Stephanie A. Cuello
SENIOR COUNSEL

May 1, 2024

VIA ELECTRONIC FILING

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

Re: *Energy Conservation Cost Recovery Clause;* Docket No. 20240002-EG

Dear Mr. Teitzman:

On behalf of Duke Energy Florida, LLC ("DEF"), please find enclosed for electronic filing in the above-referenced docket:

- DEF's Petition for Approval of True-Up Amount for the Period January 2023 through December 2023; and
- Direct Testimony of Karla Rodriguez with attached Exhibit No. KR-1T.

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/clg
Attachments

106 East College Avenue, Suite 800, Tallahassee, FL 32301
Phone: 850.521.1425 ■ Email: stephanie.cuello@duke-energy.com

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Energy Conservation Cost Recovery Clause	Docket No. 20240002-EG Filed: May 1, 2024

DUKE ENERGY FLORIDA, LLC'S
PETITION FOR APPROVAL OF TRUE-UP AMOUNT

Pursuant to Order No. PSC-2024-0028-PCO-EG, issued February 6, 2024, in the above-referenced docket, Duke Energy Florida, LLC ("DEF" or "the Company") petitions the Florida Public Service Commission ("Commission") for approval of an over-recovery of $3,699,623 as DEF's adjusted net true-up amount for the period January 2023 through December 2023. In support of this petition, DEF states:

1. The name and address of the affected agency are:

   Florida Public Service Commission
   2540 Shumard Oak Boulevard
   Tallahassee, Florida 32399-0850

2. The Petitioner's name and address are:

   Duke Energy Florida, LLC
   299 First Avenue North
   St. Petersburg, Florida 33701

Notices, orders, pleadings and correspondence to be served upon DEF in this proceeding should be directed to:

Dianne M. Triplett
Deputy General Counsel
Duke Energy Florida
299 1st Avenue North
St. Petersburg, FL 33701
(727) 820-4692 telephone
Dianne.Triplett@duke-energy.com

Matthew R. Bernier
Associate General Counsel
Duke Energy Florida
106 E. College Avenue, Suite 800
Tallahassee, FL 32301
(850) 521-1428 telephone
Matt.Bernier@duke-energy.com

Stephanie A. Cuello
Duke Energy Florida, LLC
106 E. College Avenue, Suite 800
Tallahassee, FL 32301
(850) 521-1425 telephone
Stephanie.Cuello@duke-energy.com
FLRegulatoryLegal@duke-energy.com

3. DEF is a public utility subject to the Commission's jurisdiction pursuant to Chapter 366, Florida Statutes (F.S.). Pursuant to Section 366.82, F.S., and Rule 25-17.015, Florida Administrative Code (F.A.C.), DEF recovers its reasonable and prudent unreimbursed costs for conservation audits, conservation programs and implementation of DEF's conservation plan through the Energy Conservation Cost Recovery ("ECCR") clause. DEF has substantial interests in the proper calculation and recovery of its ECCR factor and the final true-up which is used in the computation of the ECCR factor.

4. DEF seeks Commission approval of an over-recovery of $3,699,623 as the adjusted net true-up amount for the period January 2023 through December 2023. DEF's final adjusted net true-up amount for the period January 2023 through December 2023 was calculated consistent with the methodology set forth in Schedule 1 attached to Commission Order No. 10093, dated June 19, 1981. This calculation and supporting documentation are contained in Exhibit KR-1T, an exhibit attached to the prefiled testimony of DEF's witness Karla Rodriguez, which is being filed in conjunction with this petition.

5. As reflected on Schedule CT-1 of Exhibit KR-1T to Ms. Rodriguez' testimony, the adjusted net true-up for the period January 2023 through December 2023 is an over-recovery of $3,699,623, which is the difference of the actual true-up over-recovery of $9,254,377 and the estimated/actual true-up over-recovery of $5,554,754.

WHEREFORE, DEF respectfully requests that the Commission approve an over-recovery of $3,699,623 as the final adjusted net true-up amount for the period January 2023 through December 2023.

Respectfully submitted this 1st day of May, 2024.

Respectfully submitted,

/s/ Stephanie A. Cuello
DIANNE M. TRIPLETT
Deputy General Counsel
Duke Energy Florida, LLC
299 First Avenue North
St. Petersburg, FL 33701
T: 727.820.4692
E: Dianne.Triplett@duke-energy.com

MATTHEW R. BERNIER
Associate General Counsel
Duke Energy Florida, LLC
106 E. College Avenue, Suite 800
Tallahassee, FL 32301
T: 850.521.1428
E: Matt.Bernier@duke-energy.com

STEPHANIE A. CUELLO
Senior Counsel
Duke Energy Florida, LLC
106 E. College Avenue, Suite 800
Tallahassee, FL 32301
T: 850.521-1425
E: Stephanie.Cuello@duke-energy.com
FLRegulatoryLegal@duke-energy.com

CERTIFICATE OF SERVICE
Docket No. 20240002-EG

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic mail to the following this 1st day of May, 2024.

/s/ Stephanie A. Cuello
Attorney

Jacob Imig / Carlos Marquez / Saad Farooqi
Office of General Counsel
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850
jimig@psc.state.fl.us
CMarquez@psc.state.fl.us
sfarooqi@psc.state.fl.us

J. Wahlen / M. Means / V. Ponder
Tampa Electric Company
P.O. Box 391
Tallahassee, FL 32302
jwahlen@ausley.com
mmeans@ausley.com
vponder@ausley.com

Jon C. Moyle, Jr.
FIPUG
118 North Gadsden Street
Tallahassee, FL 32301
jmoyle@moylelaw.com
mqualls@moylelaw.com

Maria Jose Moncada / William P. Cox
Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408-0420
maria.moncada@fpl.com
will.p.cox@fpl.com

James W. Brew / Laura Wynn Baker / Sarah B. Newman
Stone Mattheis Xenopoulos & Brew, P.C.
PCS Phosphate –White Springs
1025 Thomas Jefferson Street, NW
Eighth Floor, West Tower
Washington, DC 20007
jbrew@smxblaw.com
lwb@smxblaw.com
sbn@smxblaw.com

Peter J. Mattheis / Michael K. Lavanga / Joseph R. Briscar
Stone Mattheis Xenopoulos & Brew, PC
NUCOR
1025 Thomas Jefferson Street, NW
Eighth Floor, West Tower
Washington, DC 20007
pjm@smxblaw.com
mkl@smxblaw.com
jrb@smxblaw.com

W. Trierweiler / M. Wessling /P. Christensen /O. Ponce / A. Watrous / C. Rehwinkel
Office of Public Counsel
111 West Madison Street, Room 812
Tallahassee, FL 32399-1400
trierweiler.walt@leg.state.fl.us
wessling.mary@leg.state.fl.us
christensen.patty@leg.state.fl.us
ponce.octavio@leg.state.fl.us
watrous.austin@leg.state.fl.us
rehwinkel.charles@leg.state.fl.us

