

Stephanie A. Cuello

May 2, 2022

# 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. 20220002-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 2021 through December 2021; 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/mw Attachments

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

\_\_\_\_\_

In re: Energy Conservation Cost

Recovery Clause

Docket No. 20220002-EG

Filed: May 2, 2022

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

Pursuant to Order No. PSC-2022-0053-PCO-EG, issued February 7, 2022, 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 \$10,606,390 as DEF's adjusted net true-up amount for the period January 2021 through December 2021. 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
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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 \$10,606,390 as the adjusted net true-up amount for the period January 2021 through December 2021. DEF's final adjusted net true-up amount for the period January 2021 through December 2021 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 2021 through December 2021 is an over-recovery of \$10,606,390, which is the difference of the actual true-up over-recovery of \$19,360,611 and the estimated/actual true-up over-recovery of \$8,754,221.

WHEREFORE, DEF respectfully requests that the Commission approve an overrecovery of \$10,606,390 as the final adjusted net true-up amount for the period January 2021 through December 2021.

Respectfully submitted this 2nd day of May, 2022.

/s/ Stephanie A. Cuello

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# **CERTIFICATE OF SERVICE**

Docket No. 20220002-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, 2022.

/s/ Stephanie A. Cuello
Attorney

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# DUKE ENERGY FLORIDA, LLC DOCKET NO. 20220002-EG

# **Energy Conservation and Cost Recovery Final True-up** for the Period January through December 2021

# DIRECT TESTIMONY OF Karla Rodriguez

May 2, 2022

$\mathbf{O}$	Please state vour	name and	husiness	address
v.	riease state your	name and	Dusiness	auuress.

A. My name is Karla Rodriguez. My business address is 299 1<sup>st</sup> 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 Sr. Strategy & Collaboration Manager in the Portfolio Analysis and Regulatory Strategy 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 2021 actual energy conservation program costs with actual revenues collected through the Company's Energy Conservation Cost Recovery ("ECCR") Clause during the period January 2021 through December 2021. 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
  - Smart \$aver Custom Incentive
  - Standby Generation

A.

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

# Q. Do you have any exhibits to your testimony?

A. Yes, Exhibit No.\_(KR-1T) entitled, "Duke Energy Florida, LLC Energy Conservation Adjusted Net True-Up for the Period January 2021 through December 2021." There are six (6) schedules included in this exhibit.

# Q. Will you please explain your exhibit?

Yes. Exhibit No.\_\_(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 2021 through December 2021. 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 2021. Schedule CT-6 is DEF's capital structure and cost rates.

# Q. Would you please discuss Schedule CT-1?

2 3

A. Yes. Schedule CT-1 line 14 shows that DEF's actual end-of-period ECCR true-up for December 31, 2021, was an over-recovery of \$10,606,390, 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 2021 through December 2021 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 2021 through December 2021. 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 2021 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 2021 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 2021 through December 2021?

No. PSC-2020-0165-PAA-EU. The capital structure and cost rates relied on to calculate the revenue requirement rate of return for the period January 2021 through December 2021 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 2021 through December 2021 on Schedule CT-3 pages 4 and 5.

# Q. Does this conclude your Direct Testimony?

A. Yes.

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SCHEDULE CT-1
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#### **DUKE ENERGY FLORIDA, LLC**

# ENERGY CONSERVATION ADJUSTED NET TRUE-UP FOR THE PERIOD JANUARY 2021 THROUGH DECEMBER 2021

# LINE NO.

1	ACTUAL END OF PERIOD TRUE-UP (OVER) / UNDER RECOVERY		
2	BEGINNING BALANCE	\$2,295,039	
3	PRINCIPAL (CT 3, PAGE 2 of 4)	(19,353,419)	
4	INTEREST (CT 3, PAGE 3 of 4)	(7,192)	
5	PRIOR TRUE-UP REFUND	(2,295,039)	
6	ADJUSTMENTS	0	(\$19,360,611)
7	LESS: ESTIMATED TRUE-UP FROM AUGUST 2021		
8	PROJECTION FILING (OVER) / UNDER RECOVERY		
9	BEGINNING BALANCE	2,295,039	
10	PRINCIPAL	(8,749,621)	
11	INTEREST	(4,600)	
12	PRIOR TRUE-UP REFUND	(2,295,039)	
13	ADJUSTMENTS	0	(\$8,754,221)
14	VARIANCE TO PROJECTION		(\$10,606,390)

#### **DUKE ENERGY FLORIDA, LLC**

# ANALYSIS OF ENERGY CONSERVATION PROGRAM COSTS ACTUAL VS. ESTIMATED FOR THE PERIOD JANUARY 2021 THROUGH DECEMBER 2021

LINE				
NO.	PROGRAM	ACTUAL	ESTIMATED	DIFFERENCE
1	DEPRECIATION AMORT. & RETURN	7,681,410	9,536,843	(1,855,433)
2	PAYROLL AND BENEFITS	11,236,455	11,969,311	(732,855)
3	MATERIALS AND SUPPLIES	384,395	366,005	18,390
4	OUTSIDE SERVICES	3,767,528	4,238,980	(471,452)
5	ADVERTISING	270,865	557,209	(286,344)
6	INCENTIVES	78,679,913	86,413,347	(7,733,434)
7	VEHICLES	195,244	191,934	3,310
8	OTHER	327,091	384,646	(57,555)
9	PROGRAM REVENUES	0	0	0
10	TOTAL PROGRAM COSTS	102,542,901	113,658,274	(11,115,373)
11	LESS:			
12	CONSERVATION CLAUSE REVENUES	119,601,281	\$120,112,856	(511,575)
13	PRIOR TRUE-UP	2,295,039	2,295,039	0
	TRUE-UP BEFORE INTEREST	(19,353,419)	(8,749,621)	(10,603,798)
	ADJUSTMENT	0	0	0
16	INTEREST PROVISION	(7,192)	(4,600)	(2,592)
17	END OF PERIOD TRUE-UP	(19,360,611)	(8,754,221)	(10,606,390)

<sup>()</sup> REFLECTS OVERRECOVERY

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<sup>\*\*</sup> Certain schedules may not foot/crossfoot due to rounding of decimals in files.

