



Stephanie A. Cuello
SENIOR COUNSEL

September 8, 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 Revised ECCR Actual/Estimated True-Up and Projection Petition; and
- Revised Direct Testimony of Karla Rodriguez with Revised Exhibit No. ___(KR-1P).

Schedule SCH C-3, Page 5 of 5, has been revised to include a note which was inadvertently omitted in error. There are no changes to DEF's original Petition, Testimony and other portions of Ms. Rodriguez's Exhibit No. ___(KR-1P), other than the aforementioned revision. To avoid confusion, please replace DEF's ECCR Actual/Estimated True-Up and Projection Petition, Direct Testimony of Karla Rodriguez with Exhibit No. ___(KR-1P) (document number 05238-2022), filed on August 5, 2022, with the attached.

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/ts
Enclosures

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Energy Conservation Cost Recovery

Docket No. 20220002-EG

Filed: September 8, 2022

DUKE ENERGY FLORIDA, LLC’S REVISED PETITION FOR APPROVAL OF CONSERVATION COST RECOVERY TRUE-UP CALCULATIONS, PROJECTED PROGRAM EXPENDITURES AND PROJECTED COST RECOVERY FACTORS FOR THE PERIOD JANUARY 2023 THROUGH DECEMBER 2023

Duke Energy Florida, LLC (“DEF” or “the Company”), hereby petitions the Commission for approval of the Company’s conservation cost recovery true-up and cost recovery factors proposed for the period January 2023 through December 2023. In support thereof, the Company states:

1. DEF projects total conservation program costs of \$119,659,521 for the period January 2023 through December 2023.

2. The net true-up is an over-recovery of \$6,844,389, which includes the final conservation over-recovery of \$10,606,390, for the period January 2021 through December 2021, as shown on DEF’s schedule CT-1 filed May 2, 2022, and the actual/estimated true-up under-recovery for January 2022 through December 2022 of \$3,762,001.

3. The total recoverable conservation costs including prior period over-recoveries to be reimbursed during the January 2023 through December 2023 billing period are \$112,815,132.

4. Based upon the required true-up and projected expenditures, DEF has calculated the required conservation cost recovery factors for the period January 2023 through December 2023 as follows:

2023 ECCR Billing Factors

<u>Retail Rate Schedule</u>	<u>Secondary Voltage</u>	<u>Primary Voltage</u>	<u>Transmission Voltage</u>
Residential (Cents/kWh)	.320	N/A	N/A
General-Service-Non-Demand (Cents/kWh)	.288	.285	.282
General Service 100% Load Factor (Cents/kWh)	.217	N/A	N/A
General Service Demand (\$/kW)	.85	.84	.83
Curtaillable (\$/kW)	.46	.46	.45
Interruptible (\$/kW)	.70	.69	.69
Standby Monthly (\$/kW)	.082	.081	.080
Standby Daily (\$/kW)	.039	.039	.038
Lighting (Cents/kWh)	.116	N/A	N/A

WHEREFORE, DEF respectfully requests the Commission’s approval of the Company’s prior period conservation cost recovery true-up calculations, projected program expenditures and projected conservation cost recovery charges to be collected during the January 2023 through December 2023 billing period.

RESPECTFULLY SUBMITTED this 8th day of September, 2022.

/s/ Stephanie A. Cuello

DIANNE M. TRIPLETT
Deputy General Counsel
299 1st Avenue North
St. Petersburg, Florida 33701
T: (727) 820-4692
F: (727) 820-5041
E: dianne.triplett@duke-energy.com

MATTHEW R. BERNIER
Associate General Counsel
106 East College Avenue, Suite 800
Tallahassee, Florida 32301
T: (850) 521-1428
F: (727) 820-5041
E: matthew.bernier@duke-energy.com

STEPHANIE A. CUELLO

Senior Counsel

106 East College Avenue, Suite 800

Tallahassee, Florida 32301

T: (850) 521-1425

F: (727) 820-5041

E: stephanie.cuello@duke-energy.com

FLRegulatoryLegal@duke-energy.com

Attorneys for Duke Energy Florida, LLC

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 8th day of September, 2022.

/s/ Stephanie A. Cuello

Attorney

<p>Walt Trierweiler Jacob Imig Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 wtrierwe@psc.state.fl.us jimig@psc.state.fl.us</p> <p>J. Wahlen / M. Means / V. Ponder Tampa Electric Company P.O. Box 391 Tallahassee, FL 32302 jwahlen@ausley.com mmeans@ausley.com vponder@ausley.com</p> <p>Jon C. Moyle, Jr. FIPUG 118 North Gadsden Street Tallahassee, FL 32301 jmoyle@moylslaw.com mqualls@moylslaw.com</p> <p>Maria Moncada / Joel T. Baker/William Cox Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408-0420 maria.moncada@fpl.com Joel.baker@fpl.com will.p.cox@fpl.com</p>	<p>Beth Keating FPUC 215 South Monroe Street, Suite 601 Tallahassee, FL 32301 bkeating@gunster.com</p> <p>Paula K. Brown Tampa Electric Company P.O. Box 111 Tampa, FL 33601 regdept@tecoenergy.com</p> <p>Kenneth A. Hoffman Florida Power & Light Company 134 W. Jefferson Street Tallahassee, FL 32301-1713 ken.hoffman@fpl.com</p> <p>Richard Gentry M. Wessling Office of Public Counsel c/o The Florida Legislature 111 West Madison Street, Room 812 Tallahassee, FL 32399 gentry.richard@leg.state.fl.us wessling.mary@leg.state.fl.us</p> <p>Mike Cassel Florida Public Utilities Company 208 Wildlight Avenue Yulee, FL 32097 mcassel@fpuc.com</p> <p>Corey Allain Nucor Steele 22 Nucor Drive Frostproof FL 33843 corey.allain@nucor.com</p>	<p>Michelle D. Napier FPUC 1635 Meathe Drive West Palm Beach, FL 33411 mnapier@fpuc.com</p> <p>George Cavros Southern Alliance for Clean Energy 120 E. Oakland Park Blvd., Suite 105 Fort Lauderdale, FL 33334 george@cavros-law.com</p> <p>Peter J. Mattheis/Michael K. Lavanga/Joseph R. Briscar Nucor Steel 1025 Thomas Jefferson St., NW, Ste. 800 West Washington DC 20007 (202) 342-0800 (202) 342-0807 jrb@smxblaw.com mkl@smxblaw.com pjm@smxblaw.com</p> <p>James W. Brew / Laura W. Baker PCS Phosphate 1025 Thomas Jefferson Street, N.W. Eighth Floor, West Tower Washington, D.C. 20007 jbrew@smxblaw.com lwb@smxblaw.com</p>
--	---	--

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

REVISED DIRECT TESTIMONY OF

KARLA RODRIGUEZ

ON BEHALF OF

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20220002-EG

September 8, 2022

1 **Q. State your name and business address.**

2 A. My name is Karla Rodriguez. 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 (“DEBS”), as Senior Strategy
7 & Collaboration Manager in the Portfolio Analysis and Regulatory Strategy
8 Department. DEBS is a service-company affiliate of Duke Energy Florida, LLC (“Duke
9 Energy Florida,” “DEF,” or “the Company”).

10

11 **Q. What are your current duties and responsibilities at Duke Energy?**

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

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

2 A. The purpose of my testimony is to describe the components and costs of the Company's
3 DSM programs. I will detail the projected costs for each program, explain how these
4 costs are presented in my attached exhibit, and show the resulting projected Energy
5 Conservation Cost Recovery (“ECCR”) factors for 2023 customer billings.

