



Stephanie A. Cuello  
SENIOR COUNSEL

May 2, 2023

**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. 20230002-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 2022 through December 2022; 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

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

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In re: Energy Conservation Cost  
Recovery Clause

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Docket No. 20230002-EG

Filed: May 2, 2023

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

Pursuant to Order No. PSC-2023-0086-PCO-EG, issued February 15, 2023, 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 \$862,479 as DEF’s adjusted net true-up amount for the period January 2022 through December 2022. 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 1<sup>st</sup> 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  
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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 \$862,479 as the adjusted net true-up amount for the period January 2022 through December 2022. DEF's final adjusted net true-up amount for the period January 2022 through December 2022 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 No. \_\_ (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 No. \_\_\_(KR-1T) to Ms. Rodriguez' testimony, the adjusted net true-up for the period January 2022 through December 2022 is an over-recovery of \$862,479, which is the difference of the actual true-up over-recovery of \$7,706,868 and the estimated/actual true-up over-recovery of \$6,844,389.

WHEREFORE, DEF respectfully requests that the Commission approve an over-recovery of \$862,479 as the final adjusted net true-up amount for the period January 2022 through December 2022.

Respectfully submitted this 2nd day of May, 2023.

*/s/ Stephanie A. Cuello*

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**CERTIFICATE OF SERVICE**

*Docket No. 20230002-EG*

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic mail to the following this 2<sup>nd</sup> day of May, 2023.

/s/ Stephanie A. Cuello

Attorney

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**DUKE ENERGY FLORIDA, LLC**

**DOCKET NO. 20230002-EG**

**Energy Conservation and Cost Recovery Final True-up  
for the Period January through December 2022**

**DIRECT TESTIMONY OF  
Karla Rodriguez**

**May 2, 2023**

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

2 A. My name is Karla Rodriguez. My business address is 299 1<sup>st</sup> Ave N, St. Petersburg,  
3 FL 33701.

4  
5 **Q. By whom are you employed and in what capacity?**

6 A. I am employed by Duke Energy Business Services, LLC, as Sr. Strategy &  
7 Collaboration Manager in the Portfolio Analysis and Regulatory Strategy department.  
8 Duke Energy Business Services and Duke Energy Florida, LLC (“DEF” or “the  
9 Company”) are both wholly owned subsidiaries of Duke Energy Corporation.

10  
11 **Q. What are your duties and responsibilities in that position?**

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

16

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

2 A. The purpose of my testimony is to compare DEF's 2022 actual energy conservation  
3 program costs with actual revenues collected through the Company's Energy  
4 Conservation Cost Recovery ("ECCR") Clause during the period January 2022  
5 through December 2022. The Company relies upon the information presented in my  
6 testimony and exhibit in the conduct of its affairs.

7  
8 **Q. For what programs does Duke Energy Florida seek recovery?**

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

- 15 • Home Energy Check
- 16 • Residential Incentive
- 17 • Neighborhood Energy Saver
- 18 • Low-Income Weatherization Assistance Program
- 19 • Load Management (Residential and Commercial)
- 20 • Business Energy Check
- 21 • Better Business a/k/a Smart \$aver Business
- 22 • Smart \$aver Custom Incentive
- 23 • Standby Generation

- 1 • Interruptible Service
- 2 • Curtailable Service
- 3 • Technology Development
- 4 • Qualifying Facility

5

6 **Q. Do you have any exhibits to your testimony?**

7 A. Yes, Exhibit No.\_\_(KR-1T) entitled, “Duke Energy Florida, LLC Energy  
8 Conservation Adjusted Net True-Up for the Period January 2022 through December  
9 2022.” There are six (6) schedules included in this exhibit.

10

11 **Q. Will you please explain your exhibit?**

12 A. Yes. Exhibit No.\_\_(KR-1T) presents Schedules CT-1 through CT-6. Schedules CT-1  
13 to CT-4 set out actual costs incurred for all programs during the period from January  
14 2022 through December 2022. These schedules also illustrate variances between actual  
15 costs and previously projected values for the same time period. Schedule CT-5 provides  
16 a brief summary of each conservation program that includes a program description,  
17 program accomplishments, annual program expenditures, significant program cost  
18 variances versus projections and a program progress summary over the twelve-month  
19 period ending December 2022. Schedule CT-6 is DEF’s capital structure and cost rates.

20

21 **Q. Would you please discuss Schedule CT-1?**

22 A. Yes. Schedule CT-1 line 14 shows that DEF’s actual end-of-period ECCR true-up for  
23 December 31, 2022, was an over-recovery of \$862,479, including principal and interest.