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#### DUKE ENERGY FLORIDA, LLC

# ACTUAL ENERGY CONSERVATION PROGRAM COSTS PER PROGRAM FOR THE PERIOD JANUARY 2021 THROUGH DECEMBER 2021

		DEPRECIATION									PROGRAM	
LINE		AMORTIZATION	PAYROLL &		OUTSIDE	<b>MATERIALS &amp;</b>					REVENUES	
NO.	PROGRAM	& RETURN	BENEFITS	VEHICLES	SERVICES	SUPPLIES	ADVERTISING	INCENTIVES	OTHER	SUB-TOTAL	(CREDIT)	TOTAL
1	HOME ENERGY CHECK	0	2,837,609	82,052	370,818	135,375	26,907	406,378	13,191	3,872,329	0	3,872,329
2	RESIDENTIAL INCENTIVE PROGRAM	0	1,214,498	34,366	179,587	3,849	49,748	2,560,925	16,914	4,059,888	0	4,059,888
3	BUSINESS ENERGY CHECK	0	364,157	2,360	125,357	2,168	18,047	12,301	10,069	534,459	0	534,459
4	BETTER BUSINESS	0	982,210	1,335	109,809	2,954	59,564	975,919	34,224	2,166,015	0	2,166,015
5	TECHNOLOGY DEVELOPMENT	0	187,007	6,110	254,272	(6,257)	0	0	2,880	444,012	0	444,012
6	SMART \$AVER CUSTOM INCENTIVE PROGRAM	0	129,313	49	100,200	34	43,643	91,243	5,819	370,301	0	370,301
7	INTERRUPTIBLE SERVICE	59,388	293,261	11,149	1,022	19,064	0	42,810,243	16,902	43,211,029	0	43,211,029
8	CURTAILABLE SERVICE	0	47,490	0	0	0	0	1,686,472	13,909	1,747,871	0	1,747,871
9	LOAD MANAGEMENT (RESIDENTIAL & COMMMERCIAL)	7,629,399	1,950,473	42,940	2,206,932	130,425	35,595	26,813,419	34,290	38,843,473	0	38,843,473
10	LOW INCOME WEATHERIZATION ASSISTANCE PROGRAM	0	108,523	325	0	142	0	81,305	1,728	192,023	0	192,023
11	STANDBY GENERATION	0	260,767	12,089	6,773	24,505	0	2,964,158	9,708	3,278,001	0	3,278,001
12	QUALIFYING FACILITY	0	933,886	412	(90,895)	100	0	0	7,021	850,524	0	850,524
13	NEIGHBORHOOD ENERGY SAVER	0	144,873	1,488	57,001	513	37,360	277,549	5,664	524,447	0	524,447
14	CONSERVATION PROGRAM ADMIN	(7,377)	1,782,388	570	446,652	71,522	0	0	154,772	2,448,528	0	2,448,528
15	TOTAL ALL PROGRAMS	7,681,410	11,236,455	195,244	3,767,528	384,395	270,865	78,679,913	327,091	102,542,901	0	102,542,901

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#### DUKE ENERGY FLORIDA, LLC

#### VARIANCE IN ENERGY CONSERVATION PROGRAM COSTS 12 MONTHS ACTUAL vs. 12 MONTHS ESTIMATED

LINE NO.		DEPRECIATION AMORTIZATION & RETURN	PAYROLL & BENEFITS	VEHICLES	OUTSIDE SERVICES	MATERIALS & SUPPLIES	ADVERTISING	INCENTIVES	OTHER	SUB-TOTAL	PROGRAM REVENUES (CREDIT)	TOTAL
1	HOME ENERGY CHECK	0	(162,890)	4,620	(66,829)	104,193	(133,201)	(221,045)	2,013	(473,139)	0	(473,139)
2	RESIDENTIAL INCENTIVE PROGRAM	0	(80,779)	6,396	(157,556)	(950)	(105,827)	(420,069)	(546)	(759,331)	0	(759,331)
3	BUSINESS ENERGY CHECK	0	(23,182)	(365)	(3,542)	(10,326)	(3,733)	(4,699)	5,418	(40,429)	0	(40,429)
4	BETTER BUSINESS	0	(19,248)	(7,954)	(70,036)	(7,091)	1,168	(1,545)	15,384	(89,322)	0	(89,322)
5	TECHNOLOGY DEVELOPMENT	0	(53,820)	431	(72,860)	(5,564)	0	0	(307)	(132,120)	0	(132,120)
6	SMART \$AVER CUSTOM INCENTIVE PROGRAM	0	(622)	(857)	(90,104)	(914)	4,241	(91,104)	(4,949)	(184,309)	0	(184,309)
7	INTERRUPTIBLE SERVICE	(25,582)	40,825	2,943	(3,066)	5,754	0	(4,762,755)	(1,846)	(4,743,727)	0	(4,743,727)
8	CURTAILABLE SERVICE	0	(2,561)	0	0	0	0	(577,883)	(393)	(580,837)	0	(580,837)
9	LOAD MANAGEMENT (RESIDENTIAL & COMMMERCIAL)	(1,829,851)	(80,193)	(4,267)	563,332	(100,130)	(31,178)	660,132	(8,842)	(830,997)	0	(830,997)
10	LOW INCOME WEATHERIZATION ASSISTANCE PROGRAM	0	(20,428)	325	0	(158)	(10,175)	(58,211)	(2,223)	(90,871)	0	(90,871)
11	STANDBY GENERATION	0	(8,893)	871	6,773	(5,315)	0	(603,582)	(4,936)	(615,081)	0	(615,081)
12	QUALIFYING FACILITY	0	(136,897)	(88)	(145,634)	(415)	0	0	1,391	(281,643)	0	(281,643)
13	NEIGHBORHOOD ENERGY SAVER	0	(14,729)	988	(363,396)	169	2,405	(1,652,671)	(10,955)	(2,038,189)	0	(2,038,189)
14	CONSERVATION PROGRAM ADMIN	0	(169,439)	267	(68,535)	39,136	(10,045)	0	(46,765)	(255,379)	0	(255,379)
15	TOTAL ALL PROGRAMS	(1,855,433)	(732,855)	3,310	(471,452)	18,390	(286,344)	(7,733,434)	(57,555)	(11,115,373)	0	(11,115,373)

<sup>\*\*</sup> Certain schedules may not foot/crossfoot due to rounding of decimals in files.

