Stephanie A. Cuello
SENIOR COUNSEL

March 31, 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 2022 Final True-Up Report. The filing includes the following:

- DEF's Petition for Approval of Environmental Cost Recovery Final True-Up for the period January 2022 to December 2022;
- Direct Testimony of Gary P. Dean and Exhibit No.___(GPD-1) and Exhibit No. ___(GPD-2);
- Direct Testimony of Eric Szkolnyj;
- Direct Testimony of Reggie Anderson; and
- Direct Testimony of Kim S. McDaniel and Exhibit No. ___ (KSM-1).

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
Enclosures

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Environmental Cost Recovery Clause	Docket No. 20230007-EI
	Filed: March 31, 2023

DUKE ENERGY FLORIDA'S PETITION FOR APPROVAL OF ENVIRONMENTAL COST RECOVERY CLAUSE FINAL TRUE-UP FOR THE PERIOD JANUARY 2022 - DECEMBER 2022

Duke Energy Florida, LLC ("DEF" or "the Company"), hereby petitions for approval of DEF's final end-of-the period Environmental Cost Recovery Clause ("ECRC") True-Up amount of an over-recovery of $1,560,296, and an over-recovery of $309,443 as the adjusted net true-up for the period January 2022 through December 2022. In support of this Petition, DEF states:

1. The actual end-of-period ECRC true-up over-recovery amount of $1,560,296 for the period January 2022 through December 2022 was calculated in accordance with the methodology set forth in Form 42-2A of Exhibit No. __ (GPD-1) accompanying the direct testimony of DEF witness Gary P. Dean, which is being filed together with this Petition and incorporated herein. Additional cost information for specific ECRC programs for the period January 2022 through December 2022 are presented in the direct testimonies of Reginald Anderson, Kim McDaniel, and Eric Szkolnyj, filed with this Petition and incorporated herein.

2. In Order No. PSC-2022-0424-FOF-EI, the Commission approved an over-recovery of $1,250,853 as the actual/estimated ECRC true-up for the period January 2022 through December 2022.

3. As reflected on Form 42-1A, Line 3, of Exhibit No. __ (GPD-1) to Mr. Dean's testimony, the adjusted net true-up for the period January 2022 through December 2022 is an over-

recovery of $309,443, which is the difference between the actual true-up over-recovery of $1,560,296 and the actual/estimate true-up over-recovery of $1,250,853.

WHEREFORE, DEF respectfully requests that the Commission approve the Company's final 2022 end-of-period Environmental Cost Recovery True-Up amount of an over-recovery amount of $1,560,296, and an over-recovery of $309,443 as the adjusted net true-up for the period January 2022 through December 2022.

RESPECTFULLY SUBMITTED this 31st day of March, 2023.

/s/ Stephanie A. Cuello
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Attorneys for Duke Energy Florida, LLC

CERTIFICATE OF SERVICE

Docket No. 20230007-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic mail to the following this 31st day of March, 2023.

/s/ Stephanie A. Cuello
Attorney

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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

March 31, 2023

Q. Please state your name and business address.

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

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

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

Q. What are your responsibilities in that position?

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

Q. Please describe your educational background and professional experience.

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

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

A. Yes.

Q. What is the purpose of your testimony?

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

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

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

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

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

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

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

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

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

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

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

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

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

A. Yes.

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

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

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

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

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

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

Q. Does this conclude your testimony?

A. Yes.

DUKE ENERGY FLORIDA, LLC
Environmental Cost Recovery Clause
Commission Forms 42-1A Through 42-9A

January 2022 - December 2022
Final True-Up
Docket No. 20230007-EI

DUKE ENERGY FLORIDA, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022
(in Dollars)

Form 42-1A

Docket No. 20230007-EI
Duke Energy Florida
Witness: G. P. Dean
Exh. No. __ (GPD-1)

Line		Period Amount
1	Over/(Under) Recovery for the Period January 2022 - December 2022 (Form 42-2A, Line 5 + 6 + 10)	$ 1,560,296
2	Actual/Estimated True-Up Amount Approved for the Period January 2022 - December 2022 (Order No. PSC-2022-0424-FOF-EI)	1,250,853
3	Final True-Up Amount to be Refunded/(Recovered) in the Projection Period January 2024 to December 2024 (Lines 1 - 2)	$ 309,443

DUKE ENERGY FLORIDA, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022

End-of-Period True-Up Amount
(in Dollars)

Form 42-2A

Docket No. 20230007-EI
Duke Energy Florida
Witness: G. P. Dean
Exh. No. __ (GPD-1)

Line	Description		Actual Jan-22	Actual Feb-22	Actual Mar-22	Actual Apr-22	Actual May-22	Actual Jun-22	Actual Jul-22	Actual Aug-22	Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	End of Period Total
1	ECRC Revenues (net of Revenue Taxes)		$849,098	$788,076	$823,978	$782,706	$879,649	$1,045,131	$1,100,563	$1,139,609	$1,079,107	$860,774	$742,719	$808,043	10,899,452
2	True-Up Provision (Order No. PSC-2021-0426-FOF-EI)	1,828,238	$152,353	$152,353	$152,353	$152,353	$152,353	$152,353	$152,353	$152,353	$152,353	$152,353	$152,353	$152,353	1,828,238
3	ECRC Revenues Applicable to Period (Lines 1 + 2)		$1,001,451	940,429	976,331	935,059	1,032,002	1,197,484	1,252,916	1,291,962	1,231,460	1,013,127	895,072	960,396	12,727,690
4	Jurisdictional ECRC Costs														
	a. O & M Activities (Form 42-5A, Line 9)		$334,762	$787,356	$209,195	$945,526	$620,201	$372,497	$691,125	$465,605	$586,204	$493,435	$1,186,406	$462,531	$7,154,843
	b. Capital Investment Projects (Form 42-7A, Line 9)		307,930	309,840	310,575	348,335	344,673	342,964	342,427	348,414	348,926	349,450	350,219	352,220	4,055,973
	c. Other (A)		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Total Jurisdictional ECRC Costs		$642,692	$1,097,196	$519,770	$1,293,861	$964,874	$715,461	$1,033,552	$814,019	$935,130	$842,885	$1,536,625	$814,751	$11,210,816
5	Over/(Under) Recovery (Line 3 - Line 4d)		$358,759	($156,766)	$456,560	($358,802)	$67,129	$482,023	$219,364	$477,942	$296,331	$170,242	($641,553)	$145,645	$1,516,874
6	Interest Provision (Form 42-3A, Line 10)		214	372	698	1,156	1,502	2,459	3,893	4,876	6,268	7,609	7,382	6,993	43,422
7	Beginning Balance True-Up & Interest Provision		1,828,238	2,034,857	1,726,110	2,031,015	1,521,016	1,437,293	1,769,422	1,840,326	2,170,791	2,321,037	2,346,535	1,560,011	1,828,238
	a. Deferred True-Up - January 2021 - December 2021 (2021 TU filing dated April 1, 2022)		447,153	447,153	447,153	447,153	447,153	447,153	447,153	447,153	447,153	447,153	447,153	447,153	447,153
8	True-Up Collected/(Refunded) (see Line 2)		(152,353)	(152,353)	(152,353)	(152,353)	(152,353)	(152,353)	(152,353)	(152,353)	(152,353)	(152,353)	(152,353)	(152,353)	(1,828,238)
9	End of Period Total True-Up (Lines 5+6+7+7a+8)		$2,482,011	$2,173,263	$2,478,168	$1,968,169	$1,884,446	$2,216,576	$2,287,480	$2,617,945	$2,768,190	$2,793,688	$2,007,164	$2,007,449	$2,007,449
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)		$2,482,011	$2,173,263	$2,478,168	$1,968,169	$1,884,446	$2,216,576	2,287,480	$2,617,945	$2,768,190	$2,793,688	$2,007,164	$2,007,449	$2,007,449

Notes:
(A) N/A

DUKE ENERGY FLORIDA, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022

Interest Provision
(in Dollars)

Line	Description	Actual Jan-22	Actual Feb-22	Actual Mar-22	Actual Apr-22	Actual May-22	Actual Jun-22	Actual Jul-22	Actual Aug-22	Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	End of Period Total
1	Beginning True-Up Amount (Form 42-2A, Line 7 + 7a + 10)	$2,275,391	$2,482,011	$2,173,263	$2,478,168	$1,968,169	$1,884,446	$2,216,576	$2,287,480	$2,617,945	$2,768,190	$2,793,688	$2,007,164	
2	Ending True-Up Amount Before Interest (Line 1 + Form 42-2A, Lines 5 + 8)	2,481,797	2,172,891	2,477,470	1,967,013	1,882,944	2,214,117	2,283,587	2,613,069	2,761,922	2,786,079	1,999,782	2,000,456	
3	Total of Beginning & Ending True-Up (Lines 1 + 2)	4,757,187	4,654,902	4,650,733	4,445,181	3,851,113	4,098,563	4,500,162	4,900,548	5,379,867	5,554,270	4,793,470	4,007,620	
4	Average True-Up Amount (Line 3 x 1/2)	2,378,594	2,327,451	2,325,367	2,222,591	1,925,557	2,049,282	2,250,081	2,450,274	2,689,934	2,777,135	2,396,735	2,003,810	
5	Interest Rate (Last Business Day of Prior Month)	0.08%	0.14%	0.24%	0.49%	0.76%	1.12%	1.76%	2.40%	2.38%	3.20%	3.37%	4.01%	
6	Interest Rate (Last Business Day of Current Month)	0.14%	0.24%	0.49%	0.76%	1.12%	1.76%	2.40%	2.38%	3.20%	3.37%	4.01%	4.37%	
7	Total of Beginning & Ending Interest Rates (Lines 5 + 6)	0.22%	0.38%	0.73%	1.25%	1.88%	2.88%	4.16%	4.78%	5.58%	6.57%	7.38%	8.38%	
8	Average Interest Rate (Line 7 x 1/2)	0.110%	0.190%	0.365%	0.625%	0.940%	1.440%	2.080%	2.390%	2.790%	3.285%	3.690%	4.190%	
9	Monthly Average Interest Rate (Line 8 x 1/12)	0.009%	0.016%	0.030%	0.052%	0.078%	0.120%	0.173%	0.199%	0.233%	0.274%	0.308%	0.349%	
10	Interest Provision for the Month (Line 4 x Line 9)	$214	$372	$698	$1,156	$1,502	$2,459	$3,893	$4,876	$6,268	$7,609	$7,382	$6,993	$43,422

