44,676	44,557	44,438	44,320	44,201	44,082	43,963	43,844	43,725	43,606	43,488	43,369	528,269
2	Total Investment Projects - Recoverable Costs	\$394,174	\$393,671	\$392,637	\$391,317	\$391,092	\$391,117	\$389,963	\$389,107	\$388,795	\$388,485	\$388,178	\$387,866	\$4,686,401
3	Recoverable Costs Allocated to Energy	91,178	91,393	91,186	90,603	91,082	91,810	91,309	90,858	90,753	90,650	90,548	90,444	1,091,813
	Recoverable Costs Allocated to Distribution Demand	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Recoverable Costs Allocated to Demand - Production - Base	198,923	198,435	197,839	197,332	196,858	196,386	195,963	195,788	195,812	195,835	195,859	195,882	2,360,912
	Recoverable Costs Allocated to Demand - Production - Intermediate	104,073	103,843	103,612	103,382	103,152	102,921	102,691	102,461	102,230	102,000	101,771	101,540	1,233,676
	Recoverable Costs Allocated to Demand - Production - Peaking	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Retail Energy Jurisdictional Factor	0.97050	0.97160	0.95600	0.94300	0.94940	0.94010	0.93000	0.93591	0.94586	0.97332	0.97589	0.96162	
	Retail Distribution Demand Jurisdictional Factor	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	
6	Retail Demand Jurisdictional Factor - Production - Base	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	
	Retail Demand Jurisdictional Factor - Production - Intermediate	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	
	Retail Demand Jurisdictional Factor - Production - Peaking	0.95110	0.95110	0.95110	0.95110	0.95110	0.95110	0.95110	0.95110	0.95110	0.95110	0.95110	0.95110	
7	Jurisdictional Energy Recoverable Costs (B)	88,488	88,797	87,174	85,439	86,473	86,311	84,918	85,035	85,839	88,232	88,365	86,973	1,042,043
	Jurisdictional Demand Recoverable Costs - Distribution (B)	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Jurisdictional Demand Recoverable Costs - Production - Base (C)	193,757	193,282	192,701	192,207	191,746	191,286	190,874	190,703	190,727	190,749	190,773	190,795	2,299,599
	Jurisdictional Demand Recoverable Costs - Production - Intermediate (C)	96,410	96,197	95,983	95,770	95,557	95,343	95,130	94,917	94,703	94,490	94,278	94,064	1,142,840
	Jurisdictional Demand Recoverable Costs - Production - Peaking (C)	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Total Jurisdictional Recoverable Costs - Investment Projects (Lines 7 + 8)	\$378,655	\$378,276	\$375,858	\$373,416	\$373,775	\$372,939	\$370,922	\$370,655	\$371,269	\$373,470	\$373,415	\$371,831	\$4,484,482

Notes:
 (A) Each project's Total System Recoverable Expenses on Form 42-8E, Line 9; Form 42-8E, Line 5 for Projects 5 - Emission Allowances and Project 7. 4 - Reagents.
 (B) Line 3 x Line 5
 (C) Line 4 x Line 6

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
January 2023 - December 2023

SO2 and NOx EMISSIONS ALLOWANCES - Energy (Project 5)
(in Dollars)

Line	Description	Beginning of Period Amount	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Estimated Jul-23	Estimated Aug-23	Estimated Sep-23	Estimated Oct-23	Estimated Nov-23	Estimated Dec-23	End of Period Total
1	Working Capital Dr (Cr)														
	a. 0158150 SO ₂ Emission Allowance Inventory	\$3,210,153	\$3,210,153	\$3,210,153	\$3,210,153	\$3,210,153	\$3,210,153	\$3,210,153	\$3,209,695	\$3,209,211	\$3,208,767	\$3,208,591	\$3,208,425	\$3,208,084	\$3,208,084
	b. 0254020 Auctioned SO ₂ Allowance	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	c. 0158170 NO _x Emission Allowance Inventory	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Other (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Total Working Capital	\$3,210,153	\$3,210,153	\$3,210,153	\$3,210,153	\$3,210,153	\$3,210,153	\$3,210,153	\$3,209,695	\$3,209,211	\$3,208,767	\$3,208,591	\$3,208,425	\$3,208,084	\$3,208,084
3	Average Net Investment		\$3,210,153	\$3,210,153	\$3,210,153	\$3,210,153	\$3,210,153	\$3,210,153	\$3,209,924	\$3,209,453	\$3,208,989	\$3,208,679	\$3,208,508	\$3,208,255	
4	Return on Average Net Working Capital Balance (B)														
	a. Debt Component 1.81%		4,847	4,847	4,847	4,847	4,847	4,847	4,847	4,846	4,845	4,845	4,845	4,844	58,154
	b. Equity Component Grossed Up For Taxes 6.16%		16,473	16,473	16,473	16,473	16,473	16,473	16,472	16,469	16,467	16,465	16,465	16,463	197,639
5	Total Return Component (C)		\$21,320	\$21,320	\$21,320	\$21,320	\$21,320	\$21,320	\$21,319	\$21,315	\$21,312	\$21,310	\$21,310	\$21,307	255,793
6	Expense Dr (Cr)														
	a. 0509030 SO ₂ Allowance Expense		\$0	\$0	\$0	\$0	\$0	\$0	\$458	\$484	\$444	\$177	\$165	\$341	2,069
	b. 0407426 Amortization Expense		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. 0509212 NO _x Allowance Expense		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
7	Net Expense (D)		0	0	0	0	0	0	458	484	444	177	165	341	2,069
8	Total System Recoverable Expenses (Lines 5 + 7)		\$21,320	\$21,320	\$21,320	\$21,320	\$21,320	\$21,320	\$21,777	\$21,799	\$21,756	\$21,487	\$21,475	\$21,648	257,862
	a. Recoverable Costs Allocated to Energy		21,320	21,320	21,320	21,320	21,320	21,320	21,777	21,799	21,756	21,487	21,475	21,648	257,862
	b. Recoverable Costs Allocated to Demand		0	0	0	0	0	0	0	0	0	0	0	0	0
9	Energy Jurisdictional Factor		0.97050	0.97160	0.95600	0.94300	0.94940	0.94010	0.93000	0.93591	0.94586	0.97332	0.97589	0.96162	
10	Demand Jurisdictional Factor		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
11	Retail Energy-Related Recoverable Costs (E)		\$20,691	\$20,715	\$20,382	\$20,105	\$20,241	\$20,043	\$20,253	\$20,402	\$20,578	\$20,914	\$20,958	\$20,817	246,097
12	Retail Demand-Related Recoverable Costs (F)		0	0	0	0	0	0	0	0	0	0	0	0	0
13	Total Jurisdictional Recoverable Costs (Lines 11 + 12)		\$ 20,691	\$ 20,715	\$ 20,382	\$ 20,105	\$ 20,241	\$ 20,043	\$ 20,253	\$ 20,402	\$ 20,578	\$ 20,914	\$ 20,958	\$ 20,817	\$ 246,097