1 **Q. What does Schedule CT-2 show?**

2 A. The four pages of Schedule CT-2 provide an annual summary of conservation  
3 program revenues as well as itemized conservation program costs for the period  
4 January 2022 through December 2022 detailing actual, estimated and variance  
5 calculations by program. These costs are directly attributable to DEF's Commission-  
6 approved programs.

7  
8 **Q. Would you please discuss Schedule CT-3?**

9 A. Yes. Page one of Schedule CT-3 provides actual conservation program costs by  
10 month for the period January 2022 through December 2022. Page two of Schedule  
11 CT-3 presents program revenues by month offset by expenses, a calculation of the  
12 end of period net true-up for each month, and the total for the year. Page three  
13 provides the monthly interest calculation. Page four of Schedule CT-3 provides  
14 conservation account numbers for the 2022 calendar year.

15  
16 **Q. What is the purpose of Schedule CT-4?**

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

19  
20 **Q. Would you please discuss Schedule CT-5?**

21 A. Yes. Schedule CT-5 provides a brief summary of each conservation program that  
22 includes a program description, program accomplishments, annual program

1 expenditures, significant program cost variances versus projections and a program  
2 progress summary for the 2022 calendar year.

3

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

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

7

8 **Q. What capital structure and cost rates did DEF rely on to calculate the revenue  
9 requirement rate of return for the period January 2022 through December  
10 2022?**

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

15

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

17 A. The actual data used in calculating the actual true-up amounts is from DEF's records  
18 unless otherwise indicated. These records are kept in the regular course of DEF's  
19 business in accordance with general accounting principles and practices, provisions  
20 of the Uniform System of Accounts as prescribed by the Federal Energy Regulatory  
21 Commission and any accounting rules and orders established by this Commission.  
22 Pursuant to Rule 25-17.015(3), F.A.C., DEF provides a list of all account numbers

1 used for conservation cost recovery during the period January 2022 through  
2 December 2022 on Schedule CT-3 pages 4 and 5.

3

4 **Q. Does this conclude your Direct Testimony?**

5 A. Yes.

6

Duke Energy Florida, LLC  
Energy Conservation Adjusted Net True-Up  
For the Period January 2022 through December 2022

Line No.			
1	<b>Actual End of Period True-Up (Over) / Under Recovery</b>		
2	Beginning Balance	\$19,360,611	
3	Principal (CT 3, PAGE 2 of 4)	(6,566,123)	
4	Interest (CT 3, PAGE 3 of 4)	(214,032)	
5	Prior True-Up Refund	(19,360,611)	
6	Adjustments	<u>(926,713)</u>	(\$7,706,868)
7	<b>Less: Estimated True-Up from August 2022</b>		
8	<b>Projection Filing (Over) /Under Recovery</b>		
9	Beginning Balance	19,360,611	
10	Principal	(5,794,348)	
11	Interest	(132,904)	
12	Prior True-Up Refund	(19,360,611)	
13	Adjustments	<u>(917,137)</u>	<u>(\$6,844,389)</u>
14	Variance to Projection		<u><u>(\$862,479)</u></u>

**Duke Energy Florida, LLC**  
**Analysis of Energy Conservation Program Costs**  
**Actual vs. Estimated**  
**For the Period January 2022 through December 2022**

Line No.	Program	Actual	Estimated	Difference
1	Depreciation Amortization & Return	6,444,730	6,523,555	(78,825)
2	Payroll & Benefits	10,590,442	10,870,073	(279,631)
3	Materials & Supplies	498,769	265,234	233,535
4	Outside Services	3,809,773	4,787,323	(977,550)
5	Advertising	710,230	902,500	(192,270)
6	Incentives	87,457,041	89,232,555	(1,775,514)
7	Vehicles	255,611	241,676	13,935
8	Other	405,559	404,086	1,473
9	Program Revenues	0	0	0
10	Total Program Costs	<u>110,172,154</u>	<u>113,227,001</u>	<u>(3,054,848)</u>
11	Less:			
12	Conservation Clause Revenues	97,377,666	\$99,660,738	(2,283,073)
13	Prior True-Up	<u>19,360,611</u>	<u>19,360,611</u>	<u>0</u>
14	True-Up Before Interest	(6,566,123)	(5,794,348)	(771,775)
15	Adjustment	(926,713)	(917,137)	(9,576)
16	Interest Provision	<u>(214,032)</u>	<u>(132,904)</u>	<u>(81,128)</u>
17	End of Period True-Up	<u><u>(7,706,868)</u></u>	<u><u>(6,844,389)</u></u>	<u><u>(862,479)</u></u>

( ) 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 2022 through December 2022

