

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20210002-EG

**Energy Conservation and Cost Recovery Final True-up
for the Period January through December 2020**

DIRECT TESTIMONY OF

Lori J. Cross

May 3, 2021

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

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

4

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

6 A. I am employed by Duke Energy Business Services, LLC, as Strategy & Collaboration
7 Director in the Portfolio Analysis and Regulatory Strategy department. Duke Energy
8 Business Services and Duke Energy Florida, LLC (“DEF” or “the Company”) are
9 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 2020 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 2020
5 through December 2020. 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
- 22 • Florida Custom Incentive
- 23 • Standby Generation

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

Q. Do you have any exhibits to your testimony?

A. Yes, Exhibit No. (LJC-1T) entitled, “Duke Energy Florida, LLC Energy Conservation Adjusted Net True-Up for the Period January 2020 through December 2020.” There are six (6) schedules included in this exhibit.

Q. Will you please explain your exhibit?

A. Yes. Exhibit No. (LJC-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 2020 through December 2020. 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 2020. Schedule CT-6 is DEF’s capital structure and cost rates.

Q. Would you please discuss Schedule CT-1?

1 A. Yes. Schedule CT-1 line 14 shows that DEF's actual end-of-period ECCR true-up for
2 December 31, 2020, was an over-recovery of \$3,783,777, including principal and
3 interest.

4
5 **Q. What does Schedule CT-2 show?**

6 A. The four pages of Schedule CT-2 provide an annual summary of conservation
7 program revenues as well as itemized conservation program costs for the period
8 January 2020 through December 2020 detailing actual, estimated and variance
9 calculations by program. These costs are directly attributable to DEF's Commission-
10 approved programs.

11
12 **Q. Would you please discuss Schedule CT-3?**

13 A. Yes. Page one of Schedule CT-3 provides actual conservation program costs by
14 month for the period January 2020 through December 2020. Page two of Schedule
15 CT-3 presents program revenues by month offset by expenses, a calculation of the
16 end of period net true-up for each month, and the total for the year. Page three
17 provides the monthly interest calculation. Page four of Schedule CT-3 provides
18 conservation account numbers for the 2020 calendar year.

19
20 **Q. What is the purpose of Schedule CT-4?**

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

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

2 A. Yes. Schedule CT-5 provides a brief summary of each conservation program that
3 includes a program description, program accomplishments, annual program
4 expenditures, significant program cost variances versus projections and a program
5 progress summary for the 2020 calendar year.

6

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

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

10

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

12 A. The actual data used in calculating the actual true-up amounts is from DEF's records
13 unless otherwise indicated. These records are kept in the regular course of DEF's
14 business in accordance with general accounting principles and practices, provisions
15 of the Uniform System of Accounts as prescribed by the Federal Energy Regulatory
16 Commission and any accounting rules and orders established by this Commission.
17 Pursuant to Rule 25-17.015(3), F.A.C., DEF provides a list of all account numbers
18 used for conservation cost recovery during the period January 2020 through
19 December 2020 on Schedule CT-3 pages 4 and 5.

20

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

22 A. Yes.

23

DUKE ENERGY FLORIDA, LLC

ENERGY CONSERVATION ADJUSTED NET TRUE-UP
FOR THE PERIOD JANUARY 2020 THROUGH DECEMBER 2020

**LINE
NO.**

1	ACTUAL END OF PERIOD TRUE-UP (OVER) / UNDER RECOVERY		
2	BEGINNING BALANCE	(\$3,747,510)	
3	PRINCIPAL (CT 3, PAGE 2 of 4)	(2,326,938)	
4	INTEREST (CT 3, PAGE 3 of 4)	32,195	
5	PRIOR TRUE-UP REFUND	3,747,510	
6	ADJUSTMENTS	(296)	(\$2,295,039)
7	LESS: ESTIMATED TRUE-UP FROM AUGUST 2020		
8	PROJECTION FILING (OVER) / UNDER RECOVERY		
9	BEGINNING BALANCE	(\$3,747,510)	
10	PRINCIPAL	1,456,068	
11	INTEREST	32,966	
12	PRIOR TRUE-UP REFUND	3,747,510	
13	ADJUSTMENTS	(296)	\$1,488,738
14	VARIANCE TO PROJECTION		(\$3,783,777)

DUKE ENERGY FLORIDA, LLC

ANALYSIS OF ENERGY CONSERVATION PROGRAM COSTS
ACTUAL VS. ESTIMATED
FOR THE PERIOD JANUARY 2020 THROUGH DECEMBER 2020

LINE NO.	PROGRAM	ACTUAL	ESTIMATED	DIFFERENCE
1	DEPRECIATION AMORT. & RETURN	13,446,200	13,466,795	(20,595)
2	PAYROLL AND BENEFITS	11,891,308	12,533,734	(642,426)
3	MATERIALS AND SUPPLIES	500,883	394,582	106,301
4	OUTSIDE SERVICES	5,956,546	6,303,344	(346,797)
5	ADVERTISING	791,365	1,178,360	(386,995)
6	INCENTIVES	81,511,358	82,424,070	(912,712)
7	VEHICLES	196,535	190,506	6,029
8	OTHER	398,705	493,004	(94,299)
9	PROGRAM REVENUES	0	0	0
10	TOTAL PROGRAM COSTS	114,692,900	116,984,395	(2,291,495)
11	LESS:			
12	CONSERVATION CLAUSE REVENUES	120,767,348	119,275,837	1,491,511
13	PRIOR TRUE-UP	(3,747,510)	(3,747,510)	0
14	TRUE-UP BEFORE INTEREST	(2,326,938)	1,456,068	(3,783,006)
15	ADJUSTMENT	(296)	(296)	0
16	INTEREST PROVISION	32,195	32,966	(771)
17	END OF PERIOD TRUE-UP	(2,295,039)	1,488,738	(3,783,777)