Notes:

- (A) N/A
- (B) Line 3 x 7.97% x 1/12. Based on ROE of 10.10%, weighted cost of equity component of capital structure of 4.54% and statutory tax rate of 25.345% (inc tax multiplier = 1.3394950).
- (C) Line 5 is reported on Capital Schedule
- (D) Line 7 is reported on O&M Schedule
- (E) Line 8a x Line 9
- (F) Line 8b x Line 10

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
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Form 42 8E
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Duke Energy Florida
Witness: G. P. Dean
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Return on Capital Investments, Depreciation and Taxes
For Project: Phase II Cooling Water Intake 316(b) - Base (Project 6)
(in Dollars)

Line	Description	Beginning of Period Amount	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Estimated Jul-23	Estimated Aug-23	Estimated Sep-23	Estimated Oct-23	Estimated Nov-23	Estimated Dec-23	End of Period Total
1	Investments														
	a. Expenditures/Additions		\$5,924	(\$16,170)	(\$5,349)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$15,595)
	b. Clearings to Plant		5,924	(16,170)	(5,349)	0	0	0	0	0	0	0	0	0	0
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Other (A)		0	0	0	0	0	0	0	0	0	0	0	0	0
2	Plant-in-Service/Depreciation Base	\$13,211,834	13,217,758	13,201,588	13,196,239	13,196,239	13,196,239	13,196,239	13,196,239	13,196,239	13,196,239	13,196,239	13,196,239	13,196,239	13,196,239
3	Less: Accumulated Depreciation	(\$372,411)	(414,889)	(457,386)	(499,831)	(542,259)	(584,687)	(627,115)	(669,543)	(711,971)	(754,399)	(796,827)	(839,255)	(881,683)	
4	CWIP - Non-Interest Bearing	\$0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Net Investment (Lines 2 + 3 + 4)	\$12,839,423	\$12,802,869	\$12,744,202	\$12,696,408	\$12,653,980	\$12,611,552	\$12,569,124	\$12,526,696	\$12,484,268	\$12,441,840	\$12,399,412	\$12,356,984	\$12,314,556	
6	Average Net Investment		\$12,821,146	\$12,773,535	\$12,720,305	\$12,675,194	\$12,632,766	\$12,590,338	\$12,547,910	\$12,505,482	\$12,463,054	\$12,420,626	\$12,378,198	\$12,335,770	
7	Return on Average Net Investment (B)														
	a. Debt Component	1.81%	19,359	19,287	19,207	19,138	19,074	19,010	18,946	18,882	18,818	18,754	18,690	18,626	227,791
	b. Equity Component Grossed Up For Taxes	6.16%	65,792	65,548	65,275	65,043	64,825	64,608	64,390	64,172	63,954	63,737	63,519	63,301	774,164
	c. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
8	Investment Expenses														
	a. Depreciation (C)	3.8582%	42,478	42,497	42,445	42,428	42,428	42,428	42,428	42,428	42,428	42,428	42,428	42,428	509,272
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	d. Property Taxes (D)	0.000014	15	15	15	15	15	15	15	15	15	15	15	15	180
	e. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
9	Total System Recoverable Expenses (Lines 7 + 8)		\$127,644	\$127,347	\$126,942	\$126,624	\$126,342	\$126,061	\$125,779	\$125,497	\$125,215	\$124,934	\$124,652	\$124,370	1,511,407
	a. Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Recoverable Costs Allocated to Demand		\$127,644	\$127,347	\$126,942	\$126,624	\$126,342	\$126,061	\$125,779	\$125,497	\$125,215	\$124,934	\$124,652	\$124,370	1,511,407
10	Energy Jurisdictional Factor		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
11	Demand Jurisdictional Factor - Production (Base)		0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	
12	Retail Energy-Related Recoverable Costs (E)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Retail Demand-Related Recoverable Costs (F)		124,329	124,040	123,645	123,336	123,061	122,787	122,513	122,238	121,963	121,689	121,415	121,140	1,472,156
14	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$124,329	\$124,040	\$123,645	\$123,336	\$123,061	\$122,787	\$122,513	\$122,238	\$121,963	\$121,689	\$121,415	\$121,140	\$1,472,156

Notes:

- (A) N/A
- (B) Line 6 x 7.97% x 1/12. Based on ROE of 10.10%, weighted cost of equity component of capital structure of 4.54% and statutory tax rate of 25.345% (inc tax multiplier = 1.3394950).
- (C) Line 2 x rate x 1/12. Depreciation rate based on approved rates in Order PSC-2021-0202-AS-EI.
- (D) Line 2 x rate x 1/12. Based on 2022 Effective Tax Rate on original cost.
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
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Docket No. 20230007-EI
Duke Energy Florida
Witness: G. P. Dean
Exh. No. __ (GPD-2)
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Return on Capital Investments, Depreciation and Taxes
For Project: Phase II Cooling Water Intake 316(b) - Base - Bartow (Project 6.1)
(in Dollars)