Kenneth A. Hoffman
Florida Power & Light Company
134 W. Jefferson Street
Tallahassee, FL 32301-1713
ken.hoffman@fpl.com

Beth Keating
Florida Public Utilities Company
215 South Monroe Street, Suite 601
Tallahassee, FL 32301
bkeating@gunster.com

Derrick Craig
Florida Public Utilities Company
208 Wildlight Avenue
Yulee, FL 32097
dcraig@chpk.com

Michelle D. Napier
Florida Public Utilities Company
1635 Meathe Drive
West Palm Beach, FL 33411
mnapier@fpuc.com

Paula K. Brown
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601
regdept@tecoenergy.com

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20240002-EG

Energy Conservation and Cost Recovery Final True-up for the Period January through December 2023

DIRECT TESTIMONY OF Karla Rodriguez

May 1, 2024

Q. Please state your name and business address.

A. My name is Karla Rodriguez. My business address is 299 1st Ave N, St. Petersburg, FL 33701.

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

A. I am employed by Duke Energy Business Services, LLC, as Lead Strategy & Collaboration Manager in the Portfolio Regulatory Strategy and Support department. Duke Energy Business Services and Duke Energy Florida, LLC ("DEF" or "the Company") are both wholly owned subsidiaries of Duke Energy Corporation.

Q. What are your duties and responsibilities in that position?

A. My responsibilities include regulatory planning, support and compliance of the Company's energy efficiency and demand-side management ("DSM") programs. This includes support for development, implementation and training, budgeting, and accounting functions related to these programs.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to compare DEF's 2023 actual energy conservation program costs with actual revenues collected through the Company's Energy Conservation Cost Recovery ("ECCR") Clause during the period January 2023 through December 2023. The Company relies upon the information presented in my testimony and exhibit in the conduct of its affairs.

Q. For what programs does Duke Energy Florida seek recovery?

A. DEF seeks recovery through the ECCR Clause for conservation programs approved by the Commission as part of the Company's DSM Plan, as well as for Conservation Program Administration (i.e., those common administration expenses not specifically assigned to an individual program). Notably, DEF seeks recovery of costs for conservation programs approved by the Commission on August 3, 2020 (see Order No. PSC-2020-0274-PAA-EG), as follows:

- Home Energy Check
- Residential Incentive
- Neighborhood Energy Saver
- Low-Income Weatherization Assistance Program
- Load Management (Residential and Commercial)
- Business Energy Check
- Better Business a/k/a Smart $aver Business
- Smart $aver Custom Incentive
- Standby Generation

- Interruptible Service
- Curtailable Service
- Technology Development
- Qualifying Facility

Q. Do you have any exhibits to your testimony?

A. Yes, Exhibit KR-1T entitled, "Duke Energy Florida, LLC Energy Conservation Adjusted Net True-Up for the Period January 2023 through December 2023." There are six (6) schedules included in this exhibit.

Q. Will you please explain your exhibit?

A. Yes. Exhibit KR-1T presents Schedules CT-1 through CT-6. Schedules CT-1 to CT-4 set out actual costs incurred for all programs during the period from January 2023 through December 2023. These schedules also illustrate variances between actual costs and previously projected values for the same time period. Schedule CT-5 provides a brief summary of each conservation program that includes a program description, program accomplishments, annual program expenditures, significant program cost variances versus projections and a program progress summary over the twelve-month period ending December 2023. Schedule CT-6 is DEF's capital structure and cost rates.

Q. Would you please discuss Schedule CT-1?

A. Yes. Schedule CT-1 line 14 shows that DEF's actual end-of-period ECCR true-up for December 31, 2023, was an over-recovery of $3,699,623, including principal and interest.

Q. What does Schedule CT-2 show?

A. The four pages of Schedule CT-2 provide an annual summary of conservation program revenues as well as itemized conservation program costs for the period January 2023 through December 2023 detailing actual, estimated and variance calculations by program. These costs are directly attributable to DEF's Commission-approved programs.

Q. Would you please discuss Schedule CT-3?

A. Yes. Page one of Schedule CT-3 provides actual conservation program costs by month for the period January 2023 through December 2023. Page two of Schedule CT-3 presents program revenues by month offset by expenses, a calculation of the end of period net true-up for each month, and the total for the year. Page three provides the monthly interest calculation. Page four of Schedule CT-3 provides conservation account numbers for the 2023 calendar year.

Q. **What is the purpose of Schedule CT-4?**

A. The three pages of Schedule CT-4 show monthly capital investment, depreciation and return for each applicable conservation program.

Q. Would you please discuss Schedule CT-5?

A. Yes. Schedule CT-5 provides a brief summary of each conservation program that includes a program description, program accomplishments, annual program expenditures, significant program cost variances versus projections and a program progress summary for the 2023 calendar year.

Q. What is the purpose of Schedule CT-6?

A. Schedule CT-6 is the capital structure and cost rates used to calculate the return for each applicable conservation program.

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

A. DEF used the capital structure and cost rates consistent with the language in Order No. PSC-2020-0165-PAA-EU and Order No. PSC-2022-0357-FOF-EI. The capital structure and cost rates relied on to calculate the revenue requirement rate of return for the period January 2023 through December 2023 are shown on Schedule CT-6.

Q. What is the source of data used to calculate the true-up amount.

A. The actual data used in calculating the actual true-up amounts is from DEF's records unless otherwise indicated. These records are kept in the regular course of DEF's business in accordance with general accounting principles and practices, 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. Pursuant to Rule 25-17.015(3), F.A.C., DEF provides a list of all account numbers used for conservation cost recovery during the period January 2023 through December 2023 on Schedule CT-3 page 4.

Q. Does this conclude your Direct Testimony?

A. Yes.

Duke Energy Florida, LLC
Energy Conservation Adjusted Net True-Up
For the Period January 2023 through December 2023

Line No.			
1	**Actual End of Period True-Up (Over) / Under Recovery**		
2	Beginning Balance	$7,706,868	
3	Principal (CT 3, Page 2 of 4)	(8,901,192)	
4	Interest (CT 3, Page 3 of 4)	(353,185)	
5	Prior True-Up Refund	(7,706,868)	
6	Adjustments	0	(9,254,377)
7	**Less: Estimated True-Up from August 2023 Filig (Over)/Under Recovery**		
9	Beginning Balance	7,706,868	
10	Principal	(5,255,295)	
11	Interest	(299,459)	
12	Prior True-Up Refund	(7,706,868)	
13	Adjustments	0	(5,554,754)
14	Variance to A/ E Filing		($3,699,623)

Duke Energy Florida, LLC
Analysis of Energy Conservation Program Costs
Actual vs. Estimated
For the Period January 2023 through December 2023

Line No.	Program	Actual	Estimated	Difference
1	Depreciation Amortization & Return	5,642,504	5,774,606	(132,102)
2	Payroll & Benefits	11,943,633	12,227,832	(284,199)
3	Materials & Supplies	591,771	363,765	228,006
4	Outside Services	3,406,450	3,929,704	(523,253)
5	Advertising	592,284	848,561	(256,276)
6	Incentives	85,894,476	88,578,001	(2,683,525)
7	Vehicles	346,837	338,959	7,878
8	Other	658,731	641,091	17,640
9	Program Revenues	0	0	0
10	Total Program Costs	109,076,687	112,702,518	(3,625,831)
11	*Less:*			
12	Conservation Clause Revenues	110,271,011	$110,250,945	20,066
13	Prior True-Up	7,706,868	7,706,868	(0)
14	True-Up Before Interest	(8,901,192)	(5,255,295)	(3,645,897)
15	Adjustment	0	0	0
16	Interest Provision	(353,185)	(299,459)	(53,726)
17	End of Period True-Up	(9,254,377)	(5,554,754)	(3,699,623)

( ) Reflects Over-Recovery
** Certain schedules may not foot/crossfoot due to rounding of decimals in files.