() REFLECTS OVERRECOVERY

** 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 2020 THROUGH DECEMBER 2020

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	2,736,790	87,030	450,767	119,416	298,857	408,330	25,332	4,126,524	0	4,126,524
2	RESIDENTIAL INCENTIVE PROGRAM	0	1,631,101	46,141	191,566	23,816	138,601	4,696,872	13,935	6,742,030	0	6,742,030
3	BUSINESS ENERGY CHECK	0	398,661	4,387	71,132	44,142	22,684	5,731	9,771	556,508	0	556,508
4	BETTER BUSINESS	0	1,011,002	3,190	110,520	2,045	43,915	2,048,670	13,232	3,232,574	0	3,232,574
5	TECHNOLOGY DEVELOPMENT	0	224,592	3,513	218,478	45,784	0	0	4,137	496,504	0	496,504
6	FLORIDA CUSTOM INCENTIVE PROGRAM	0	252,583	72	235,071	1,258	32,213	231,211	25,964	778,371	0	778,371
7	INTERRUPTIBLE SERVICE	35,636	210,999	1,806	0	837	0	40,666,513	15,239	40,931,031	0	40,931,031
8	CURTAILABLE SERVICE	0	40,798	0	0	21	0	2,027,594	3	2,068,416	0	2,068,416
9	LOAD MANAGEMENT (RESIDENTIAL & COMMERCIAL)	13,444,103	1,798,055	42,877	1,914,105	12,361	186,033	26,699,387	72,106	44,169,027	0	44,169,027
10	LOW INCOME WEATHERIZATION ASSISTANCE PROGRAM	0	97,834	0	30	189	16,000	74,553	4,923	193,529	0	193,529
11	STANDBY GENERATION	(40,916)	266,423	6,379	22,527	229,788	0	3,838,063	4,268	4,326,532	0	4,326,532
12	QUALIFYING FACILITY	0	1,091,380	575	2,162,927	398	0	0	4,356	3,259,637	0	3,259,637
13	NEIGHBORHOOD ENERGY SAVER	0	208,737	493	54,720	2,467	53,064	814,432	12,650	1,146,564	0	1,146,564
14	CONSERVATION PROGRAM ADMIN	7,377	1,922,353	71	524,703	18,359	0	0	192,790	2,665,653	0	2,665,653
15	TOTAL ALL PROGRAMS	13,446,200	11,891,308	196,535	5,956,546	500,883	791,365	81,511,358	398,705	114,692,900	0	114,692,900

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	55,047	13,102	(135,044)	91,513	(342,237)	(144,391)	1,411	(460,599)	0	(460,599)
2	RESIDENTIAL INCENTIVE PROGRAM	0	(378,928)	245	(61,386)	13,331	(27,766)	264,402	(4,089)	(194,192)	0	(194,192)
3	BUSINESS ENERGY CHECK	0	(43,808)	(520)	(77,448)	34,221	(15,099)	(29,269)	(6,173)	(138,096)	0	(138,096)
4	BETTER BUSINESS	0	(80,852)	(7,062)	(45,473)	(2,513)	(9,370)	407,312	(14,710)	247,333	0	247,333
5	TECHNOLOGY DEVELOPMENT	0	44,865	(2,639)	(142,743)	33,363	0	0	(3,784)	(70,939)	0	(70,939)
6	FLORIDA CUSTOM INCENTIVE PROGRAM	0	12,603	(472)	18,642	(1,450)	(5,673)	(75,563)	(16,150)	(68,063)	0	(68,063)
7	INTERRUPTIBLE SERVICE	8,206	(7,698)	(3,601)	0	702	0	365,423	667	363,699	0	363,699
8	CURTAILABLE SERVICE	0	(2,049)	0	0	21	0	(353,943)	3	(355,968)	0	(355,968)
9	LOAD MANAGEMENT (RESIDENTIAL & COMMERCIAL)	(28,801)	7,047	4,054	(14,343)	(6,549)	(32,636)	(533,136)	(9,574)	(613,936)	0	(613,936)
10	LOW INCOME WEATHERIZATION ASSISTANCE PROGRAM	0	(12,160)	0	0	0	16,000	8,632	(1,117)	11,354	0	11,354
11	STANDBY GENERATION	0	(33,300)	3,515	3,434	(22,906)	0	(453,521)	30	(502,748)	0	(502,748)
12	QUALIFYING FACILITY	0	(44,923)	(576)	162,388	(263)	0	0	(1,254)	115,371	0	115,371
13	NEIGHBORHOOD ENERGY SAVER	0	(70,271)	136	(104,601)	69	29,785	(368,658)	(3,629)	(517,169)	0	(517,169)
14	CONSERVATION PROGRAM ADMIN	0	(87,999)	(153)	49,777	(33,239)	0	0	(35,929)	(107,543)	0	(107,543)
15	TOTAL ALL PROGRAMS	(20,595)	(642,426)	6,029	(346,797)	106,301	(386,995)	(912,712)	(94,299)	(2,291,495)	0	(2,291,495)

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

DUKE ENERGY FLORIDA, LLC

ESTIMATED ENERGY CONSERVATION PROGRAM COSTS PER PROGRAM
FOR THE PERIOD JANUARY 2020 THROUGH DECEMBER 2020

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	2,681,743	73,928	585,812	27,903	641,094	552,721	23,921	4,587,123	0	4,587,123
2	RESIDENTIAL INCENTIVE PROGRAM	0	2,010,029	45,896	252,951	10,485	166,367	4,432,469	18,024	6,936,222	0	6,936,222
3	BUSINESS ENERGY CHECK	0	442,469	4,907	148,580	9,921	37,783	35,000	15,943	694,604	0	694,604
4	BETTER BUSINESS	0	1,091,854	10,252	155,993	4,558	53,284	1,641,359	27,942	2,985,241	0	2,985,241
5	TECHNOLOGY DEVELOPMENT	0	179,727	6,153	361,222	12,421	0	0	7,921	567,444	0	567,444
6	FLORIDA CUSTOM INCENTIVE PROGRAM	0	239,980	544	216,429	2,708	37,885	306,774	42,114	846,433	0	846,433
7	INTERRUPTIBLE SERVICE	27,430	218,697	5,407	0	135	0	40,301,090	14,572	40,567,332	0	40,567,332
8	CURTAILABLE SERVICE	0	42,847	0	0	0	0	2,381,537	0	2,424,384	0	2,424,384
9	LOAD MANAGEMENT (RESIDENTIAL & COMMERCIAL)	13,472,904	1,791,008	38,823	1,928,448	18,910	218,668	27,232,523	81,679	44,782,963	0	44,782,963
10	LOW INCOME WEATHERIZATION ASSISTANCE PROGRAM	0	109,994	0	30	189	0	65,922	6,041	182,175	0	182,175
11	STANDBY GENERATION	(40,916)	299,723	2,864	19,093	252,694	0	4,291,584	4,238	4,829,280	0	4,829,280
12	QUALIFYING FACILITY	0	1,136,303	1,151	2,000,540	661	0	0	5,610	3,144,266	0	3,144,266
13	NEIGHBORHOOD ENERGY SAVER	0	279,008	357	159,321	2,398	23,279	1,183,091	16,279	1,663,733	0	1,663,733
14	CONSERVATION PROGRAM ADMIN	7,377	2,010,352	224	474,926	51,598	0	0	228,719	2,773,196	0	2,773,196
15	TOTAL ALL PROGRAMS	13,466,795	12,533,734	190,506	6,303,344	394,582	1,178,360	82,424,070	493,004	116,984,395	0	116,984,395