Line	Description	Beginning of Period Amount	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Estimated Jul-23	Estimated Aug-23	Estimated Sep-23	Estimated Oct-23	Estimated Nov-23	Estimated Dec-23	End of Period Total
1	Investments														
	a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$74,672	\$74,672	\$74,672	\$74,672	\$74,672	\$388,360
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Other (A)		0	0	0	0	0	0	0	0	0	0	0	0	0
2	Plant-in-Service/Depreciation Base	\$0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Less: Accumulated Depreciation	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	15,000	89,672	164,344	239,016	313,688	388,360	
5	Net Investment (Lines 2 + 3 + 4)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$89,672	\$164,344	\$239,016	\$313,688	\$388,360	
6	Average Net Investment		\$0	\$0	\$0	\$0	\$0	\$0	\$7,500	\$52,336	\$127,008	\$201,680	\$276,352	\$351,024	
7	Return on Average Net Investment (B)														
	a. Debt Component	1.81%	0	0	0	0	0	0	11	79	192	305	417	530	1,534
	b. Equity Component Grossed Up For Taxes	6.16%	0	0	0	0	0	0	38	269	652	1,035	1,418	1,801	5,213
	c. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
8	Investment Expenses														
	a. Depreciation (C)	3.8582%	0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	d. Property Taxes (D)	0.000014	0	0	0	0	0	0	0	0	0	0	0	0	0
	e. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
9	Total System Recoverable Expenses (Lines 7 + 8)		\$0	\$0	\$0	\$0	\$0	\$0	\$49	\$348	\$844	\$1,340	\$1,835	\$2,331	6,747
	a. Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Recoverable Costs Allocated to Demand		\$0	\$0	\$0	\$0	\$0	\$0	\$49	\$348	\$844	\$1,340	\$1,835	\$2,331	6,747
10	Energy Jurisdictional Factor		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
11	Demand Jurisdictional Factor - Production (Base)		0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	
12	Retail Energy-Related Recoverable Costs (E)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Retail Demand-Related Recoverable Costs (F)		0	0	0	0	0	0	48	339	822	1,305	1,787	2,270	6,572
14	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$0	\$0	\$0	\$0	\$0	\$0	\$48	\$339	\$822	\$1,305	\$1,787	\$2,270	\$6,572

Notes:

- (A) N/A
- (B) Line 6 x 7.97% x 1/12. Based on ROE of 10.10%, weighted cost of equity component of capital structure of 4.54% and statutory tax rate of 25.345% (inc tax multiplier = 1.3394950).
- (C) Line 2 x rate x 1/12. Depreciation rate based on approved rates in Order PSC-2021-0202-AS-EI.
- (D) Line 2 x rate x 1/12. Based on 2022 Effective Tax Rate on original cost.
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
January 2023 - December 2023

Return on Capital Investments, Depreciation and Taxes
For Project: Phase II Cooling Water Intake 316(b) - Intermediate - Anclote (Project 6.2)
(in Dollars)

Line	Description	Beginning of Period Amount	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Estimated Jul-23	Estimated Aug-23	Estimated Sep-23	Estimated Oct-23	Estimated Nov-23	Estimated Dec-23	End of Period Total
1	Investments														
	a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Other (A)		0	0	0	0	0	0	0	0	0	0	0	0	0
2	Plant-in-Service/Depreciation Base	\$0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Less: Accumulated Depreciation	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Net Investment (Lines 2+ 3 + 4)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	Average Net Investment		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	Return on Average Net Investment (B)														
	a. Debt Component		0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Equity Component Grossed Up For Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
8	Investment Expenses														
	a. Depreciation (C)		0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	d. Property Taxes (D)		0	0	0	0	0	0	0	0	0	0	0	0	0
	e. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
9	Total System Recoverable Expenses (Lines 7 + 8)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
	a. Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Recoverable Costs Allocated to Demand		0	0	0	0	0	0	0	0	0	0	0	0	0
10	Energy Jurisdictional Factor		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
11	Demand Jurisdictional Factor - Production (Intermediate)		0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	
12	Retail Energy-Related Recoverable Costs (E)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Retail Demand-Related Recoverable Costs (F)		0	0	0	0	0	0	0	0	0	0	0	0	0
14	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Notes:

- (A) N/A
- (B) Line 6 x 7.97% x 1/12. Based on ROE of 10.10%, weighted cost of equity component of capital structure of 4.54% and statutory tax rate of 25.345% (inc tax multiplier = 1.3394950).
- (C) Line 2 x rate x 1/12. Depreciation rate based on approved rates in Order PSC-2021-0202-AS-EI.
- (D) Line 2 x rate x 1/12. Based on 2022 Effective Tax Rate on original cost.
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
January 2023 - December 2023

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Docket No. 20230007-EI
Duke Energy Florida
Witness: G. P. Dean
Exh. No. __ (GPD-2)
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Schedule of Amortization and Return
For Project: CAIR/CAMR - Energy (Project 7.4 - Reagents and By-Products)
(in Dollars)