6

7 **Q. For what programs does DEF seek recovery?**

8 A. Pursuant to Rule 25-17.015, F.A.C., DEF seeks recovery through the ECCR clause of
9 costs related to the following conservation programs approved by the Commission as part
10 of the Company's DSM Plan on August 3, 2020 (see Order No. PSC-2020-0274-PAA-
11 EG), as well as for common, administrative expenses not linked to a specific program:

- 12 • Home Energy Check
- 13 • Residential Incentive Program
- 14 • Neighborhood Energy Saver
- 15 • Low-Income Weatherization Assistance Program
- 16 • Load Management (Residential and Commercial)
- 17 • Business Energy Check
- 18 • Better Business
- 19 • Smart \$aver Custom Incentive Program
- 20 • Standby Generation
- 21 • Interruptible Service
- 22 • Curtailable Service
- 23 • Technology Development

- Qualifying Facility

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Q. Do you have any exhibits to your testimony?

A. Yes. Exhibit No. (KR-1P) supports DEF's energy conservation calculations for the 2022 actual/estimated period and the 2023 projection period. There are six (6) schedules included in this exhibit.

Q. Will you please explain your exhibit?

A. Yes. Exhibit No. (KR-1P) presents Schedules C-1 through C-6. Schedules C-1 to C-4 provide projected program costs for calendar year 2023 along with an updated projection of program costs for 2022. The 2022 updated projection of costs includes the actual costs incurred for the period from January 2022 through June 2022 and forecasted costs for July through December 2022. Schedule C-5 provides a summary report for each program that includes a program description, estimated annual program expenditures for 2023, and a summary of program accomplishments through the period ending June 2022. Schedule C-6 is the capital structure and cost rates used to calculate the return for each applicable conservation program.

Q. Would you please discuss Schedule C-1?

A. Schedule C-1 provides the calculation of the cost recovery factors for 2023 by rate class.

Q. What does Schedule C-2 show?

1 A. Schedule C-2 provides annual and monthly conservation program cost estimates for the
2 2023 projection period for each conservation program as well as for common
3 administration expenses. Additionally, Schedule C-2 presents program costs by specific
4 category (e.g., payroll, materials, incentives, etc.) and includes a schedule of estimated
5 capital investments, depreciation and return for the projection period.

6

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

8 A. Schedule C-3 contains a detailed breakdown of conservation program costs by specific
9 category and by month for the period of January through June 2022 (actual) and July
10 through December 2022 (estimated). In addition, Schedule C-3 presents a schedule of
11 capital investment, depreciation and return, an energy conservation adjustment
12 calculation of true-up, and a calculation of interest provision for the 2022
13 actual/estimated period.

14

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

16 A. Schedule C-4 provides the projected ECCR revenues for the 2023 projection period.

17

18 **Q. Would you please discuss Schedule C-5?**

19 A. Schedule C-5 presents a brief description of each program, as well as a summary of
20 progress and projected expenditures for each program for which DEF seeks cost recovery
21 through the ECCR clause.

22

23 **Q. What is the purpose of Schedule C-6?**

1 A. Schedule C-6 provides the capital structure and cost rates used to calculate the Return on
 2 Average Investment on Schedules C-2 and C-3.

3

4 **Q. Would you please summarize the results presented in your Exhibit?**

5 A. Yes. Schedule C-2, Page 1 of 5, Line 26, shows total 2023 projected program costs of
 6 \$119,659,521 plus a prior period over-recovery of \$ 6,844,389 resulting in estimated net
 7 revenue requirements in 2023 of \$112,815,132. The following table includes DEF's
 8 proposed ECCR billing factors, by retail rate class and voltage level for calendar year
 9 2023, as contained in Schedule C-1, Page 2 of 2.

10

11

2023 ECCR Billing Factors

12

13

14

15

16

17

18

19

20

21

22

23

	Secondary	Primary	Transmission
<u>Retail Rate Schedule</u>	<u>Voltage</u>	<u>Voltage</u>	<u>Voltage</u>
Residential (Cents/kWh)	.320	N/A	N/A
General-Service-Non-Demand (Cents/kWh)	.288	.285	.282
General Service 100% Load Factor (Cents/kWh)	.217	N/A	N/A
General Service Demand (\$/kW)	.85	.84	.83
Curtable (\$/kW)	.46	.46	.45
Interruptible (\$/kW)	.70	.69	.69
Standby Monthly (\$/kW)	.082	.081	.080
Standby Daily (\$/kW)	.039	.039	.038
Lighting (Cents/kWh)	.116	N/A	N/A

1 **Q. Does this conclude your testimony?**

2 A. Yes.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Calculation of Energy & Demand Allocation % by Rate Class
January 2023 - December 2023

Duke Energy Florida, LLC
Witness: Karla Rodriguez
Revised Exhibit No. ___(KR-1P)
Schedule C-1
Page 1 of 2