DUKE ENERGY FLORIDA, LLC

ACTUAL CONSERVATION PROGRAM COSTS BY MONTH
FOR THE PERIOD JANUARY 2020 THROUGH DECEMBER 2020

LINE

NO. PROGRAM TITLE	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
1 HOME ENERGY CHECK	418,155	417,200	411,295	291,871	283,778	310,906	367,571	302,789	331,082	325,759	330,004	336,114	4,126,524
2 RESIDENTIAL INCENTIVE PROGRAM	731,231	521,449	590,327	521,446	584,311	444,248	512,339	610,184	684,393	716,290	402,430	423,382	6,742,030
3 BUSINESS ENERGY CHECK	57,572	64,187	38,047	39,519	38,650	41,701	85,858	43,988	40,341	37,303	34,452	34,891	556,508
4 BETTER BUSINESS	322,362	293,910	305,841	221,909	192,523	175,468	267,210	191,554	148,249	587,538	395,715	130,295	3,232,574
5 TECHNOLOGY DEVELOPMENT	15,777	18,871	16,739	25,421	28,628	21,799	27,993	21,300	23,323	28,322	210,934	57,397	496,504
6 FLORIDA CUSTOM INCENTIVE PROGRAM	58,532	115,402	72,607	103,560	46,483	54,480	52,436	49,596	54,437	44,908	58,869	67,061	778,371
7 INTERRUPTIBLE SERVICE	3,061,485	3,564,450	3,262,085	3,177,315	3,400,687	2,841,786	3,325,606	3,873,408	3,610,350	3,485,912	3,827,054	3,500,893	40,931,031
8 CURTAILABLE SERVICE	210,167	208,945	151,515	169,859	322,425	14,874	162,984	158,288	150,632	128,195	181,283	209,250	2,068,416
9 LOAD MANAGEMENT (RESIDENTIAL & COMMERCIAL)	3,649,307	3,798,605	3,810,117	3,404,867	3,258,817	3,555,459	3,749,446	3,691,767	3,692,206	3,500,753	4,273,302	3,784,379	44,169,027
10 LOW INCOME WEATHERIZATION ASSISTANCE PROGRAM	46,896	(1,377)	18,220	21,674	1,711	1,311	16,407	9,252	29,706	18,092	17,773	13,864	193,529
11 STANDBY GENERATION	333,052	347,968	352,489	351,284	601,433	345,207	340,172	342,990	342,289	321,817	335,147	312,685	4,326,532
12 QUALIFYING FACILITY	131,156	247,895	211,698	255,370	304,862	221,531	319,345	278,419	270,509	46,046	179,876	792,931	3,259,637
13 NEIGHBORHOOD ENERGY SAVER	120,540	442,047	(322,213)	219,557	485,484	34,595	72,844	23,349	20,531	19,701	15,048	15,081	1,146,564
14 CONSERVATION PROGRAM ADMIN	160,428	250,343	285,253	227,989	184,539	272,129	209,198	185,531	218,251	317,150	83,620	271,222	2,665,653
15 TOTAL ALL PROGRAMS	9,316,661	10,289,895	9,204,020	9,031,639	9,734,330	8,335,493	9,509,409	9,782,414	9,616,297	9,577,786	10,345,508	9,949,447	114,692,900
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)	9,316,661	10,289,895	9,204,020	9,031,639	9,734,330	8,335,493	9,509,409	9,782,414	9,616,297	9,577,786	10,345,508	9,949,447	114,692,900

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Energy Conservation Adjustment
Calculation of True-Up
January 2020 - December 2020

FPSC Docket No. 20210002-EG
Duke Energy Florida, LLC
Witness: Lori J. Cross
Exhibit No. ____ (LJC-1T)
Schedule CT-3
Page 2 of 4
May 3, 2021

Line No.	Act January	Act February	Act March	Act April	Act May	Act June	Act July	Act August	Act September	Act October	Act November	Act December	Total
1 ECCR Revenues	\$8,082,984	\$8,368,852	\$8,715,363	\$9,923,051	\$9,308,754	\$10,692,820	\$12,180,547	\$11,883,081	\$11,830,621	\$10,609,767	\$10,192,822	\$8,978,686	\$120,767,348
2 Prior Period True-Up Over/(Under) Recovery	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(3,747,510)
3 ECCR Revenues Applicable to Period	7,770,691	8,056,559	8,403,071	9,610,759	8,996,461	10,380,527	11,868,255	11,570,788	11,518,329	10,297,475	9,880,530	8,666,393	117,019,838
4 ECCR Expenses	9,316,661	10,289,895	9,204,020	9,031,639	9,734,330	8,335,493	9,509,409	9,782,414	9,616,297	9,577,786	10,345,508	9,949,447	114,692,900
5 True-Up This Period (Over)/Under Recovery	1,545,969	2,233,336	800,949	(579,119)	737,869	(2,045,034)	(2,358,845)	(1,788,374)	(1,902,032)	(719,689)	464,978	1,283,054	(2,326,938)
6 Current Period Interest	6,091	7,930	11,248	6,593	393	457	313	84	(96)	(206)	(334)	(278)	32,195
7 Adjustments	(296)	0	0	0	0	0	0	0	0	0	0	0	(296)
8 True-Up & Interest Provision Beginning of Period	3,747,510	4,986,982	6,915,955	7,415,860	6,531,041	6,957,010	4,600,141	1,929,316	(171,266)	(2,385,686)	(3,417,874)	(3,265,522)	3,747,510
9 GRT Refunded	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Prior Period True-Up Over/(Under) Recovery	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(312,293)	(3,747,510)
11 End of Period Net True-Up	\$4,986,982	\$6,915,955	\$7,415,860	\$6,531,041	\$6,957,010	\$4,600,141	\$1,929,316	(\$171,266)	(\$2,385,686)	(\$3,417,874)	(\$3,265,522)	(\$2,295,039)	(\$2,295,039)