DUKE ENERGY FLORIDA, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022

Variance Report of O&M Activities
(In Dollars)

Line		(1) YTD Actual	(2) Actual/ Estimated	(3) Variance Amount	(4) Variance Percent
1	Description of 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	2,630	3,751	(1,121)	-30%
6	Phase II Cooling Water Intake 316(b) - Base	86,887	144,393	(57,506)	-40%
6a	Phase II Cooling Water Intake 316(b) - Intm	0	41,666	(41,666)	-100%
7.2	CAIR/CAMR - Peaking - Demand	0	0	0	0%
7.4	CAIR/CAMR Crystal River - Base	0	0	0	0%
7.4	CAIR/CAMR Crystal River - Energy	6,989,567	6,929,623	59,944	0.87%
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	147,005	170,448	(23,443)	-14%
8	Arsenic Groundwater Standard - Base	47,952	47,370	582	1%
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	44,465	37,607	6,858	18%
17	Mercury & Air Toxic Standards (MATS) CR4 & CR5 - Energy	207,728	215,822	(8,094)	-4%
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	398,961	403,171	(4,210)	-1%
2	Total O&M Activities - Recoverable Costs	$7,925,196	$7,993,851	($68,655)	-1%
3	Recoverable Costs Allocated to Energy	7,643,352	7,589,974	53,377	1%
4	Recoverable Costs Allocated to Demand	281,844	403,877	(122,033)	-30%

Notes:

Column (1) End of Period Totals on Form 42-5A
Column (2) 2022 Actual/Estimated Filing (7/29/2022)
Column (3) = Column (1) - Column (2)
Column (4) = Column (3) / Column (2)

DUKE ENERGY FLORIDA, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022

O&M Activities
(in Dollars)

Line	Description	Actual Jan-22	Actual Feb-22	Actual Mar-22	Actual Apr-22	Actual May-22	Actual Jun-22	Actual Jul-22	Actual Aug-22	Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	End of Period Total
1	Description of O&M Activities													
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	87	0	1,313	0	1,229	0	0	0	0	0	0	0	2,630
6	Phase II Cooling Water Intake 316(b) - Base	0	0	0	13,009	26,737	(15,353)	5,033	2,085	10,676	18,399	22,943	3,358	86,887
6a	Phase II Cooling Water Intake 316(b) - Intm	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
7.4	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	321,724	780,688	61,390	922,869	597,326	384,364	775,557	501,063	616,182	484,791	1,164,871	378,740	6,989,567
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	60,266	0	15,149	190	5,315	66,085	0	147,005
8	Arsenic Groundwater Standard - Base	2,228	3,121	5,719	5,497	900	4,234	4,418	1,403	1,425	690	2,922	15,395	47,952
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 ICR 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	0	0	6,115	6,629	0	0	0	0	15,610	0	16,111	44,465
17	Mercury & Air Toxic Standards (MATS) CR4 & CR5 - Energy	1,918	18,167	130,935	29,871	25,183	588	968	749	177	628	561	(2,015)	207,728
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	34,930	30,381	21,929	31,797	40,515	(1,497)	29,843	12,584	33,121	24,916	50,086	90,355	398,961
2	Total of O&M Activities	$360,888	$832,357	$221,287	$1,009,158	$698,519	$432,601	$815,819	$533,034	$661,771	$550,348	$1,307,468	$501,944	$7,925,196
3	Recoverable Costs Allocated to Energy	358,660	829,236	215,568	990,652	670,883	383,455	806,368	514,397	649,480	525,944	1,215,519	483,192	7,643,352
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	2,228	3,121	5,719	18,506	27,637	49,147	9,451	18,637	12,291	24,404	91,950	18,753	281,844
	Recoverable Costs Allocated to Demand - Prod-Intm	0	0	0	0	0	0	0	0	0	0	0	0	0
	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	0.92760	0.94600	0.94580	0.93710	0.88620	0.85240	0.84620	0.87150	0.88500	0.89510	0.90580	0.92120	
6	Retail Transmission Demand Jurisdictional Factor	0.71994	0.71994	0.71994	0.71994	0.71994	0.71994	0.71994	0.71994	0.71994	0.71994	0.71994	0.71994	
	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	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	
	Retail Production Demand Jurisdictional Factor - Intm	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	
	Retail Production Demand Jurisdictional Factor - Peaking	0.90678	0.90678	0.90678	0.90678	0.90678	0.90678	0.90678	0.90678	0.90678	0.90678	0.90678	0.90678	
	Retail Production Demand Jurisdictional Factor - A&G	0.95415	0.95415	0.95415	0.95415	0.95415	0.95415	0.95415	0.95415	0.95415	0.95415	0.95415	0.95415	
7	Jurisdictional Energy Recoverable Costs (A)	332,693	784,457	203,884	928,340	594,536	326,857	682,348	448,297	574,790	470,773	1,101,017	445,116	6,893,108
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)	2,069	2,899	5,311	17,186	25,665	45,640	8,777	17,308	11,414	22,662	85,389	17,415	261,735
	Jurisdictional Demand Recoverable Costs - Prod-Intm (B)	0	0	0	0	0	0	0	0	0	0	0	0	0
	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 for O&M Activities (Lines 7 + 8)	$334,762	$787,356	$209,195	$945,526	$620,201	$372,497	$691,125	$465,605	$586,204	$493,435	$1,186,406	$462,531	$7,154,843

Notes:
(A) Line 3 x Line 5
(B) Line 4 x Line 6

DUKE ENERGY FLORIDA, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022

Variance Report of Capital Investment Activities
(In Dollars)

Line			(1) Total Year Actual	(2) Actual/ Estimated	(3) Variance Amount	(4) Variance Percent
1	Description of Capital Investment Activities					
	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	245,026	241,519	3,507	1%
	6	Phase II Cooling Water Intake 316(b)	1,349,446	1,346,896	2,550	0%
	7.x	CAIR/CAMR	345,119	317,744	27,375	9%
	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)	317,794	315,160	2,634	1%
	16	National Pollutant Discharge Elimination System (NPDES)	1,247,218	1,236,832	10,386	1%
	17x	Mercury & Air Toxics Standards (MATS)	421,382	418,053	3,329	1%
	18	Coal Combustion Residual (CCR) Rule	532,744	528,281	4,463	1%
2	Total Capital Investment Activities - Recoverable Costs		$4,458,729	$4,404,485	$54,244	1%
3	Recoverable Costs Allocated to Energy		1,011,527	977,316	$34,211	4%
4	Recoverable Costs Allocated to Demand		$3,447,202	$3,427,169	$20,033	1%

Notes:

Column (1) End of Period Totals on Form 42-7A
Column (2) 2022 Actual/Estimated Filing (7/29/2022)
Column (3) = Column (1) - Column (2)
Column (4) = Column (3) / Column (2)

DUKE ENERGY FLORIDA, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022

Capital Investment Projects-Recoverable Costs
(in Dollars)

Form 42-7A

Docket No. 20230007-EI
Duke Energy Florida
Witness: G. P. Dean
Exh. No. __ (GPD-1)

Line		Description	Actual Jan-22	Actual Feb-22	Actual Mar-22	Actual Apr-22	Actual May-22	Actual Jun-22	Actual Jul-22	Actual Aug-22	Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	End of Period Total
1		Description of Investment Projects (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	20,273	20,273	20,269	20,265	20,262	20,257	20,257	20,634	20,634	20,634	20,634	20,634	245,026
	6	Phase II Cooling Water Intake 316(b) - Base	81,370	81,318	81,253	122,519	122,368	122,261	122,130	123,402	123,145	122,885	123,111	123,684	1,349,446
	6.1	Phase II Cooling Water Intake 316(b) - Base - Bartow	0	0	0	0	0	0	0	0	0	0	0	0	0
	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	24,025	24,380	25,725	26,366	27,602	29,527	30,180	31,037	31,074	31,459	31,553	32,191	345,119
	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
	15.1	Effluent Limitation Guidelines CRN (RLG) - Base	26,741	26,672	26,604	26,536	26,467	26,399	26,332	26,548	26,478	26,409	26,339	26,269	317,794
	16	National Pollutant Discharge Elimination System (NPDES) - Intermediate	104,674	104,455	104,236	104,017	103,798	103,580	103,361	104,265	104,042	103,819	103,597	103,374	1,247,218
	17	Mercury & Air Toxic Standards (MATS) CR4 & CR5 - Energy	35,497	35,401	35,304	35,208	35,111	35,015	34,919	35,182	35,084	34,986	34,887	34,788	421,382
	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 - Demand	44,221	44,762	44,646	44,533	44,419	44,307	44,194	44,563	44,448	44,333	44,218	44,103	532,744
2		Total Investment Projects - Recoverable Costs	$336,801	$337,261	$338,037	$379,444	$380,027	$381,346	$381,373	$385,631	$384,905	$384,525	$384,339	$385,043	$4,458,729
3		Recoverable Costs Allocated to Energy	79,795	80,054	81,298	81,839	82,975	84,799	85,356	86,853	86,792	87,079	87,074	87,613	1,011,527
		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	152,332	152,752	152,503	193,588	193,254	192,967	192,656	194,513	194,071	193,627	193,668	194,056	2,199,984
		Recoverable Costs Allocated to Demand - Production - Intermediate	104,674	104,455	104,236	104,017	103,798	103,580	103,361	104,265	104,042	103,819	103,597	103,374	1,247,218
		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	0.92760	0.94600	0.94580	0.93710	0.88620	0.85240	0.84620	0.87150	0.88500	0.89510	0.90580	0.92120	
		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	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	
		Retail Demand Jurisdictional Factor - Production - Intermediate	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	
		Retail Demand Jurisdictional Factor - Production - Peaking	0.90678	0.90678	0.90678	0.90678	0.90678	0.90678	0.90678	0.90678	0.90678	0.90678	0.90678	0.90678	
7		Jurisdictional Energy Recoverable Costs (B)	74,018	75,731	76,892	76,691	73,532	72,283	72,228	75,692	76,811	77,944	78,872	80,709	911,404
		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)	141,463	141,853	141,622	179,775	179,465	179,199	178,910	180,634	180,224	179,812	179,850	180,210	2,043,015
		Jurisdictional Demand Recoverable Costs - Production - Intermediate (C)	92,449	92,256	92,062	91,869	91,675	91,483	91,289	92,088	91,891	91,694	91,498	91,301	1,101,553
		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 for Investment Projects (Lines 7 + 8)	$307,930	$309,840	$310,575	$348,335	$344,673	$342,964	$342,427	$348,414	$348,926	$349,450	$350,219	$352,220	$4,055,973