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	2,704,898	107,247	314,917	118,158	442,584	589,491	32,420	4,309,716	0	4,309,716
2	Residential Incentive Program	0	1,059,094	45,471	228,950	7,688	96,931	1,843,977	40,103	3,322,214	0	3,322,214
3	Business Energy Check	0	345,777	3,609	45,468	45,359	10,671	22,696	9,685	483,266	0	483,266
4	Better Business a/k/a Smart \$aver Business	0	944,444	1,639	150,052	922	43,660	374,317	21,654	1,536,688	0	1,536,688
5	Technology Development	0	136,027	4,930	62,342	56,737	0	0	1,467	261,504	0	261,504
6	Smart \$aver Custom Incentive	0	152,261	231	86,507	3,284	27,972	5,988	9,728	285,970	0	285,970
7	Interruptible Service	310,094	452,357	20,754	1,550	16,568	0	46,207,082	20,348	47,028,753	0	47,028,753
8	Curtable Service	0	24,508	0	107	0	0	2,571,702	6,299	2,602,615	0	2,602,615
9	Load Management (Residential & Commercial)	6,134,636	1,874,868	47,685	2,070,117	100,506	19,416	25,387,199	77,947	35,712,372	0	35,712,372
10	Low Income Weatherization Assistance	0	164,013	1,984	0	0	0	80,408	5,682	252,087	0	252,087
11	Standby Generation	0	305,828	15,185	3,705	6,370	0	5,872,867	6,868	6,210,824	0	6,210,824
12	Qualifying Facility	0	874,164	1,204	16,108	54	0	0	3,265	894,795	0	894,795
13	Neighborhood Energy Saver	0	193,657	4,578	503,309	1,360	68,995	4,501,313	15,021	5,288,234	0	5,288,234
14	Conservation Program Admin	0	1,358,546	1,094	326,641	141,762	0	0	155,073	1,983,117	0	1,983,117
15	Total All Programs	6,444,730	10,590,442	255,611	3,809,773	498,769	710,230	87,457,041	405,559	110,172,154	0	110,172,154

Duke Energy Florida, LLC

Variance in Energy Conservation 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	(79,152)	10,179	(166,344)	103,193	71,504	82,497	(15,999)	5,878	0	5,878
2	Residential Incentive Program	0	(29,603)	3,507	52,284	(1,198)	(54,922)	(732,992)	18,788	(744,136)	0	(744,136)
3	Business Energy Check	0	10,821	1,110	(91,841)	11,412	(37,870)	(6,304)	5,167	(107,503)	0	(107,503)
4	Better Business a/k/a Smart \$aver Business	0	(53,354)	(3,695)	(60,790)	371	(29,674)	(298,996)	3,539	(442,599)	0	(442,599)
5	Technology Development	0	10,160	(3,595)	(472,391)	54,049	0	0	(33)	(411,811)	0	(411,811)
6	Smart \$aver Custom Incentive	0	13,056	(98)	(29,769)	2,976	(28,140)	(90,000)	4,783	(127,193)	0	(127,193)
7	Interrupt ble Service	19,878	27,581	3,151	968	(24,635)	0	(69,208)	4,793	(37,472)	0	(37,472)
8	Curtable Service	0	(13,659)	0	107	0	0	(99,704)	(5,373)	(118,630)	0	(118,630)
9	Load Management (Residential & Commercial)	(98,703)	(92,744)	(2,434)	(84,826)	75,597	(129,480)	(824,221)	27,554	(1,129,258)	0	(1,129,258)
10	Low Income Weatherization Assistance	0	(5,314)	818	0	(300)	(32,000)	(78,179)	(57)	(115,031)	0	(115,031)
11	Standby Generation	0	42,165	5,512	1,208	(278)	0	18,172	1,936	68,715	0	68,715
12	Qualifying Facility	0	(37,736)	(902)	(44,000)	(246)	0	0	341	(82,544)	0	(82,544)
13	Neighborhood Energy Saver	0	10,495	(254)	(27,982)	431	48,312	323,420	2,856	357,279	0	357,279
14	Conservation Program Admin	0	(82,346)	634	(54,173)	12,164	0	0	(46,823)	(170,544)	0	(170,544)
15	Total All Programs	(78,825)	(279,631)	13,935	(977,550)	233,535	(192,270)	(1,775,514)	1,473	(3,054,848)	0	(3,054,848)

Duke Energy Florida, LLC

Estimated Energy Conservation Program Costs Per Program  
For the Period January 2022 through December 2022