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Calculation of Interest Provision
January 2020 - December 2020

FPSC Docket No. 20210002-EG
Duke Energy Florida, LLC
Witness: Lori J. Cross
Exhibit No. ____ (LJC-1T)
Schedule CT-3
Page 3 of 4
May 3, 2021

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 (CT-3, Page 2 of 4, Lines 7 & 8)	\$3,747,214	\$4,986,982	\$6,915,955	\$7,415,860	\$6,531,041	\$6,957,010	\$4,600,141	\$1,929,316	(\$171,266)	(\$2,385,686)	(\$3,417,874)	(\$3,265,522)	
2	Ending True-Up Amount Before Interest (CT-3, Page 2 of 4, Lines 5,7-10)	4,980,891	6,908,025	7,404,612	6,524,448	6,956,617	4,599,684	1,929,003	(171,350)	(2,385,590)	(3,417,668)	(3,265,188)	(2,294,761)	
3	Total Beginning & Ending True-Up (Line 1 + Line 2)	8,728,105	11,895,007	14,320,567	13,940,308	13,487,658	11,556,694	6,529,144	1,757,966	(2,556,857)	(5,803,354)	(6,683,062)	(5,560,283)	
4	Average True-Up Amount (50% of Line 3)	4,364,052	5,947,503	7,160,283	6,970,154	6,743,829	5,778,347	3,264,572	878,983	(1,278,428)	(2,901,677)	(3,341,531)	(2,780,142)	
5	Interest Rate: First Day Reporting Business Month	1.71%	1.64%	1.56%	2.21%	0.06%	0.08%	0.11%	0.12%	0.11%	0.07%	0.10%	0.14%	
6	Interest Rate: First Day Subsequent Business Month	1.64%	1.56%	2.21%	0.06%	0.08%	0.11%	0.12%	0.11%	0.07%	0.10%	0.14%	0.10%	
7	Total (Line 5 & Line 6) (Line 5 + Line 6)	3.35%	3.20%	3.77%	2.27%	0.14%	0.19%	0.23%	0.23%	0.18%	0.17%	0.24%	0.24%	
8	Average Interest Rate (50% of Line 7)	1.675%	1.600%	1.885%	1.135%	0.070%	0.095%	0.115%	0.115%	0.090%	0.085%	0.120%	0.120%	
9	Interest Provision (Line 4 * Line 8) / 12	\$6,091	\$7,930	\$11,248	\$6,593	\$393	\$457	\$313	\$84	(\$96)	(\$206)	(\$334)	(\$278)	\$32,195

Duke Energy Florida, LLC
Conservation Account Numbers
For the Period January 2020 - December 2020

Line No.	Account	Product	Program Title
1	0908000	HEHC	Home Energy Check
1	0909000	HEHC	Home Energy Check (Advertising)
1	0403002	HEHC	Home Energy Check (Equipment Depreciation)
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	Florida Custom Incentive
6	0909000	NRPRSC	Florida Custom Incentive (Advertising)
7	0908000	IRRSVC	Interruptible Service
7	0403002	IRRSVC	Interruptible Service (Equipment Depreciation)
8	0908000	PWRSHR	Curtable Service
9	0908000	PWRMGR	Energy Management - Residential
9	0908002	PWRMGR	Energy Management - Residential (Amortization of Load Mgmt Switches)
9	0909000	PWRMGR	Energy Management - Residential (Advertising)
9	0403002	PWRMGR	Energy Management - Residential (Equipment Depreciation)
9	0182398	PWRMGR	Other accounts included with Energy Management - Residential (Switch installation)
10	0908000	COMLM	Energy Management - Commercial
11	0908000	WZELEC	Low Income Weatherization Asst
11	0909000	WZELEC	Low Income Weatherization Asst (Advertising)
12	0908000	STBGEN	Standby Generation
12	0403002	STBGEN	Standby Generation (Equipment Depreciation)
13	0908000	PPCOGN	Qualifying Facility - COGEN contract maintenance
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 - December 2020 Actuals

FPSC Docket No. 20210002-EG
Duke Energy Florida, LLC
Witness: Lori J. Cross
Exhibit No. ____ (LJC-17)
Schedule CT-4
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May 3, 2021

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	<u>Conservation Program Admin (E)</u>														
2	Investments		\$29,481	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$29,481
3	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
4	Depreciation Base		0	29,481	29,481	29,481	29,481	29,481	29,481	29,481	29,481	29,481	29,481	29,481	
5															
6	Depreciation Expense		0	491	491	491	491	491	491	491	491	491	491	491	5,401
7															
8	Cumulative Investment	0	29,481	29,481	29,481	29,481	29,481	29,481	29,481	29,481	29,481	29,481	29,481	29,481	29,481
9	Less: Accumulated Depreciation	0	0	491	982	1,473	1,964	2,455	2,946	3,437	3,928	4,419	4,910	5,401	5,401
10	Net Investment	0	29,481	28,990	28,499	28,008	27,517	27,026	26,535	26,044	25,553	25,062	24,571	24,080	24,080
11	Average Investment		14,741	29,236	28,745	28,254	27,763	27,272	26,781	26,290	25,799	25,308	24,817	24,326	
12	Return on Average Investment		77	153	150	147	146	143	139	136	135	132	129	126	1,613
13															
14	Return Requirements		94	187	183	180	178	175	171	167	166	162	158	155	1,976
15															
16	Program Total		\$94	\$678	\$674	\$671	\$669	\$666	\$662	\$658	\$657	\$653	\$649	\$646	\$7,377
17	<u>Standby Generation (D)</u>														
18	Investments		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	Retirements		222,782	0	0	0	0	0	0	0	0	0	0	0	222,782
20	Depreciation Base		0	0	0	0	0	0	0	0	0	0	0	0	
21															
22	Depreciation Expense		(29,615)	0	0	0	0	0	0	0	0	0	0	0	(29,615)
23															
24	Cumulative Investment	222,782	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Less: Accumulated Depreciation	23,509	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Net Investment	199,273	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Average Investment		0	0	0	0	0	0	0	0	0	0	0	0	
28	Return on Average Investment		(11,301)	0	0	0	0	0	0	0	0	0	0	0	(11,301)
29															
30	Return Requirements		(11,301)	0	0	0	0	0	0	0	0	0	0	0	(11,301)
31															
32	Program Total		(\$40,916)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$40,916)