Notes:

(A) Each project's Total System Recoverable Expenses on Form 42-8A, Line 9; Form 42-8A, 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, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022

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

Line	Description			Beginning of Period Amoun	Actual Jan-22	Actual Feb-22	Actual Mar-22	Actual Apr-22	Actual May-22	Actual Jun-22	Actual Jul-22	Actual Aug-22	Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	End of Period Total
1	Working Capital Dr (Cr)																
	a. 0158150 SO2 Emission Allowance Inventory			$3,212,783	$3,212,696	$3,212,696	$3,211,382	$3,211,382	$3,210,153	$3,210,153	$3,210,153	$3,210,153	$3,210,153	$3,210,153	$3,210,153	$3,210,153	$3,210,153
	b. 0254020 Auctioned SO2 Allowance			0	0	0	0	0	0	0	0	0	0	0	0	0	$0
	c. 0158170 NOx 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			$3,212,783	$3,212,696	$3,212,696	$3,211,382	$3,211,382	$3,210,153	$3,210,153	$3,210,153	$3,210,153	$3,210,153	$3,210,153	$3,210,153	$3,210,153	$3,210,153
3	Average Net Investment				$3,212,740	$3,212,696	$3,212,039	$3,211,382	$3,210,768	$3,210,153	$3,210,153	$3,210,153	$3,210,153	$3,210,153	$3,210,153	$3,210,153	
4	Return on Average Net Working Capital Balance (B)	Jan-Jul	Aug-Dec														
	a. Debt Component	1.65%	1.65%		4,428	4,428	4,427	4,426	4,426	4,425	4,425	4,425	4,425	4,425	4,425	4,425	53,110
	b. Equity Component Grossed Up For Taxes	5.92%	6.06%		15,845	15,845	15,842	15,839	15,836	15,832	15,832	16,209	16,209	16,209	16,209	16,209	191,916
5	Total Return Component (C)				$20,273	$20,273	$20,269	$20,265	$20,262	$20,257	$20,257	$20,634	$20,634	$20,634	$20,634	$20,634	245,026
6	Expense Dr (Cr)																
	a. 0509030 SO_2 Allowance Expense				$87	$0	$1,313	$0	$1,229	$0	$0	$0	$0	$0	$0	$0	$2,630
	b. 0407426 Amortization Expense				0	0	0	0	0	0	0	0	0	0	0	0	0
	c. 0509212 NOx 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)				87	0	1,313	0	1,229	0	0	0	0	0	0	0	2,630
8	Total System Recoverable Expenses (Lines 5 + 7 + 8)				$20,360	$20,273	$21,582	$20,265	$21,491	$20,257	$20,257	$20,634	$20,634	$20,634	$20,634	$20,634	247,656
	a. Recoverable Costs Allocated to Energy				20,360	20,273	21,582	20,265	21,491	20,257	20,257	20,634	20,634	20,634	20,634	20,634	247,656
	b. Recoverable Costs Allocated to Demand				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	0
9	Energy Jurisdictional Factor				0.92760	0.94600	0.94580	0.93710	0.88620	0.85240	0.84620	0.87150	0.88500	0.89510	0.90580	0.92120	
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)				$18,886	$19,178	$20,413	$18,990	$19,045	$17,267	$17,141	$17,983	$18,261	$18,469	$18,690	$19,008	223,333
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 12 + 13)				$18,886	$19,178	$20,413	$18,990	$19,045	$17,267	$17,141	$17,983	$18,261	$18,469	$18,690	$19,008	$223,333

Notes:

(A) N/A

(B) Jan - Jul 2022 Line 3 x 7.57% x 1/12. Aug - Dec 2022 Line 3 x 7.71% x 1/12. Jan-Jul based on ROE of 9.85%, and weighted cost of equity component of capital structure of 4.35%. Aug-Dec based on ROE of 10.10%, and weighted cost of equity component of capital structure of 4.46%. 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, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022

Docket No. 20230007-EI
Duke Energy Florida
Witness: G. P. Dean
Exh. No. __ (GPD-1)
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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-22	Actual Feb-22	Actual Mar-22	Actual Apr-22	Actual May-22	Actual Jun-22	Actual Jul-22	Actual Aug-22	Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	End of Period Total
1	Investments																
	a. Expenditures/Additions				($8,028)	($8,422)	($12,268)	$17,825	$17,047	$31,889	$9,551	$2,635	$0	$1,765	$151,115	$110,051	$313,159
	b. Clearings to Plant				0	0	12,869,957	0	0	0	0	0	0	0	0	341,877	
	c. Retirements				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	
2	Plant-in-Service/Depreciation Base			$0	0	0	12,869,957	12,869,957	12,869,957	12,869,957	12,869,957	12,869,957	12,869,957	12,869,957	12,869,957	13,211,834	
3	Less: Accumulated Depreciation			0	0	0	0	(41,379)	(82,758)	(124,137)	(165,516)	(206,895)	(248,274)	(289,653)	(331,032)	(372,411)	
4	CWIP - Non-Interest Bearing			12,898,675	12,890,647	12,882,225	0	17,825	34,872	66,761	76,312	78,947	78,947	80,712	231,826	0	
5	Net Investment (Lines 2 + 3 + 4)			$12,898,675	$12,890,647	$12,882,225	$12,869,957	$12,846,403	$12,822,071	$12,812,581	$12,780,753	$12,742,009	$12,700,630	$12,661,016	$12,770,751	$12,839,423	
6	Average Net Investment				$12,894,661	$12,886,436	$12,876,091	$12,858,180	$12,834,237	$12,817,326	$12,796,667	$12,761,381	$12,721,319	$12,680,823	$12,715,883	$12,805,087	
7	Return on Average Net Investment (B)	Jan-Jul	Aug-Dec														
	a. Debt Component	1.65%	1.65%		17,773	17,762	17,748	17,723	17,690	17,667	17,638	17,589	17,534	17,478	17,527	17,650	211,779
	b. Equity Component Grossed Up For Taxes	5.92%	6.06%		63,597	63,556	63,505	63,417	63,299	63,215	63,113	64,434	64,232	64,028	64,205	64,655	765,256
	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	41,379	41,379	41,379	41,379	41,379	41,379	41,379	41,379	41,379	372,411
	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)	0.000497			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)				$81,370	$81,318	$81,253	$122,519	$122,368	$122,261	$122,130	$123,402	$123,145	$122,885	$123,111	$123,684	1,349,446
	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				$81,370	$81,318	$81,253	$122,519	$122,368	$122,261	$122,130	$123,402	$123,145	$122,885	$123,111	$123,684	1,349,446
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				0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	
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)				75,564	75,516	75,456	113,777	113,637	113,538	113,416	114,597	114,359	114,117	114,327	114,859	1,253,163
14	Total Jurisdictional Recoverable Costs (Lines 12 + 13)				$75,564	$75,516	$75,456	$113,777	$113,637	$113,538	$113,416	$114,597	$114,359	$114,117	$114,327	$114,859	$1,253,163

Notes:

(A) N/A

(B) Jan - Jul 2022 Line 3 x 7.57% x 1/12. Aug - Dec 2022 Line 3 x 7.71% x 1/12. Jan-Jul based on ROE of 9.85%, and weighted cost of equity component of capital structure of 4.35%. Aug-Dec based on ROE of 10.10%, and weighted cost of equity component of capital structure of 4.46%. 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 2021 Effective Tax Rate on original cost.

(E) Line 9a x Line 10

(F) Line 9b x Line 11

DUKE ENERGY FLORIDA, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022

Docket No. 20230007-EI
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 - Bartow (Project 6.1)
(in Dollars)

Line	Description			Beginning of Period Amount	Actual Jan-22	Actual Feb-22	Actual Mar-22	Actual Apr-22	Actual May-22	Actual Jun-22	Actual Jul-22	Actual Aug-22	Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	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	
	c. Retirements				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	
2	Plant-in-Service/Depreciation Base			$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	
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)			$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	
7	Return on Average Net Investment (B)	Jan-Jul	Aug-Dec														
	a. Debt Component	1.65%	1.65%		0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Equity Component Grossed Up For Taxes	5.92%	6.06%		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)	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)	0.000497			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 (Base)				0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	
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) Jan - Jul 2022 Line 3 x 7.57% x 1/12. Aug - Dec 2022 Line 3 x 7.71% x 1/12. Jan-Jul based on ROE of 9.85%, and weighted cost of equity component of capital structure of 4.35%. Aug-Dec based on ROE of 10.10%, and weighted cost of equity component of capital structure of 4.46%. 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 2021 Effective Tax Rate on original cost.