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	2,784,050	97,068	481,261	14,965	371,080	506,994	48,419	4,303,838	0	4,303,838
2	Residential Incentive Program	0	1,088,696	41,963	176,666	8,887	151,853	2,576,969	21,315	4,066,350	0	4,066,350
3	Business Energy Check	0	334,956	2,498	137,309	33,947	48,541	29,000	4,518	590,769	0	590,769
4	Better Business a/k/a Smart \$aver Business	0	997,798	5,334	210,841	551	73,334	673,313	18,116	1,979,287	0	1,979,287
5	Technology Development	0	125,867	8,525	534,734	2,689	0	0	1,500	673,315	0	673,315
6	Smart \$aver Custom Incentive	0	139,205	329	116,277	308	56,112	95,988	4,944	413,163	0	413,163
7	Interruptible Service	290,216	424,777	17,603	582	41,203	0	46,276,290	15,554	47,066,225	0	47,066,225
8	Curtaillable Service	0	38,167	0	0	0	0	2,671,406	11,671	2,721,245	0	2,721,245
9	Load Management (Residential & Commercial)	6,233,339	1,967,612	50,119	2,154,943	24,909	148,896	26,211,420	50,393	36,841,630	0	36,841,630
10	Low Income Weatherization Assistance	0	169,326	1,166	0	300	32,000	158,587	5,739	367,118	0	367,118
11	Standby Generation	0	263,664	9,672	2,497	6,648	0	5,854,695	4,932	6,142,108	0	6,142,108
12	Qualifying Facility	0	911,900	2,106	60,108	300	0	0	2,924	977,338	0	977,338
13	Neighborhood Energy Saver	0	183,162	4,832	531,291	929	20,684	4,177,893	12,165	4,930,954	0	4,930,954
14	Conservation Program Admin	0	1,440,892	460	380,815	129,599	0	0	201,896	2,153,661	0	2,153,661
15	Total All Programs	6,523,555	10,870,073	241,676	4,787,323	265,234	902,500	89,232,555	404,086	113,227,001	0	113,227,001



Duke Energy Florida, LLC

Actual Conservation Program Costs by Month  
For the Period January 2022 through December 2022

Line No.	Program	January	February	March	April	May	June	July	August	September	October	November	December	Total
1	Home Energy Check	218,728	267,070	315,290	487,643	276,804	313,125	544,866	333,990	283,547	258,175	771,973	238,506	4,309,716
2	Residential Incentive Program	295,138	170,381	287,385	222,285	222,937	353,524	232,887	448,463	301,517	268,968	251,788	266,941	3,322,214
3	Business Energy Check	36,663	34,782	38,480	41,247	37,220	35,001	33,352	64,510	39,703	40,496	35,562	46,250	483,266
4	Better Business a/k/a Smart \$aver Business	114,961	206,264	104,358	110,964	143,436	133,205	107,487	168,074	108,383	144,696	86,443	108,418	1,536,688
5	Technology Development	10,904	19,186	11,843	18,588	11,030	12,967	8,804	16,159	8,899	18,834	148,943	(24,652)	261,504
6	Smart \$aver Custom Incentive	21,358	16,910	22,119	29,150	36,217	28,148	27,953	29,097	23,050	17,412	16,018	18,538	285,970
7	Interrupt ble Service	2,706,152	2,921,673	4,905,882	4,535,398	4,399,468	4,012,938	3,545,490	4,600,547	4,224,026	3,855,142	2,485,329	4,836,709	47,028,753
8	Curtable Service	706,315	78,394	11,030	174,283	237,029	212,373	251,406	193,198	243,680	183,267	142,547	169,093	2,602,615
9	Load Management (Residential & Commercial)	3,145,673	4,251,826	4,032,498	2,037,817	2,066,583	2,070,711	2,782,910	2,920,776	2,780,930	4,138,782	2,534,687	2,949,181	35,712,372
10	Low Income Weatherization Assistance	24,995	15,453	19,904	25,854	17,189	19,097	21,989	23,413	24,465	23,704	13,750	22,274	252,087
11	Standby Generation	443,862	465,215	472,763	571,721	865,043	485,617	483,173	494,040	460,420	460,587	472,234	536,147	6,210,824
12	Qualifying Facility	67,694	75,155	103,810	75,075	78,488	80,015	81,422	65,358	85,499	77,541	55,661	49,075	894,795
13	Neighborhood Energy Saver	(117,380)	115,298	695,092	837,757	414,878	66,117	816,168	617,444	411,944	16,160	384,329	1,030,428	5,288,234
14	Conservation Program Admin	186,235	128,487	242,879	115,154	165,035	220,067	154,874	146,078	231,279	212,758	24,773	155,498	1,983,117
15	Total All Programs	7,861,296	8,766,094	11,263,334	9,282,936	8,971,357	8,042,905	9,092,780	10,121,146	9,227,342	9,716,521	7,424,037	10,402,405	110,172,154
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)	7,861,296	8,766,094	11,263,334	9,282,936	8,971,357	8,042,905	9,092,780	10,121,146	9,227,342	9,716,521	7,424,037	10,402,405	110,172,154