Notes:

- Investments made into the Standby program in 2019 should have been classified as O&M (not Capital). The adjustment shown is to credit the Depreciation Expense and Return on those Investments.
- Jan - Jun return on average investment is calculated using an annual rate of 6.273% based on May 2019 DEF Surveillance Report capital structure & costs rates. See Stipulation & Settlement Agreement in Order No. PSC-12-0425-PAA-EU, Docket 20120002-EG.
- Jul - Dec return on average investment is calculated using an annual rate of 6.247% based on May 2020 DEF Surveillance Report capital structure & costs rates. See Stipulation & Settlement Agreement in Order No. PSC-12-0425-PAA-EU, Docket 20120002-EG.
- Return Requirements are calculated using a combined statutory tax rate of 24.522%.

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Schedule of Capital Investment, Depreciation & Return
January - December 2020 Actuals

FPSC Docket No. 20210002-EG
Duke Energy Florida, LLC
Witness: Lori J. Cross
Exhibit No. ____ (LJC-1T)
Schedule CT-4
Page 2 of 3
May 3, 2021

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	<u>Interruptible Service (D)</u>														
2	Investments		\$0	\$0	\$0	\$0	\$0	\$0	\$70,118	\$0	\$0	\$0	\$0	\$0	\$70,118
3	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
4	Depreciation Base		116,373	116,373	116,373	116,373	116,373	116,373	116,373	186,492	186,492	186,492	186,492	186,492	0
5															
6	Depreciation Expense		1,940	1,940	1,940	1,940	1,940	1,940	1,940	3,108	3,108	3,108	3,108	3,108	29,120
7															
8	Cumulative Investment	116,373	116,373	116,373	116,373	116,373	116,373	116,373	186,492	186,492	186,492	186,492	186,492	186,492	186,492
9	Less: Accumulated Depreciation	50,643	52,583	54,523	56,463	58,403	60,343	62,283	64,223	67,331	70,439	73,547	76,655	79,763	79,763
10	Net Investment	65,730	63,790	61,850	59,910	57,970	56,030	54,090	122,269	119,161	116,053	112,945	109,837	106,729	106,729
11	Average Investment		64,760	62,820	60,880	58,940	57,000	55,060	88,180	120,715	117,607	114,499	111,391	108,283	
12	Return on Average Investment		338	328	318	309	298	288	459	628	612	596	580	564	5,318
13															
14	Return Requirements		413	401	389	378	365	352	563	770	751	731	711	692	6,516
15															
16	Program Total		\$2,353	\$2,341	\$2,329	\$2,318	\$2,305	\$2,292	\$2,503	\$3,878	\$3,859	\$3,839	\$3,819	\$3,800	\$35,636
17	<u>Residential Energy Management - Summary (Itemized below) (D)</u>														
18	Expenditures Booked Directly to Plant		\$723,783	\$557,714	\$85,487	\$137,758	(\$2,598)	\$8,058	\$388,176	\$535,234	\$574,731	\$453,120	\$557,666	\$222,645	\$4,241,773
19	Retirements		(\$49,104)	\$10,620	\$17,159	\$91,469	\$115,047	\$3,325	\$2,407,052	\$1,591,458	\$412,325	\$437,122	\$2,613,171	\$1,278,980	8,928,625
20	Investments Booked to CWIP		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
21	Closings to Plant		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
22	Depreciation Base		\$62,317,413	\$63,060,438	\$63,604,262	\$63,635,435	\$63,669,934	\$63,608,150	\$62,411,019	\$60,799,940	\$60,333,282	\$60,483,290	\$59,411,264	\$58,022,854	
23															
24	Depreciation Expense		\$985,924	\$997,573	\$1,006,636	\$1,007,156	\$1,008,003	\$1,004,668	\$986,593	\$973,987	\$969,123	\$971,537	\$958,935	\$943,863	11,813,998
25															
26	Cumulative Plant Investment	62,292,861	\$63,065,748	\$63,612,841	\$63,681,169	\$63,727,457	\$63,609,812	\$63,614,545	\$61,595,669	\$60,539,445	\$60,701,851	\$60,717,849	\$58,662,344	\$57,606,008	57,606,008
27	Less: Accumulated Depreciation	37,138,272	\$38,173,300	\$39,160,253	\$40,149,730	\$41,065,417	\$41,958,372	\$42,959,715	\$41,539,256	\$40,921,785	\$41,478,583	\$42,012,998	\$40,358,762	\$40,023,644	40,023,644
28	Cumulative CWIP Investment	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
29	Net Plant Investment	25,154,589	24,892,448	24,452,588	23,531,439	22,662,041	21,651,440	20,654,830	20,056,413	19,617,660	19,223,268	18,704,852	18,303,582	17,582,364	17,582,364
30	Average Investment		25,023,518	24,672,518	23,992,014	23,096,740	22,156,740	21,153,135	20,355,622	19,837,037	19,420,464	18,964,060	18,504,217	17,942,973	
31	Return on Average Investment		130,816	128,981	125,423	120,742	115,830	110,583	105,959	103,259	101,092	98,715	96,322	93,400	1,331,122
32															
33	Return Requirements		130,816	128,981	125,423	120,742	115,830	110,583	105,959	103,259	101,092	98,715	96,322	93,400	1,331,122
34															
35	Program Total		\$1,145,917	\$1,155,321	\$1,160,033	\$1,154,827	\$1,149,667	\$1,139,916	\$1,116,556	\$1,100,637	\$1,093,116	\$1,092,614	\$1,077,077	\$1,058,422	\$13,444,103
36	<u>Residential Energy Management - SmartGrid Hardware for ODS, LMS, APPDEV & TELECOM (D)</u>														
37	Expenditures Booked Directly to Plant		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
38	Retirements		(88,254)	0	0	0	114,564	0	2,260,944	1,181,478	45,337	(81,649)	2,298,780	670,720	6,401,919
39	Investments Booked to CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0
40	Closings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
41	Depreciation Base		10,631,518	10,675,645	10,675,645	10,675,645	10,618,363	10,561,081	9,430,609	7,709,398	7,095,991	7,114,147	6,005,582	4,520,832	
42															
43	Depreciation Expense		124,475	124,475	124,475	124,475	123,792	120,532	103,568	89,127	81,817	82,033	68,822	52,145	1,219,736
44															
45	Cumulative Plant Investment	10,587,391	10,675,645	10,675,645	10,675,645	10,675,645	10,561,081	10,561,081	8,300,137	7,118,659	7,073,323	7,154,972	4,856,192	4,185,472	4,185,472
46	Less: Accumulated Depreciation	8,880,970	9,093,699	9,218,174	9,342,649	9,467,124	9,476,352	9,596,884	7,439,508	6,347,157	6,383,637	6,547,319	4,317,361	3,698,786	3,698,786
47	Cumulative CWIP Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	Net Plant Investment	1,706,421	1,581,946	1,457,471	1,332,996	1,208,521	1,084,729	964,197	860,629	771,502	689,685	607,652	538,830	486,685	486,685
49	Average Investment		1,644,184	1,519,709	1,395,234	1,270,759	1,146,625	1,024,463	912,413	816,066	730,594	648,669	573,241	512,758	
50	Return on Average Investment		8,596	7,945	7,294	6,643	5,994	5,356	4,750	4,248	3,803	3,376	2,984	2,669	63,658
51															
52	Return Requirements		10,513	9,717	8,921	8,124	7,331	6,551	5,826	5,210	4,665	4,141	3,660	3,274	77,933
53															
54	Program Total		\$134,988	\$134,192	\$133,396	\$132,599	\$131,123	\$127,083	\$109,394	\$94,337	\$86,482	\$86,174	\$72,482	\$55,419	\$1,297,669