Duke Energy Florida, LLC
Actual Energy Conservation Program Costs Per Program
For the Period January 2023 through December 2023

Line No.	Program	Depreciation Amortization & Return	Payroll & Benefits	Vehicles	Outside Services	Materials & Supplies	Advertising	Incentives	Other	Sub-Total	Program Revenues (Credit)	Total
1	Home Energy Check	0	3,373,512	122,091	196,746	73,479	215,944	844,801	105,052	4,931,626	0	4,931,626
2	Residential Incentive Program	0	1,218,140	47,456	163,347	59,729	161,106	2,136,844	103,674	3,890,296	0	3,890,296
3	Business Energy Check	0	414,316	6,145	40,596	49,206	31,439	0	25,952	567,655	0	567,655
4	Better Business a/k/a Smart $aver Business	0	1,001,345	2,073	130,748	915	27,785	552,876	35,853	1,751,596	0	1,751,596
5	Technology Development	0	231,221	48,138	43,371	51,135	0	0	3,901	377,765	0	377,765
6	Smart $aver Custom Incentive	0	106,619	231	81,002	85	10,026	0	15,545	213,508	0	213,508
7	Interruptible Service	716,346	647,969	31,717	2,813	59,085	0	46,824,365	54,709	48,337,004	0	48,337,004
8	Curtailable Service	0	34,991	0	938	2,540	0	1,839,031	10,494	1,887,993	0	1,887,993
9	Load Management (Residential & Commercial)	4,926,158	2,030,056	41,052	2,120,578	102,098	48,950	22,061,784	55,571	31,386,248	0	31,386,248
10	Low Income Weatherization Assistance	0	144,550	2,187	1,765	848	0	104,802	7,646	261,798	0	261,798
11	Standby Generation	0	377,154	20,134	11,906	12,697	0	5,604,128	21,257	6,047,277	0	6,047,277
12	Qualifying Facility	0	672,652	903	0	46	0	0	3,250	676,851	0	676,851
13	Neighborhood Energy Saver	0	201,432	4,055	380,521	1,483	97,035	5,925,846	16,519	6,626,891	0	6,626,891
14	Conservation Program Admin	0	1,489,676	20,656	232,118	178,423	0	0	199,307	2,120,180	0	2,120,180
15	Total All Programs	5,642,504	11,943,633	346,837	3,406,450	591,771	592,284	85,894,476	658,731	109,076,687	0	109,076,687

Duke Energy Florida, LLC
Vaiance in Energy Conseervation Program Costs
12 Months Actual vs. 12 Months Estimated

Line No.	Program	Depreciation Amortization & Return	Payroll & Benefits	Vehicles	Outside Services	Materials & Supplies	Advertising	Incentives	Other	Sub-Total	Program Revenues (Credit)	Total
1	Home Energy Check	0	(55,875)	(2,909)	(153,327)	34,184	(194,775)	229,982	24,552	(118,168)	0	(118,168)
2	Residential Incentive Program	0	(41,304)	(4,259)	4,757	44,604	(87,589)	209,230	(1,566)	123,871	0	123,871
3	Business Energy Check	0	(29,573)	(500)	(43,703)	14,668	1,803	0	(4,354)	(61,660)	0	(61,660)
4	Better Business a/k/a Smart $aver Business	0	(37,322)	(1,026)	(23,367)	(2,469)	(4,777)	159,702	(1,643)	89,099	0	89,099
5	Technology Development	0	(35,524)	4,034	(47,399)	6,972	0	0	(102)	(72,018)	0	(72,018)
6	Smart $aver Custom Incentive	0	(4,654)	(172)	2,716	(1,085)	(4,444)	(20,000)	(202)	(27,841)	0	(27,841)
7	Interruptible Service	3,961	(49,105)	(2,838)	0	35,141	0	(1,666,459)	(4,240)	(1,683,541)	0	(1,683,541)
8	Curtailable Service	0	20,696	0	0	2,540	0	(640,754)	6,818	(610,700)	0	(610,700)
9	Load Management (Residential & Commercial)	(136,063)	(24,249)	(455)	(36,228)	54,008	16,701	(1,236,463)	(2,794)	(1,365,544)	0	(1,365,544)
10	Low Income Weatherization Assistance	0	(35,302)	697	1,531	54	(100)	(1,660)	2,697	(32,083)	0	(32,083)
11	Standby Generation	0	(30,725)	(2,955)	7,228	(4,257)	0	128,111	(1,493)	95,909	0	95,909
12	Qualifying Facility	0	(52,111)	(887)	(55,000)	(250)	0	0	(1,286)	(109,534)	0	(109,534)
13	Neighborhood Energy Saver	0	14,017	(425)	(114,789)	391	16,903	154,787	509	71,394	0	71,394
14	Conservation Program Admin	0	76,833	19,574	(65,672)	43,506	0	0	744	74,985	0	74,985
15	Total All Programs	(132,102)	(284,199)	7,878	(523,253)	228,006	(256,276)	(2,683,525)	17,640	(3,625,831)	0	(3,625,831)

Duke Energy Florida, LLC
Estimated Energy Conservation Program Costs Per Program
For the Period January 2023 through December 2023