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#### DUKE ENERGY FLORIDA, LLC

# ESTIMATED ENERGY CONSERVATION PROGRAM COSTS PER PROGRAM FOR THE PERIOD JANUARY 2021 THROUGH DECEMBER 2021

LINE		DEPRECIATION AMORTIZATION	PAYROLL &		OUTSIDE	MATERIALS &					PROGRAM REVENUES	
NO.	PROGRAM	& RETURN	BENEFITS	VEHICLES	SERVICES	SUPPLIES	ADVERTISING	INCENTIVES	OTHER	SUB-TOTAL	(CREDIT)	TOTAL
1 HOME ENERG		0	3,000,499	77,432	437,647	31,182	160,108	627,423	11,177	4,345,468	0	4,345,468
2 RESIDENTIAL	INCENTIVE PROGRAM	0	1,295,277	27,970	337,143	4,799	155,575	2,980,995	17,460	4,819,219	0	4,819,219
3 BUSINESS EN	ERGY CHECK	0	387,339	2,725	128,899	12,494	21,781	17,000	4,651	574,888	0	574,888
4 BETTER BUSIN	NESS	0	1,001,458	9,288	179,846	10,045	58,396	977,464	18,840	2,255,337	0	2,255,337
5 TECHNOLOGY	/ DEVELOPMENT	0	240,827	5,679	327,132	(693)	0	0	3,187	576,132	0	576,132
6 SMART \$AVE	R CUSTOM INCENTIVE PROGRAM	0	129,935	906	190,303	947	39,403	182,347	10,768	554,610	0	554,610
7 INTERRUPTIB	LE SERVICE	84,970	252,436	8,206	4,088	13,310	0	47,572,999	18,748	47,954,756	0	47,954,756
8 CURTAILABLE	SERVICE	0	50,051	0	0	0	0	2,264,355	14,302	2,328,708	0	2,328,708
9 LOAD MANAG	GEMENT (RESIDENTIAL & COMMERCIAL)	9,459,250	2,030,665	47,207	1,643,600	230,555	66,773	26,153,288	43,132	39,674,470	0	39,674,470
10 LOW INCOME	WEATHERIZATION ASSISTANCE PROGRAM	0	128,952	0	0	300	10,175	139,516	3,951	282,894	0	282,894
11 STANDBY GEN	NERATION	0	269,660	11,218	0	29,819	0	3,567,740	14,645	3,893,082	0	3,893,082
12 QUALIFYING I	FACILITY	0	1,070,783	500	54,739	515	0	0	5,630	1,132,167	0	1,132,167
13 NEIGHBORHO	OOD ENERGY SAVER	0	159,602	500	420,397	344	34,955	1,930,220	16,619	2,562,636	0	2,562,636
14 CONSERVATION	ON PROGRAM ADMIN	(7,377)	1,951,827	303	515,187	32,386	10,045	0	201,537	2,703,907	0	2,703,907
15 TOTAL ALL PR	OGRAMS	9,536,843	11,969,311	191,934	4,238,980	366,005	557,209	86,413,347	384,646	113,658,274	0	113,658,274

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#### DUKE ENERGY FLORIDA, LLC

#### ACTUAL CONSERVATION PROGRAM COSTS BY MONTH FOR THE PERIOD JANUARY 2021 THROUGH DECEMBER 2021

LINE

LINE													
NO. PROGRAM TITLE	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
1 HOME ENERGY CHECK	283,849	277,877	283,595	411,727	287,645	343,949	332,977	335,384	303,328	323,659	421,768	266,571	3,872,329
2 RESIDENTIAL INCENTIVE PROGRAM	550,613	429,805	365,856	349,059	370,684	320,102	386,923	262,299	270,511	228,523	135,284	390,228	4,059,888
3 BUSINESS ENERGY CHECK	40,367	46,740	41,270	49,194	40,168	41,650	44,398	52,483	47,363	47,362	44,148	39,318	534,459
4 BETTER BUSINESS	263,874	223,378	370,741	235,650	101,795	131,900	128,723	108,587	175,934	192,711	119,592	113,130	2,166,015
5 TECHNOLOGY DEVELOPMENT	(11,745)	65,114	25,946	23,035	18,756	15,112	63,217	28,881	20,336	25,644	46,484	123,230	444,012
6 SMART \$AVER CUSTOM INCENTIVE PROGRAM	30,124	65,496	59,683	33,343	22,578	23,085	25,396	21,695	22,545	21,291	21,773	23,291	370,301
7 INTERRUPTIBLE SERVICE	3,331,780	3,511,546	3,855,610	3,878,238	3,095,725	4,229,819	3,647,443	3,649,606	3,965,765	3,693,924	40,027	6,311,546	43,211,029
8 CURTAILABLE SERVICE	240,607	364,084	(23,230)	188,935	140,921	141,841	148,767	165,154	138,657	176,477	5,701	59,957	1,747,871
9 LOAD MANAGEMENT (RESIDENTIAL & COMMERCIAL)	3,725,319	3,472,719	3,249,509	2,609,666	2,836,912	3,089,336	3,206,961	3,129,631	3,257,341	3,072,404	970,002	6,223,673	38,843,473
10 LOW INCOME WEATHERIZATION ASSISTANCE PROGRAM	11,073	2,981	10,426	9,321	28,707	11,679	14,940	11,866	27,252	26,766	10,981	26,033	192,023
11 STANDBY GENERATION	316,584	318,486	293,666	294,634	314,507	354,834	306,244	299,757	388,098	347,749	20,246	23,196	3,278,001
12 QUALIFYING FACILITY	289,252	(119,072)	(6,286)	152,694	45,890	69,940	84,276	78,528	66,699	68,191	52,151	68,262	850,524
13 NEIGHBORHOOD ENERGY SAVER	17,783	15,864	16,144	11,924	11,769	20,738	11,942	40,167	68,874	17,962	11,794	279,486	524,447
14 CONSERVATION PROGRAM ADMIN	222,329	193,150	300,877	237,021	175,635	255,181	188,701	171,165	262,082	146,167	82,369	213,852	2,448,528
15 TOTAL ALL PROGRAMS	9,311,806	8,868,169	8,843,805	8,484,441	7,491,693	9,049,166	8,590,909	8,355,203	9,014,785	8,388,831	1,982,319	14,161,773	102,542,901
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)	9,311,806	8,868,169	8,843,805	8,484,441	7,491,693	9,049,166	8,590,909	8,355,203	9,014,785	8,388,831	1,982,319	14,161,773	102,542,901
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Duke Energy Florida, LLC Energy Conservation Cost Recovery Energy Conservation Adjustment Calculation of True-Up January 2021 - December 2021 FPSC Docket No. 20220002-EG Duke Energy Florida, LLC Witness Karla Rodriguez EXHIBIT NO. 1 (KR-1T) Schedule CT-3 Page 2 of 4 May 2, 2022