(E) Line 9a x Line 10

(F) Line 9b x Line 11

DUKE ENERGY FLORIDA, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022

Docket No. 20230007-EI
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) - Intermediate - Anclote (Project 6.2)
(in Dollars)

Line	Description			Beginning of Period Amount	Actual Jan-22	Actual Feb-22	Actual Mar-22	Actual Apr-22	Actual May-22	Actual Jun-22	Actual Jul-22	Actual Aug-22	Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	End of Period Total
1	Investments																
	a. Expenditures/Additions				$0	$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)	Jan-Jul	Aug-Dec														
	a. Debt Component	1.65%	1.65%		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Equity Component Grossed Up For Taxes	5.92%	6.06%		0	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	0
8	Investment Expenses																
	a. Depreciation (C)	10.37%			0	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	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	N/A
	d. Property Taxes (D)	0.005630			0	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	0
9	Total System Recoverable Expenses (Lines 7 + 8)				$0	$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	0
	b. Recoverable Costs Allocated to Demand				0	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 - Production (Intermediate)				0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	
12	Retail Energy-Related Recoverable Costs (E)				$0	$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	0
14	Total Jurisdictional Recoverable Costs (Lines 12 + 13)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Notes:

(A) N/A

(B) Jan - Jul 2022 Line 3 x 7.57% x 1/12. Aug - Dec 2022 Line 3 x 7.71% x 1/12. Jan-Jul based on ROE of 9.85%, and weighted cost of equity component of capital structure of 4.35%. Aug-Dec based on ROE of 10.10%, and weighted cost of equity component of capital structure of 4.46%. 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-2010-0131-FOF-EI.

(D) Line 2 x rate x 1/12. Based on 2020 Effective Tax Rate on original cost.

(E) Line 9a x Line 10

(F) Line 9b x Line 11

DUKE ENERGY FLORIDA, LLC
Environmental Cost Recovery Clause
Final True-Up
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Docket No. 20230007-EI
Duke Energy Florida
Witness: G. P. Dean
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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-22	Actual Feb-22	Actual Mar-22	Actual Apr-22	Actual May-22	Actual Jun-22	Actual Jul-22	Actual Aug-22	Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	End of Period Total
1	Working Capital Dr (Cr)																
	a. 0154401 Ammonia Inventory			$2,286,125	$2,289,545	$2,461,640	$2,526,032	$2,622,687	$2,899,988	$3,049,960	$3,093,555	$3,194,794	$3,307,559	$3,399,216	$3,480,593	$3,622,236	3,622,236
	b. 0154200 Limestone Inventory (F)			1,562,225	1,476,629	1,499,262	1,666,254	1,541,367	1,684,136	1,724,226	1,697,706	1,671,539	1,495,133	1,586,990	1,351,384	1,562,606	1,562,606
2	Total Working Capital			$3,848,350	3,766,174	3,960,902	4,192,286	4,164,054	4,584,124	4,774,186	4,791,261	4,866,333	4,802,692	4,986,207	4,831,976	5,184,843	5,184,843
3	Average Net Investment				3,807,262	3,863,538	4,076,594	4,178,170	4,374,089	4,679,155	4,782,723	4,828,797	4,834,513	4,894,450	4,909,092	5,008,410	
4	Return on Average Net Working Capital Balance (A)	Jan-Jul	Aug-Dec														
	a. Debt Component (F)	1.65%	1.65%		5,248	5,325	5,619	5,759	6,029	6,449	6,592	6,656	6,664	6,746	6,766	6,903	$74,756
	b. Equity Component Grossed Up For Taxes	5.92%	6.06%		18,777	19,055	20,106	20,607	21,573	23,078	23,588	24,381	24,410	24,713	24,787	25,288	270,363
5	Total Return Component (B)				24,025	24,380	25,725	26,366	27,602	29,527	30,180	31,037	31,074	31,459	31,553	32,191	345,119
6	Expense Dr (Cr)																
	a. 502030 Ammonia Expense				71,809	193,334	76,587	219,063	265,077	250,091	265,832	206,696	238,691	122,037	276,955	256,803	2,442,975
	b. 502040 Limestone Expense				181,456	391,300	166,777	464,301	499,365	505,486	503,257	425,210	379,430	275,612	607,833	366,596	4,766,623
	c. 502050 Dibasic Acid Expense				0	0	0	0	0	0	0	0	0	0	0	0	0
	d. 502070 Gypsum Disposal/Sale				(38,579)	(124,024)	(349,725)	0	(474,235)	(693,001)	(398,911)	(341,015)	(337,466)	(282,736)	(199,986)	(456,422)	(3,696,100)
	e. 502040 Hydrated Lime Expense				107,038	238,071	85,890	239,505	224,965	239,635	241,254	210,172	195,995	129,987	280,818	211,764	2,405,094
	f. 502300 Caustic Expense (F)				0	82,008	81,862	0	82,153	82,153	164,124	0	139,532	239,892	199,252	0	1,070,975
7	Net Expense (C)				321,724	780,688	61,390	922,869	597,326	384,364	775,557	501,063	616,182	484,791	1,164,871	378,740	6,989,567
8	Total System Recoverable Expenses (Lines 5 + 7)				$345,749	$805,068	$87,115	$949,235	$624,928	$413,891	$805,737	$532,100	$647,256	$516,250	$1,196,424	$410,931	$7,334,686
	a. Recoverable Costs Allocated to Energy				345,749	805,068	87,115	949,235	624,928	413,891	805,737	532,100	647,256	516,250	1,196,424	410,931	$7,334,686
	b. Recoverable Costs Allocated to Demand				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
9	Energy Jurisdictional Factor				0.92760	0.94600	0.94580	0.93710	0.88620	0.85240	0.84620	0.87150	0.88500	0.89510	0.90580	0.92120	
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)				$320,717	$761,595	$82,394	$889,528	$553,811	$352,801	$681,814	$463,726	$572,822	$462,095	$1,083,721	$378,550	$6,603,573
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)				$320,717	$761,595	$82,394	$889,528	$553,811	$352,801	$681,814	$463,726	$572,822	$462,095	$1,083,721	$378,550	$6,603,573

Notes:

(A) Jan - Jul 2022 Line 3 x 7.57% x 1/12. Aug - Dec 2022 Line 3 x 7.71% x 1/12. Jan-Jul based on ROE of 9.85%, and weighted cost of equity component of capital structure of 4.35%. Aug-Dec based on ROE of 10.10%, and weighted cost of equity component of capital structure of 4.46%. 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, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022

Docket No. 20230007-EI
Duke Energy Florida
Witness: G. P. Dean
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Return on Capital Investments, Depreciation and Taxes
For Project: Effluent Limitation Guidelines CRN - Base (Project 15.1)
(in Dollars)

Line	Description			Beginning of Period Amount	Actual Jan-22	Actual Feb-22	Actual Mar-22	Actual Apr-22	Actual May-22	Actual Jun-22	Actual Jul-22	Actual Aug-22	Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	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	
	c. Retirements				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	
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			(102,323)	(113,147)	(123,971)	(134,795)	(145,619)	(156,443)	(167,267)	(178,091)	(188,915)	(199,739)	(210,563)	(221,387)	(232,211)	
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)			$2,510,656	$2,499,832	$2,489,008	$2,478,184	$2,467,360	$2,456,536	$2,445,712	$2,434,888	$2,424,064	$2,413,240	$2,402,416	$2,391,592	$2,380,768	
6	Average Net Investment				$2,505,244	$2,494,420	$2,483,596	$2,472,772	$2,461,948	$2,451,124	$2,440,300	$2,429,476	$2,418,652	$2,407,828	$2,397,004	$2,386,180	
7	Return on Average Net Investment (B)	Jan-Jul	Aug-Dec														
	a. Debt Component	1.65%	1.65%		3,453	3,438	3,423	3,408	3,393	3,378	3,364	3,349	3,334	3,319	3,304	3,289	40,452
	b. Equity Component Grossed Up For Taxes	5.92%	6.06%		12,356	12,302	12,249	12,196	12,142	12,089	12,036	12,267	12,212	12,158	12,103	12,048	146,158
	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)	0.0497%			108	108	108	108	108	108	108	108	108	108	108	108	1,296
	e. Other				0	0	0	0	0	0	0	0	0	0	0	0	0
9	Total System Recoverable Expenses (Lines 7 + 8)				$26,741	$26,672	$26,604	$26,536	$26,467	$26,399	$26,332	$26,548	$26,478	$26,409	$26,339	$26,269	317,794
	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				$26,741	$26,672	$26,604	$26,536	$26,467	$26,399	$26,332	$26,548	$26,478	$26,409	$26,339	$26,269	317,794
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)				0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	
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)				24,833	24,769	24,706	24,643	24,579	24,515	24,453	24,654	24,589	24,525	24,460	24,395	295,119
14	Total Jurisdictional Recoverable Costs (Lines 12 + 13)				$24,833	$24,769	$24,706	$24,643	$24,579	$24,515	$24,453	$24,654	$24,589	$24,525	$24,460	$24,395	$295,119

Notes:

(A) N/A

(B) Jan - Jul 2022 Line 3 x 7.57% x 1/12. Aug - Dec 2022 Line 3 x 7.71% x 1/12. Jan-Jul based on ROE of 9.85%, and weighted cost of equity component of capital structure of 4.35%. Aug-Dec based on ROE of 10.10%, and weighted cost of equity component of capital structure of 4.46%. 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-2010-0131-FOF-EI.

(D) Line 2 x rate x 1/12. Based on 2020 Effective Tax Rate on original cost.