Rate Class	(1) Average 12CP Load Factor at Meter (%)	(2) Sales at Meter (mWh)	(3) Avg 12 CP at Meter (MW)	(4) Delivery Efficiency Factor	(5) Sales at Source (Generation) (mWh)	(6) Avg 12 CP at Source (MW)	(7) Annual Average Demand (MWh)	(8) Annual Average Demand Allocator (%)	(9) 12 CP Allocator (%)	(10) 12 CP & 25% AD Demand Allocator (%)
Residential										
RS-1, RST-1, RSL-1, RSL-2, RSS-1 Secondary	0.516	21,187,001	4,686.2	0.9247403	22,911,299	5,067.6	2,615.45	53.933%	63.722%	61.275%
General Service Non-Demand										
GS-1, GST-1										
Secondary	0.608	1,151,328	216.2	0.9247403	1,245,029	233.8	142.1	2.931%	2.940%	2.937%
Primary	0.608	12,153	2.3	0.9758571	12,454	2.3	1.4	0.029%	0.029%	0.029%
Sec Del/Primary Mtr	0.608	42	0.0	0.9758571	43	0.0		0.000%	0.000%	0.000%
Transmission	0.608	2,410	0.5	0.9858571	2,444	0.5	0.3	0.006%	0.006%	0.006%
		<u>1,165,933</u>	<u>218.9</u>		<u>1,259,970</u>	<u>236.6</u>	<u>143.8</u>	<u>2.966%</u>	<u>2.975%</u>	<u>2.973%</u>
GS-2 Secondary	1.000	207,230	23.66	0.9247403	224,095	25.6	25.6	0.528%	0.322%	0.373%
General Service Demand										
GSD-1, GSDT-1										
Secondary	0.742	11,732,889	1,805.2	0.9247403	12,687,767	1,952.2	1,448.4	29.867%	24.547%	25.877%
Primary	0.742	1,674,480	257.6	0.9758571	1,715,907	264.0	195.9	4.039%	3.320%	3.500%
Sec Del/Primary Mtr	0.742	18,791	2.9	0.9758571	19,256	3.0	2.2	0.045%	0.037%	0.039%
Transm Del/ Primary Mtr	0.742	0	0.0	0.9758571	0	0.0	0.0	0.000%	0.000%	0.000%
Transmission	0.742	396,109	60.9	0.9858571	401,792	61.8	45.9	0.946%	0.777%	0.819%
SS-1 Primary	0.958	64,447	7.7	0.9758571	66,042	7.9	7.5	0.155%	0.099%	0.113%
Transm Del/ Transm Mtr	0.958	4,740	0.6	0.9858571	4,808	0.6	0.5	0.011%	0.007%	0.008%
Transm Del/ Primary Mtr	0.958	994	0.1	0.9758571	1,019	0.1	0.1	0.002%	0.002%	0.002%
		<u>13,892,451</u>	<u>2,135.1</u>		<u>14,896,591</u>	<u>2,289.5</u>	<u>1,700.52</u>	<u>35.066%</u>	<u>28.790%</u>	<u>30.359%</u>
Curtaillable										
CS-2, CST-2										
Secondary	1.028	0	0.0	0.9247403	0	0.0	0.0	0.000%	0.000%	0.000%
Primary	1.028	61,191	6.8	0.9758571	62,704	7.0	7.2	0.148%	0.088%	0.103%
SS-3 Primary	2.390	81,829	3.9	0.9758571	83,853	4.0	9.6	0.197%	0.050%	0.087%
		<u>143,019</u>	<u>10.7</u>		<u>146,558</u>	<u>11.0</u>	<u>16.7</u>	<u>0.345%</u>	<u>0.138%</u>	<u>0.190%</u>
Interruptible										
IS-2, IST-2										
Secondary	0.957	364,150	43.4	0.9247403	393,786	47.0	45.0	0.927%	0.591%	0.675%
Sec Del/Primary Mtr	0.957	3,936	0.5	0.9758571	4,033	0.5	0.5	0.009%	0.006%	0.007%
Primary Del / Primary Mtr	0.957	1,020,628	121.7	0.9758571	1,045,879	124.7	119.4	2.462%	1.569%	1.792%
Primary Del / Transm Mtr	0.957	73	0.0	0.9858571	74	0.0	0.0	0.000%	0.000%	0.000%
Transm Del/ Transm Mtr	0.957	822,182	98.1	0.9858571	833,977	99.5	95.2	1.963%	1.251%	1.429%
Transm Del/ Primary Mtr	0.957	329,681	39.3	0.9758571	337,837	40.3	38.6	0.795%	0.507%	0.579%
SS-2 Primary	1.147	14,551	1.4	0.9758571	14,911	1.5	1.7	0.035%	0.019%	0.023%
Transm Del/ Transm Mtr	1.147	2,359	0.2	0.9858571	2,392	0.2	0.3	0.006%	0.003%	0.004%
Transm Del/ Primary Mtr	1.147	50,947	5.1	0.9758571	52,207	5.2	6.0	0.123%	0.065%	0.080%
		<u>2,608,506</u>	<u>309.8</u>		<u>2,685,097</u>	<u>318.9</u>	<u>306.5</u>	<u>6.321%</u>	<u>4.010%</u>	<u>4.588%</u>
Lighting										
LS-1 (Secondary)	11.683	330,646	3.2	0.9247403	357,555	3.5	40.8	0.842%	0.044%	0.243%
		<u>39,534,786</u>	<u>7,388</u>		<u>42,481,164</u>	<u>7,953</u>	<u>4,849</u>	<u>100.000%</u>	<u>100.000%</u>	<u>100.000%</u>

Notes:

- | | |
|---|---|
| (1) Average 12CP load factor based on load research study filed July 30, 2021 (FPSC rule 25-6.0437 (7)) | (6) Column 3 / Column 4 |
| (2) Projected kWh sales for the period January 2023 to December 2023 | (7) Column 5 / 8,760 hours |
| (3) Calculated: Column 2 / (8,760 hours x Column 1) | (8) Column 5 / Total Column 5 |
| (4) Based on system average line loss analysis for 2021 | (9) Column 6 / Total Column 6 |
| (5) Column 2 / Column 4 | (10) Column 8 x 1/13 + Column 9 x 12/13 |

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Calculation of Energy Conservation Cost Recovery Rate Factors by Rate Class
January 2023 - December 2023

Rate Class	(1) Annual Average Demand Allocator (%)	(2) 12 CP & 25% AD Demand Allocator (%)	(3) Energy- Related Costs (\$)	(4) Production Demand Costs (\$)	(5) Total Energy Conservation Costs (\$)	(6) Projected Effective Sales at Meter Level (mWh)	(7) Billing KW Load Factor (%)	(8) Projected Effective KW at Meter Level (kW)	(9) Energy Conservation Cost Recovery (\$/kW-month)	(10) Energy Conservation Cost Recovery (cents/kWh)
Residential										
RS-1, RST-1, RSL-1, RSL-2, RSS-1 Secondary	53.933%	61.275%	\$9,846,486	\$ 57,940,329	\$ 67,786,816	21,187,001				0.320
General Service Non-Demand										
GS-1, GST-1										
Secondary						1,151,328				0.288
Primary						12,031				0.285
Transmission						2,362				0.282
TOTAL GS	2.966%	2.973%	\$541,491	\$ 2,810,916	\$ 3,352,408	1,165,721				
General Service										
GS-2 Secondary	0.528%	0.373%	\$96,308	\$ 352,831	\$ 449,139	207,230				0.217
General Service Demand										
GSD-1, GSDT-1, SS-1*										
Secondary						11,732,889			0.85	
Primary						1,741,125			0.84	
Transmission						392,832			0.83	
TOTAL GSD	35.066%	30.359%	\$6,402,041	\$ 28,706,687	\$ 35,108,728	13,866,847	46.04%	41,259,666		
Curtable										
CS-2, CST-2, CS-3, CST-3, SS-3*										
Secondary						-			0.46	
Primary						141,589			0.46	
Transmission						-			0.45	
TOTAL CS	0.345%	0.190%	\$62,985	\$ 179,390	\$ 242,375	141,589	37.10%	522,730		
Interruptible										
IS-2, IST-2, SS-2*										
Secondary						364,150			0.70	
Primary						1,405,545			0.69	
Transmission						808,122			0.69	
TOTAL IS	6.321%	4.588%	\$1,153,962	\$ 4,337,914	\$ 5,491,876	2,577,817	45.31%	7,793,004		
Lighting										
LS-1 Secondary	0.842%	0.243%	\$153,665	\$ 230,125	\$ 383,790	330,646				0.116
	100.000%	100.000%	\$ 18,256,939	\$ 94,558,193	\$ 112,815,132	39,476,851				0.286

Notes:

- (1) From Schedule C-1 1P, Column 8
- (2) From Schedule C-1 1P, Column 10
- (3) Column 1 x Total Energy Dollars, C-2 Page 1, line 20
- (4) Column 2 x Total Demand Dollars, C-2 Page 1, line 21
- (5) Column 3 + Column 4
- (6) kWh sales at effective secondary voltage
- (7) Class Billing kW Load Factor
- (8) Column 6 x 1000 / 8,760 / Column 7 x 12
- (9) Column 5 / Column 8 (x voltage factor if applicable)
- (10) Column 5 / Column 6 / 10

Calculation of Standby Service kW Charges			
	ECCR Cost	Effective kW	\$/kW
Total GSD, CS, IS	\$40,842,980	49,575,400	0.82
SS-1, 2, 3 - \$/kW-mo			
	Secondary	Primary	Transmission
Monthly - \$0.82/kW * 10%	0.082	0.081	0.080
Daily - \$0.82/kW / 21	0.039	0.039	0.038