Notes:

- Jan - Jun return on average investment is calculated using an annual rate of 6.273% based on May 2019 DEF Surveillance Report capital structure & costs rates. See Stipulation & Settlement Agreement in Order No. PSC-12-0425-PAA-EU, Docket 20120002-EG.
- Jul - Dec return on average investment is calculated using an annual rate of 6.247% based on May 2020 DEF Surveillance Report capital structure & costs rates. See Stipulation & Settlement Agreement in Order No. PSC-12-0425-PAA-EU, Docket 20120002-EG.
- Return Requirements are calculated using a combined statutory tax rate of 24.522%.

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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	<u>Residential Energy Management - SmartGrid Software for ODS, LMS, APPDEV (D)</u>														
2	Expenditures Booked Directly to Plant		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
4	Investments Booked to CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0
5	Closings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
6	Depreciation Base		11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	
8	Depreciation Expense		189,575	189,575	189,575	189,575	189,575	189,575	189,575	189,575	189,575	189,575	189,575	189,575	2,274,900
10	Cumulative Plant Investment	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260	11,374,260
11	Less: Accumulated Depreciation	8,855,012	9,044,587	9,234,162	9,423,737	9,613,312	9,802,887	9,992,462	10,182,037	10,371,612	10,561,187	10,750,762	10,940,337	11,129,912	11,129,912
12	Cumulative CWIP Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Net Plant Investment	2,519,247	2,329,672	2,140,097	1,950,522	1,760,947	1,571,372	1,381,797	1,192,222	1,002,647	813,072	623,497	433,922	244,347	244,347
14	Average Investment		2,424,460	2,234,885	2,045,310	1,855,735	1,666,160	1,476,585	1,287,010	1,097,435	907,860	718,285	528,710	339,135	
15	Return on Average Investment		12,674	11,684	10,692	9,701	8,711	7,719	6,699	5,712	4,726	3,739	2,752	1,765	86,574
17	Return Requirements		15,501	14,290	13,077	11,865	10,654	9,441	8,217	7,006	5,797	4,586	3,375	2,165	105,974
19	Program Total		<u>\$205,076</u>	<u>\$203,865</u>	<u>\$202,652</u>	<u>\$201,440</u>	<u>\$200,229</u>	<u>\$199,016</u>	<u>\$197,792</u>	<u>\$196,581</u>	<u>\$195,372</u>	<u>\$194,161</u>	<u>\$192,950</u>	<u>\$191,740</u>	<u>\$2,380,874</u>
20	<u>Residential Energy Management - Load Management Switches (D)</u>														
21	Expenditures Booked Directly to Plant		\$723,783	\$557,714	\$85,487	\$137,758	(\$2,598)	\$8,058	\$388,176	\$535,234	\$574,731	\$453,120	\$557,666	\$222,645	\$4,241,773
22	Retirements		39,150	10,620	17,159	91,469	483	3,325	146,108	409,980	366,988	518,771	314,391	608,260	2,526,706
23	Investments Booked to CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0
24	Closings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
25	Amortization Base		<u>40,311,635</u>	<u>41,010,533</u>	<u>41,554,357</u>	<u>41,585,530</u>	<u>41,677,311</u>	<u>41,672,809</u>	<u>41,606,150</u>	<u>41,716,282</u>	<u>41,863,031</u>	<u>41,994,883</u>	<u>42,031,422</u>	<u>42,127,762</u>	
27	Amortization Expense		671,874	683,523	692,586	693,106	694,636	694,561	693,450	695,285	697,731	699,929	700,538	702,143	8,319,362
29	Cumulative Plant Investment	40,331,210	41,015,843	41,562,937	41,631,264	41,677,553	41,674,471	41,679,204	41,921,272	42,046,526	42,254,269	42,188,618	42,431,892	42,046,277	42,046,277
30	Less: Accumulated Depreciation	19,402,290	20,035,014	20,707,917	21,383,344	21,984,980	22,679,133	23,370,369	23,917,710	24,203,015	24,533,758	24,714,916	25,101,063	25,194,946	25,194,946
31	Cumulative CWIP Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Net Plant Investment	20,928,920	20,980,829	20,855,020	20,247,921	19,692,572	18,995,338	18,308,835	18,003,561	17,843,510	17,720,510	17,473,702	17,330,829	16,851,331	16,851,331
33	Average Investment		20,954,875	20,917,925	20,551,470	19,970,247	19,343,955	18,652,087	18,156,198	17,923,536	17,782,010	17,597,106	17,402,266	17,091,080	
34	Return on Average Investment		109,546	109,352	107,437	104,398	101,125	97,508	94,510	93,299	92,563	91,600	90,586	88,966	1,180,890
36	Return Requirements		133,979	133,741	131,399	127,682	123,679	119,256	115,920	114,434	113,531	112,350	111,107	109,120	1,446,198
38	Program Total		<u>\$805,853</u>	<u>\$817,264</u>	<u>\$823,985</u>	<u>\$820,788</u>	<u>\$818,315</u>	<u>\$813,817</u>	<u>\$809,370</u>	<u>\$809,719</u>	<u>\$811,262</u>	<u>\$812,279</u>	<u>\$811,645</u>	<u>\$811,263</u>	<u>\$9,765,560</u>
39	<u>Summary of Demand & Energy</u>														
40	Energy		\$94	\$678	\$674	\$671	\$669	\$666	\$662	\$658	\$657	\$653	\$649	\$646	\$7,377
41	Demand		1,107,354	1,157,662	1,162,362	1,157,145	1,151,972	1,142,208	1,119,059	1,104,515	1,096,975	1,096,453	1,080,896	1,062,222	13,438,823
42	Total Return & Depreciation		<u>\$1,107,448</u>	<u>\$1,158,340</u>	<u>\$1,163,036</u>	<u>\$1,157,816</u>	<u>\$1,152,641</u>	<u>\$1,142,874</u>	<u>\$1,119,721</u>	<u>\$1,105,173</u>	<u>\$1,097,632</u>	<u>\$1,097,106</u>	<u>\$1,081,545</u>	<u>\$1,062,868</u>	<u>\$13,446,200</u>