(E) Line 9a x Line 10

(F) Line 9b x Line 11

DUKE ENERGY FLORIDA, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022

Docket No. 20230007-EI
Duke Energy Florida
Witness: G. P. Dean
Exh. No. __ (GPD-1)
Page 15 of 18

Return on Capital Investments, Depreciation and Taxes
For Project: NPDES - Intermediate (Project 16)
(in Dollars)

Line	Description			Beginning of Period Amount	Actual Jan-22	Actual Feb-22	Actual Mar-22	Actual Apr-22	Actual May-22	Actual Jun-22	Actual Jul-22	Actual Aug-22	Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	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	
	c. Retirements				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	
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			(3,000,702)	(3,035,369)	(3,070,036)	(3,104,703)	(3,139,370)	(3,174,037)	(3,208,704)	(3,243,371)	(3,278,038)	(3,312,705)	(3,347,372)	(3,382,039)	(3,416,706)	
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)			$9,841,168	$9,806,501	$9,771,834	$9,737,167	$9,702,500	$9,667,833	$9,633,166	$9,598,499	$9,563,832	$9,529,165	$9,494,498	$9,459,831	$9,425,164	
6	Average Net Investment				$9,823,835	$9,789,168	$9,754,501	$9,719,834	$9,685,167	$9,650,500	$9,615,833	$9,581,166	$9,546,499	$9,511,832	$9,477,165	$9,442,498	
7	Return on Average Net Investment (B)	Jan-Jul	Aug-Dec														
	a. Debt Component	1.65%	1.65%		13,541	13,493	13,445	13,397	13,349	13,302	13,254	13,206	13,158	13,110	13,063	13,015	159,333
	b. Equity Component Grossed Up For Taxes	5.92%	6.06%		48,451	48,280	48,109	47,938	47,767	47,596	47,425	48,377	48,202	48,027	47,852	47,677	575,701
	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)	0.7490%			8,015	8,015	8,015	8,015	8,015	8,015	8,015	8,015	8,015	8,015	8,015	8,015	96,180
	e. Other				0	0	0	0	0	0	0	0	0	0	0	0	0
9	Total System Recoverable Expenses (Lines 7 + 8)				$104,674	$104,455	$104,236	$104,017	$103,798	$103,580	$103,361	$104,265	$104,042	$103,819	$103,597	$103,374	1,247,218
	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				$104,674	$104,455	$104,236	$104,017	$103,798	$103,580	$103,361	$104,265	$104,042	$103,819	$103,597	$103,374	1,247,218
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)				0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	0.88321	
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)				92,449	92,256	92,062	91,869	91,675	91,483	91,289	92,088	91,891	91,694	91,498	91,301	1,101,553
14	Total Jurisdictional Recoverable Costs (Lines 12 + 13)				$92,449	$92,256	$92,062	$91,869	$91,675	$91,483	$91,289	$92,088	$91,891	$91,694	$91,498	$91,301	$1,101,553

Notes:

(A) N/A

(B) Jan - Jul 2022 Line 3 x 7.57% x 1/12. Aug - Dec 2022 Line 3 x 7.71% x 1/12. Jan-Jul based on ROE of 9.85%, and weighted cost of equity component of capital structure of 4.35%. Aug-Dec based on ROE of 10.10%, and weighted cost of equity component of capital structure of 4.46%. 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-2010-0131-FOF-EI.

(D) Line 2 x rate x 1/12. Based on 2020 Effective Tax Rate on original cost.

(E) Line 9a x Line 10

(F) Line 9b x Line 11

DUKE ENERGY FLORIDA, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022

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-22	Actual Feb-22	Actual Mar-22	Actual Apr-22	Actual May-22	Actual Jun-22	Actual Jul-22	Actual Aug-22	Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	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	
	c. Retirements				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	
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			(503,933)	(519,219)	(534,505)	(549,791)	(565,077)	(580,363)	(595,649)	(610,935)	(626,221)	(641,507)	(656,793)	(672,079)	(687,365)	
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)			$3,186,254	$3,170,968	$3,155,682	$3,140,396	$3,125,110	$3,109,824	$3,094,538	$3,079,252	$3,063,966	$3,048,680	$3,033,394	$3,018,108	$3,002,822	
6	Average Net Investment				$3,178,611	$3,163,325	$3,148,039	$3,132,753	$3,117,467	$3,102,181	$3,086,895	$3,071,609	$3,056,323	$3,041,037	$3,025,751	$3,010,465	
7	Return on Average Net Investment (B)	Jan-Jul	Aug-Dec														
	a. Debt Component	1.65%	1.65%		4,381	4,360	4,339	4,318	4,297	4,276	4,255	4,234	4,213	4,192	4,170	4,149	51,184
	b. Equity Component Grossed Up For Taxes	5.92%	6.06%		15,677	15,602	15,526	15,451	15,375	15,300	15,225	15,509	15,432	15,355	15,278	15,200	184,930
	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)	0.0497%			153	153	153	153	153	153	153	153	153	153	153	153	1,836
	e. Other (E)				0	0	0	0	0	0	0	0	0	0	0	0	0
9	Total System Recoverable Expenses (Lines 7 + 8)				$35,497	$35,401	$35,304	$35,208	$35,111	$35,015	$34,919	$35,182	$35,084	$34,986	$34,887	$34,788	421,382
	a. Recoverable Costs Allocated to Energy				35,497	35,401	35,304	35,208	35,111	35,015	34,919	35,182	35,084	34,986	34,887	34,788	421,382
	b. Recoverable Costs Allocated to Demand				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	0
10	Energy Jurisdictional Factor				0.92760	0.94600	0.94580	0.93710	0.88620	0.85240	0.84620	0.87150	0.88500	0.89510	0.90580	0.92120	
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 (F)				$32,927	$33,489	$33,391	$32,993	$31,115	$29,847	$29,548	$30,661	$31,049	$31,316	$31,601	$32,047	379,985
13	Retail Demand-Related Recoverable Costs (G)				0	0	0	0	0	0	0	0	0	0	0	0	0
14	Total Jurisdictional Recoverable Costs (Lines 12 + 13)				$32,927	$33,489	$33,391	$32,993	$31,115	$29,847	$29,548	$30,661	$31,049	$31,316	$31,601	$32,047	$379,985

Notes:

(A) N/A

(B) Jan - Jul 2022 Line 3 x 7.57% x 1/12. Aug - Dec 2022 Line 3 x 7.71% x 1/12. Jan-Jul based on ROE of 9.85%, and weighted cost of equity component of capital structure of 4.35%. Aug-Dec based on ROE of 10.10%, and weighted cost of equity component of capital structure of 4.46%. 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-2010-0131-FOF-EI.

(D) Line 2 x rate x 1/12. Based on 2020 Effective Tax Rate on original cost.

(E) Decrease in depreciation expense related to retired rate base assets as approved in Docket No. 19990007-EI, Order No. PSC-1999-2513-FOF-EI.

(F) Line 9a x Line 10

(G) Line 9b x Line 11

DUKE ENERGY FLORIDA, LLC
Environmental Cost Recovery Clause
Final True-Up
January 2022 - December 2022

Docket No. 20230007-EI
Duke Energy Florida
Witness: G. P. Dean
Exh. No. __ (GPD-1)
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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-22	Actual Feb-22	Actual Mar-22	Actual Apr-22	Actual May-22	Actual Jun-22	Actual Jul-22	Actual Aug-22	Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	End of Period Total
1	Investments																
	a. Expenditures/Additions				$507	($507)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	b. Clearings to Plant				507	(507)	0	0	0	0	0	0	0	0	0	0	
	c. Retirements				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	
2	Plant-in-Service/Depreciation Base			$4,321,533	4,322,040	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			(66,960)	(84,861)	(102,764)	(120,664)	(138,565)	(156,466)	(174,367)	(192,268)	(210,168)	(228,069)	(245,970)	(263,871)	(281,771)	
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)			$4,254,573	$4,237,179	$4,218,769	$4,200,869	$4,182,968	$4,165,067	$4,147,166	$4,129,265	$4,111,365	$4,093,464	$4,075,563	$4,057,662	$4,039,762	
6	Average Net Investment				$4,245,876	$4,227,974	$4,209,819	$4,191,918	$4,174,017	$4,156,117	$4,138,216	$4,120,315	$4,102,414	$4,084,514	$4,066,613	$4,048,712	
7	Return on Average Net Investment (B)	Jan-Jul	Aug-Dec														
	a. Debt Component	1.65%	1.65%		5,852	5,828	5,803	5,778	5,753	5,729	5,704	5,679	5,654	5,630	5,605	5,580	68,595
	b. Equity Component Grossed Up For Taxes	5.92%	6.06%		20,941	20,852	20,763	20,675	20,586	20,498	20,410	20,804	20,714	20,623	20,533	20,443	247,842
	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	17,903	17,901	17,901	17,901	17,901	17,901	17,901	17,901	17,901	17,901	17,901	214,811
	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)	0.0497%			(473)	179	179	179	179	179	179	179	179	179	179	179	1,496
	e. Other				0	0	0	0	0	0	0	0	0	0	0	0	0
9	Total System Recoverable Expenses (Lines 7 + 8)				$44,221	$44,762	$44,646	$44,533	$44,419	$44,307	$44,194	$44,563	$44,448	$44,333	$44,218	$44,103	532,744
	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				$44,221	$44,762	$44,646	$44,533	$44,419	$44,307	$44,194	$44,563	$44,448	$44,333	$44,218	$44,103	532,747
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				0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	0.92865	
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)				41,066	41,568	41,461	41,356	41,250	41,146	41,041	41,383	41,277	41,170	41,063	40,956	494,736
14	Total Jurisdictional Recoverable Costs (Lines 12 + 13)				$41,066	$41,568	$41,461	$41,356	$41,250	$41,146	$41,041	$41,383	$41,277	$41,170	$41,063	$40,956	$494,736

Notes:

(A) N/A

(B) Jan - Jul 2022 Line 3 x 7.57% x 1/12. Aug - Dec 2022 Line 3 x 7.71% x 1/12. Jan-Jul based on ROE of 9.85%, and weighted cost of equity component of capital structure of 4.35%. Aug-Dec based on ROE of 10.10%, and weighted cost of equity component of capital structure of 4.46%. 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-2010-0131-FOF-EI.