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Estimated Conservation Program Costs
January 2023 - December 2023

FPSC Docket No. 20220002-EG
Duke Energy Florida, LLC
Witness: Karla Rodriguez
Revised Exhibit No. ___(KR-1P)
Schedule C-2
Page 1 of 5

Line No.	Program Demand (D) or Energy (E)	12 Month Total		
1	Home Energy Check (E)	\$4,760,883		
2	Residential Incentive Program (E)	4,539,440		
3	Business Energy Check (E)	736,298		
4	Better Business (E)	2,072,098		
5	Technology Development (E)	800,000		
6	Smart Saver Custom Incentive (E)	590,129		
7	Interruptible Service (D)	48,567,597		
8	Curtable Service (D)	2,921,327		
9	Load Management (Residential & Commercial) (D)	38,877,746		
10	Low Income Weatherization Assistance Program (E)	481,087		
11	Standby Generation (D)	5,775,310		
12	Qualifying Facility (E)	1,068,800		
13	Neighborhood Energy Saver (E)	5,817,805		
14	Conservation Program Admin (E)	1,649,753		
15	Conservation Program Admin (D)	1,001,247		
16	Total ECCR Program Costs	<u>\$119,659,521</u>		
17			2022	
18		12 Months	End of Period Net True-Up	
19	<u>Demand & Energy Summary</u>	<u>Total</u>	<u>(Over)/Under Recovery</u>	<u>Total Costs</u>
20	Energy	\$22,516,294	(\$4,259,355)	\$18,256,939
21	Demand	97,143,227	(2,585,034)	94,558,193
22	Total Demand & Energy Costs	<u>\$119,659,521</u>	<u>(\$6,844,389)</u>	<u>\$112,815,132</u>

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Estimated Conservation Program Costs
January 2023 - December 2023

Line No.	Program Demand (D) or Energy (E)	Est Jan-23	Est Feb-23	Est Mar-23	Est Apr-23	Est May-23	Est Jun-23	Est Jul-23	Est Aug-23	Est Sep-23	Est Oct-23	Est Nov-23	Est Dec-23	Total
1	Home Energy Check (E)	\$398,321	\$401,855	\$419,613	\$421,199	\$409,919	\$407,919	\$420,823	\$402,833	\$398,659	\$386,908	\$347,728	\$345,105	\$4,760,883
2	Residential Incentive Program (E)	352,813	368,021	401,779	387,390	391,565	401,280	395,558	395,489	404,578	380,879	355,167	304,920	4,539,440
3	Business Energy Check (E)	56,065	55,689	71,291	56,466	56,513	70,072	82,743	55,232	67,983	53,020	62,522	48,701	736,298
4	Better Business (E)	180,701	174,704	177,665	176,838	181,880	174,400	180,131	173,498	173,892	167,665	154,464	156,260	2,072,098
5	Technology Development (E)	42,073	41,274	41,208	37,613	44,102	43,650	44,692	43,486	57,096	136,424	134,024	134,359	800,000
6	Smart \$aver Custom Incentive (E)	49,714	49,588	49,972	49,874	49,862	49,550	50,273	49,436	48,858	48,702	47,036	47,264	590,129
7	Interruptible Service (D)	3,951,917	3,980,248	3,989,879	4,015,104	4,023,813	4,032,770	4,045,836	4,089,764	4,097,866	4,108,204	4,111,770	4,120,427	48,567,597
8	Curtailable Service (D)	236,934	236,877	237,044	236,995	237,002	248,440	248,768	248,388	248,124	248,054	247,299	247,402	2,921,327
9	Load Management (Residential & Commercial) (D)	3,527,718	3,708,250	3,771,486	2,830,194	2,741,522	3,071,016	3,205,891	3,219,201	3,202,731	2,939,769	3,542,984	3,116,983	38,877,746
10	Low Income Weatherization Assistance Program (E)	36,536	39,474	42,925	41,378	41,294	40,968	41,720	42,485	43,314	41,619	38,355	31,018	481,087
11	Standby Generation (D)	482,098	481,959	485,456	486,155	486,884	479,537	481,070	479,297	485,301	478,044	474,516	474,995	5,775,310
12	Qualifying Facility (E)	94,591	88,562	96,382	90,680	95,697	88,674	99,032	87,734	93,318	82,374	74,740	77,016	1,068,800
13	Neighborhood Energy Saver (E)	401,189	463,009	527,175	499,398	490,883	500,637	526,879	523,932	541,026	513,785	483,292	346,601	5,817,805
14	Conservation Program Admin (E)	141,372	140,470	143,112	142,333	142,446	140,190	145,394	139,374	135,182	134,070	122,090	123,720	1,649,753
15	Conservation Program Admin (D)	85,799	85,252	86,856	86,383	86,452	85,082	88,241	84,587	82,043	81,368	74,097	75,087	1,001,247
16	Total ECCR Program Costs	\$10,037,842	\$10,315,232	\$10,541,843	\$9,557,999	\$9,479,836	\$9,834,186	\$10,057,050	\$10,034,739	\$10,079,971	\$9,800,884	\$10,270,083	\$9,649,857	\$119,659,521
17	Demand & Energy Summary													
18	Energy	\$1,753,375	\$1,822,646	\$1,971,122	\$1,903,169	\$1,904,163	\$1,917,341	\$1,987,245	\$1,913,500	\$1,963,907	\$1,945,445	\$1,819,417	\$1,614,963	\$22,516,294
19	Demand	8,284,466	8,492,586	8,570,721	7,654,830	7,575,673	7,916,845	8,069,805	8,121,238	8,116,065	7,855,440	8,450,665	8,034,893	97,143,227
20	Total Demand & Energy Costs	\$10,037,842	\$10,315,232	\$10,541,843	\$9,557,999	\$9,479,836	\$9,834,186	\$10,057,050	\$10,034,739	\$10,079,971	\$9,800,884	\$10,270,083	\$9,649,857	\$119,659,521

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Estimated Conservation Program Costs
January 2023 - December 2023

FPSC Docket No. 20220002-EG
Duke Energy Florida, LLC
Witness: Karla Rodriguez
Revised Exhibit No. ___(KR-1P)
Schedule C-2
Page 3 of 5