Lin	ie	Act	Act	Act	Act	Act								
No	D.	January	February	March	April	May	June	July	August	September	October	November	December	Total
1	ECCR Revenues	\$8,883,003	\$8,558,235	\$8,872,747	\$8,957,180	\$9,710,732	\$11,161,056	\$11,365,520	\$11,292,044	\$12,356,864	\$11,109,900	\$7,867,265	\$9,466,736	\$119,601,281
2	Prior Period True-Up Over/(Under) Recovery	191,253	191,253	191,253	191,253	191,253	191,253	191,253	191,253	191,253	191,253	191,253	191,253	2,295,039
3	ECCR Revenues Applicable to Period	9,074,256	8,749,488	9,064,001	9,148,433	9,901,985	11,352,309	11,556,774	11,483,298	12,548,117	11,301,153	8,058,518	9,657,989	121,896,320
4	ECCR Expenses	9,311,806	8,868,169	8,843,805	8,484,441	7,491,693	9,049,166	8,590,909	8,355,203	9,014,785	8,388,831	1,982,319	14,161,773	102,542,901
5	True-Up This Period (Over)/Under Recovery	237,549	118,681	(220,196)	(663,992)	(2,410,292)	(2,303,143)	(2,965,864)	(3,128,094)	(3,533,332)	(2,912,322)	(6,076,199)	4,503,784	(19,353,419)
6	Current Period Interest	(191)	(150)	(131)	(137)	(145)	(267)	(454)	(532)	(746)	(1,050)	(1,671)	(1,718)	(7,192)
7	Adjustments	0	0	0	0	0	0	0	0	0	0	0	0	0
8	True-Up & Interest Provision Beginning of Period	(2,295,039)	(1,866,427)	(1,556,643)	(1,585,717)	(2,058,592)	(4,277,776)	(6,389,933)	(9,164,998)	(12,102,371)	(15,445,195)	(18,167,313)	(24,053,930)	(2,295,039)
9	GRT Refunded	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Prior Period True-Up Over/(Under) Recovery	191,253	191,253	191,253	191,253	191,253	191,253	191,253	191,253	191,253	191,253	191,253	191,253	2,295,039
11	End of Period Net True-Up	(\$1,866,427)	(\$1,556,643)	(\$1,585,717)	(\$2,058,592)	(\$4,277,776)	(\$6,389,933)	(\$9,164,998)	(\$12,102,371)	(\$15,445,195)	(\$18,167,313)	(\$24,053,930)	(\$19,360,611)	(\$19,360,611)

#### Duke Energy Florida, LLC Energy Conservation Cost Recovery Calculation of Interest Provision January 2021 - December 2021

FPSC Docket No. 20220002-EG Duke Energy Florida, LLC Witness Karla Rodriguez EXHIBIT NO. 1 (KR-1T) Schedule CT-3 Page 3 of 4 May 2, 2022

Line No.		Act January	Act February	Act March	Act April	Act May	Act June	Act July	Act August	Act September	Est October	Est November	Est December	Total
1	Beginning True-Up Amount (C3, Page 7, Lines 7 & 8)	(\$2,295,039)	(\$1,866,427)	(\$1,556,643)	(\$1,585,717)	(\$2,058,592)	(\$4,277,776)	(\$6,389,933)	(\$9,164,998)	(\$12,102,371)	(\$15,445,195)	(\$18,167,313)	(\$24,053,930)	
2	Ending True-Up Amount Before Interest (C3, Page 7, Lines 5,7-10)	(1,866,236)	(1,556,493)	(1,585,586)	(2,058,455)	(4,277,631)	(6,389,666)	(9,164,544)	(12,101,839)	(15,444,449)	(18,166,263)	(24,052,259)	(19,358,893)	
3	Total Beginning & Ending True-Up (Line 1 + Line 2)	(4,161,275)	(3,422,921)	(3,142,229)	(3,644,172)	(6,336,224)	(10,667,442)	(15,554,476)	(21,266,836)	(27,546,820)	(33,611,458)	(42,219,573)	(43,412,824)	
4	Average True-Up Amount (50% of Line 3)	(2,080,638)	(1,711,460)	(1,571,114)	(1,822,086)	(3,168,112)	(5,333,721)	(7,777,238)	(10,633,418)	(13,773,410)	(16,805,729)	(21,109,786)	(21,706,412)	
5	Interest Rate: First Day Reporting Business Month	0.10%	0.12%	0.09%	0.11%	0 07%	0 04%	0 08%	0.06%	0.06%	0.07%	0.08%	0.11%	
6	Interest Rate: First Day Subsequent Business Month	0.12%	0.09%	0.11%	0.07%	0 04%	0 08%	0 06%	0.06%	0.07%	0.08%	0.11%	0.08%	
7	Total (Line 5 & Line 6) (Line 5 + Line 6)	0.22%	0.21%	0.20%	0.18%	0.11%	0.12%	0.14%	0.12%	0.13%	0.15%	0.19%	0.19%	
8	Average Interest Rate (50% of Line 7)	0.110%	0.105%	0.100%	0 090%	0 055%	0.060%	0.070%	0.060%	0.065%	0.075%	0 095%	0 095%	
9	Interest Provision (Line 4 * Line 8) / 12	(\$191)	(\$150)	(\$131)	(\$137)	(\$145)	(\$267)	(\$454)	(\$532)	(\$746)	(\$1,050)	(\$1,671)	(\$1,718)	(\$7,192)