(D) Line 2 x rate x 1/12. Based on 2021 Effective Tax Rate on original cost. January includes a $652 credit to reflect a 2021 adjustment based on the January 2021 Plant-In-Service.

(E) Line 9a x Line 10

(F) Line 9b x Line 11

Actual Capital Structure and Cost Rates
Before ROE Trigger

		(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	$ 7,346,556	44.20%	9.85%	4.35%	5.83%	0.4858%
2	Long Term Debt	6,187,237	37.23%	4.25%	1.58%	1.58%	0.1317%
3	Short Term Debt	299,827	1.80%	2.22%	0.04%	0.04%	0.0033%
4	Cust Dep Active	160,050	0.96%	1.40%	0.01%	0.01%	0.0008%
5	Cust Dep Inactive	1,516	0.01%			0.00%	0.0000%
6	Invest Tax Cr	199,171	1.20%	7.36%	0.09%	0.11%	0.0092%
7	Deferred Inc Tax	2,426,397	14.60%			0.00%	0.0000%
8	**Total**	**$ 16,620,755**	**100.00%**		**6.07%**	**7.57%**	**0.6308%**

	ITC split between Debt and Equity**:		Ratio	Cost Rate	Ratio	Ratio	Deferred Inc Tax	Weighted ITC	After Gross-up
9	Common Equity	7,346,556	54%	9.9%	5.35%	73.3%	0.09%	0.066%	0.088%
10	Preferred Equity	-	0%				0.09%	0.000%	0.000%
11	Long Term Debt	6,187,237	46%	4.25%	1.94%	26.7%	0.09%	0.024%	0.024%
12		13,533,793	100%		7.29%			0.090%	0.112%

	Breakdown of Revenue Requirement Rate of Return between Debt and Equity:	
13	Total Equity Component (Lines 1 and 9)	5.918%
14	Total Debt Component (Lines 2, 3 , 4 , and 11)	1.654%
15	**Total Revenue Requirement Rate of Return**	**7.572%**

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

Actual Capital Structure and Cost Rates
ROE Trigger Effective August 1, 2022

		(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	$ 7,346,556	44.20%	10.10%	4.46%	5.97%	0.4975%
2	Long Term Debt	6,187,237	37.23%	4.25%	1.58%	1.58%	0.1317%
3	Short Term Debt	299,827	1.80%	2.22%	0.04%	0.04%	0.0033%
4	Cust Dep Active	160,050	0.96%	1.40%	0.01%	0.01%	0.0008%
5	Cust Dep Inactive	1,516	0.01%			0.00%	0.0000%
6	Invest Tax Cr	199,171	1.20%	7.36%	0.09%	0.11%	0.0092%
7	Deferred Inc Tax	2,426,397	14.60%			0.00%	0.0000%
8	**Total**	**$ 16,620,755**	**100.00%**		**6.18%**	**7.71%**	**0.6425%**

	ITC split between Debt and Equity**:		Ratio	Cost Rate	Ratio	Ratio	Deferred Inc Tax	Weighted ITC	After Gross-up
9	Common Equity	7,346,556	54%	10.1%	5.48%	73.8%	0.09%	0.066%	0.089%
10	Preferred Equity	-	0%				0.09%	0.000%	0.000%
11	Long Term Debt	6,187,237	46%	4.25%	1.94%	26.2%	0.09%	0.024%	0.024%
12		13,533,793	100%		7.43%			0.090%	0.113%

	Breakdown of Revenue Requirement Rate of Return between Debt and Equity:	
13	Total Equity Component (Lines 1 and 9)	6.059%
14	Total Debt Component (Lines 2, 3 , 4 , and 11)	1.654%
15	**Total Revenue Requirement Rate of Return**	**7.713%**

Notes:

Statutory 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

ERIC SZKOLNYJ

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC.

DOCKET NO. 20230007-EI

March 31, 2023

Q. Please state your name and business address.

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

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

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

Q: What are your responsibilities in that position?

A: I am responsible for oversight of the operation and maintenance of the majority of CCP facilities in the Carolinas and Florida, including the CCP facility at the Crystal River Energy Center. This includes operating and maintaining all CCP facilities in compliance with state and federal regulations. The Operations and Maintenance group at each station maintains accountability for overall CCP

facility performance which requires close collaboration with other Duke Energy CCP organizations such as Project Implementation, Engineering, and Facility Closure. The Company relies on my opinions and information I provide when making decisions regarding the CCP facilities under my supervision.

Q: Please describe your educational background and professional experience.

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

Q. What is the purpose of your testimony?

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

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

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

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

REGINALD ANDERSON

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

March 31, 2023

Q. Please state your name and business address.

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

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

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

Q. What are your responsibilities in that position?

A. As Vice President of DEF's Regulated & Renewable Energy organization, my responsibilities include overall leadership and strategic direction of DEF's power generation fleet. My responsibilities include strategic and tactical planning to operate and maintain DEF's non-nuclear generation fleet; generation fleet project and addition recommendations; major maintenance programs; outage and project management; generation facilities retirement; asset allocation; workforce

planning and staffing; organizational alignment and design; continuous business improvement; retention and inclusion; succession planning; and oversight of numerous employees and hundreds of millions of dollars in assets and capital and O&M budgets.

Q. Please describe your educational background and professional experience.

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

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

A. Yes.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to explain material variances between actual and actual/estimated project expenditures for environmental compliance costs associated with DEF's Integrated Clean Air Compliance Program (Project 7.4),

Mercury and Air Toxics Standards (MATS) – Crystal River (CR) 4&5 (Project 17), Mercury and Air Toxics Standards ("MATS") - Anclote Gas Conversion Project (Project 17.1), and Mercury & Air Toxics Standards (MATS) – CR 1&2 (Project 17.2) for the period January 2022 - December 2022.

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

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

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

KIM SPENCE McDANIEL

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20230007-EI

March 31, 2023

Q. Please state your name and business address.

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

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

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

Q. What are your responsibilities in that position?

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

Q. Please describe your educational background and professional experience.

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

Q. What is the purpose of your testimony?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

On February 14, 2019, the EPA and the Corps published in the Federal Register, the "Revised Definition of 'Waters of the United States,'" which proposed to narrow the extent of the Clean Water Act jurisdiction as compared to the 2015 definition adopted by the Obama Administration (Proposed Rule). On January 23, 2020, the EPA and the Corps released a pre-publication version of *The Navigable Waters Protection Rule: Definition of "Waters of the United States." (NWPR Rule)*. On April 21, 2020, the EPA and the Corps published the modified definition of the WOTUS in the Federal Register. DEF has reviewed the final rule and determined there are no impacts associated with the 2020 WOTUS Rule with respect to the operation of our existing generation facilities. On January 20, 2021, through Executive Order 13990, the Biden Administration directed the EPA and the Corps to review the NWPR Rule. The US District Court for the District of Arizona vacated and remanded the NWPR Rule on August 30, 2021, which vacated and remanded the rule nationwide. The EPA and the Corps announced on September 3, 2021 that efforts to implement the NWPR Rule had ceased and on December 7, 2021, the EPA published a proposed rule to officially repeal the NWPR Rule and replace it with the 1986 WOTUS rule. The public

comment period for this proposed rule closed on February 7, 2022. On January 18, 2023, the EPA and Corps' published in the Federal Register the final rule revising the definition of "Waters of the United States" (the "WOTUS Final Rule"). The WOTUS Final Rule sets forth which surface waters and wetlands are jurisdictional for section 404 wetland permitting, NPDES, and other Clean Water Act ("CWA") regulatory programs. The WOTUS Final Rule became effective on March 20, 2023. DEF is evaluating the rule to ascertain whether any further compliance steps are required.

Q. Does this conclude your testimony?

A. Yes.

Duke Energy Florida, LLC

Review of Integrated Clean Air Compliance Plan

Submitted to the
Florida Public Service Commission

March 31, 2023

Table of Contents

Acronyms

BART – Best Available Retrofit Technology

CAIR – Clean Air Interstate Rule

CAMR – Clean Air Mercury Rule

CAVR – Clean Air Visibility Rule

CCR - Coal Combustion Residuals

CO_2 – Carbon Dioxide

CPP – Clean Power Plan

CSAPR – Cross-State Air Pollution Rule

DEF – Duke Energy Florida

ECRC – Environmental Cost Recovery Clause

EPA – Environmental Protection Agency

EGU – Electric Generating Unit

ELG - Effluent Limitation Guidelines

ESP – Electrostatic Precipitator

FDEP – Florida Department of Environmental Protection

FGD – Flue Gas Desulfurization

GHG – Greenhouse Gas

LNB – Low NO_x Burner

MATS – Mercury and Air Toxic Standards

MWh – Megawatt Hour

NAAQS – National Ambient Air Quality Standards

NO_x – Nitrogen Oxides

NPDES – National Pollutant Discharge Elimination System

NSPS - New Source Performance Standards

PAC – Powdered Activated Carbon

Plan D – DEF Integrated Clean Air Compliance Plan

PM – Particulate Matter

ppb – Parts per billion

PSC – Public Service Commission
SCR – Selective Catalytic Reduction
SIP – Site Implementation Plan
SO_2 – Sulfur Dioxide

Executive Summary

In the 2007 Environmental Cost Recovery Clause ("ECRC") Docket (No. 20070007-EI), the Commission approved Duke Energy Florida's ("DEF") updated Integrated Clean Air Compliance Plan (Plan D) as a reasonable and prudent means to comply with the requirements of the Clean Air Interstate Rule ("CAIR") (subsequently replaced by the Cross-State Air Pollution Rule ("CSAPR"), Clean Air Mercury Rule ("CAMR") (subsequently replaced by the Mercury and Air Toxics Standards ("MATS" rule), Clean Air Visibility Rule ("CAVR"), and related regulatory requirements. In its 2007 final order, the Commission also 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." This report provides the required review for 2023.