Line No.	Program	Depreciation Amortization & Return	Payroll & Benefits	Vehicles	Outside Services	Materials & Supplies	Advertising	Incentives	Other	Sub-Total	Program Revenues (Credit)	Total
1	Home Energy Check	0	3,429,387	125,000	350,073	39,295	410,719	614,819	80,500	5,049,793	0	5,049,793
2	Residential Incentive Program	0	1,259,444	51,716	158,591	15,126	248,695	1,927,614	105,240	3,766,425	0	3,766,425
3	Business Energy Check	0	443,890	6,645	84,300	34,539	29,635	0	30,306	629,315	0	629,315
4	Better Business a/k/a Smart $aver Business	0	1,038,667	3,099	154,115	3,384	32,562	393,174	37,496	1,662,497	0	1,662,497
5	Technology Development	0	266,745	44,103	90,769	44,163	0	0	4,003	449,783	0	449,783
6	Smart $aver Custom Incentive	0	111,273	403	78,286	1,170	14,470	20,000	15,748	241,349	0	241,349
7	Interruptible Service	712,385	697,074	34,555	2,813	23,944	0	48,490,825	58,950	50,020,546	0	50,020,546
8	Curtailable Service	0	14,295	0	938	0	0	2,479,784	3,676	2,498,693	0	2,498,693
9	Load Management (Residential & Commercial)	5,062,221	2,054,306	41,508	2,156,807	48,091	32,249	23,298,247	58,365	32,751,792	0	32,751,792
10	Low Income Weatherization Assistance	0	179,852	1,489	235	794	100	106,462	4,949	293,881	0	293,881
11	Standby Generation	0	407,879	23,090	4,678	16,954	0	5,476,017	22,750	5,951,368	0	5,951,368
12	Qualifying Facility	0	724,763	1,789	55,000	296	0	0	4,536	786,385	0	786,385
13	Neighborhood Energy Saver	0	187,415	4,480	495,310	1,092	80,131	5,771,059	16,009	6,555,497	0	6,555,497
14	Conservation Program Admin	0	1,412,843	1,081	297,790	134,917	0	0	198,564	2,045,195	0	2,045,195
15	Total All Programs	5,774,606	12,227,832	338,959	3,929,704	363,765	848,561	88,578,001	641,091	112,702,518	0	112,702,518

Duke Energy Florida, LLC
Actual Conservation Program Costs by Month
For the Period January 2023 through December 2023

Line No.	Program	January	February	March	April	May	June	July	August	September	October	November	December	Total
1	Home Energy Check	314,665	344,936	320,405	420,016	412,794	652,126	433,584	403,521	471,761	450,257	368,027	339,533	4,931,626
2	Residential Incentive Program	266,886	236,902	262,289	281,380	314,356	383,495	324,071	331,452	420,639	397,316	345,175	326,335	3,890,296
3	Business Energy Check	39,997	43,376	47,273	55,170	46,570	44,287	46,177	57,499	62,280	54,284	35,313	35,429	567,655
4	Better Business a/k/a Smart $aver Business	124,114	145,163	168,373	141,438	125,287	114,453	161,112	216,480	176,591	172,009	95,077	111,499	1,751,596
5	Technology Development	20,634	24,477	51,934	29,591	34,533	28,028	47,401	21,581	52,022	21,770	18,055	27,739	377,765
6	Smart $aver Custom Incentive	13,596	16,689	25,760	18,837	18,115	22,065	25,170	17,781	15,156	16,670	11,209	12,462	213,508
7	Interruptible Service	4,355,310	4,070,724	4,199,491	3,836,784	4,057,221	3,802,570	4,311,772	3,680,101	3,800,712	3,773,772	3,927,495	4,521,053	48,337,004
8	Curtailable Service	233,215	205,049	164,055	174,324	144,467	108,388	24,154	76,594	456,587	107,368	96,824	96,968	1,887,993
9	Load Management (Residential & Commercial)	3,383,855	2,553,305	2,475,010	2,277,418	2,366,249	2,675,779	2,823,846	2,820,246	2,794,322	2,493,162	2,089,019	2,634,037	31,386,248
10	Low Income Weatherization Assistance	15,396	23,547	30,400	14,343	33,492	24,066	10,614	16,151	34,086	17,735	19,150	22,818	261,798
11	Standby Generation	480,198	481,532	528,138	471,001	525,124	489,068	513,375	502,296	499,805	532,288	489,803	534,648	6,047,277
12	Qualifying Facility	60,504	61,083	63,481	58,600	60,294	60,348	57,526	53,962	56,998	57,365	41,293	45,397	676,851
13	Neighborhood Energy Saver	427,918	20,011	1,126,886	554,192	18,191	1,418,107	588,468	697,054	483,727	683,385	603,744	5,207	6,626,891
14	Conservation Program Admin	143,478	138,698	191,783	125,380	168,588	183,036	158,624	243,227	110,248	158,205	242,956	255,957	2,120,180
15	Total All Programs	9,879,767	8,365,491	9,655,279	8,458,473	8,325,282	10,005,816	9,525,896	9,137,944	9,434,932	8,935,586	8,383,139	8,969,082	109,076,687
16	Less: Base Rate Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Net Recoverable (CT-3,Page 2, Line 4)	9,879,767	8,365,491	9,655,279	8,458,473	8,325,282	10,005,816	9,525,896	9,137,944	9,434,932	8,935,586	8,383,139	8,969,082	109,076,687

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Energy Conservation Adjustment
Calculation of True-Up
January 2023 - December 2023

Line No.		Act January	Act February	Act March	Act April	Act May	Act June	Act July	Act August	Act September	Act October	Act November	Act December	Total
1	ECCR Revenues	$8,556,739	$7,145,949	$8,171,424	$8,419,998	$8,645,278	$10,176,466	$11,185,332	$11,718,556	$11,485,164	$9,446,159	$7,635,284	$7,684,662	$110,271,011
2	Prior Period True-Up Over/(Under) Recovery	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	7,706,868
3	ECCR Revenues Applicable to Period	9,198,978	7,788,188	8,813,663	9,062,237	9,287,517	10,818,705	11,827,571	12,360,795	12,127,403	10,088,398	8,277,523	8,326,901	117,977,879
4	ECCR Expenses	9,879,767	8,365,491	9,655,279	8,458,473	8,325,282	10,005,816	9,525,896	9,137,944	9,434,932	8,935,586	8,383,139	8,969,082	109,076,687
5	True-Up This Period (Over)/Under Recovery	680,788	577,303	841,616	(603,764)	(962,235)	(812,889)	(2,301,675)	(3,222,851)	(2,692,470)	(1,152,812)	105,617	642,181	(8,901,192)
6	Current Period Interest	(26,361)	(22,404)	(17,717)	(15,330)	(16,441)	(17,705)	(22,133)	(32,191)	(42,697)	(48,466)	(48,018)	(43,722)	(353,185)
7	Adjustments	0	0	0	0	0	0	0	0	0	0	0	0	0
8	True-Up & Interest Provision Beginning of Period	(7,706,868)	(6,410,201)	(5,213,064)	(3,746,926)	(3,723,781)	(4,060,218)	(4,248,573)	(5,930,142)	(8,542,945)	(10,635,873)	(11,194,912)	(10,495,075)	(7,706,868)
9	GRT Refunded	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Prior Period True-Up Over/(Under) Recovery	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	7,706,868
11	End of Period Net True-Up	($6,410,201)	($5,213,064)	($3,746,926)	($3,723,781)	($4,060,218)	($4,248,573)	($5,930,142)	($8,542,945)	($10,635,873)	($11,194,912)	($10,495,075)	($9,254,377)	($9,254,377)

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Calculation of Interest Provision
January 2023 - December 2023