FPSC Docket No. 20220002-EG
Duke Energy Florida, LLC
Witness Karla Rodriguez
EXHIBIT NO. 1 (KR-1T)
SCHEDULE CT-3
Page 4 of 4
May 2, 2022

#### Duke Energy Florida, LLC Conservation Account Numbers For the Period January 2021 - December 2021

Line			
No.	Account	Product	Program Title
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
4	0909000	NRBBUS	Better Business (Advertising)
5	0908000	TECDEV	Technology Development (Energy Efficiency Research)
6	0908000	NRPRSC	Smart \$aver Custom Incentive Program
6	0909000	NRPRSC	Smart \$aver Custom Incentive Program (Advertising)
7	0908000	IRRSVC	Interruptible Service
7	0403002	IRRSVC	Interruptible Service (Equipment Depreciation)
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	0403002	PWRMGR	Load Management - Residential (Equipment Depreciation)
9	0182398	PWRMGR	Other accounts included with Load Management - Residential (Switch installation)
10	0908000	COMLM	Load Management - Commercial
11	0908000	WZELEC	Low Income Weatherization Asst
11	0909000	WZELEC	Low Income Weatherization Asst (Advertising)
12	0908000	STBGEN	Standby Generation
13	0908000	PPCOGN	Qualifying Facility - COGEN contract maintenance
14	0908000	HWLI	Neighborhood Energy Saver
14	0909000	HWLI	Neighborhood Energy Saver (Advertising)
4.5	0000000	NORROS	Constitution Program Adults
15	0908000	NOPROD	Conservation Program Admin

#### Duke Energy Florida, LLC Energy Conservation Cost Recovery Schedule of Capital Investment, Depreciation & Return January 2021 December 2021

FPSC Docket No. 20220002 EG Duke Energy Florida, LLC Witness Karla Rodriguez EXHIBIT NO. 1 (KR 1T) Schedule CT 4 Page 1 of 2

Line No.	Program Demand (D) or Energy (E)	Beginning Balance	Actual January	Actual February	Actual March	Actual April	Actual May	Actual June	Actual July	Actual August	Actual September	Actual October	Actual November	Actual December	Total
1	Conservation Program Admin (E)														
2	Investments		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Retirements		0	0	0	0	0	29,481	0	0	φ0	0	0	0	29,481
4	Depreciation Base		29,481	29,481	29,481	29,481	29,481	25,401	0	0	0	0	0	0	23,401
-	Depreciation base		25,401	25,401	25,401	25,401	25,401	U	U	U	U	U	U	U	
5	December 5		404	404	404	404	404	(7.050)	•		•				(5.404)
6	Depreciation Expense (Note 1)		491	491	491	491	491	(7,856)	0	0	U	0	0	0	(5,401)
/															
8	Cumulative Investment	29,481	29,481	29,481	29,481	29,481	29,481	0	0	0	0	0	0	0	0
9	Less Accumulated Depreciation	5 401	5 892	6 383	6 874	7 365	7 856	(29 481)	0	0	0	0	0	0	0
10	Net Investment	24,080	23,589	23,098	22,607	22,116	21,625	0	0	0	0	0	0	0	0
11	Average Investment		23,835	23,344	22,853	22,362	21,871	0	0	0	0	0	0	0	
12	Return on Average Investment		155	151	148	145	142	0	0	0	0	0	0	0	741
13	•														
14	Return Requirements (Note 1)		155	152	148	145	142	(2 718)	0	0	0	0	0	0	(1 976)
15		_						,,							()
16	Program Total	_	\$646	\$643	\$639	\$636	\$633	(\$10,574)	\$0	\$0	\$0	\$0	\$0	\$0	(\$7,377)

Note (1) All Expenses for this Program should be reversed, including the 2020 Revenue Requirement of \$7,377 (2020 Depreciation Expenseof \$5,401 and 2020 Return Requirements of \$1,976) - this is not a DEF ECCR Program.

Line	Program	Beginning	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	
No.	Demand (D) or Energy (E)	Balance	January	February	March	April	May	June	July	August	September	October	November	December	Total
17	Interruptible Service (D)														
18	Investments		\$0	\$0	\$49,859	\$0	\$0	\$27,666	\$72,105	\$0	\$0	\$0	\$0	\$240,420	\$390,050
19	Retirements		44,502	0	0	0	48	0	0	0	0	0	0	0	44,550
20	Depreciation Base		164,241	141,990	141,990	191,849	191,825	191,801	219,467	291,572	291,572	291,572	291,572	291,572	
21															
22	Depreciation Expense		2,737	2,367	2,367	3,198	3,197	3,197	3,658	4,860	4,860	4,860	4,860	4,860	45,021
23															
24	Cumulative Investment	186,492	141,990	141,990	191,849	191,849	191,801	219,467	291,572	291,572	291,572	291,572	291,572	531,992	531,992
25	Less Accumulated Depreciation	79,763	37,998	40,365	42,732	45,930	49,079	52,276	55,934	60,794	65,654	70,514	75,374	80,234	80,234
26	Net Investment	106,729	103,992	101,625	149,117	145,919	142,722	167,191	235,638	230,778	225,918	221,058	216,198	451,758	451,758
27	Average Investment		105,360	102,808	125,371	147,518	144,320	154,956	201,414	233,208	228,348	223,488	218,628	333,978	
28	Return on Average Investment		682	665	811	955	935	1,003	1,304	1,510	1,478	1,446	1,416	2,162	14,367
29															
30	Return Requirements		682	665	811	955	935	1,003	1,304	1,510	1,478	1,446	1,416	2,162	14,367
31		· <del>-</del>													
32	Program Total		\$3,419	\$3,032	\$3,178	\$4,153	\$4,132	\$4,200	\$4,962	\$6,370	\$6,338	\$6,306	\$6,276	\$7,022	\$59,388