**Duke Energy Florida, LLC  
Energy Conservation Cost Recovery  
Energy Conservation Adjustment  
Calculation of True-Up  
January 2022 - December 2022**

**Docket No. 20230002-EG  
Duke Energy Florida  
Witness: Karla Rodriguez  
Exhibit No.\_\_(KR-1T)  
Schedule CT-3  
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May 2, 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	\$6,699,779	\$7,277,344	\$7,393,676	\$7,011,927	\$8,024,691	\$9,391,697	\$9,789,802	\$10,252,395	\$9,588,434	\$7,897,607	\$6,786,535	\$7,263,778	\$97,377,666
2	Prior Period True-Up Over/(Under) Recovery	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	19,360,611
3	ECCR Revenues Applicable to Period	8,313,164	8,890,729	9,007,060	8,625,312	9,638,075	11,005,081	11,403,186	11,865,779	11,201,819	9,510,992	8,399,919	8,877,163	116,738,277
4	ECCR Expenses	7,861,296	8,766,094	11,263,334	9,282,936	8,971,357	8,042,905	9,092,780	10,121,146	9,227,342	9,716,521	7,424,037	10,402,405	110,172,154
5	True-Up This Period (Over)/Under Recovery	(451,867)	(124,635)	2,256,274	657,624	(666,718)	(2,962,176)	(2,310,406)	(1,744,633)	(1,974,477)	205,529	(975,882)	1,525,243	(6,566,123)
6	Current Period Interest	(1,721)	(2,764)	(4,496)	(6,101)	(8,639)	(13,486)	(21,276)	(25,314)	(30,182)	(33,650)	(34,126)	(32,277)	(214,032)
7	Adjustments (Notes 1 & 2)	0	0	0	0	(917,137)	0	0	0	0	(9,576)	0	0	(926,713)
8	True-Up & Interest Provision Beginning of Period	(19,360,611)	(18,200,815)	(16,714,830)	(12,849,667)	(10,584,760)	(10,563,869)	(11,926,147)	(12,644,444)	(12,801,007)	(13,192,282)	(11,416,594)	(10,813,218)	(19,360,611)
9	GRT Refunded	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Prior Period True-Up Over/(Under) Recovery	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	19,360,611
11	End of Period Net True-Up	(\$18,200,815)	(\$16,714,830)	(\$12,849,667)	(\$10,584,760)	(\$10,563,869)	(\$11,926,147)	(\$12,644,444)	(\$12,801,007)	(\$13,192,282)	(\$11,416,594)	(\$10,813,218)	(\$7,706,868)	(\$7,706,868)

**Duke Energy Florida, LLC  
Energy Conservation Cost Recovery  
Calculation of Interest Provision  
January 2022 - December 2022**

**Docket No. 20230002-EG  
Duke Energy Florida  
Witness: Karla Rodriguez  
Exhibit No.\_\_(KR-1T)  
Schedule CT-3  
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May 2, 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)	(\$19,360,611)	(\$18,200,815)	(\$16,714,830)	(\$12,849,667)	(\$11,501,896)	(\$10,563,869)	(\$11,926,147)	(\$12,644,444)	(\$12,801,007)	(\$13,201,858)	(\$11,416,594)	(\$10,813,218)	
2 Ending True-Up Amount Before Interest (C3, Page 7, Lines 5,7-10)	(18,199,094)	(16,712,066)	(12,845,171)	(10,578,659)	(10,555,230)	(11,912,661)	(12,623,168)	(12,775,693)	(13,162,100)	(11,382,944)	(10,779,092)	(7,674,591)	
3 Total Beginning & Ending True-Up (Line 1 + Line 2)	(37,559,706)	(34,912,881)	(29,560,001)	(23,428,326)	(22,057,126)	(22,476,530)	(24,549,315)	(25,420,138)	(25,963,107)	(24,584,802)	(22,195,686)	(18,487,808)	
4 Average True-Up Amount (50% of Line 3)	(18,779,853)	(17,456,441)	(14,780,001)	(11,714,163)	(11,028,563)	(11,238,265)	(12,274,658)	(12,710,069)	(12,981,553)	(12,292,401)	(11,097,843)	(9,243,904)	
5 Interest Rate: First Day Reporting Business 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: First Day Subsequent Business 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 (Line 5 & Line 6) (Line 5 + Line 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 (50% of Line 7)	0.11%	0.19%	0.37%	0.63%	0.94%	1.44%	2.08%	2.39%	2.79%	3.29%	3.69%	4.19%	
9 Interest Provision (Line 4 * Line 8) / 12	(\$1,721)	(\$2,764)	(\$4,496)	(\$6,101)	(\$8,639)	(\$13,486)	(\$21,276)	(\$25,314)	(\$30,182)	(\$33,650)	(\$34,126)	(\$32,277)	(\$214,032)