Line No.		Act January	Act February	Act March	Act April	Act May	Act June	Act July	Act August	Act September	Act October	Act November	Act December	Total
1	Beginning True-Up Amount (C3, Page 7, Lines 7 & 8)	($7,706,868)	($6,410,201)	($5,213,064)	($3,746,926)	($3,723,781)	($4,060,218)	($4,248,573)	($5,930,142)	($8,542,945)	($10,635,873)	($11,194,912)	($10,495,075)	
2	Ending True-Up Amount Before Interest (C3, Page 7, Lines 5,7-10)	(6,383,840)	(5,190,660)	(3,729,209)	(3,708,451)	(4,043,777)	(4,230,868)	(5,908,009)	(8,510,754)	(10,593,176)	(11,146,446)	(10,447,057)	(9,210,655)	
3	Total Beginning & Ending True-Up (Line 1 + Line 2)	(14,090,708)	(11,600,861)	(8,942,273)	(7,455,377)	(7,767,557)	(8,291,085)	(10,156,582)	(14,440,896)	(19,136,121)	(21,782,320)	(21,641,969)	(19,705,729)	
4	Average True-Up Amount (50% of Line 3)	(7,045,354)	(5,800,430)	(4,471,136)	(3,727,688)	(3,883,779)	(4,145,543)	(5,078,291)	(7,220,448)	(9,568,061)	(10,891,160)	(10,820,985)	(9,852,865)	
5	Interest Rate: First Day Reporting Business Month	4.37%	4.61%	4.66%	4.85%	5.02%	5.14%	5.11%	5.35%	5.35%	5.36%	5.32%	5.33%	
6	Interest Rate: First Day Subsequent Business Month	4.61%	4.66%	4.85%	5.02%	5.14%	5.11%	5.35%	5.35%	5.36%	5.32%	5.33%	5.32%	
7	Total (Line 5 & Line 6) (Line 5 + Line 6)	8.98%	9.27%	9.51%	9.87%	10.16%	10.25%	10.46%	10.70%	10.71%	10.68%	10.65%	10.65%	
8	Average Interest Rate (50% of Line 7)	4.49%	4.64%	4.76%	4.94%	5.08%	5.13%	5.23%	5.35%	5.36%	5.34%	5.33%	5.33%	
9	Interest Provision (Line 4 * Line 8) / 12	($26,361)	($22,404)	($17,717)	($15,330)	($16,441)	($17,705)	($22,133)	($32,191)	($42,697)	($48,466)	($48,018)	($43,722)	($353,185)

Duke Energy Florida, LLC
Conservation Account Numbers
For the Period January 2023 - December 2023

Line No.	Account	Product	Program
1	0908000	HEHC	Home Energy Check
1	0909000	HEHC	Home Energy Check (Advertising)
2	0908000	SSHEI	Residential Incentive Program
2	0909000	SSHEI	Residential Incentive Program (Advertising)
3	0908000	NRAOS	Business Energy Check
3	0909000	NRAOS	Business Energy Check (Advertising)
4	0908000	NRBBUS	Better Business a/k/a Smart $aver Business
4	0909000	NRBBUS	Better Business a/k/a Smart $aver Business (Advertising)
5	0908000	TECDEV	Technology Development
6	0908000	NRPRSC	Smart $aver Custom Incentive
6	0909000	NRPRSC	Smart $aver Custom Incentive (Advertising)
7	0908000	IRRSVC	Interruptible Service
8	0908000	PWRSHR	Curtailable Service
9	0908000	PWRMGR	Load Management - Residential
9	0908002	PWRMGR	Load Management - Residential (Amortization of Load Mgmt Switches)
9	0909000	PWRMGR	Load Management - Residential (Advertising)
9	0182398	PWRMGR	Load Management - Residential (Switch installation)
9	0182309	PWRMGR	Load Management - Residential (Amortization of Load Mgmt Switches)
10	0908000	COMLM	Load Management - Commercial
11	0908000	WZELEC	Low Income Weatherization Assistance
11	0909000	WZELEC	Low Income Weatherization Assistance (Advertising)
12	0908000	STBGEN	Standby Generation
13	0908000	PPCOGN	Qualifying Facility
14	0908000	HWLI	Neighborhood Energy Saver
14	0909000	HWLI	Neighborhood Energy Saver (Advertising)
15	0908000	NOPROD	Conservation Program Admin

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Schedule of Capital Investment, Depreciation & Return
January 2023 - December 2023

Docket No. 20240002-EG
Duke Energy Florida
Witness: Karla Rodriguez
Exhibit KR-1T
Schedule CT-4
Page 1 of 1
May 1, 2024