Line No.	Program Demand (D) or Energy (E)	Depreciation, Amortization & Return	Payroll & Benefits	Materials & Supplies	Outside Services	Advertising	Incentives	Vehicles	Other	Program Revenues (Credits)	Total
1	Home Energy Check (E)	10,215	2,839,562	30,170	545,017	600,000	542,950	138,594	54,376	0	4,760,883
2	Residential Incentive Program (E)	0	1,227,967	11,271	193,958	252,000	2,784,924	48,190	21,131	0	4,539,440
3	Business Energy Check (E)	0	389,378	33,220	184,896	60,000	58,000	4,800	6,004	0	736,298
4	Better Business (E)	0	1,027,929	23,904	289,204	84,000	605,847	12,126	29,088	0	\$2,072,098
5	Technology Development (E)	0	187,007	24,000	563,401	0	0	10,592	15,000	0	800,000
6	Smart \$aver Custom Incentive (E)	0	129,599	5,196	169,200	60,000	216,800	3,740	5,595	0	590,129
7	Interrupt ble Service (D)	651,959	348,044	6,774	0	0	47,528,595	12,000	20,225	0	48,567,597
8	Curtable Service (D)	0	58,836	0	0	0	2,862,490	0	0	0	2,921,327
9	Load Management (Residential & Commercial) (D)	6,155,889	1,970,095	18,403	3,625,532	312,000	26,713,548	46,334	35,946	0	38,877,746
10	Low Income Weatherization Assistance Program (E)	0	134,788	300	0	32,004	306,885	1,500	5,610	0	481,087
11	Standby Generation (D)	0	274,911	26,736	0	0	5,451,519	15,000	7,144	0	5,775,310
12	Qualifying Facility (E)	0	961,000	500	100,000	0	0	2,700	4,600	0	1,068,800
13	Neighborhood Energy Saver (E)	0	184,554	600	540,699	102,146	4,963,807	6,000	20,000	0	5,817,805
14	Conservation Program Admin (E)	0	933,470	93,347	485,405	0	0	622	136,909	0	1,649,753
15	Conservation Program Admin (D)	0	566,530	56,653	294,595	0	0	378	83,091	0	1,001,247
16	Total ECCR Program Costs	\$6,818,063	\$11,233,670	\$331,073	\$6,991,906	\$1,502,150	\$92,035,364	\$302,576	\$444,719	\$0	\$119,659,521
17	Demand & Energy Summary										
18	Energy	\$10,215	\$8,015,255	\$222,507	\$3,071,778	\$1,190,150	\$9,479,212	\$228,864	\$298,313	\$0	\$22,516,294
19	Demand	6,807,848	3,218,416	108,566	3,920,127	312,000	82,556,152	73,712	146,406	0	97,143,227
20	Total Demand & Energy Costs	\$6,818,063	\$11,233,670	\$331,073	\$6,991,906	\$1,502,150	\$92,035,364	\$302,576	\$444,719	\$0	\$119,659,521

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

FPSC Docket No. 20220002-EG
Duke Energy Florida, LLC
Witness: Karla Rodriguez
Revised Exhibit No. ___(KR-1P)
Schedule C-2
Page 4 of 5

Line No.	Program Demand (D) or Energy (E)	Beginning Balance	Est Jan-23	Est Feb-23	Est Mar-23	Est Apr-23	Est May-23	Est Jun-23	Est Jul-23	Est Aug-23	Est Sep-23	Est Oct-23	Est Nov-23	Est Dec-23	Total
1	Home Energy Check (E)														
2	Investments		\$0	\$0	\$68,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$68,100
3	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
4	Depreciation Base		0	0	0	68,100	68,100	68,100	68,100	68,100	68,100	68,100	68,100	68,100	68,100
5															
6	Depreciation Expense		0	0	0	1,135	1,135	1,135	1,135	1,135	1,135	1,135	1,135	1,135	10,215
7															
8	Cumulative Investment	0	0	0	68,100	68,100	68,100	68,100	68,100	68,100	68,100	68,100	68,100	68,100	68,100
9	Less: Accumulated Depreciation	0	0	0	0	1,135	2,270	3,405	4,540	5,675	6,810	7,945	9,080	10,215	10,215
10	Net Investment	0	0	0	68,100	66,965	65,830	64,695	63,560	62,425	61,290	60,155	59,020	57,885	57,885
11	Average Investment		0	0	34,050	67,533	66,398	65,263	64,128	62,993	61,858	60,723	59,588	58,453	58,453
12	Return on Average Investment		0	0	0	0	0	0	0	0	0	0	0	0	0
13															
14	Program Total		\$0	\$0	\$0	\$1,135	\$1,135	\$1,135	\$1,135	\$1,135	\$1,135	\$1,135	\$1,135	\$1,135	\$10,215

Line No.	Program Demand (D) or Energy (E)	Beginning Balance	Est Jan-23	Est Feb-23	Est Mar-23	Est Apr-23	Est May-23	Est Jun-23	Est Jul-23	Est Aug-23	Est Sep-23	Est Oct-23	Est Nov-23	Est Dec-23	Total
15	Interruptible Service (D)														
16	Investments		\$137,160	\$173,708	\$137,160	\$173,708	\$137,160	\$137,160	\$137,160	\$173,708	\$137,160	\$0	\$0	\$0	\$1,344,084
17	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
18	Depreciation Base		1,686,507	1,823,667	1,997,375	2,134,535	2,308,243	2,445,403	2,582,563	2,719,723	2,893,431	3,030,591	3,030,591	3,030,591	3,030,591
19															
20	Depreciation Expense		28,109	30,395	33,290	35,576	38,471	40,758	43,044	45,330	48,225	50,511	50,511	50,511	494,731
21															
22	Cumulative Investment	1,686,507	1,823,667	1,997,375	2,134,535	2,308,243	2,445,403	2,582,563	2,719,723	2,893,431	3,030,591	3,030,591	3,030,591	3,030,591	3,030,591
23	Less: Accumulated Depreciation	285,047	313,156	343,551	376,841	412,417	450,888	491,646	534,690	580,020	628,245	678,756	729,267	779,778	779,778
24	Net Investment	1,401,460	1,510,511	1,653,824	1,757,694	1,895,826	1,994,515	2,090,917	2,185,033	2,313,411	2,402,346	2,351,835	2,301,324	2,250,813	2,250,813
25	Average Investment		1,455,986	1,582,168	1,705,759	1,826,760	1,945,171	2,042,716	2,137,975	2,249,222	2,357,879	2,377,091	2,326,580	2,276,069	2,276,069
26	Return on Average Investment		9,427	10,244	11,045	11,828	12,594	13,226	13,843	14,563	15,266	15,391	15,064	14,737	157,228
27															
28	Program Total		\$37,536	\$40,639	\$44,335	\$47,404	\$51,065	\$53,984	\$56,887	\$59,893	\$63,491	\$65,902	\$65,575	\$65,248	\$651,959

Line No.	Program Demand (D) or Energy (E)	Beginning Balance	Est Jan-23	Est Feb-23	Est Mar-23	Est Apr-23	Est May-23	Est Jun-23	Est Jul-23	Est Aug-23	Est Sep-23	Est Oct-23	Est Nov-23	Est Dec-23	Total
29	Residential Load Management Switches (D)														
30	Expenditures Booked Directly to Plant		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$6,000,000
31	Retirements		791,351	611,611	903,634	983,421	611,854	1,067,446	316,488	899,279	863,814	1,070,889	415,682	678,592	9,214,061
32	Investments Booked to CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0
33	Closings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
34	Amortization Base		25,656,209	25,454,728	25,197,106	24,753,578	24,455,941	24,116,291	23,924,324	23,816,440	23,434,893	22,967,542	22,724,256	22,677,119	22,677,119
35															
36	Amortization Expense		427,612	424,254	419,960	412,568	407,607	401,946	398,747	396,949	390,589	382,800	378,745	377,960	4,819,737
37															
38	Cumulative Plant Investment	26,051,885	25,760,534	25,648,923	25,245,289	24,761,868	24,650,013	24,082,568	24,266,080	23,866,800	23,502,986	22,932,097	23,016,415	22,837,823	22,837,823
39	Less: Accumulated Depreciation	16,104,562	15,740,824	15,553,466	15,069,792	14,498,940	14,294,692	13,629,193	13,711,451	13,209,121	12,735,896	12,047,807	12,010,870	11,710,238	11,710,238
40	Cumulative CWIP Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Net Plant Investment	9,947,322	10,019,710	10,095,456	10,175,496	10,262,928	10,355,321	10,453,375	10,554,628	10,657,679	10,767,090	10,884,290	11,005,545	11,127,585	11,127,585
42	Average Investment		9,983,516	10,057,583	10,135,476	10,219,212	10,309,125	10,404,348	10,504,002	10,606,154	10,712,385	10,825,690	10,944,918	11,066,565	11,066,565
43	Return on Average Investment		64,640	65,120	65,624	66,167	66,749	67,365	68,010	68,672	69,359	70,093	70,865	71,653	814,317
44															
45	Program Total		\$492,252	\$489,374	\$485,584	\$478,735	\$474,356	\$469,311	\$466,757	\$465,621	\$459,948	\$452,893	\$449,610	\$449,613	\$5,634,054