Duke Energy Florida, LLC  
Conservation Account Numbers  
For the Period January 2022 - December 2022

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	Interrupt ble Service
8	0908000	PWRSHR	Curtable 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 2022 - December 2022**

Docket No. 20230002-EG  
Duke Energy Florida  
Witness: Karla Rodriguez  
Exhibit No. \_\_\_(KR-1T)  
Schedule CT-4  
Page 1 of 1  
May 2, 2023

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	<b>Interruptible Service (D)</b>														
2	Investments		\$0	\$0	\$0	\$651,385	\$0	\$0	\$0	\$409,347	\$169,176	\$0	\$160,896	\$0	\$1,390,803
3	Retirements		0	0	11,969	0	0	0	0	0	0	0	0	0	11,969
4	Depreciation Base		531,992	531,992	526,007	520,023	1,171,407	1,171,407	1,171,407	1,171,407	1,580,754	1,749,930	1,749,930	1,910,826	
5															
6	Depreciation Expense		8,867	8,867	8,767	8,667	19,524	19,524	19,524	19,524	26,346	29,166	29,166	31,848	229,790
7															
8	Cumulative Investment	531,992	531,992	531,992	520,023	1,171,407	1,171,407	1,171,407	1,171,407	1,580,754	1,749,930	1,749,930	1,910,826	1,910,826	1,910,826
9	Less: Accumulated Depreciation	80,234	89,101	97,968	94,766	103,433	122,957	142,481	162,005	181,529	207,875	237,041	266,207	298,055	298,055
10	Net Investment	451,758	442,891	434,024	425,257	1,067,974	1,048,450	1,028,926	1,009,402	1,399,225	1,542,055	1,512,889	1,644,619	1,612,771	1,612,771
11	Average Investment		447,324	438,457	429,640	746,615	1,058,212	1,038,688	1,019,164	1,204,314	1,470,640	1,527,472	1,578,754	1,628,695	
12	Return on Average Investment (Note 1)		2,823	2,766	2,711	4,711	6,678	6,555	6,432	7,741	9,453	9,818	10,147	10,469	80,304
13															
14	Program Total		\$11,690	\$11,633	\$11,478	\$13,378	\$26,202	\$26,079	\$25,956	\$27,265	\$35,799	\$38,984	\$39,313	\$42,317	\$310,094
15	<b>Residential Energy Management - Load Management Switches (D)</b>														
16	Expenditures Booked Directly to Plant		\$241,382	\$113,495	\$249,606	\$14,611	\$125,299	\$2,203	\$71,536	\$277,124	\$130,161	(\$103,282)	\$182,952	\$181,351	\$1,486,438
17	Retirements		582,155	364,586	531,287	870,347	298,506	634,481	424,784	967,595	225,056	586,697	564,912	552,360	6,602,768
18	Investments Booked to CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0
19	Closings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
20	Amortization Base		29,066,979	28,834,990	28,500,549	28,049,339	27,479,523	27,138,328	26,610,898	25,986,245	25,667,043	25,391,327	24,712,240	24,336,556	
21															
22	Amortization Expense		484,459	480,593	475,019	467,498	458,001	452,315	443,524	433,113	427,793	423,197	411,879	405,617	5,363,008
23															
24	Cumulative Plant Investment	29,358,056	29,017,283	28,766,193	28,484,512	27,628,776	27,455,569	26,823,290	26,470,043	25,779,571	25,684,675	24,994,696	24,612,736	24,241,727	24,241,727
25	Less: Accumulated Depreciation	17,268,622	17,170,926	17,286,934	17,230,665	16,827,816	16,987,311	16,805,145	16,823,885	16,289,403	16,492,139	16,328,639	16,175,606	16,028,862	16,028,862
26	Cumulative CWIP Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Net Plant Investment	12,089,434	11,846,357	11,479,259	11,253,847	10,800,960	10,468,257	10,018,145	9,646,158	9,490,168	9,192,536	8,666,057	8,437,130	8,212,864	8,212,864
28	Average Investment		11,967,895	11,662,808	11,366,553	11,027,403	10,634,608	10,243,201	9,832,151	9,568,163	9,341,352	8,929,297	8,551,594	8,324,997	
29	Return on Average Investment (Note 1)		75,521	73,596	71,727	69,586	67,108	64,637	62,044	61,500	60,041	57,393	54,966	53,509	771,628
30															
31	Program Total		\$559,980	\$554,189	\$546,746	\$537,084	\$525,109	\$516,952	\$505,568	\$494,613	\$487,834	\$480,590	\$466,845	\$459,126	\$6,134,636
32	<b>Summary of Demand &amp; Energy</b>														
33	Energy		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
34	Demand		571,670	565,822	558,224	550,462	551,311	543,031	531,524	521,878	523,633	519,574	506,158	501,443	6,444,730
35	Total Return & Depreciation		\$571,670	\$565,822	\$558,224	\$550,462	\$551,311	\$543,031	\$531,524	\$521,878	\$523,633	\$519,574	\$506,158	\$501,443	\$6,444,730

Note 1>  
Return on Average Investment for Jan - Jul 2022 per WACC methodology prescribed in Order No. PSC-2020-0165-PAA-EU Docket No. 20200118-EU.  
Return on Investment for Aug - Dec 2022 per Order No. PSC-2022-0357-FOF-EI Docket No. 20220143-EI.