Line	Program	Beginning	Actual												
No.	Demand (D) or Energy (E)	Balance	January	February	March	April	May	June	July	August	September	October	November	December	Total
33	Residential Load Management Summ	ary (Itemized below) (D)													
34	Expenditures Booked Directly to Plant		\$10,608	\$72,050	\$400,008	\$271,184	\$137,809	\$95,254	\$236,506	\$97,653	\$131,430	\$116,650	\$97,981	(\$32,584)	\$1,634,549
35	Retirements		\$23,223,995	\$1,527,278	\$173,186	\$115,510	\$716,048	\$520,148	\$546,159	\$478,289	\$494,594	\$400,226	\$780,483	\$906,583	29,882,500
36	Investments Booked to CWIP		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
37	Closings to Plant		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
38	Depreciation Base		\$39,059,237	\$32,915,568	\$32,938,024	\$33,122,974	\$32,961,865	\$32,481,074	\$32,043,676	\$31,767,958	\$31,379,169	\$31,063,189	\$30,589,484	\$29,609,015	
39															
40	Depreciation Expense		\$643,377	\$547,686	\$546,898	\$549,824	\$547,139	\$539,130	\$531,840	\$527,245	\$520,765	\$515,498	\$507,603	\$493,493	6,470,498
41															
42	Cumulative Plant Investment	57,606,009	\$34,392,622	\$32,937,394	\$33,164,216	\$33,319,890	\$32,741,650	\$32,316,756	\$32,007,104	\$31,626,467	\$31,263,303	\$30,979,727	\$30,297,224	\$29,358,056	29,358,056
43	Less Accumulated Depreciation	40,023,644	\$17,684,528	\$16,705,191	\$17,078,902	\$17,513,217	\$17,344,307	\$17,363,290	\$17,348,970	\$17,397,926	\$17,424,097	\$17,539,369	\$17,266,488	\$17,268,622	17,268,622
44	Cumulative CWIP Investment	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
45	Net Plant Investment	17,582,364	16,708,094	16,232,203	16,085,313	15,806,673	15,397,343	14,953,467	14,658,133	14,228,541	13,839,206	13,440,358	13,030,736	12,089,434	12,089,434
46	Average Investment		17,145,229	16,470,149	16,158,758	15,945,993	15,602,008	15,175,405	14,805,800	14,443,337	14,033,874	13,639,782	13,235,547	12,352,472	
47	Return on Average Investment		110,997	106,629	104,613	103,234	101,007	98,246	95,853	93,506	90,855	88,305	85,686	79,970	1,158,901
48															
49	Return Requirements		110,997	106,629	104,613	103,234	101,007	98,246	95,853	93,506	90,855	88,305	85,686	79,970	1,158,901
50															
51	Program Total		\$754 374	\$654 315	\$651 511	\$653 058	\$648 146	\$637 376	\$627 693	\$620 751	\$611 620	\$603 803	\$593 289	\$573 463	\$7 629 399

Based on ROE of 10.5%, weighted cost of equity component of capital structure and statutory income tax rate of 23.793% (inc tax multiplier 1.3122). Using the WACC methodology prescribed in Order No. PSC-2020-0165-PAA-EU Docket No. 20200118-EU.

#### Duke Energy Florida, LLC Energy Conservation Cost Recovery Schedule of Capital Investment, Depreciation & Return January 2021 December 2021

FPSC Docket No. 20220002 EG Duke Energy Florida, LLC Witness Karla Rodriguez EXHIBIT NO. 1 (KR 1T) Schedule CT 4 Page 2 of 2

Part	Line No.	Program Demand (D) or Energy (E)	Beginning Balance	Actual January	Actual February	Actual March	Actual April	Actual May	Actual June	Actual July	Actual August	Actual September	Actual October	Actual November	Actual December	Total
Seminate   1.00   1.0	1	Residential Load Management SmartGrid	Hardware for ODS, LMS, A	APPDEV & TEL	ECOM (D)											
Contraction Bookes to COUPR   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																\$0
Description From	3 4												-			4,185,470 0
Companies Personne	5			-									-			0
Consistent functionational A 148.472   193.279   193.290   477.500   477.500   479.500	6	Depreciation Base		1,604,790	193,225	437,805	470,834	470,834	469,832	469,832	469,832	469,832	469,832	469,832	0	
Consistent functionational A 148.472   193.279   193.290   477.500   477.500   479.500	7	Dennesiation France		10 104	2 202	E 247	E 644	E 011	E E00	E E00	E 500	E E00	E E00	E E00		71,460
1   1   1   1   1   1   1   1   1   1		Depreciation Expense	=	19,124	2,303	5,217	5,011	5,011	5,599	5,599	5,599	5,599	5,599	5,599		71,460
1	10															0
13 MePlet Procedure   486,655   487,561   487,562   48																0
Marcing Incomment   177,123   456,41   42,550   427,30   416,625   446,625																0
15   Real ment howevery inventment   3,008   3,000   2,969   2,900   2,903   2,868   2,851   2,815   2,717   2,743   2,706   0			400,000													· ·
Program Total   Superior   Supe				3,088	3,020	2,996	2,960	2,923	2,888	2,851	2,815	2,779	2,743	2,706	0	31,769
Program Total		Data Danishan		0.000	0.000	0.000	0.000	0.000	0.000	0.054	0.045	0.770	0.740	0.700		04.700
Program Total   Program		Return Requirements	-	3,088	3,020	2,996	2,960	2,923	2,888	2,851	2,815	2,779	2,743	2,706	U	31,769
Pacing   Demond   D		Program Total	_	\$22,212	\$5,323	\$8,213	\$8,571	\$8,534	\$8,487	\$8,450	\$8,414	\$8,378	\$8,342	\$8,305	\$0	\$103,229
Pacing   Demond   D																
Pacing   Demond   D	Line	Program	Beginning	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual		Actual		Actual	
Expenditures Booked Directly to Plant   \$0   \$0   \$0   \$0   \$0   \$0   \$0   \$	No.	Demand (D) or Energy (E)	Balance	January	February	March	April	May	June	July	August	September	October	November	December	Total
Expenditures Booked Directly to Plant   \$0   \$0   \$0   \$0   \$0   \$0   \$0   \$	20	Residential Load Management SmartGrid	Software for ODS IMS A	PPDEV (D)												
Investments Booked to CWIP			000000000000000000000000000000000000000		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Consider to Plant													-	-		11,374,260
Depreciation Base				-									-	-		0
Page				-												U
Consider Plant Investment		2 oproducti 2 dos		00,001	70,101	Ü	ū	Ü	Ü	ŭ	ū	Ü	ŭ	ŭ	ŭ	
Cumulative Plant Investment		Depreciation Expense		1,423	1,169	0	0	0	0	0	0	0	0	0	0	2,592
See   Less Accumulated Depreciation   1,129,912   83,971   70,131   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Cumulativa Blant Investment	11 274 260	95 204	70 121	0	0	0	0	0	0	0	0	0	0	0
Signature   Company   Co											-	-		-		0
Average Investment 122.885 712 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0	0					0							0
Return Con Average Investment   795   5			244,348			-				-		-	-			0
Residential Load Management Load Management Switches (D)  Residential Lo																800
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#### Notes