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

FPSC Docket No. 20220002-EG
 Duke Energy Florida, LLC
 Witness: Karla Rodriguez
 Revised Exhibit No. ____ (KR-1P)
 Schedule C-2
 Page 5 of 5

Line No.	Program Demand (D) or Energy (E)	Beginning Balance	Est Jan-23	Est Feb-23	Est Mar-23	Est Apr-23	Est May-23	Est Jun-23	Est Jul-23	Est Aug-23	Est Sep-23	Est Oct-23	Est Nov-23	Est Dec-23	Total
1	Residential Load Mgt Software (D)														
2	Investments		\$41,166	\$41,166	\$41,166	\$41,166	\$41,166	\$41,166	\$41,166	\$41,166	\$41,166	\$41,166	\$41,166	\$41,166	\$493,992
3	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
4	Depreciation Base		0	41,166	82,332	123,498	164,664	205,830	246,996	288,162	329,328	370,494	411,660	452,826	
5															
6	Depreciation Expense		0	686	1,372	2,058	2,744	3,431	4,117	4,803	5,489	6,175	6,861	7,547	45,283
7															
8	Cumulative Investment	0	41,166	82,332	123,498	164,664	205,830	246,996	288,162	329,328	370,494	411,660	452,826	493,992	493,992
9	Less: Accumulated Depreciation	0	0	686	2,058	4,116	6,860	10,291	14,408	19,211	24,700	30,875	37,736	45,283	45,283
10	Net Investment	0	41,166	81,646	121,440	160,548	198,970	236,705	273,754	310,117	345,794	380,785	415,090	448,709	448,709
11	Average Investment		20,583	61,406	101,543	140,994	179,759	217,838	255,230	291,936	327,956	363,290	397,938	431,900	
12	Return on Average Investment		133	398	658	913	1,164	1,411	1,653	1,890	2,123	2,352	2,576	2,797	18,068
13															
14	Program Total		\$133	\$1,084	\$2,030	\$2,971	\$3,908	\$4,842	\$5,770	\$6,693	\$7,612	\$8,527	\$9,437	\$10,344	\$63,351

Line No.	Program Demand (D) or Energy (E)	Beginning Balance	Est Jan-23	Est Feb-23	Est Mar-23	Est Apr-23	Est May-23	Est Jun-23	Est Jul-23	Est Aug-23	Est Sep-23	Est Oct-23	Est Nov-23	Est Dec-23	Total
15	Residential Load Mgt Upgrades (D)														
16	Investments		\$666,717	\$666,717	\$666,717	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000,151
17	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
18	Depreciation Base		0	666,717	1,333,434	2,000,151	2,000,151	2,000,151	2,000,151	2,000,151	2,000,151	2,000,151	2,000,151	2,000,151	
19															
20	Depreciation Expense		0	11,112	22,224	33,337	33,337	33,337	33,337	33,337	33,337	33,337	33,337	33,337	333,369
21															
22	Cumulative Investment	0	666,717	1,333,434	2,000,151	2,000,151	2,000,151	2,000,151	2,000,151	2,000,151	2,000,151	2,000,151	2,000,151	2,000,151	2,000,151
23	Less: Accumulated Depreciation	0	0	11,112	33,336	66,673	100,010	133,347	166,684	200,021	233,358	266,695	300,032	333,369	333,369
24	Net Investment	0	666,717	1,322,322	1,966,815	1,933,478	1,900,141	1,866,804	1,833,467	1,800,130	1,766,793	1,733,456	1,700,119	1,666,782	1,666,782
25	Average Investment		333,359	994,520	1,644,569	1,950,147	1,916,810	1,883,473	1,850,136	1,816,799	1,783,462	1,750,125	1,716,788	1,683,451	
26	Return on Average Investment		2,159	6,439	10,648	12,627	12,411	12,195	11,979	11,763	11,547	11,331	11,116	10,900	125,115
27															
28	Program Total		\$2,159	\$17,551	\$32,872	\$45,964	\$45,748	\$45,532	\$45,316	\$45,100	\$44,884	\$44,668	\$44,453	\$44,237	\$458,484

29	Demand & Energy Summary														
30	Energy		\$0	\$0	\$0	\$1,135	\$1,135	\$1,135	\$1,135	\$1,135	\$1,135	\$1,135	\$1,135	\$1,135	\$10,215
31	Demand		532,080	548,648	564,821	575,074	575,077	573,669	574,730	577,307	575,935	571,990	569,075	569,442	6,807,848
32	Total Depreciation & Return		\$532,080	\$548,648	\$564,821	\$576,209	\$576,212	\$574,804	\$575,865	\$578,442	\$577,070	\$573,125	\$570,210	\$570,577	\$6,818,063

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Program Costs
January - June 2022 Actuals
July - December 2022 Estimates

FPSC Docket No. 20220002-EG
Duke Energy Florida, LLC
Witness: Karla Rodriguez
Revised Exhibit No. (KR-1P)
Schedule C-3
Page 1 of 5