Notes:

- Jan - Jun return on average investment is calculated using an annual rate of 6.273% based on May 2019 DEF Surveillance Report capital structure & costs rates. See Stipulation & Settlement Agreement in Order No. PSC-12-0425-PAA-EU, Docket 20120002-EG.
- Jul - Dec return on average investment is calculated using an annual rate of 6.247% based on May 2020 DEF Surveillance Report capital structure & costs rates. See Stipulation & Settlement Agreement in Order No. PSC-12-0425-PAA-EU, Docket 20120002-EG.
- Return Requirements are calculated using a combined statutory tax rate of 24.522%.

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 their energy consumption 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 2020 - December 2020:

31,560 customers participated in the Home Energy Check Program.

Program Fiscal Expenditures - January 2020 - December 2020:

Expenses for this program were \$4,126,524.

Program Progress Summary:

1,008,379 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 2020 - December 2020:

19,200 measures were implemented through this program resulting in a savings of 6.2 Summer MW, 12 Winter MW and 8.8 GWh.

Program Fiscal Expenditures - January 2020 - December 2020:

Expenses for this program were \$6,742,030.

Program Progress Summary:

1,083,206 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 and provides home energy reports to approximately 15,000 customers who have previously participated in the program. These home energy reports provide information about energy efficiency and continue the engagement with customers around low-cost, energy-saving measures that can deliver additional energy and bill savings.

Program Accomplishments - January 2020 - December 2020:

In-home installations were suspended in March 2020, due to concerns about customer safety due to COVID-19 and remained suspended through year-end. Energy efficiency measures were installed on 950 homes, and home energy reports were provided to 13,443 customers.

Program Fiscal Expenditures - January 2020 - December 2020:

Expenses for this program were \$1,146,564.

Program Progress Summary:

Since program inception, DEF has installed energy-efficiency measures on 43,724 homes and has provided home energy reports to 76,187 customers.

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 2020 - December 2020:
515 weatherization measures were installed on 139 residential homes.

Program Fiscal Expenditures - January 2020 - December 2020:
Expenses for this program were \$193,529.

Program Progress Summary:
26,739 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 Energy Management Program

Program Description: The Residential/Commercial Energy 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 2020 - December 2020:

2,735 residential customers were added to the program in 2020. The commercial program has been closed to new participants since July 2000.

Program Fiscal Expenditures - January 2020 - December 2020:

Expenses for the residential/commercial energy management program were \$44,169,027.

Program Progress Summary:

There were approximately 439,000 residential participants and 60 commercial participants at year-end 2020.

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 2020 - December 2020:
429 commercial energy audits were completed in 2020.

Program Fiscal Expenditures - January 2020 - December 2020:
Expenses for this program were \$556,508.

Program Progress Summary:
43,856 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

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 2020 - December 2020:

Incentives were provided to customers for 951 commercial energy efficiency measures through this program in 2020.

Program Fiscal Expenditures - January 2020 - December 2020:

Expenses for this program were \$3,232,574.

Program Progress Summary:

Incentives have been provided to customers for 23,067 commercial energy-efficiency measures through this program since inception.

Program Description and Progress

Program Title: Florida Custom Incentive Program

Program Description: The 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 2020 - December 2020:

Incentives were provided to 134 customers who participated in this program in 2020.

Program Fiscal Expenditures - January 2020 - December 2020:

Expenses for this program were \$778,371.

Program Progress Summary:

436 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 control 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 2020 - December 2020:

DEF added 5 accounts to this program in 2020.

Program Fiscal Expenditures - January 2020 - December 2020:

Expenses for this program were \$4,326,532.

Program Progress Summary:

There were 179 accounts at year-end 2020 providing 75 MW of 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 2020 - December 2020:

7 accounts were added to the program.

Program Fiscal Expenditures - January 2020 - December 2020:

Expenses for this program were \$40,931,031.

Program Progress Summary:

192 accounts currently participate in this program providing 534 winter MW and 502 summer MW of 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 2020 - December 2020:

No accounts were added to this program.