## **Program Description and Progress**

**Program Title:** Home Energy Check Program

**Program Description:** The Home Energy Check Program is a residential energy audit program that provides customers with 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 2022 - December 2022:**

37,725 customers participated in this program.

**Program Fiscal Expenditures - January 2022 - December 2022:**

Expenses for this program were \$4,309,716.

**Program Progress Summary:**

1,067,836 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.

## **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 2022 - December 2022:**

10,318 measures were implemented through this program resulting in a savings of 2.3 Summer MW, 3.6 Winter MW and 5.6 GWh.

**Program Fiscal Expenditures - January 2022 - December 2022:**

Expenses for this program were \$3,322,214.

**Program Progress Summary:**

1,108,664 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 2022 - December 2022:**  
DEF installed numerous energy-efficiency measures in 4,771 homes.

**Program Fiscal Expenditures - January 2022 - December 2022:**  
Expenses for this program were \$5,288,234.

**Program Progress Summary:**  
Since program inception, DEF has installed energy-efficiency measures in 49,032 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 2022 - December 2022:**

1,177 weatherization measures were installed on 134 residential homes.

**Program Fiscal Expenditures - January 2022 - December 2022:**

Expenses for this program were \$252,087.

**Program Progress Summary:**

28,571 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 2022 - December 2022:**

767 residential customers were added to the program. The commercial program has been closed to new participants since 2000.

**Program Fiscal Expenditures - January 2022 - December 2022:**

Expenses for the residential/commercial load management program were \$35,712,372.

**Program Progress Summary:**

There were approximately 433,000 residential participants and 59 commercial participants at year-end 2022.

## **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 2022 - December 2022:**

146 commercial energy audits were completed.

**Program Fiscal Expenditures - January 2022 - December 2022:**

Expenses for this program were \$483,266.

**Program Progress Summary:**

44,289 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 Program a/k/a Smart \$aver Business

**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 2022 - December 2022:**

Incentives were provided to customers for 172 commercial energy efficiency measures through this program.

**Program Fiscal Expenditures - January 2022 - December 2022:**

Expenses for this program were \$1,536,688.

**Program Progress Summary:**

Incentives have been provided to customers for 23,406 commercial energy-efficiency measures through this program since inception.

## **Program Description and Progress**

**Program Title:** Smart Saver Custom Incentive Program

**Program Description:** The Smart Saver 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 2022 - December 2022:**

There were 0 customers who participated in this program.

**Program Fiscal Expenditures - January 2022 - December 2022:**

Expenses for this program were \$285,970.

**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 2022 - December 2022:**

DEF added three accounts to this program.

**Program Fiscal Expenditures - January 2022 - December 2022:**

Expenses for this program were \$6,210,824.

**Program Progress Summary:**

There were 185 accounts at year-end 2022, providing 83 of winter MW load control.

## **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 2022 - December 2022:**

Two accounts were added to the program.

**Program Fiscal Expenditures - January 2022 - December 2022:**

Expenses for this program were \$47,028,753.

**Program Progress Summary:**

There were 172 accounts participating in this program in 2022, providing 484 of winter MW load control.

## **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 2022 - December 2022:**

No accounts were added to this program.

**Program Fiscal Expenditures - January 2022 - December 2022:**

Expenses for this program were \$2,602,615.

**Program Progress Summary:**

There were two customers and four accounts participating in this program in 2022, providing 45 MW of load control.



## 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 2022 - December 2022:**

Several research and development projects were completed, continued and/or launched in 2022.

- Launched 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 part 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.
- 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 are under development and testing that include 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 will allow automatic control of devices according to the customer's preference, and enabling open-source, utility-demand response. The Smart Home

## Program Description and Progress

Gateway can also potentially be used engage customer awareness of how energy is being used in the home.