Based on ROE of 10.5%, weighted cost of equity component of capital structure and statutory income tax rate of 23.793% (inc tax multiplier 1.3122). Using the WACC methodology prescribed in Order No. PSC-2020-0165-PAA-EU Docket No. 20200118-EU.

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# **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 2021 - December 2021:

21,732 customers participated in this program.

# Program Fiscal Expenditures - January 2021 - December 2021:

Expenses for this program were \$3,872,329.

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

1,030,111 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.

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# **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 2021 - December 2021:

15,140 measures were implemented through this program resulting in a savings of 3.5 Summer MW, 5.7 Winter MW and 7.5 GWh.

# Program Fiscal Expenditures - January 2021 - December 2021:

Expenses for this program were \$4,059,888.

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

1,098,346 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.

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# **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 2021 - December 2021:

In-home installations continued to be suspended in 2021 due to concerns about customer safety due to COVID-19 and remained suspended through May 2021. Energy-efficiency measures were installed in 537 homes.

# **Program Fiscal Expenditures - January 2021 - December 2021:**

Expenses for this program were \$524,447.

# **Program Progress Summary:**

Since program inception, DEF has installed energy-efficiency measures in 44,261 homes.

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# **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 2021 - December 2021:**

655 weatherization measures were installed on 133 residential homes.

# Program Fiscal Expenditures - January 2021 - December 2021:

Expenses for this program were \$192,023.

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

27,394 measures have been implemented through this program. DEF participates in local, statewide, 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.

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# **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 2021 - December 2021:**

1,604 residential customers were added to the program. The commercial program has been closed to new participants since July 2000.

# Program Fiscal Expenditures - January 2021 - December 2021:

Expenses for the residential/commercial load management program were \$38,843,473.

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

There were approximately 433,784 residential participants and 60 commercial participants at year-end 2021.

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# **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 2021 - December 2021:

287 commercial energy audits were completed.

# **Program Fiscal Expenditures - January 2021 - December 2021:**

Expenses for this program were \$534,459.

# **Program Progress Summary:**

44,143 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.

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# **Program Description and Progress**

**Program Title:** Better 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 2021 - December 2021:

Incentives were provided to customers for 167 commercial energy efficiency measures through this program.

# Program Fiscal Expenditures - January 2021 - December 2021:

Expenses for this program were \$2,166,015.

# **Program Progress Summary:**

Incentives have been provided to customers for 23,234 commercial energy-efficiency measures through this program since inception.

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# **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 2021 - December 2021:

Incentives were provided to 21 customers who participated in this program.

# Program Fiscal Expenditures - January 2021 - December 2021:

Expenses for this program were \$370,301.

# **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.

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# **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 2021 - December 2021:

DEF added 5 accounts to this program.

# **Program Fiscal Expenditures - January 2021 - December 2021:**

Expenses for this program were \$3,278,001.

# **Program Progress Summary:**

There were 183 accounts at year-end 2021, providing 254 of winter MW load control.

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# **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 2021 - December 2021:

4 accounts were added to the program.

# **Program Fiscal Expenditures - January 2021 - December 2021:**

Expenses for this program were \$43,211,029.

# **Program Progress Summary:**

There were 198 accounts participating in this program in 2021, providing 564 winter MW and 468 summer MW of load control.

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# **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 2021 - December 2021:

No accounts were added to this program.

# Program Fiscal Expenditures - January 2021 - December 2021:

Expenses for this program were \$1,747,871.

# **Program Progress Summary:**

There were 2 customers and 4 accounts participating in this program in 2021, providing 10.8 MW of load control.

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# **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 2021 - December 2021:

Several research and development projects were completed, continued and/or launched in 2021.

- Completed a project to do field evaluation with Electric Power Research Institute (EPRI) and the Grid Modernization Lab Consortium (GMLC) of a utility-integrated DSM solution using open standards and open source platforms. A consortium of National Labs, the Grid Modernization Lab Consortium, has developed both the software and hardware, all based on open-source technologies, to leverage DSM of residential loads to provide grid resiliency using a Home Energy Management System (HEMS). In 2021, DEF tested the cloud-based HEMS in 7 customer homes. This project leveraged the homes and equipment installations from our CTA-2045 Projects.
- 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, DR (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

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# **Program Description and Progress**