Line No.	Program Demand (D) or Energy (E)	Beginning Balance	ACT January	ACT February	ACT March	ACT April	ACT May	ACT June	ACT July	ACT August	ACT September	ACT October	ACT November	ACT December	Total
1	**Interruptible Service (D)**														
2	Investments		$0	$398,103	$93,722	$177,711	$260,173	$0	$162,456	$38,632	$0	$190,307	$0	$57,936	$1,379,039
3	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
4	Depreciation Base		1,910,826	1,910,826	2,308,929	2,402,651	2,580,362	2,840,535	2,840,535	3,002,990	3,041,622	3,041,622	3,231,929	3,231,929	
5															
6	Depreciation Expense		31,848	31,848	38,483	40,045	43,007	47,343	47,343	50,051	50,695	50,695	53,867	53,867	539,092
7															
8	Cumulative Investment	1,910,826	1,910,826	2,308,929	2,402,651	2,580,362	2,840,535	2,840,535	3,002,990	3,041,622	3,041,622	3,231,929	3,231,929	3,289,865	3,289,865
9	Less: Accumulated Depreciation	298,055	329,903	361,751	400,234	440,279	483,286	530,629	577,972	628,023	678,718	729,413	783,280	837,147	837,147
10	Net Investment	1,612,771	1,580,923	1,947,178	2,002,417	2,140,083	2,357,249	2,309,906	2,425,018	2,413,599	2,362,904	2,502,516	2,448,649	2,452,718	2,452,718
11	Average Investment		1,596,847	1,764,050	1,974,797	2,071,250	2,248,666	2,333,577	2,367,462	2,419,308	2,388,251	2,432,710	2,475,582	2,450,683	
12	Return on Average Investment (Note 1)		10,672	11,789	13,197	13,842	15,028	15,595	15,822	16,168	15,961	16,258	16,544	16,378	177,254
13															
14	Program Total		$42,520	$43,637	$51,680	$53,887	$58,035	$62,938	$63,165	$66,219	$66,656	$66,953	$70,411	$70,245	$716,346
15	**Residential Energy Management - Load Management Switches (D)**														
16	Expenditures Booked Directly to Plant		$137,108	$243,528	$424,134	$117,482	$369,751	$155,770	$411,846	$382,378	$327,327	$823,939	$363,975	$1,226,844	$4,984,083
17	Retirements		791,351	611,611	903,634	983,421	611,854	1,067,446	316,488	899,279	863,814	1,070,889	415,682	678,592	9,214,061
18	Closings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
19	Amortization Base		23,846,051	23,281,678	22,767,583	22,248,190	21,568,034	21,098,136	20,561,939	20,365,901	19,866,732	19,226,708	19,307,362	19,124,200	
20															
21	Amortization Expense		397,442	388,036	379,467	370,811	359,474	351,643	342,706	339,438	331,119	320,452	321,796	318,743	4,221,127
22															
23	Cumulative Investment	24,241,727	23,587,484	23,219,400	22,739,900	21,873,962	21,631,858	20,720,183	20,815,541	20,298,639	19,762,152	19,515,203	19,463,496	20,011,748	20,011,748
24	Less: Accumulated Depreciation	16,028,862	15,634,954	15,411,378	14,887,211	14,274,602	14,022,221	13,306,419	13,332,636	12,772,795	12,240,100	11,489,663	11,395,777	11,035,928	11,035,928
25	Net Investment	8,212,864	7,952,530	7,808,022	7,852,689	7,599,360	7,609,637	7,413,764	7,482,904	7,525,844	7,522,052	8,025,540	8,067,719	8,975,820	8,975,820
26	Average Investment		8,082,697	7,880,276	7,830,355	7,726,024	7,604,499	7,511,701	7,448,334	7,504,374	7,523,948	7,773,796	8,046,629	8,521,769	
27	Return on Average Investment (Note 1)		54,017	52,664	52,330	51,633	50,821	50,201	49,778	50,152	50,283	51,953	53,776	56,951	624,559
28															
29	Program Total		$451,459	$440,700	$431,797	$422,444	$410,295	$401,844	$392,484	$389,590	$381,402	$372,405	$375,572	$375,694	$4,845,686
30	**Load Management Upgrade (D)**														
31	Expenditures Booked Directly to Plant		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
33	Investments Booked to CWIP		104	645	652,333	193,323	7,632	7,902	7,656	29,127	993,868	76,981	25,036	404,894	2,399,502
34	Closings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
35	Amortization Base		0	0	0	0	0	0	0	0	0	0	0	0	
36															
37	Amortization Expense		0	0	0	0	0	0	0	0	0	0	0	0	0
38															
39	Cumulative Plant Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Less: Accumulated Depreciation	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Cumulative CWIP Investment	0	104	749	653,082	846,405	854,038	861,939	869,596	898,723	1,892,591	1,969,572	1,994,608	2,399,502	2,399,502
42	Net Plant Investment	0	104	749	653,082	846,405	854,038	861,939	869,596	898,723	1,892,591	1,969,572	1,994,608	2,399,502	2,399,502
43	Average Investment		52	427	326,916	749,744	850,221	857,988	865,767	884,159	1,395,657	1,931,081	1,982,090	2,197,055	
44	Return on Average Investment (Note 1)		0	3	2,185	5,010	5,682	5,734	5,786	5,909	9,328	12,905	13,247	14,683	80,472
45															
46	Program Total		$0	$3	$2,185	$5,010	$5,682	$5,734	$5,786	$5,909	$9,328	$12,905	$13,247	$14,683	$80,472
30	**Summary of Demand & Energy**														
31	Energy		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	Demand		493,979	484,340	485,662	481,341	474,012	470,516	461,435	461,718	457,386	452,263	459,230	460,622	5,642,504
33	Total Return & Depreciation		$493,979	$484,340	$485,662	$481,341	$474,012	$470,516	$461,435	$461,718	$457,386	$452,263	$459,230	$460,622	$5,642,504

Note 1>

Program Description and Progress

Program Title: Home Energy Check Program

Program Description: The Home Energy Check Program is a residential energy audit program that give customers an analysis of the energy consumption of their residence as well as educational information on how to reduce energy usage and save money. The audit provides Duke Energy Florida, LLC (DEF) an opportunity to promote and directly install cost-effective measures in customer homes and educate and encourage customers to implement energy-saving practices. The Home Energy Check Program is the foundation for other residential demand-side management programs and offers the following types of energy audits:

- Type 1: Free Walk-Through (computer assisted)
- Type 2: Customer Online (Internet Option)
- Type 3: Customer Phone Assisted
- Type 4: Home Energy Rating (BERS/HERS) Audit

The Home Energy Check Program provides residential customers with energy efficiency tips and examples of easily installed, energy-efficiency measures. The program promotes continued customer involvement by demonstrating sustainable and measurable reductions in energy usage through the implementation of low-cost, energy-efficiency measures and energy-saving recommendations. Participants in the program may receive a residential Energy Efficiency Kit that contains energy-saving measures that can be easily installed and utilized by the customer. Contents of this kit are evaluated periodically and may change over time.

Program Accomplishments - January 2023 - December 2023:
36,915 customers participated in this program.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $4,931,626.

Program Progress Summary:
1,104,751 participants have participated in the Home Energy Check Program since inception. DEF will continue to leverage this program to educate customers about cost-effective, energy-efficiency measures they can implement and incentives available for home-energy improvements for which they may be eligible. Additionally, DEF began providing Assistance Kits to low-income customers through this program. The kits contain a number of measures that provide energy efficiency savings to customers.

Program Description and Progress

Program Title: Residential Incentive Program

Program Description: The Residential Incentive Program provides incentives to customers for energy-efficiency improvements for both existing and new homes. The Residential Incentive Program includes incentives for measures such as duct testing, duct repair, attic insulation, replacement of windows, high-efficiency heat pump replacing resistance heat, high-efficiency heat pump replacing a heat pump, and newly constructed Energy Star homes.

Program Accomplishments - January 2023 - December 2023:
11,878 measures were implemented through this program resulting in savings of 2.4 Summer MW, 4.4 Winter MW and 6.5 GWh at the generator.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $3,890,296.

Program Progress Summary:
1,120,542 measures have been implemented through this program. This program will continue to be offered to residential customers to provide opportunities for improving the energy efficiency of existing and new homes.

Program Description and Progress

Program Title: Neighborhood Energy Saver Program

Program Description: DEF's Neighborhood Energy Saver program is designed to provide energy-saving education and assistance to low-income customers. This program targets neighborhoods that meet certain income-eligibility requirements. DEF typically installs energy-saving measures in approximately 4,500 homes.

Program Accomplishments - January 2023 - December 2023:
DEF installed numerous energy-efficiency measures in 5,846 homes.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $6,626,891.

Program Progress Summary:
Since program inception, DEF has installed energy-efficiency measures in 54,878 homes.

Program Description and Progress

Program Title: Low-Income Weatherization Assistance Program

Program Description: The Low-Income Weatherization Assistance Program (LIWAP) is designed to integrate DEF's DSM program measures with assistance provided by the Florida Department of Economic Opportunity (DEO) and local weatherization providers to deliver energy-efficiency measures to income-eligible families. Through this partnership, DEF assists local weatherization agencies by providing energy education materials and financial incentives to weatherize the homes of low-income families.

Program Accomplishments - January 2023 - December 2023:
1,636 weatherization measures were installed on 184 residential homes.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $261,798.