The primary original components of DEF's 2006 Compliance Plan D included:

Sulfur Dioxide ("SO_2")

- Installation of flue gas desulfurization ("FGD") systems on Crystal River ("CR") Units 4 and 5
- Fuel switching at CR Units 1 and 2 to burn low sulfur coal
- Fuel switching at Anclote Units 1 and 2 to burn low sulfur oil and natural gas
- Purchases of SO_2 allowances

Nitrogen Oxides ("NO_x")

- Installation of low NO_x burners ("LNBs") and selective catalytic reduction ("SCR") systems on CR Units 4 and 5

- Installation of LNBs and separated over-fire air ("SOFA") or alternative NO_x controls at Anclote Units 1 and 2
- Purchase of annual and ozone season NO_x allowances

Mercury

- Installation of FGD and SCR systems at CR Units 4 and 5
- Installation of powdered activated carbon ("PAC") injection on CR Unit 2

As detailed in Docket No. 20070007-EI, DEF decided on Plan D based on a quantitative and qualitative evaluation of the ability of alternative plans to meet environmental requirements, while managing risks and controlling costs. That evaluation demonstrated that Plan D is DEF's most cost-effective alternative to meet applicable regulatory requirements. The Plan was designed to strike a balance between reducing emissions, primarily through the installation of controls on DEF's largest and newest coal units (CR Units 4 and 5) and making strategic use of emission allowance markets.

In accordance with the Commission's final order in Docket No. 20070007-EI, DEF has continued to review the efficacy of Plan D and the cost-effectiveness of retrofit options in relation to expected changes in environmental regulations. With regard to efficacy, Plan D remains the cornerstone of DEF's efforts to comply with applicable air quality regulations in a cost-effective manner.

As indicated in previous ECRC filings, the U.S. Court of Appeals for the District of Columbia ("D.C. Circuit") stayed the effect of CSAPR (proposed by the U.S. Environmental Protection Agency ("EPA") to replace CAIR) leaving CAIR in effect until the court completed its review of CSAPR. In August 2012, the D.C. Circuit vacated CSAPR in its entirety, and in January 2013, the court denied the EPA's petition for rehearing. On April 29, 2014, the U.S. Supreme Court reversed the D.C. Circuit's decision and upheld the CSAPR. The EPA subsequently petitioned the D.C. Circuit to reinstate CSAPR, making it effective January 1, 2015. The court agreed with the EPA and approved its petition. On September 7, 2016, the EPA finalized its CSAPR Update rule and eliminated Florida, South Carolina, and North Carolina from the CSAPR ozone season program based on modeling which shows that NO_x emissions from these states do

not significantly contribute to ozone nonattainment in any downwind state. Duke Energy sources in Florida are no longer subject to any CSAPR NO_x emission limitations, as of the beginning of 2017.

Additionally, on February 16, 2012, the EPA issued MATS to replace the vacated CAMR for emissions from coal- and oil-fired electric generating units ("EGUs"), including, DEF's Anclote Units 1 and 2, Suwannee Units 1, 2, and 3, and CR Units 1, 2, 4, and 5. The following summarizes the results of DEF's MATS compliance analyses for these units:

Anclote Units 1 & 2: DEF determined that the most cost-effective option for Anclote Units 1 and 2 was conversion to fire 100% natural gas rather than installation of emission controls to comply with MATS. The Commission approved DEF's petition for ECRC recovery of costs associated with the Anclote Conversion Project in Docket No. 20120103-EI.

Suwannee Units 1, 2 & 3: DEF determined that no further modifications were needed on Suwannee Units 1, 2 and 3 as these units were already capable of operating on 100% natural gas.

CR Units 4 & 5: DEF determined that the existing electrostatic precipitators ("ESPs"), FGDs, and SCRs at CR Units 4 and 5 would provide sufficient control for MATS compliance under typical conditions. DEF also determined that chemical injection systems would be required to mitigate mercury re-emissions from the FGDs. On December 15, 2014, DEF requested a one-year extension to allow time for installation of additional mercury control systems. On March 12, 2015, the Florida Department of Environmental Protection ("FDEP") authorized a one-year extension (to April 16, 2016) for all mercury-related MATS requirements on CR Units 4 and 5; the units have operated in compliance with the Standards since that time.

CR Units 1 & 2: DEF determined that the use of alternative coals (along with dry sorbent injection, PAC injection, and ESP enhancements) was a feasible and cost-effective strategy to allow these units to continue running for a limited period of time in compliance with MATS and Best Available Retrofit Technology ("BART") requirements until new generation could be built. This plan was approved by the Commission in Order No. PSC-2014-0173-PAA-EI (April 17, 2014). On February 6, 2014, the FDEP granted a one-year extension (to April 16, 2016) for all MATS requirements on CR Units 1 and 2; the units were operated in compliance with the Standards since that time. CR Units 1 and 2 were retired from service on December 31, 2018.

DEF is confident that the emission controls installed pursuant to Plan D, along with compliance strategies discussed further in this Plan, continue to enable the Company to achieve and maintain compliance with all applicable environmental regulations in a cost-effective manner.

I. Introduction

In its final order in the 2007 ECRC Docket (No. 20070007-EI), the Commission approved DEF's updated Integrated Clean Air Compliance Plan (Plan D) as a reasonable and prudent means to comply with the requirements of CAIR, CAMR, CAVR and related regulatory requirements. In *In re Environmental Cost Recovery Clause*, Order No. PSC-2007-0922-FOF-EI, p. 8 (Nov. 16, 2007), the Commission specifically found that "PEF's [now DEF's] updated Integrated Clean Air Compliance Plan represents the most cost-effective alternative for achieving and maintaining compliance with CAIR, CAMR, and CAVR, and related regulatory requirements, and it is reasonable and prudent for DEF to recover prudently incurred costs to implement the plan." *Id*. The Commission also 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." *Id*. The purpose of this report is to provide the required review for 2022.

II. Regulatory Background

No changes have occurred since previous filing of the Integrated Clean Air Compliance Plan, Docket No. 20220007.

A. Status of CAIR and CSAPR

No changes have occurred since previous filing of the Integrated Clean Air Compliance Plan, Docket No. 20220007.

B. Vacatur of CAMR and Adoption of MATS

In February 2008, the D.C. Circuit Court vacated CAMR and rejected the EPA's delisting of coal-fired EGUs from the list of emission sources that are subject to Section 112 of the Clean

Air Act. *See New Jersey v. EPA*, 517 F.3d 574 (D.C. Cir. 2008). As a result, in lieu of CAMR, the EPA was required to adopt new emissions standards for control of various hazardous air pollutant emissions from coal-fired EGUs. *Id*. The EPA issued its proposed rule to replace CAMR on March 16, 2011, with publication following in the *Federal Register* on May 3, 2011. *See* 76 Fed. Reg. 24976 (May 3, 2011). On February 16, 2012, the EPA published the final rule which established new MATS limits for emissions of various metals and acid gases from both coal- and oil-fired EGUs. Compliance generally was required to be achieved within three years of the EPA's adoption of MATS (i.e., April 16, 2015), although the Clean Air Act authorizes permitting authorities to grant one-year compliance extensions in certain circumstances. On June 29, 2015, the U.S. Supreme Court remanded the MATS rule to the D.C. Circuit, finding that the EPA insufficiently considered costs in determining that it is "appropriate and necessary" to regulate mercury from power plants. On December 15, 2015, the D.C. Circuit remanded the MATS rule to the EPA without vacatur, and the EPA committed to completing its consideration of cost by April 16, 2016. On March 3, 2016, the U.S. Supreme Court denied a request for a stay of the MATS rule while the EPA completes it cost consideration, thus the MATS rule remained in effect pending the cost consideration process. On March 18, 2016, a coalition of 20 states led by Michigan petitioned the Court for a writ of certiorari asking the Court to declare whether an administrative rule promulgated without statutory authority may be left in effect by a reviewing court during the pendency of its review. *See State of Mich., et al. v. EPA*, Pet. for Writ of Cert. to U.S. Sup. Ct. (filed Mar. 18, 2016). On April 14, 2016 the EPA issued a final finding that it is appropriate and necessary to set standards for emissions of air toxics from coal and oil-fired power plants. This finding responded to the decision by the U.S. Supreme Court that the EPA must consider cost in the appropriate and necessary finding supporting MATS. This finding was challenged.

On February 7, 2019 the EPA proposed a revision to its response to the U.S. Supreme Court decision in *Michigan v. EPA* which held that the EPA erred by not considering cost in its determination that regulation under section 112 of the Clean Air Act of hazardous air pollutant emissions from coal- and oil-fired electric utility steam generating units is appropriate and necessary. On May 22, 2020, the EPA published a reconsideration of the appropriate and necessary

finding for the MATS, correcting flaws in the 2016 supplemental cost finding. However, the EPA is not removing coal- and oil-fired EGUs from the list of affected source categories for regulation under section 112 of the CAA, so the MATS rule remains in effect. On January 31, 2022, the EPA proposed revocation of the 2020 reconsideration noted above affirmed the previous Appropriate and Necessary finding. This proposal reaffirms the determination that it is appropriate and necessary to regulate hazardous air pollutants (HAP), including mercury, from power plants after considering cost and would revoke the 2020 finding that it is not appropriate and necessary to regulate coal- and oil-fired power plants under the Clean Air Act (CAA) section 112**.** This proposal is currently open for public review and comment. DEF continues to monitor developments associated with this rule.

In the 2011 ECRC docket, the Commission recognized that the EPA's adoption of MATS for EGUs would require the Company to modify its Integrated Clean Air Compliance Plan. See Order No. PSC-2011-0553-FOF-EI, at 11. Accordingly, consistent with the Commission's expectation that utilities "take steps to control the level of costs that must be incurred for environmental compliance," Order No. PSC-2008-0775-FOF-EI, at 7, the Commission approved the Company's request to recover costs incurred to assess the EPA's proposed rule, prepare comments to the EPA, and develop compliance strategies within the aggressive regulatory timeframes proposed by the EPA.