Program Fiscal Expenditures - January 2020 - December 2020:

Expenses for this program were \$2,068,416.

Program Progress Summary:

There were 2 customers and 4 accounts participating in this program in 2020 providing 10.8 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 DSM measures and other market-related research.

Program Accomplishments - January 2020 - December 2020:

Several research and development projects continued and/or launched in 2020.

- Continued 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 2020, DEF will test the HEMS in 15 customer homes. This project will leverage 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.
- Working on 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. This project will engage these capabilities to expand the functionality of the Smart Home Gateway to potentially engage customer awareness of how energy is being used in the home. Other capabilities will include enabling customer appliance control, allowing automatic control of devices according to the customer's preference, and enabling open-source, utility-demand response.

Program Description and Progress

- Launched 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 are made at several points within the home. Analysis of the temperature data and rate of change of the temperature will provide conclusions on what could be causing a customer's high energy usage. This information will be provided to the customer to resolve the high bill complaint. This could also simplify DEF auditors' attic inspections requirements since the attic duct leaks could be detected in the analysis of the temperature data.
- Continued a project with the University of South Florida to leverage customer-sited solar PV and energy storage at the USF 5th Avenue Garage Microgrid. The system provides load smoothing, islanding and DR. 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 research on 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 continued to explore 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. 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 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. DEF continues to recruit additional participants for this pilot. This pilot will assess the viability of cloud communications to provide triggering and impacts of DR events on variable-capacity heat pumps. DEF continues to execute DR events and analyze the variable-capacity heat pumps performance. The pilot is also investigating the impacts of variable-capacity HVAC DR events on customer comfort.
- Continued a project to gather robust data about residential customers that drive electric vehicles (EV). The project will determine what type of hardware customers use to charge their vehicle,

Program Description and Progress

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, the project assessed the effectiveness of incentives to shift on-peak EV charging to off-peak times. The incentives for charging at off-peak were very effective at changing charging behavior. DEF is also investigating the capability of EV chargers to be a DR resource.

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

Program Fiscal Expenditures - January 2020 - December 2020:

Expenses for this program were \$496,504.

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 purchase of as-available energy and firm energy and capacity from Qualifying Facilities (QFs), 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 QFs program, DEF facilitates and administers the power purchases from (QFs) and state jurisdictional interconnections. This Program develops standard offer contracts, negotiates, enters into, 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 2020 - December 2020:

Avoided cost and generator interconnection service activity with renewable and distributed resource (DR) developers continued in 2020. DEF provided QFs, 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 QFs 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, 2020, DEF had over 4,700 MW of solar projects in its various grid interconnection queues representing over 60 potential projects. The QF-purchased power contracts produced more than 2.4 Million MWh for DEF customers during 2020. Finally, 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 the claims of the QF counterparty. The panel further found that DEF is the prevailing party, entitled to attorneys' fees and expenses, which DEF has sought by filing a fee petition with the AAA panel. A final award addressing DEF's claims will be issued following the panel's ruling on DEF's fee and expense petition.

Program Description and Progress

Program Fiscal Expenditures - January 2020 - December 2020:

Expenses for this program were \$3,259,637.

Program Progress Summary:

As of December 31, 2020, DEF administered approximately 411 MW of firm capacity contracts from in-service QFs, and 7 non-firm as-available energy QF contracts with QFs in-service. DEF is continuing to monitor 1 non-firm as-available energy QF contract for future service. Finally, as of December 31, 2020, DEF administered both pre-applications for state jurisdictional interconnection, and applications for both state and FERC generator interconnection applications. The year ended with over 4,700 MW of potential QFs generators in the various DEF interconnection queues.

**Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Capital Structure and Cost Rates**

**FPSC Docket No. 20210002-EG
Duke Energy Florida, LLC
Witness: Lori J. Cross
Exhibit No. ____ (LJC-1P)
Schedule C-6
Page 1 of 1
May 3, 2021**

Class of Capital	Retail	Amount	Ratio	Cost Rate	Weighted Cost Rate	PreTax Weighted Cost Rate
CE	\$	4,874,577,393	41.0%	10.50%	4.31%	5.71%
LTD		4,845,025,196	40.8%	4.70%	1.92%	1.92%
STD		(59,426,995)	-0.5%	-0.36%	0.00%	0.00%
CD-Active		176,756,874	1.5%	2.38%	0.04%	0.04%
CD-Inactive		1,853,499	0.0%	0.00%	0.00%	0.00%
Deferred Tax		2,026,313,275	17.0%	0.00%	0.00%	0.00%
ITC		19,805,922	0.2%	7.71%	0.01%	0.01%
Total	\$	11,884,905,162	100.00%		6.27%	7.67%
Total Debt					1.967%	1.97%
Total Equity					4.307%	5.71%

May 2019 DEF Surveillance Report capital structure and cost rates. See Stipulation & Settlement Agreement in Order No. PSC-12-0425-PAA-EU, Dockets 120001-EI, 120002-EI & 120007-EI.
Consistent with Paragraph 19 of the RRSSA
Used to Calculate January 2020 - June 2020

Class of Capital	Retail	Amount	Ratio	Cost Rate	Weighted Cost Rate	PreTax Weighted Cost Rate
CE	\$	5,587,139,333	41.5%	10.50%	4.36%	5.77%
LTD	\$	5,219,534,862	38.8%	4.62%	1.79%	1.79%
STD	\$	228,721,050	1.7%	2.10%	0.04%	0.04%
CD-Active	\$	184,176,907	1.4%	2.43%	0.03%	0.03%
CD-Inactive	\$	1,820,718	0.0%	0.00%	0.00%	0.00%
Deferred Tax	\$	2,189,708,749	16.3%	0.00%	0.00%	0.00%
ITC	\$	58,310,573	0.4%	7.66%	0.03%	0.03%
Total	\$	13,469,412,193	100.00%		6.25%	7.66%
Total Debt					1.8911%	1.89%
Total Equity					4.3554%	5.77%

May 2020 DEF Surveillance Report capital structure and cost rates. See Stipulation & Settlement Agreement in Order No. PSC-12-0425-PAA-EU, Dockets 120001-EI, 120002-EI & 120007-EI.
Used to Calculate July 2020 - December 2020