Line	Description	Beginning of Period Amount	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Estimated Jul-23	Estimated Aug-23	Estimated Sep-23	Estimated Oct-23	Estimated Nov-23	Estimated Dec-23	End of Period Total
1	Working Capital Dr (Cr)														
	a. 0154401 Ammonia Inventory	\$3,622,236	\$3,625,104	\$3,650,891	\$3,641,060	\$3,694,325	\$3,788,256	\$3,848,662	\$3,708,049	\$3,708,049	\$3,708,049	\$3,708,049	\$3,708,049	\$3,708,049	\$3,708,049
	b. 0154200 Limestone Inventory	\$1,562,606	1,632,235	1,629,412	1,584,548	1,440,852	1,612,140	1,536,281	1,572,578	1,572,578	1,572,578	1,572,578	1,572,578	1,572,578	1,572,578
2	Total Working Capital	\$5,184,843	\$5,257,339	\$5,280,303	\$5,225,608	\$5,135,177	\$5,400,396	\$5,384,943	\$5,280,628	\$5,280,628	\$5,280,628	\$5,280,628	\$5,280,628	\$5,280,628	5,280,628
3	Average Net Investment		5,221,091	5,268,821	5,252,955	5,180,392	5,267,787	5,392,670	5,332,785	5,280,628	5,280,628	5,280,628	5,280,628	5,280,628	
4	Return on Average Net Working Capital Balance (A)														
	a. Debt Component		1.81%	7,883	7,955	7,932	7,822	7,954	8,142	8,052	7,973	7,973	7,973	7,973	\$95,607
	b. Equity Component Grossed Up For Taxes		6.16%	26,792	27,037	26,956	26,583	27,032	27,673	27,365	27,098	27,098	27,098	27,098	324,926
5	Total Return Component (B)		34,676	34,993	34,887	34,405	34,986	35,815	35,417	35,071	35,071	35,071	35,071	35,071	420,533
6	Expense Dr (Cr)														
	a. 0502030 Ammonia Expense		20,776	5,315	312,002	218,483	126,068	227,579	215,250	223,125	196,875	164,692	113,400	131,303	1,954,868
	b. 0502040 Limestone Expense		27,597	0	533,875	422,854	203,347	387,763	577,053	600,635	550,393	226,285	215,891	450,596	4,196,290
	c. 0502050 Dibasic Acid Expense		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. 0502070 Gypsum Disposal/Sale		(345,972)	0	0	(82,497)	(483,371)	(285,433)	13,358	14,099	12,944	5,153	4,820	9,933	(1,136,963)
	e. 0502040 Hydrated Lime Expense		17,117	6,708	256,781	237,145	149,737	242,090	196,800	204,000	180,000	150,575	103,680	120,048	1,864,682
	f. 0502300 Caustic Expense		149,235	50,257	301,266	282,095	24,248	127,264	25,000	25,000	25,000	25,000	25,000	25,000	1,084,365
7	Net Expense (C)		(131,246)	62,280	1,403,924	1,078,081	20,030	699,264	1,027,461	1,066,859	965,212	571,706	462,792	736,880	7,963,242
8	Total System Recoverable Expenses (Lines 5 + 7)		(\$96,571)	\$97,272	\$1,438,811	\$1,112,486	\$55,015	\$735,079	\$1,062,879	\$1,101,930	\$1,000,283	\$606,777	\$497,863	\$771,950	8,383,776
	a. Recoverable Costs Allocated to Energy		(96,571)	97,272	1,438,811	1,112,486	55,015	735,079	1,062,879	1,101,930	1,000,283	606,777	497,863	771,950	8,383,776
	b. Recoverable Costs Allocated to Demand		0	0	0	0	0	0	0	0	0	0	0	0	0
9	Energy Jurisdictional Factor		0.97050	0.97160	0.95600	0.94300	0.94940	0.94010	0.93000	0.93591	0.94586	0.97332	0.97589	0.96162	
10	Demand Jurisdictional Factor		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
11	Retail Energy-Related Recoverable Costs (D)		(93,722)	94,510	1,375,504	1,049,075	52,232	691,048	988,479	1,031,309	946,125	590,589	485,861	742,322	7,953,330
12	Retail Demand-Related Recoverable Costs (E)		0	0	0	0	0	0	0	0	0	0	0	0	0
13	Total Jurisdictional Recoverable Costs (Lines 11 + 12)		\$ (93,722)	\$ 94,510	\$ 1,375,504	\$ 1,049,075	\$ 52,232	\$ 691,048	\$ 988,479	\$ 1,031,309	\$ 946,125	\$ 590,589	\$ 485,861	\$ 742,322	\$ 7,953,330

Notes:

- (A) Line 3 x 7.97% x 1/12. Based on ROE of 10.10%, weighted cost of equity component of capital structure of 4.54% and statutory tax rate of 25.345% (inc tax multiplier = 1.3394950).
- (B) Line 5 is reported on Capital Schedule
- (C) Line 7 is reported on O&M Schedule
- (D) Line 8a x Line 9
- (E) Line 8b x Line 10

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
January 2023 - December 2023

Return on Capital Investments, Depreciation and Taxes
For Project: NESHAP - Citrus CC - Base (Project 7.6)
(in Dollars)

Line	Description	Beginning of Period Amount	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Estimated Jul-23	Estimated Aug-23	Estimated Sep-23	Estimated Oct-23	Estimated Nov-23	Estimated Dec-23	End of Period Total
1	Investments														
	a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Other (A)		0	0	0	0	0	0	0	0	0	0	0	0	0
2	Plant-in-Service/Depreciation Base	\$0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Less: Accumulated Depreciation	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Net Investment (Lines 2 + 3 + 4)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	Average Net Investment		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	Return on Average Net Investment (B)														
	a. Debt Component	1.81%	0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Equity Component Grossed Up For Taxes	6.16%	0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Other (A)		0	0	0	0	0	0	0	0	0	0	0	0	0
8	Investment Expenses														
	a. Depreciation (C)	3.1800%	0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	d. Property Taxes (D)	0.000014	0	0	0	0	0	0	0	0	0	0	0	0	0
	e. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
9	Total System Recoverable Expenses (Lines 7 + 8)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
	a. Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Recoverable Costs Allocated to Demand		0	0	0	0	0	0	0	0	0	0	0	0	0
10	Energy Jurisdictional Factor		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	Demand Jurisdictional Factor		0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	
12	Retail Energy-Related Recoverable Costs (E)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Retail Demand-Related Recoverable Costs (F)		0	0	0	0	0	0	0	0	0	0	0	0	0
14	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Notes:

- (A) N/A
- (B) Line 6 x 7.97% x 1/12. Based on ROE of 10.10%, weighted cost of equity component of capital structure of 4.54% and statutory tax rate of 25.345% (inc tax multiplier = 1.3394950).
- (C) Line 2 x rate x 1/12. Depreciation rate based on approved rates in Order No. PSC-2021-0202-AS-EI.
- (D) Line 2 x rate x 1/12. Based on 2022 Effective Tax Rate on original cost.
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
January 2023 - December 2023

Return on Capital Investments, Depreciation and Taxes
For Project: Effluent Limitation Guidelines CRN - Energy (Project 15.1)
(in Dollars)