Program Progress Summary:
30,207 measures have been implemented through this program. DEF participates in local, state-wide, and national agency meetings to promote the delivery of this program. Meetings with weatherization and other low-income agencies are conducted throughout DEF's territory to encourage customer participation in energy-efficiency programs. This program was recently modified to align the eligibility with that of agencies who provide weatherization services. This change is intended to expand the network of agencies with which DEF can partner.

Program Description and Progress

Program Title: Residential/Commercial Load Management Program

Program Description: The Residential/Commercial Load Management Program is a voluntary demand response program that provides monthly bill credits to customers who allow DEF to reduce peak demand by controlling service to selected electric equipment through various devices and communication options installed on the customer's premises. These interruptions are at DEF's option, during specified time periods, and generally coincide with hours of peak demand. Residential customers must have a minimum, average, monthly usage of 600 kWh to be eligible to participate in this program.

Program Accomplishments - January 2023 - December 2023:
2,916 residential customers were added to the program. The commercial program has been closed to new participants since 2000.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for the residential/commercial load management program were $31,386,248.

Program Progress Summary:
There were approximately 433,000 residential participants and 59 commercial participants at year-end 2023.

Program Description and Progress

Program Title: Business Energy Check Program

Program Description: The Business Energy Check Program is a commercial energy audit program that provides commercial customers with an analysis of their energy usage and information about energy-saving practices and cost-effective measures that they can implement at their facilities. The Business Energy Check Program serves as the foundation for the Better Business Program.

Program Accomplishments - January 2023 - December 2023:
479 commercial energy audits were completed.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $567,655.

Program Progress Summary:
44,768 non-residential customers have participated in the Business Energy Check Program since inception. This program continues to educate and inform commercial customers about cost-effective, energy-efficiency improvements.

Program Description and Progress

Program Title: Better Business a/k/a Smart $aver Business Program

Program Description: This umbrella efficiency program provides incentives to existing commercial, industrial, and governmental customers for heating, air conditioning, ceiling and roof insulation upgrades, duct leakage and repair, demand-control ventilation, cool-roof coating, high-efficiency, energy-recovery ventilation, and HVAC-optimization-qualifying measures.

Program Accomplishments - January 2023 - December 2023:
Incentives were provided to customers for 216 commercial energy efficiency measures through this program.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $1,751,596.

Program Progress Summary:
Incentives have been provided to customers for 23,622 commercial energy-efficiency measures through this program since inception**.**

Program Description and Progress

Program Title: Smart $aver Custom Incentive Program

Program Description: The Smart $aver Custom Incentive Program (f/k/a Florida Custom Incentive Program) is designed to encourage commercial and industrial customers to make capital investments for energy-efficiency measures which reduce peak demand and provide energy savings. This program provides incentives for individual, custom projects which are cost-effective but not otherwise addressed through DEF's prescriptive incentive programs. Examples of energy-efficient technologies that would be considered under this program include but are not limited to new construction measures and new thermal energy storage systems.

Program Accomplishments - January 2023 - December 2023:
There were 0 customers who participated in this program.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $213,508.

Program Progress Summary:
457 projects have received incentives through this program since inception. This program continues to target customer-specific, energy-efficiency measures not covered through DEF's prescriptive commercial programs.

Program Description and Progress

Program Title: Standby Generation

Program Description: The Standby Generation Program is a demand response program that allows DEF to reduce system demand by dispatching the customer's standby generator. This is a voluntary program available to commercial and industrial customers who have on-site generation capability.

Program Accomplishments - January 2023 - December 2023:
DEF added four accounts to this program.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $6,047,277.

Program Progress Summary:
There were 187 active/enrolled accounts at year-end 2023, providing 83 of winter MW load control at the generator.

Program Description and Progress

Program Title: Interruptible Service Program

Program Description: The Interruptible Service Program is a direct load control program that reduces DEF's system demand at times of capacity shortage during peak or emergency conditions.

Program Accomplishments - January 2023 - December 2023:
One account was added to the program.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $48,337,004.

Program Progress Summary:
There were 173 accounts participating in this program in 2023, providing 512 of winter MW load control at the generator.

Program Description and Progress

Program Title: Curtailable Service Program

Program Description: The Curtailable Service Program is an indirect load control program that reduces DEF's system demand at times of capacity shortage during peak or emergency conditions.

Program Accomplishments - January 2023 - December 2023:
One account was added to this program.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $1,887,993.

Program Progress Summary:
There was a total of 5 NET participants in this program in 2023, providing 56 winter MW of load control at the generator.

Program Description and Progress

Program Title: Technology Development

Program Description: The Technology Development Program is designed to allow DEF to investigate technologies that support the development of new demand response (DR) and energy-efficiency (EE) programs. This program includes but is not limited to, technological research, field demonstration projects, research on load behavior and demand-side management (DSM) measures and other market-related research.

Program Accomplishments - January 2023 - December 2023:
Several research and development projects were completed, continued and/or launched in 2023.

- Launched a project to evaluate the energy efficiency and demand response capability of an energy storing, ultra-efficient, commercial packaged air conditioner technology that combines dew-point-style sensible cooling with liquid desiccant dehumidification. This technology implements indirect evaporative cooling using a liquid desiccant. This desiccant can be recharged and stored in a tank for use later. This stored energy can be used to make the peak power consumption very low. We are piloting this technology compared to standard packaged units at a volunteer customer site. The energy consumption of this technology will be documented. If the testing is successful, this technology could be included in future EE and DR programs.
- Continued a project to evaluate the demand response capability of the Ford Lightning Electric Pickup Truck in a Vehicle-to-Grid (V2G) configuration. The pilot will consist of lab testing of the vehicle, electric vehicle charger and home integration system. We will also test the system in 4 employee volunteer DEF customer homes. This project will focus on the capabilities of the Ford Lightning EV to provide V2G demand response, Vehicle-to-Home backup power and EV charging control. These systems could be a valuable future potential resource as a component of DEF's DR Portfolio.
- Continued a project with the University of Central Florida (UCF) to document the value of long-duration customer-side energy storage systems. This project is using the technology at UCF's Microgrid Control lab to directly test a long-duration energy storage system. Use cases to be investigated include study of battery performance during charging and discharging, documenting the effects of cycling on battery performance (battery degradation, efficiency, etc.), optimal operation of a battery energy storage system in a distribution system with high penetration of solar energy, control of behind-the-meter distributed energy resources to provide services including, peak capacity management, demand response (consuming or generating), frequency regulation, ramping capability and voltage management.