C. Greenhouse Gas Regulation

In 2007, then-Governor Crist issued Executive Order 07-127 directing the FDEP to promulgate regulations requiring reductions in utility CO_2 emissions. In addition, the 2008 Florida Legislature enacted legislation authorizing the FDEP to adopt rules establishing a cap-and-trade program and requiring the FDEP to submit any such rules for legislative review and ratification. However, the FDEP did not adopt any cap-and-trade rules, and the Legislature subsequently repealed the 2008 law. Likewise, although a number of bills that would regulate GHG emissions have been introduced to Congress over the past several years, none have become law. In the meantime, the EPA began implementing a regulatory approach to reducing GHG emissions through the Clean Air Act. At this time, however, there are no GHG emission standards applicable to DEF's existing generating units.

On June 25, 2013, President Obama issued a Presidential Memorandum directing the EPA to establish GHG emission guidelines for existing power plants under Section 111(d) of the Clean Air Act. The Presidential Memorandum directed the EPA to issue proposed GHG standards, regulations, or guidelines, as appropriate, for existing power plants by no later than June 1, 2014, and issue final standards, regulations or guidelines, as appropriate, by no later than June 1, 2015. In addition, the Presidential Memorandum directed the EPA to include a requirement in the new regulations that states submit State Implementation Plans ("SIPs") to implement the new guidelines by no later than June 30, 2016.

On August 3, 2015, the EPA released the final New Source Performance Standards ("NSPS") for CO_2 emissions from existing fossil fuel-fired EGUs (also known as the Clean Power Plan or "CPP"). The final CPP established state-specific emission goals; for Florida, the goals would begin a phased approach in 2022, ending with a rate goal of 919 lb. CO_2/MWh annual average for the period 2030 and beyond. Alternatively, the state was able adopt a mass emissions approach culminating in a 2030 target of 105,094,704 tons (existing units) or 106,641,595 tons (existing plus new units). The final CPP was challenged in the D.C. Circuit by 27 states and a number of industry groups. Oral argument occurred on September 27, 2016. The D.C. Circuit subsequently issued a stay of the litigation. Previously, on February 9, 2016, the U.S. Supreme Court had placed a stay on the CPP until such time that all litigation is completed.

Also, on August 3, 2015, the EPA released the final NSPS for CO_2 emissions from new, modified and reconstructed fossil fuel-fired EGUs. The rule included emission limits of 1,400 lb. CO_2/MWh for new coal-fired units and 1,000 lb. CO_2/MWh for new natural gas combined-cycle units. This rule was also challenged in the D.C. Circuit. The D.C. Circuit issued an order suspending this litigation pending a review of the rule by EPA.

On March 28, 2017, President Trump signed an Executive Order ("EO") entitled "Promoting Energy Independence and Economic Growth." The EO directed 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 directed the

EPA to review the following rules and determine whether to suspend, revise, or rescind those rules:

- The final CO_2 emission standards for existing power plants ("CPP")
- The final CO_2 emission standards for new power plants ("CO_2 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 CO_2 NSPS rules while each is reviewed by the EPA. The EO did not change the current status of the CPP which was under a legal hold by the U.S. Supreme Court. With regard to the CO_2 NSPS, that rule remained in effect pending the outcome of the EPA's review. On December 6, 2018, the EPA proposed to revise the New Source Performance Standards (NSPS) for greenhouse gas emissions from new, modified, and reconstructed fossil fuel-fired power plants. After further analysis and review, the EPA proposed to determine that the best system of emission reduction ("BSER") for newly constructed coal-fired units, is the most efficient demonstrated steam cycle in combination with the best operating practices. The EPA did not propose to amend the standards of performance for newly constructed or reconstructed stationary combustion turbines. In January 2021, EPA issued a clear framework for determining when standards are appropriate for GHG emissions from stationary source categories under the Clean Air Act (CAA) section 111(b)(1)(A). The EPA did not take final action to revise the BSER in the 2018 proposal.

On October 16, 2017, the EPA published a proposal to announce its intention to repeal the CPP. The proposal also requested public comment on the proposed rule. The EPA held public hearings on November 28 and 29, 2017, in Charleston, West Virginia, and extended the public comment period until January 16, 2018. In response to numerous requests for additional opportunities for the public to provide oral testimony on the proposed rule in more than one location, the EPA conducted three listening sessions, and extended the public comment period until April 26, 2018.

On December 28, 2017 the EPA published an Advanced Notice of Proposed Rulemaking ("ANPR") to solicit information from the public as the agency considered proposing emission guidelines to limit GHG emissions from existing EGUs.The EPA also "solicited information on

the proper respective roles of the state and federal governments in the process, as well as information on systems of emission reduction that are applicable at or to an existing EGU, information on compliance measures, and information on state planning requirements under the Clean Air Act."

On June 19, 2019, the EPA issued the Affordable Clean Energy rule ("ACE"), an effort to provide existing coal-fired electric utility generating units, or EGUs, with achievable and realistic standards for reducing greenhouse gas (GHG) emissions. This action was finalized in conjunction with two related, but separate and distinct rulemakings: (1) The repeal of the Clean Power Plan (CPP) and (2) Revised implementing regulations for ACE, ongoing emission guidelines, and all future emission guidelines for existing sources issued under the authority of the Clean Air Act (CAA) section 111(d). On January 19, 2021, the court vacated the ACE rule and remanded it back to the EPA. Vacatur means that the rule will no longer be in effect once the Mandate is issued; the Mandate is the court's directive to enforce its decision. On February 22, 2021, the court granted the EPA's motion to withhold issuance of the mandate with respect to the vacatur of the Clean Power Plan Repeal Rule until the EPA responds to the court's remand in a new rulemaking action. No party filed for Rehearing regarding the court's January 19th decision. Accordingly, on March 5, 2021, the court issued the Partial Mandate to the EPA, officially vacating the ACE rule, but withholding the mandate regarding the CPP repeal. Currently, neither the ACE rule nor Clean Power Plan rule are in effect. The parties have until April 19, 2021, to ask the Supreme Court to take the case. On October 29, 2021, the Supreme Court agreed to hear the appeal of ACE vacatur. The case was heard at the Supreme Court on February 28, 2022, and we are awaiting the ruling from the court. In the meantime, the EPA is working on a replacement rule.

D. Status of BART Requirements under CAVR

No changes have occurred since previous filing of the Integrated Clean Air Compliance Plan, Docket No. 20220007.

E. Status of National Ambient Air Quality Standards (NAAQS)

No changes have occurred since previous filing of the Integrated Clean Air Compliance Plan, Docket No. 20220007.

F. Status of Combustion Turbine MACT

In March of 2004, the Environmental Protection Agency ("EPA") promulgated National Emission Standards for Hazardous Air Pollutants ("NESHAP") for stationary combustion turbines ("CTs") that are located at major sources of hazardous air pollutants ("HAPs") and are constructed after January 14, 2003. The NESHAP, subpart YYYY, implements section 112(d) of the Clean Air Act ("CAA") by requiring all major combustion turbine sources to meet HAP emission standards reflecting the application of the maximum achievable control technology ("MACT"). In April 2004, the EPA stayed the effectiveness of the rule for the lean premix and diffusion flame gas-fired sub-categories of stationary combustion turbines. The EPA concluded that a stay was necessary to avoid unnecessary expenditures on compliance as they evaluated a delisting petition for these two sub-categories of turbines.

On March 9, 2022, the EPA published in the *Federal Register*, at 87 Fed. Reg.13,183, a final rule to remove the stay for natural gas-fired stationary CTs. As a result of the final rule, lean premix and diffusion flame gas-fired turbines that were constructed or reconstructed at major sources of HAP emissions after January 14, 2003, must comply with emission and operating limitations beginning March 9, 2022, or upon startup of future affected units. Owners/operators will then have 180 days to demonstrate compliance with the formaldehyde standard, i.e., September 5, 2022. *See* 40 C.F.R. §63.6110(a).

Under the EPA's definition of major source, Duke Energy Florida's (DEF) Citrus County Combined Cycle (Units 1A, 1B, 2A, 2B), are subject to the rule and associated compliance requirements. Hines Energy Complex and Bartow Combined Cycle were successfully reclassified as an Area Source and are therefore no longer subject to the rule.

Due to ongoing litigation, EPA is evaluating the potential to regulate additional units and pollutants under Section 112 of CAA. DEF will continue to monitor developments and update the Commission.

Please refer to Ms. McDaniel's testimony filed contemporaneously with this document for discussion of the Rule's impact, DEF's compliance strategy, and projected costs.

III. DEF's Integrated Clean Air Compliance Plan

No changes have occurred since previous filing of the Integrated Clean Air Compliance Plan, Docket No. 20220007.

A. Visibility Requirements

No changes have occurred since previous filing of the Integrated Clean Air Compliance Plan, Docket No. 20220007.

IV. Efficacy of DEF's Plan

A. Project Milestones

No changes have occurred since previous filing of the Integrated Clean Air Compliance Plan, Docket No. 20220007.

B. Projects

No changes have occurred since previous filing of the Integrated Clean Air Compliance Plan, Docket No. 20220007.

V. Conclusion

DEF has completed installation of the emission controls contemplated in its approved Plan D on time and within budget. The FGD and SCR systems at CR Units 4 and 5 have enabled DEF to comply with CAIR, and subsequently the CSAPR requirements and will continue to be the

cornerstone of DEF's integrated air quality compliance strategy for years to come. DEF is confident that Plan D, along with the other compliance strategies discussed in the document, has enabled the Company to achieve and maintain compliance with applicable regulations, including MATS, in a cost-effective manner.