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

- Completed a pilot to determine the viability of using precision temperature measurement and analysis to determine issues with customer HVAC systems, duct work, or building envelope that could resolve high bill complaints. Precision temperature measurements were made at several points within the participant's homes. Analysis of the temperature data and rate of change of the temperature provided conclusions on what could be causing a customer's high energy usage. These conclusions did not fully explain the temperature issues in the participant's home. DEF has decided not to move forward with this technology at this time.
- Continued a project with the University of South Florida 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 <a href="https://dashboards.epri.com/duke-usfsp-parking">https://dashboards.epri.com/duke-usfsp-parking</a>. 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 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.
- Continued the Energy Management Circuit Breaker (EMCB) Project. This project explores the potential for developing a program for customer circuit breakers that includes communication, metering, and remote operation for potential applications including EE, DR, and integration of distributed energy resources. The prototype EMCB hardware and software in the field pilot program have been replaced with commercial versions, and operational data is being collected from appliances in 9 customer homes. The prototype EMCB-EV (a self-contained electric vehicle charger) will be replaced with a commercial version of this device. DEF will test the effectiveness of this product and consider potential program opportunities for implementation. This data will be used to document the operation of these breakers and assess the cost-effectiveness for potential EE and DR programs.
- Completed a project with EPRI to assess the DR opportunities for new and existing variable capacity heat pump systems for potential future load-management programs. DEF used manufacturer cloud communications to control existing, variable-capacity heat pumps at volunteer participants' homes. DR events were executed, and data showed promising results. This pilot confirmed the viability of cloud communications to provide triggers and impacts of DR events on variable-capacity heat pumps. The participant customers reported very little impact on comfort during the demand response events.
- Completed a project to gather robust data about residential customers that drive electric

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# **Program Description and Progress**

vehicles (EV). The project will determine what type of hardware customers use to charge their vehicle, where they charge (at home, work or public charging station, in/out of DEF service territory, etc.) and how much power and energy are consumed by EV charging. In 2020 and 2021, the project assessed the effectiveness of incentives to shift on-peak EV charging to off-peak times. The incentives to charge off-peak and incentives to avoid charging on-peak were both shown to be very effective at changing charging behavior.

- 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.
- Launched 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 capabilities of a particular aggregator to collect data from multiple 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 2021 - December 2021:**

Expenses for this program were \$444,012.

# **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.

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# **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 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, and restructures non-firm energy, firm energy and capacity contracts entered into with qualifying cogeneration, small power producers and renewable facilities.

# Program Accomplishments - January 2021 - December 2021:

Avoided cost and generator interconnection service activity with renewable and distributed resource (DR) developers continued in 2021. 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, 2021, DEF had over 4,400 MW of solar projects in its various grid interconnection queues representing 60 potential projects. The QF-purchased power contracts produced more than 2.4 Million MWh for DEF customers during 2021. After terminating a QF contract for default in the fall of 2018, DEF received a formal dispute notice dated March 28, 2019, under a demand for arbitration in accordance with the FPSC-approved QF contract. DEF has and continues to defend this arbitration, on behalf of its customers, under the American Arbitration Association's, (AAA) Large Complex Commercial Rules. The formal AAA hearing was held from December 7-11, 2020. On March 3, 2021, the AAA panel issued an interim award finding that the termination of the QF contract by DEF was proper and dismissed with prejudice all of the claims of the QF counterparty. The panel further found that DEF is the prevailing party, entitled to attorneys' fees and expenses, which DEF sought by filing a fee petition with the AAA panel and then a motion to confirm the arbitration award with the 13<sup>th</sup> Circuit Court. The court issued a final Order and Judgement granting all of DEF's claims on December 13, 2021. As of this filing, the QF counterparty has not responded to DEF's demand letter for any amounts

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# **Program Description and Progress**

due.

# Program Fiscal Expenditures - January 2021 - December 2021:

Expenses for this program were \$850,524.

# **Program Progress Summary:**

As of December 31, 2021, DEF administered approximately 411 MW of firm capacity contracts from in-service QF, and 7 non-firm as-available energy QF contracts. As of December 31, 2021, DEF administered both pre-applications for state jurisdictional interconnection, and applications for FERC generator interconnection applications. The 2021 year ended with over 3,400 MW of potential QF generators in the various DEF interconnection queues.

#### Duke Energy Florida Cost Recovery Clause January 2021 - December 2021 Actual Capital Structure and Cost Rates

FPSC Docket No. 20220002-EG Duke Energy Florida, LLC Witness Karla Rodriguez EXHIBIT NO. 1 (KR-1T) Schedule CT-6

		(1)	(2)	(3)	(4)	(5)	(6)	
	Ju	urisdictional					Monthly	
		Rate Base				Revenue	Revenue	
		Adjusted	Сар	Cost	Weighted	Requirement	Requirement	
	Re	etail (\$000s)	Ratio	Rate	Cost	Rate	Rate	
1 Common Equity	\$	6,688,612	43.79%	10.50%	4.60%	6.04%	0.5033%	
2 Long Term Debt		5,674,817	37.16%	4.31%	1.60%	1.60%	0.1333%	
3 Short Term Debt		260,772	1.71%	0.16%	0.00%	0.00%	0.0000%	
4 Cust Dep Active		178,995	1.17%	2.65%	0.03%	0.03%	0.0025%	
5 Cust Dep Inactive		1,625	0.01%			0.00%	0.0000%	
5 Invest Tax Cr		165,584	1.08%	7.66%	0.08%	0.10%	0.0083%	
7 Deferred Inc Tax		2,302,312	15.07%			0.00%	0.0000%	
3 Tota	l \$	15,272,718	100.00%		6.31%	7.77%	0.6475%	

	ITC split between Deb	ITC split between Debt and Equity**:			Ratio	Ratio	Weighted ITC	Weighted ITC	After Gross-up
9	Common Equity	6,688,612	54%	10.5%	5.68%	74.2%	0.08%	0.0593%	0.078%
10	Preferred Equity	-	0%				0.08%	0.0000%	0.000%
11	Long Term Debt	5,674,817	46%	4.31%	1.98%	25.8%	0.08%	0.0207%	0.021%
12	ITC Cost Rate	12,363,429	100%		7.66%			0.0800%	0.099%

			Monthly Rate
	Breakdown of Revenue Requirement Rate of Return between De	bt and Equity:	for Clauses
13	Total Equity Component (Lines 1 and 9)	6.118%	0.00510
14	Total Debt Component (Lines 2, 3, 4, and 11)	1.651%	0.00138
15	Total Revenue Requirement Rate of Return	7.769%	<u>0.00648</u>

#### Notes:

Statutory Tax Rate: 23.793%

#### 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