Program Description and Progress

- Continued a pilot to develop software, firmware, and applications for a Smart Home Gateway to evaluate the potential for a future home energy management program and its ability to enhance the Company's future energy efficiency and DR programs. The Smart Home Gateway currently includes processing and communications capabilities to perform on-site operations including receiving energy data from the customer's AMI meter, communications using four radios and on-site processing. Capabilities were developed and tested that included enabling appliance demand response using CTA-2045 (EcoPort) local control and enabling local control of Energy Management Circuit Breakers (EMCBs) for monitoring and demand response. These technologies allow automatic control of devices according to the customer's preference, and enabling open-source, utility-demand response using OpenADR. The Smart Home Gateway can also be used to engage customer awareness of how energy is being used in the home. These capabilities will be considered in the development of future EE and DR programs.
- Continued a project with the University of South Florida (USF) to leverage customer-sited solar PV and energy storage at the USF 5th Avenue Garage Microgrid. The system provides load smoothing, islanding, and demand response. A publicly available dashboard that shows live data, project specific facts and the capability of downloading data for further study is available for the site at https://dashboards.epri.com/duke-usfsp-parking. The result of this research may be used for the design of a potentially cost-effective DR program. USF continues its research on microgrid operation.
- Continued the Electric Power Research Institute (EPRI) Solar DPV project for data collection to document customer solar resources with a focus on larger PV arrays with and without energy storage. This project also provides the data stream for the dashboard mentioned above.
- Completed participation in an EPRI project to study the potential of using customer demand response to compensate for variable loads and intermittent renewable generation resources.
- Completed a project that will provide knowledge in methods to utilize customer Wi-Fi infrastructure to develop a dedicated, durable, and secure utility communication channel to connected devices. The project will also provide knowledge on the effectiveness of Wi-Fi-signal-strength-improvement technology. This technology could lead to lower costs and improved cost-effectiveness for existing and future DR and EE programs.
- Completed a project to evaluate the demand response capability of internet-connected residential batteries. Residential batteries potentially offer the ability to provide power reduction for demand response while eliminating any discomfort to the customer (as compared to residential appliance demand response). Certain battery manufacturers have developed technologies that allow for the collection of capacity and charge data, communication protocols for external aggregator software providers, and the ability to dispatch stored energy to serve the needs of the customer or the grid. This project focused on the capabilities of a particular

Program Description and Progress

aggregator to collect data from two battery manufacturers, the feasibility of utilizing aggregation technology for dispatching demand response event commands, and the net impact of these events on shaping demand. Such aggregation system enabled existing units that are already installed by residential customers in DEF territory to be used in this study. The results of this study will be used to develop future demand response programs utilizing customer energy storage.

- Partnered with EPRI and other research organizations to evaluate EE, energy storage, and alternative energy/innovative technologies.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $377,765.

Program Progress Summary:
DEF continued to focus on researching and testing new technologies which has the potential to provide new programs and create new customer offerings.

Program Description and Progress

Program Title: Qualifying Facility (QF)

Program Description: The purpose of this program is to meet the objectives and obligations established by Section 366.051, Florida Statutes, and the Commission's rules contained within Chapter 25-17, Florida Administrative Code, regarding the activity and purchase of as-available energy and firm energy and capacity from Qualifying Facilities (QF), including those that utilize renewable sources as defined in Section 366.91, Florida Statutes, pursuant to an as-available tariff, standard offer contract or negotiated contracts.

Under the QF program, DEF facilitates and administers the power purchases from QF and state jurisdictional interconnections. This Program develops standard offer contracts, negotiates, enters, amends, restructures, and terminates non-firm energy, firm energy and capacity contracts entered with qualifying cogeneration, small power producers and renewable facilities.

Program Accomplishments - January 2023 - December 2023:
Avoided cost and generator interconnection service activity with renewable and distributed resource (DR) developers continued in 2023. DEF provided QF, renewable, or DR-related information to many interested parties who are exploring distributed generation options in Florida. Numerous calls and meetings were held with parties interested in the advancement of their DR project. Meetings were also held with current and existing QF under contract to discuss restructuring and extending existing purchased power agreements. DEF continued evolving its analytics, forecasts and business processes required to support good faith QF-purchased power negotiations and interconnection service.

DEF successfully administered all existing QF-purchased power contracts that are in-service for contractual compliance. As of December 31, 2023, DEF had over 5,100 MW of solar projects in various stages of project development including grid interconnection. There were 114 active project applicants for all generation technologies in DEF's system interconnection process. The QF-purchased power contracts produced more than 2.44 million-MWh for DEF customers during 2023.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $676,851.

Program Progress Summary:
As of December 31, 2023, DEF administered approximately 411 MW of firm capacity contracts from in-service QF, and 5 non-firm as-available energy QF contracts. As of December 31, 2023,

Program Description and Progress

DEF administered both QF pre-applications for state jurisdictional interconnections, and QF applications for its Federal Energy Regulatory Commission jurisdictional generator interconnection process. 2023 ended with over 3,600 MW of potential QF generators in various stages of development and DEF grid interconnection.

Duke Energy Florida
Cost Recovery Clause
January 2023 - December 2023
Actual Capital Structure and Cost Rates

Docket No. 20240002-EG
Duke Energy Florida
Witness: Karla Rodriguez
Exhibit KR-1T
Schedule CT-6
Page 1 of 1
May 1, 2024

		(1) Jurisdictional Rate Base Adjusted Retail ($000s)	(2) Cap Ratio	(3) Cost Rate	(4) Weighted Cost	(5) Revenue Requirement Rate	(6) Monthly Revenue Requirement Rate
1	Common Equity	$ 8,196,604	44.95%	10.10%	4.54%	6.08%	0.5067%
2	Long Term Debt	6,847,837	37.55%	4.60%	1.73%	1.73%	0.1442%
3	Short Term Debt	329,410	1.81%	5.17%	0.09%	0.09%	0.0075%
4	Cust Dep Active	153,259	0.84%	2.61%	0.02%	0.02%	0.0017%
5	Cust Dep Inactive	1,474	0.01%			0.00%	0.0000%
6	Invest Tax Cr	191,599	1.05%	7.60%	0.08%	0.10%	0.0083%
7	Deferred Inc Tax	2,514,030	13.79%			0.00%	0.0000%
8	**Total**	**$ 18,234,213**	**100.00%**		**6.46%**	**8.02%**	**0.6683%**

	ITC split between Debt and Equity**:		Ratio	Cost Rate	Ratio	Ratio	ITC	Weighted ITC	After Gross-up
9	Common Equity	8,196,604	54%	10.1%	5.50%	72.4%	0.08%	0.0579%	0.078%
10	Preferred Equity	-	0%				0.08%	0.0000%	0.000%
11	Long Term Debt	6,847,837	46%	4.60%	2.09%	27.6%	0.08%	0.0221%	0.022%
12	ITC Cost Rate	15,044,440	100%		7.60%			0.0800%	0.100%

	Breakdown of Revenue Requirement Rate of Return between Debt and Equity:		**Monthly Rate for Clauses**
13	Total Equity Component (Lines 1 and 9)	6.158%	**0.00513**
14	Total Debt Component (Lines 2, 3 , 4 , and 11)	1.862%	**0.00155**
15	**Total Revenue Requirement Rate of Return**	8.020%	**0.00668**

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 and Order PSC-2022-0357-FOF-EI approving return on equity trigger.
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