Line No.	Program Demand (D) or Energy (E)	Depreciation		Operating & Maintenance Costs						Program Revenues (Credits)	Total
		Amortization & Return	Payroll & Benefits	Vehicles	Outside Services	Materials & Supplies	Advertising	Incentives	Other		
1	<u>Home Energy Check (E)</u>										
2	A. Actual	\$0	\$1,386,650	\$49,218	\$184,958	\$2,935	\$191,080	\$57,218	\$6,602	\$0	\$1,878,660
3	B. Estimated	0	1,397,400	47,850	296,303	12,031	180,000	449,777	41,817	0	2,425,178
4											
5	C. Total	\$0	\$2,784,050	\$97,068	\$481,261	\$14,965	\$371,080	\$506,994	\$48,419	\$0	\$4,303,838
6											
7	<u>Residential Incentive Program (E)</u>										
8	A. Actual	\$0	\$532,899	\$22,268	\$91,648	\$8,287	\$3,353	\$882,747	\$10,448	\$0	\$1,551,650
9	B. Estimated	0	555,798	19,695	85,018	600	148,500	1,694,222	10,867	0	2,514,700
10											
11	C. Total	\$0	\$1,088,696	\$41,963	\$176,666	\$8,887	\$151,853	\$2,576,969	\$21,315	\$0	\$4,066,350
12											
13	<u>Business Energy Check (E)</u>										
14	A. Actual	\$0	\$166,956	\$518	\$29,309	\$16,847	\$7,441	\$0	\$2,322	\$0	\$223,393
15	B. Estimated	0	168,000	1,980	108,000	17,100	41,100	29,000	2,196	0	367,376
16											
17	C. Total	\$0	\$334,956	\$2,498	\$137,309	\$33,947	\$48,541	\$29,000	\$4,518	\$0	\$590,769
18											
19	<u>Better Business (E)</u>										
20	A. Actual	\$0	\$487,798	\$534	\$90,841	\$251	\$33,134	\$193,313	\$7,316	\$0	\$813,187
21	B. Estimated	0	510,000	4,800	120,000	300	40,200	480,000	10,800	0	1,166,100
22											
23	C. Total	\$0	\$997,798	\$5,334	\$210,841	\$551	\$73,334	\$673,313	\$18,116	\$0	\$1,979,287
24											
25	<u>Technology Development (E)</u>										
26	A. Actual	\$0	\$53,525	\$2,525	\$28,450	\$18	\$0	\$0	\$0	\$0	\$84,518
27	B. Estimated	0	72,342	6,000	506,284	2,671	0	0	1,500	0	588,797
28											
29	C. Total	\$0	\$125,867	\$8,525	\$534,734	\$2,689	\$0	\$0	\$1,500	\$0	\$673,315
30											
31	<u>Smart \$aver Custom Incentive Program (E)</u>										
32	A. Actual	\$0	\$76,205	\$29	\$44,277	\$8	\$24,612	\$5,988	\$2,784	\$0	\$153,903
33	B. Estimated	0	63,000	300	72,000	300	31,500	90,000	2,160	0	259,260
34											
35	C. Total	\$0	\$139,205	\$329	\$116,277	\$308	\$56,112	\$95,988	\$4,944	\$0	\$413,163
36											
37	<u>Interruptible Service (D)</u>										
38	A. Actual	\$100,287	\$209,723	\$8,630	\$204	\$10,327	\$0	\$23,144,135	\$7,989	\$0	\$23,481,296
39	B. Estimated	189,929	215,053	8,973	377	30,877	0	23,132,156	7,565	0	23,584,929
40											
41	C. Total	\$290,216	\$424,777	\$17,603	\$582	\$41,203	\$0	\$46,276,290	\$15,554	\$0	\$47,066,225

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Program Costs
January - June 2022 Actuals
July - December 2022 Estimates

FPSC Docket No. 20220002-EG
Duke Energy Florida, LLC
Witness: Karla Rodriguez
Revised Exhibit No.____(KR-1P)
Schedule C-3
Page 2 of 5

Line No.	Program Demand (D) or Energy (E)	Depreciation Amortization & Return	Operating & Maintenance Costs							Program Revenues (Credits)	Total
			Payroll & Benefits	Vehicles	Outside Services	Materials & Supplies	Advertising	Incentives	Other		
1	<u>Curtable Service (D)</u>										
2	A. Actual	\$0	\$21,758	\$0	\$0	\$0	\$0	\$1,391,674	\$5,992	\$0	\$1,419,423
3	B. Estimated	0	16,409	0	0	0	0	1,279,732	5,680	0	1,301,821
4											
5	C. Total	\$0	\$38,167	\$0	\$0	\$0	\$0	\$2,671,406	\$11,671	\$0	\$2,721,245
6											
7	<u>Neighborhood Energy Saver (E)</u>										
8	A. Actual	\$0	\$88,776	\$2,044	\$204,872	\$329	\$2,684	\$1,707,893	\$5,165	\$0	\$2,011,761
9	B. Estimated	0	94,386	2,788	326,419	600	18,000	2,470,000	7,000	0	2,919,193
10											
11	C. Total	\$0	\$183,162	\$4,832	\$531,291	\$929	\$20,684	\$4,177,893	\$12,165	\$0	\$4,930,954
12											
13	<u>Load Management (Residential & Commercial) (D)</u>										
14	A. Actual	\$3,237,274	\$983,612	\$26,119	\$1,013,095	\$127,165	\$13,896	\$12,180,750	\$32,393	\$0	\$17,614,304
15	B. Estimated	2,996,065	984,000	24,000	1,141,848	(102,257)	135,000	14,030,670	18,000	0	19,227,326
16											
17	C. Total	\$6,233,339	\$1,967,612	\$50,119	\$2,154,943	\$24,909	\$148,896	\$26,211,420	\$50,393	\$0	\$36,841,630
18											
19	<u>Low Income Weatherization Assistance Program (E)</u>										
20	A. Actual	\$0	\$85,326	\$656	\$0	\$0	\$0	\$34,111	\$2,399	\$0	\$122,492
21	B. Estimated	0	84,000	510	0	300	32,000	124,476	3,340	0	244,626
22											
23	C. Total	\$0	\$169,326	\$1,166	\$0	\$300	\$32,000	\$158,587	\$5,739	\$0	\$367,118
24											
25	<u>Standby Generation (D)</u>										
26	A. Actual	\$0	\$132,173	\$5,269	\$972	\$4,327	\$0	\$3,158,810	\$2,626	\$0	\$3,304,177
27	B. Estimated	0	131,491	4,404	1,525	2,321	0	2,695,885	2,306	0	2,837,931
28											
29	C. Total	\$0	\$263,664	\$9,672	\$2,497	\$6,648	\$0	\$5,854,695	\$4,932	\$0	\$6,142,108
30											
31	<u>Qualifying Facility (E)</u>										
32	A. Actual	\$0	\$461,900	\$906	\$16,108	\$0	\$0	\$0	\$1,324	\$0	\$480,238
33	B. Estimated	0	450,000	1,200	44,000	300	0	0	1,600	0	497,100
34											
35	C. Total	\$0	\$911,900	\$2,106	\$60,108	\$300	\$0	\$0	\$2,924	\$0	\$977,338
36											
37	<u>Conservation Program Admin (E)</u>										
38	A. Actual	\$0	\$720,892	\$160	\$184,815	\$57,599	\$0	\$0	\$94,392	\$0	\$1,057,857
39	B. Estimated	0	720,000	300	196,000	72,000	0	0	107,504	0	1,095,804
40											
41	C. Total	\$0	\$1,440,892	\$460	\$380,815	\$129,599	\$0	\$0	\$201,896	\$0	\$2,153,661
42	ECCR Program Costs	\$6,523,555	\$10,870,073	\$241,676	\$4,787,323	\$265,234	\$902,500	\$89,232,555	\$404,086	\$0	\$113,227,001

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Schedule of Capital Investment, Depreciation & Return
January - June 2022 Actuals
July - December 2022 Estimates

FPSC Docket No. 20220002-EG
Duke Energy Florida, LLC
Witness: Karla Rodriguez
Revised Exhibit No. ____ (KR-1P)
Schedule C-3
Page 3 of 5