Line	Description	Beginning of Period Amount	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Estimated Jul-23	Estimated Aug-23	Estimated Sep-23	Estimated Oct-23	Estimated Nov-23	Estimated Dec-23	End of Period Total
1	Investments														
	a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Other (A)		0	0	0	0	0	0	0	0	0	0	0	0	0
2	Plant-in-Service/Depreciation Base	\$2,612,979	2,612,979	2,612,979	2,612,979	2,612,979	2,612,979	2,612,979	2,612,979	2,612,979	2,612,979	2,612,979	2,612,979	2,612,979	
3	Less: Accumulated Depreciation	(232,211)	(243,035)	(253,859)	(264,683)	(275,507)	(286,331)	(297,155)	(307,979)	(318,803)	(329,627)	(340,451)	(351,275)	(362,099)	
4	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	Net Investment (Lines 2 + 3 + 4)	\$2,380,768	\$2,369,944	\$2,359,120	\$2,348,296	\$2,337,472	\$2,326,648	\$2,315,824	\$2,305,000	\$2,294,176	\$2,283,352	\$2,272,528	\$2,261,704	\$2,250,880	
6	Average Net Investment		\$2,375,356	\$2,364,532	\$2,353,708	\$2,342,884	\$2,332,060	\$2,321,236	\$2,310,412	\$2,299,588	\$2,288,764	\$2,277,940	\$2,267,116	\$2,256,292	
7	Return on Average Net Investment (B)														
	a. Debt Component	1.81%	3,587	3,570	3,554	3,538	3,521	3,505	3,489	3,472	3,456	3,439	3,423	3,407	41,961
	b. Equity Component Grossed Up For Taxes	6.16%	12,189	12,134	12,078	12,023	11,967	11,911	11,856	11,800	11,745	11,689	11,634	11,578	142,604
	c. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
8	Investment Expenses														
	a. Depreciation (C) 4.9707%		10,824	10,824	10,824	10,824	10,824	10,824	10,824	10,824	10,824	10,824	10,824	10,824	129,888
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	d. Property Taxes (D) 0.000014		3	3	3	3	3	3	3	3	3	3	3	3	36
	e. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
9	Total System Recoverable Expenses (Lines 7 + 8)		\$26,603	\$26,531	\$26,459	\$26,388	\$26,315	\$26,243	\$26,172	\$26,099	\$26,028	\$25,955	\$25,884	\$25,812	314,489
	a. Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Recoverable Costs Allocated to Demand		\$26,603	\$26,531	\$26,459	\$26,388	\$26,315	\$26,243	\$26,172	\$26,099	\$26,028	\$25,955	\$25,884	\$25,812	314,489
10	Energy Jurisdictional Factor		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
11	Demand Jurisdictional Factor - Production (Base)		0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	
12	Retail Energy-Related Recoverable Costs (E)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Retail Demand-Related Recoverable Costs (F)		\$25,912	\$25,842	\$25,772	\$25,703	\$25,632	\$25,561	\$25,492	\$25,421	\$25,352	\$25,281	\$25,212	\$25,142	306,322
14	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$25,912	\$25,842	\$25,772	\$25,703	\$25,632	\$25,561	\$25,492	\$25,421	\$25,352	\$25,281	\$25,212	\$25,142	\$306,322

Notes:

- (A) N/A
- (B) Line 6 x 7.97% x 1/12. Based on ROE of 10.10%, weighted cost of equity component of capital structure of 4.54% and statutory tax rate of 25.345% (inc tax multiplier = 1.3394950).
- (C) Line 2 x rate x 1/12. Depreciation rate based on approved rates in Order PSC-2021-0202-AS-EI.
- (D) Line 2 x rate x 1/12. Based on 2022 Effective Tax Rate on original cost.
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
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Return on Capital Investments, Depreciation and Taxes
For Project: NPDES - Intermediate (Project 16)
(in Dollars)

Line	Description	Beginning of Period Amount	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Estimated Jul-23	Estimated Aug-23	Estimated Sep-23	Estimated Oct-23	Estimated Nov-23	Estimated Dec-23	End of Period Total
1	Investments														
	a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Other (A)		0	0	0	0	0	0	0	0	0	0	0	0	0
2	Plant-in-Service/Depreciation Base	\$12,841,870	12,841,870	12,841,870	12,841,870	12,841,870	12,841,870	12,841,870	12,841,870	12,841,870	12,841,870	12,841,870	12,841,870	12,841,870	
3	Less: Accumulated Depreciation	(3,416,706)	(3,451,373)	(3,486,040)	(3,520,707)	(3,555,374)	(3,590,041)	(3,624,708)	(3,659,375)	(3,694,042)	(3,728,709)	(3,763,376)	(3,798,043)	(3,832,710)	
4	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Net Investment (Lines 2 + 3 + 4)	\$9,425,164	\$9,390,497	\$9,355,830	\$9,321,163	\$9,286,496	\$9,251,829	\$9,217,162	\$9,182,495	\$9,147,828	\$9,113,161	\$9,078,494	\$9,043,827	\$9,009,160	
6	Average Net Investment		\$9,407,831	\$9,373,164	\$9,338,497	\$9,303,830	\$9,269,163	\$9,234,496	\$9,199,829	\$9,165,162	\$9,130,495	\$9,095,828	\$9,061,161	\$9,026,494	
7	Return on Average Net Investment (B)														
	a. Debt Component	1.81%	14,205	14,153	14,100	14,048	13,996	13,943	13,891	13,839	13,786	13,734	13,682	13,629	167,006
	b. Equity Component Grossed Up For Taxes	6.16%	48,277	48,099	47,921	47,743	47,565	47,387	47,209	47,031	46,853	46,675	46,498	46,320	567,578
	c. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
8	Investment Expenses														
	a. Depreciation (C)	3.2394%	34,667	34,667	34,667	34,667	34,667	34,667	34,667	34,667	34,667	34,667	34,667	34,667	416,004
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	d. Property Taxes (D)	0.006470	6,924	6,924	6,924	6,924	6,924	6,924	6,924	6,924	6,924	6,924	6,924	6,924	83,088
	e. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
9	Total System Recoverable Expenses (Lines 7 + 8)		\$104,073	\$103,843	\$103,612	\$103,382	\$103,152	\$102,921	\$102,691	\$102,461	\$102,230	\$102,000	\$101,771	\$101,540	1,233,676
	a. Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Recoverable Costs Allocated to Demand		\$104,073	\$103,843	\$103,612	\$103,382	\$103,152	\$102,921	\$102,691	\$102,461	\$102,230	\$102,000	\$101,771	\$101,540	1,233,676
10	Energy Jurisdictional Factor		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
11	Demand Jurisdictional Factor - Production (Intermediate)		0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	0.92637	
12	Retail Energy-Related Recoverable Costs (E)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Retail Demand-Related Recoverable Costs (F)		96,410	96,197	95,983	95,770	95,557	95,343	95,130	94,917	94,703	94,490	94,278	94,064	1,142,840
14	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$96,410	\$96,197	\$95,983	\$95,770	\$95,557	\$95,343	\$95,130	\$94,917	\$94,703	\$94,490	\$94,278	\$94,064	\$1,142,840