- Continued a project with the University of South Florida (USF) to leverage customer-sited solar PV and energy storage at the USF 5<sup>th</sup> 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>. Results of this research may be used for design of a potential cost-effective, DR program. USF continued its research on the 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.
- Continued 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 the EPRI Energy Management Circuit Breaker (EMCB) Project. This project explored the potential for developing a program for customer circuit breakers that include communication, metering, and remote operation for potential applications including EE, DR, and integration of distributed energy resources. The ECB hardware and software in the field pilot program collected operational data from appliances in 9 customer homes. The hardware from this project is being utilized in other ongoing Technology Development pilots including the V2G Project and the Smart Home Gateway Project. The commercial version of the ECB-EV (a self-contained electric vehicle charger) is still being studied for potential opportunities for controlled charging for EVs and DR capabilities. This data will be used to document the operation of these breakers and assess the cost-effectiveness for potential EE and DR programs.
- Continued 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.
- Continued a project for a study 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 will focus on the

### **Program Description and Progress**

capabilities of a particular 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 an aggregation system enables existing units that are already installed by residential customers in DEF territory to be used in this study. The results of this study could be used to develop a demand response program.

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

#### **Program Fiscal Expenditures - January 2022 - December 2022:**

Expenses for this program were \$261,504.

#### **Program Progress Summary:**

DEF continued to focus on researching and testing new technologies which have 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 2022 - December 2022:**

Avoided cost and generator interconnection service activity with renewable and distributed resource (DR) developers continued in 2022. 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 that are 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, 2022, DEF had over 5,200 MW of solar projects in its various grid interconnection queues representing over 70 potential projects. The QF-purchased power contracts produced more than 2.4 million MWh for DEF customers during 2022.

### **Program Fiscal Expenditures - January 2022 - December 2022:**

Expenses for this program were \$894,795.

### **Program Progress Summary:**

As of December 31, 2022, 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, 2022, DEF administered both pre-applications for state jurisdictional interconnection, and applications for FERC generator interconnection applications. The 2022 year ended with over 4,100 MW of

### **Program Description and Progress**

potential QF generators in the various DEF interconnection queues.

**Duke Energy Florida  
Cost Recovery Clause  
January 2022 - December 2022  
Actual Capital Structure and Cost Rates  
Before ROE Trigger**

	(1)	(2)	(3)	(4)	(5)	(6)
	Jurisdictional Rate Base	Cap Ratio	Cost Rate	Weighted Cost	Revenue Requirement Rate	Monthly Revenue Requirement Rate
	Adjusted Retail (\$000s)					
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 <b>Total</b>	<b>\$ 16,620,755</b>	<b>100.00%</b>		<b>6.07%</b>	<b>7.57%</b>	<b>0.6308%</b>

	ITC split between Debt and Equity**	Ratio	Cost Rate	Ratio	Ratio	Weighted ITC	Weighted ITC	After Gross-up	
9	Common Equity	7,346,556	54%	9.9%	5.35%	73.3%	0.09%	0.0660%	0.088%
10	Preferred Equity	-	0%				0.09%	0.0000%	0.000%
11	Long Term Debt	6,187,237	46%	4.25%	1.94%	26.7%	0.09%	0.0240%	0.024%
12	ITC Cost Rate	13,533,793	100%		7.29%			0.0900%	0.112%

	Breakdown of Revenue Requirement Rate of Return between Debt and Equity:	Monthly Rate for Clauses
13	Total Equity Component (Lines 1 and 9 )	5.918% <b>0.00493</b>
14	Total Debt Component (Lines 2, 3 , 4 , and 11 )	1.654% <b>0.00138</b>
15	<b>Total Revenue Requirement Rate of Return</b>	<b>7.572%</b> <b>0.00631</b>

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

**Duke Energy Florida  
Cost Recovery Clause  
January 2022 - December 2022  
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 <b>Total</b>	<b>\$ 16,620,755</b>	<b>100.00%</b>		<b>6.18%</b>	<b>7.71%</b>	<b>0.6425%</b>

	ITC split between Debt and Equity**:	Ratio	Cost Rate	Ratio	Ratio	Weighted ITC	Weighted ITC	After Gross-up	
9	Common Equity	7,346,556	54%	10.1%	5.48%	73.8%	0.09%	0.0664%	0.089%
10	Preferred Equity	-	0%				0.09%	0.0000%	0.000%
11	Long Term Debt	6,187,237	46%	4.25%	1.94%	26.2%	0.09%	0.0236%	0.024%
12	ITC Cost Rate	13,533,793	100%		7.43%			0.0900%	0.113%

	Breakdown of Revenue Requirement Rate of Return between Debt and Equity:	Ratio	Monthly Rate for Clauses
13	Total Equity Component (Lines 1 and 9 )	6.059%	<b>0.00505</b>
14	Total Debt Component (Lines 2, 3, 4, and 11 )	1.654%	<b>0.00138</b>
15	<b>Total Revenue Requirement Rate of Return</b>	<b>7.713%</b>	<b>0.00643</b>

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