Notes:

- (A) N/A
- (B) Line 6 x 7.97% x 1/12. Based on ROE of 10.10%, weighted cost of equity component of capital structure of 4.54% and statutory tax rate of 25.345% (inc tax multiplier = 1.3394950).
- (C) Line 2 x rate x 1/12. Depreciation rate based on approved rates in Order PSC-2021-0202-AS-EI.
- (D) Line 2 x rate x 1/12. Based on 2022 Effective Tax Rate on original cost.
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
January 2023 - December 2023

Return on Capital Investments, Depreciation and Taxes
For Project: MERCURY & AIR TOXIC STANDARDS (MATS) - CRYSTAL RIVER UNITS 4 & 5 - Energy (Project 17)
(in Dollars)

Line	Description	Beginning of Period Amount	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Estimated Jul-23	Estimated Aug-23	Estimated Sep-23	Estimated Oct-23	Estimated Nov-23	Estimated Dec-23	End of Period Total
1	Investments														
	a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Other (A)		0	0	0	0	0	0	0	0	0	0	0	0	0
2	Plant-in-Service/Depreciation Base	\$3,690,187	3,690,187	3,690,187	3,690,187	3,690,187	3,690,187	3,690,187	3,690,187	3,690,187	3,690,187	3,690,187	3,690,187	3,690,187	
3	Less: Accumulated Depreciation	(687,365)	(702,651)	(717,937)	(733,223)	(748,509)	(763,795)	(779,081)	(794,367)	(809,653)	(824,939)	(840,225)	(855,511)	(870,797)	
4	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	Net Investment (Lines 2 + 3 + 4)	\$3,002,822	\$2,987,536	\$2,972,250	\$2,956,964	\$2,941,678	\$2,926,392	\$2,911,106	\$2,895,820	\$2,880,534	\$2,865,248	\$2,849,962	\$2,834,676	\$2,819,390	
6	Average Net Investment		\$2,995,179	\$2,979,893	\$2,964,607	\$2,949,321	\$2,934,035	\$2,918,749	\$2,903,463	\$2,888,177	\$2,872,891	\$2,857,605	\$2,842,319	\$2,827,033	
7	Return on Average Net Investment (B)														
	a. Debt Component	1.81%	4,522	4,499	4,476	4,453	4,430	4,407	4,384	4,361	4,338	4,315	4,292	4,269	52,746
	b. Equity Component Grossed Up For Taxes	6.16%	15,370	15,291	15,213	15,135	15,056	14,978	14,899	14,821	14,742	14,664	14,585	14,507	179,261
	c. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
8	Investment Expenses														
	a. Depreciation (C)	4.9707%	15,286	15,286	15,286	15,286	15,286	15,286	15,286	15,286	15,286	15,286	15,286	15,286	183,432
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	d. Property Taxes (D)	0.000014	4	4	4	4	4	4	4	4	4	4	4	4	48
	e. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
9	Total System Recoverable Expenses (Lines 7 + 8)		\$35,182	\$35,080	\$34,979	\$34,878	\$34,776	\$34,675	\$34,573	\$34,472	\$34,370	\$34,269	\$34,167	\$34,066	415,487
	a. Recoverable Costs Allocated to Energy		35,182	35,080	34,979	34,878	34,776	34,675	34,573	34,472	34,370	34,269	34,167	34,066	415,487
	b. Recoverable Costs Allocated to Demand		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
10	Energy Jurisdictional Factor		0.97050	0.97160	0.95600	0.94300	0.94940	0.94010	0.93000	0.93591	0.94586	0.97332	0.97589	0.96162	
11	Demand Jurisdictional Factor		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
12	Retail Energy-Related Recoverable Costs (E)		\$34,144	\$34,084	\$33,440	\$32,890	\$33,016	\$32,598	\$32,153	\$32,263	\$32,509	\$33,355	\$33,343	\$32,759	\$396,554
13	Retail Demand-Related Recoverable Costs (F)		0	0	0	0	0	0	0	0	0	0	0	0	0
14	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$34,144	\$34,084	\$33,440	\$32,890	\$33,016	\$32,598	\$32,153	\$32,263	\$32,509	\$33,355	\$33,343	\$32,759	\$396,554

Notes:

- (A) N/A
- (B) Line 6 x 7.97% x 1/12. Based on ROE of 10.10%, weighted cost of equity component of capital structure of 4.54% and statutory tax rate of 25.345% (inc tax multiplier = 1.3394950).
- (C) Line 2 x rate x 1/12. Depreciation rate based on approved rates in Order PSC-2021-0202-AS-EI.
- (D) Line 2 x rate x 1/12. Based on 2022 Effective Tax Rate on original cost.
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
January 2023 - December 2023

Return on Capital Investments, Depreciation and Taxes
For Project: COAL COMBUSTION RESIDUAL (CCR) RULE - Base (Project 18)
(in Dollars)

Line	Description	Beginning of Period Amount	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Estimated Jul-23	Estimated Aug-23	Estimated Sep-23	Estimated Oct-23	Estimated Nov-23	Estimated Dec-23	End of Period Total
1	Investments														
	a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Other (A)		0	0	0	0	0	0	0	0	0	0	0	0	0
2	Plant-in-Service/Depreciation Base	\$4,321,533	4,321,533	4,321,533	4,321,533	4,321,533	4,321,533	4,321,533	4,321,533	4,321,533	4,321,533	4,321,533	4,321,533	4,321,533	
3	Less: Accumulated Depreciation	(281,771)	(299,672)	(317,573)	(335,474)	(353,375)	(371,276)	(389,177)	(407,078)	(424,979)	(442,880)	(460,781)	(478,682)	(496,583)	
4	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	Net Investment (Lines 2 + 3 + 4)	\$4,039,762	\$4,021,861	\$4,003,960	\$3,986,059	\$3,968,158	\$3,950,257	\$3,932,356	\$3,914,455	\$3,896,554	\$3,878,653	\$3,860,752	\$3,842,851	\$3,824,950	
6	Average Net Investment		\$4,030,811	\$4,012,910	\$3,995,009	\$3,977,108	\$3,959,207	\$3,941,306	\$3,923,405	\$3,905,504	\$3,887,603	\$3,869,702	\$3,851,801	\$3,833,900	
7	Return on Average Net Investment (B)														
	a. Debt Component	1.81%	6,086	6,059	6,032	6,005	5,978	5,951	5,924	5,897	5,870	5,843	5,816	5,789	71,250
	b. Equity Component Grossed Up For Taxes	6.16%	20,684	20,592	20,500	20,409	20,317	20,225	20,133	20,041	19,949	19,857	19,766	19,674	242,147
	c. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
8	Investment Expenses														
	a. Depreciation (C)	4.9707%	17,901	17,901	17,901	17,901	17,901	17,901	17,901	17,901	17,901	17,901	17,901	17,901	214,812
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	d. Property Taxes (D)	0.000014	5	5	5	5	5	5	5	5	5	5	5	5	60
	e. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
9	Total System Recoverable Expenses (Lines 7 + 8)		\$44,676	\$44,557	\$44,438	\$44,320	\$44,201	\$44,082	\$43,963	\$43,844	\$43,725	\$43,606	\$43,488	\$43,369	528,269
	a. Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Recoverable Costs Allocated to Demand		44,676	44,557	44,438	44,320	44,201	44,082	43,963	43,844	43,725	43,606	43,488	43,369	528,269
10	Energy Jurisdictional Factor		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
11	Demand Jurisdictional Factor - Production (Base)		0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	0.97403	
12	Retail Energy-Related Recoverable Costs (E)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Retail Demand-Related Recoverable Costs (F)		43,516	43,400	43,284	43,169	43,053	42,937	42,821	42,705	42,589	42,474	42,359	42,243	514,550
14	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$43,516	\$43,400	\$43,284	\$43,169	\$43,053	\$42,937	\$42,821	\$42,705	\$42,589	\$42,474	\$42,359	\$42,243	\$514,550

Notes:

- (A) N/A
- (B) Line 6 x 7.97% x 1/12. Based on ROE of 10.10%, weighted cost of equity component of capital structure of 4.54% and statutory tax rate of 25.345% (inc tax multiplier = 1.3394950).
- (C) Line 2 x rate x 1/12. Depreciation rate based on approved rates in Order PSC-2021-0202-AS-EI.
- (D) Line 2 x rate x 1/12. Based on 2022 Effective Tax Rate on original cost.
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

DUKE ENERGY FLORIDA
Environmental Cost Recovery Clause
Calculation of Actual / Estimated Amount
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Duke Energy Florida
Witness: G. P. Dean
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Capital Structure and Cost Rates

	(1)	(2)	(3)	(4)	(5)	(6)
	Jurisdictional Rate Base Adjusted Retail (\$000s)	Cap Ratio	Cost Rate	Weighted Cost	Revenue Requirement Rate	Monthly Revenue Requirement Rate
1 Common Equity	\$ 8,189,446	44.99%	10.10%	4.54%	6.08%	0.5067%
2 Long Term Debt	6,956,821	38.22%	4.48%	1.71%	1.71%	0.1425%
3 Short Term Debt	217,724	1.20%	4.65%	0.06%	0.06%	0.0050%
4 Cust Dep Active	153,136	0.84%	2.50%	0.02%	0.02%	0.0017%
5 Cust Dep Inactive	1,472	0.01%			0.00%	0.0000%
6 Invest Tax Cr	190,777	1.05%	7.36%	0.08%	0.10%	0.0083%
7 Deferred Inc Tax	2,491,658	13.69%			0.00%	0.0000%
8 Total	\$ 18,201,033	100.00%		6.41%	7.97%	0.6642%

	ITC split between Debt and Equity**:	Ratio	Cost Rate	Ratio	Ratio	Deferred Inc Tax	Weighted ITC	After Gross-up
9 Common Equity	8,189,446	54%	10.10%	5.46%	72.6%	0.08%	0.058%	0.078%
10 Preferred Equity	-	0%				0.08%	0.000%	0.000%
11 Long Term Debt	6,956,821	46%	4.48%	2.06%	27.4%	0.08%	0.022%	0.022%
12	15,146,266	100%		7.52%			0.080%	0.100%

Breakdown of Revenue Requirement Rate of Return between Debt and Equity:

13	Total Equity Component (Lines 1 and 9)	6.158%
14	Total Debt Component (Lines 2, 3, 4, and 11)	1.812%
15	Total Revenue Requirement Rate of Return	7.970%

Notes:

Effective Tax Rate: 25.345%

Column:

- (1) Per Order No. PSC-2020-0165-PAA-EU, issued May 20, 2020, approving amended joint motion modifying WACC methodology
- (2) Column (1) / Total Column (1)
- (3) Per Order No. PSC-2020-0165-PAA-EU, issued May 20, 2020, approving amended joint motion modifying WACC methodology
Line 6 and Line 12, the cost rate of ITC's is determined under Treasury Regulation section 1.46-6(b)(3)(ii)
- (4) Column (2) x Column (3)
- (5) For equity components: Column (4) / (1-effective income tax rate/100)
- * For debt components: Column (4)
- ** Line 6 is the pre-tax ITC components from Lines 9 and 11
- (6) Column (5) / 12

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

REGINALD ANDERSON

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

July 28, 2023

1 **Q. Please state your name and business address.**

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

4

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

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

8

9 **Q. Have you previously filed testimony before this Commission in Docket No.**
10 **20230007-EI?**

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

12

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

15 A. No.

16

1 **Q. What is the purpose of your testimony?**

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

10

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

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

17 This variance is attributable to a forecasted \$300k decrease in Dibasic Acid
18 expense, offset by forecasted increases of \$24k for Ammonia expense, \$1.8M
19 increase in Limestone expense, \$99k increase in Hydrated Lime expense, and a
20 \$784k increase in Caustic expense. In addition, Gypsum Sales Credit is \$1.2M
21 less than originally forecasted, which offsets some of the cost of the other
22 reagents.

23

24 **Q. Does this conclude your testimony?**

1 A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

ERIC SZKOLNYJ

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

July 28, 2023

1 **Q. Please state your name and business address.**

2 A. My name is Eric Szkolnyj. My business address is 526 South Church Street, Charlotte, NC
3 28202.

4
5 **Q. By whom are you employed?**

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

9
10 **Q. Have you previously filed testimony before this Commission in Docket No. 20230007-
11 EI?**

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

13
14 **Q. Has your job description, education, background, and professional experience changed
15 since that time?**

16 A. No.

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Q. What is the purpose of your testimony?

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

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

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

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

PATRICIA Q. WEST

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

July 28, 2023

1 **Q. Please state your name and business address.**

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

4

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

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

8

9 **Q. What are your responsibilities in that position?**

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

16

1 **Q. Please describe your educational background and professional experience.**

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

12
13 **Q. Have you previously filed testimony before this Commission in connection**
14 **with DEF’s Environmental Cost Recovery Clause (“ECRC”)?**

15 A. Yes.

16
17 **Q. Have you previously filed testimony before this Commission in Docket No.**
18 **20230007-EI?**

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

21
22 **Q. What is the purpose of your testimony?**

23 A. The purpose of my testimony is to explain material variances between 2023
24 actual/estimated cost projections and original 2023 cost projections for

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

17

18 **Q. Please explain the variance between actual/estimated O&M project**
19 **expenditures and original projections for Phase II Cooling Water Intake**
20 **316(b) (Projects 6 & 6a) for the period January 2023 through December**
21 **2023.**

22 A. O&M expenditures for Phase II Cooling Water Intake 316(b) are expected to be
23 \$231,814 (39%) lower than originally forecasted.

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

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

7
8 **Q. Please explain the variance between actual/estimated Capital project**
9 **expenditures and original projections for Phase II Cooling Water Intake**
10 **316(b) – Base (Project 6) for the period January 2023 through December**
11 **2023.**

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

16
17 **Q. Please explain the variance between actual/estimated Capital project**
18 **expenditures and original projections for Phase II Cooling Water Intake**
19 **316(b) – Base - Bartow, (Project 6.1) for the period January 2023 through**
20 **December 2023.**

21 A. Capital expenditures for Phase II Cooling Water Intake 316(b) Base – Bartow, are
22 expected to be \$301,156 (44%) lower than originally forecasted. This variance is
23 primarily due to the timing of implementing the compliance strategies following
24 receipt of the NDPEs permit on January 12, 2023. The exact work scope for this

1 project will be determined during the detailed engineering phase which is
2 projected to begin this year.

3

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

7 A. O&M expenditures for Arsenic Groundwater Standard - Base are expected to be
8 \$45,715 (103%) higher than forecasted. This is primarily due to costs associated
9 with additional Natural Attenuation Monitoring (“NAM”) sampling being
10 required as part of the Groundwater Monitoring Plan (“GWMP”).

11

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

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

19

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

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

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

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

16 Per the final rule, required 316(b) studies and information submittals will be tied
17 to NPDES permit renewals. For permits that expire within 45 months of the
18 effective date of the final rule, certain information must be submitted with the
19 renewal application. Other information, including field study results, are required
20 to be submitted pursuant to a schedule included in the re-issued NPDES permit.

21 Both the Anclote and Bartow stations are within this schedule and the NPDES
22 permit renewal applications, including the studies and information required under
23 40 CFR 122.21(r)(2-13) as required by the 316(b) rule of the Clean Water Act,
24 were submitted to FDEP for Anclote and Bartow in July and August 2020

1 respectively. A 316(b) Compliance Plan for Crystal River Units 4&5 utilizing the
2 cooling water blowdown from the Citrus Combined Cycle Station as the source
3 of make-up water for Crystal River Units 4&5 is being implemented as part of the
4 current permit renewal for those units.

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

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

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

1 316(b) studies and proposals under review by the agency, it is difficult to assess
2 the timing or the outcome of the final NPDES permit renewal. DEF will provide
3 the Commission an update on the status of the 316(b) Rule compliance strategies
4 for the Anclote station in the next available ECRC filing following issuance of the
5 NPDES permit renewal.

6

7 **Q. Please provide an update on the Waters of the United States (“WOTUS”)**
8 **Rule.**

9 A. On June 29, 2015 the EPA and the Army Corps of Engineers (“Corps”) published
10 the final Clean Water Rule that significantly expanded the definition of the Waters
11 of the United States (“WOTUS”). On October 9, 2015 the U.S. Court of Appeals
12 for the Sixth Circuit granted a nationwide stay of the rule effective through the
13 conclusion of the judicial review process. On February 22, 2016 the Sixth Circuit
14 issued an opinion that it has jurisdiction and is the appropriate venue to hear the
15 merits of legal challenges to the rule; however, that decision was contested, and
16 on January 22, 2018, the U.S. Supreme Court issued its decision stating federal
17 district courts, instead of federal appellate courts, have jurisdiction over
18 challenges to the rule defining waters of the United States Consistent with the
19 U.S. Supreme Court decision, the U.S. Court of Appeals for the Sixth Circuit
20 lifted its nationwide stay on February 28, 2018. The stay issued by the North
21 Dakota District Court remains in effect, but only within the thirteen states within
22 the North Dakota District. On February 28, 2017, President Trump signed an
23 executive order laying out a new policy direction for how “Waters of the United
24 States” should be defined and directing the EPA and the Corps to initiate a

1 rulemaking to either rescind or revise the 2015 Clean Water Rule developed by
2 the Obama administration. Subsequently, the EPA Administrator signed a pre-
3 publication notice reflecting the intent to move forward with rulemaking in
4 response to this directive. In addition, the executive order seeks to have the
5 Department of Justice determine the path forward on the Clean Water Rule
6 litigation in light of the new policy direction.

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

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

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

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

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

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

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

23
24

1 **Q. Does this conclude your testimony?**

2 **A. Yes.**

3

4

5