Line No.	Program Demand (D) or Energy (E)	Beginning Balance	Act Jan-22	Act Feb-22	Act Mar-22	Act Apr-22	Act May-22	Act Jun-22	Est Jul-22	Est Aug-22	Est Sep-22	Est Oct-22	Est Nov-22	Est Dec-22	Total
1	Interruptible Service (D)														
2	Investments		\$0	\$0	\$0	\$651,385	\$0	\$0	\$119,800	\$99,800	\$115,800	\$59,900	\$59,900	\$59,900	\$1,166,485
3	Retirements		0	0	11,969	0	0	0	0	0	0	0	0	0	11,969
4	Depreciation Base		531,992	531,992	526,007	520,023	1,171,407	1,171,407	1,171,407	1,291,207	1,391,007	1,506,807	1,566,707	1,626,607	
5															
6	Depreciation Expense		8,867	8,867	8,767	8,667	19,524	19,524	19,524	21,521	23,184	25,114	26,112	27,111	216,782
7															
8	Cumulative Investment	531,992	531,992	531,992	520,023	1,171,407	1,171,407	1,171,407	1,291,207	1,391,007	1,506,807	1,566,707	1,626,607	1,686,507	1,686,507
9	Less: Accumulated Depreciation	80,234	89,101	97,968	94,766	103,433	122,957	142,481	162,005	183,526	206,710	231,824	257,936	285,047	285,047
10	Net Investment	451,758	442,891	434,024	425,257	1,067,974	1,048,450	1,028,926	1,129,202	1,207,481	1,300,097	1,334,883	1,368,671	1,401,460	1,401,460
11	Average Investment		447,324	438,457	429,640	746,615	1,058,212	1,038,688	1,079,064	1,168,342	1,253,789	1,317,490	1,351,777	1,385,066	
12	Return on Average Investment		2,804	2,748	2,693	4,680	6,634	6,512	6,764	7,324	7,860	8,259	8,474	8,682	73,434
13															
14	Program Total		\$11,671	\$11,615	\$11,460	\$13,347	\$26,158	\$26,036	\$26,288	\$28,845	\$31,044	\$33,373	\$34,586	\$35,793	\$290,216
	Check		0	1	0	0	(0)	(1)							

Line No.	Program Demand (D) or Energy (E)	Beginning Balance	Act Jan-22	Act Feb-22	Act Mar-22	Act Apr-22	Act May-22	Act Jun-22	Est Jul-22	Est Aug-22	Est Sep-22	Est Oct-22	Est Nov-22	Est Dec-22	Total
15	Residential Load Management Switches (D)														
16	Expenditures Booked Directly to Plant		\$241,382	\$113,495	\$249,606	\$14,611	\$125,299	\$2,203	\$425,000	\$425,000	\$425,000	\$425,000	\$425,000	\$425,000	\$3,296,596
17	Retirements		582,155	364,586	531,287	870,347	298,506	634,481	424,784	967,595	225,056	586,697	564,912	552,360	6,602,768
18	Investments Booked to CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0
19	Closings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
20	Amortization Base		29,066,979	28,834,990	28,500,549	28,049,339	27,479,523	27,138,328	26,610,898	26,339,709	26,168,383	26,187,506	26,036,701	25,903,065	
21															
22	Amortization Expense		484,459	480,593	475,019	467,498	458,001	452,315	443,524	439,004	436,148	436,467	433,954	431,726	5,438,708
23															
24	Cumulative Plant Investment	29,358,056	29,017,283	28,766,193	28,484,512	27,628,776	27,455,569	26,823,290	26,823,506	26,280,911	26,480,855	26,319,157	26,179,245	26,051,885	26,051,885
25	Less: Accumulated Depreciation	17,268,622	17,170,926	17,286,934	17,230,665	16,827,816	16,987,311	16,805,145	16,823,885	16,295,294	16,506,385	16,356,155	16,225,197	16,104,562	16,104,562
26	Cumulative CWIP Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Net Plant Investment	12,089,434	11,846,357	11,479,259	11,253,847	10,800,960	10,468,257	10,018,145	9,999,621	9,985,617	9,974,469	9,963,002	9,954,048	9,947,322	9,947,322
28	Average Investment		11,967,895	11,662,808	11,366,553	11,027,403	10,634,608	10,243,201	10,008,883	9,992,619	9,980,043	9,968,736	9,958,525	9,950,685	
29	Return on Average Investment		75,023	73,110	71,253	69,127	66,665	64,211	62,743	62,641	62,562	62,491	62,427	62,378	794,631
30															
31	Program Total		\$559,482	\$553,703	\$546,272	\$536,625	\$524,666	\$516,526	\$506,267	\$501,645	\$498,710	\$498,958	\$496,381	\$494,104	\$6,233,339
	Check		0	1	1	1	0	1							

Line No.	Program Demand (D) or Energy (E)	Beginning Balance	Act Jan-22	Act Feb-22	Act Mar-22	Act Apr-22	Act May-22	Act Jun-22	Est Jul-22	Est Aug-22	Est Sep-22	Est Oct-22	Est Nov-22	Est Dec-22	Total
32	Demand & Energy Summary														
33	Energy		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
34	Demand		571,153	565,318	557,732	549,972	550,824	542,562	532,555	530,490	529,754	532,331	530,967	529,897	\$6,523,555
35	Total Depreciation & Return		\$571,153	\$565,318	\$557,732	\$549,972	\$550,824	\$542,562	\$532,555	\$530,490	\$529,754	\$532,331	\$530,967	\$529,897	\$6,523,555

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

Line No.	Act Jan-22	Act Feb-22	Act Mar-22	Act Apr-22	Act May-22	Act Jun-22	Est Jul-22	Est Aug-22	Est Sep-22	Est Oct-22	Est Nov-22	Est Dec-22	Total
1 Beginning True-Up Amount (C3, Page 11, Lines 7 & 8)	(\$19,360,611)	(\$18,200,863)	(\$16,714,946)	(\$12,850,275)	(\$11,489,600)	(\$10,551,272)	(\$11,914,004)	(\$12,404,819)	(\$12,727,162)	(\$12,550,707)	(\$11,367,930)	(\$9,052,559)	
2 Ending True-Up Amount Before Interest (C3, Page 11, Lines 5,7-10)	(18,199,611)	(16,712,618)	(12,845,779)	(10,567,536)	(10,543,744)	(11,900,533)	(12,386,998)	(12,708,745)	(12,532,183)	(11,350,403)	(9,037,595)	(6,832,740)	
3 Total Beginning & Ending True-Up (Line 1 + Line 2)	(37,560,222)	(34,913,481)	(29,560,725)	(23,417,812)	(22,033,344)	(22,451,805)	(24,301,002)	(25,113,564)	(25,259,345)	(23,901,110)	(20,405,526)	(15,885,299)	
4 Average True-Up Amount (50% of Line 3)	(18,780,111)	(17,456,740)	(14,780,363)	(11,708,906)	(11,016,672)	(11,225,903)	(12,150,501)	(12,556,782)	(12,629,672)	(11,950,555)	(10,202,763)	(7,942,650)	
5 Interest Rate: First Day Reporting Business Month	0.08%	0.08%	0.24%	0.49%	0.52%	1.12%	1.76%	1.76%	1.76%	1.76%	1.76%	1.76%	1.76%
6 Interest Rate: First Day Subsequent Business Month	0.08%	0.24%	0.49%	0.52%	1.12%	1.76%	1.76%	1.76%	1.76%	1.76%	1.76%	1.76%	1.76%
7 Total (Line 5 & Line 6) (Line 5 + Line 6)	0.16%	0.32%	0.73%	1.01%	1.64%	2.88%	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%
8 Average Interest Rate (50% of Line 7)	0.080%	0.160%	0.365%	0.505%	0.820%	1.440%	1.760%	1.760%	1.760%	1.760%	1.760%	1.760%	1.760%
9 Interest Provision (Line 4 * Line 8) / 12	(\$1,252)	(\$2,328)	(\$4,496)	(\$4,927)	(\$7,528)	(\$13,471)	(\$17,821)	(\$18,417)	(\$18,524)	(\$17,527)	(\$14,964)	(\$11,649)	(\$132,904)

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

Line No.	Act Jan-22	Act Feb-22	Act Mar-22	Act Apr-22	Act May-22	Act Jun-22	Est Jul-22	Est Aug-22	Est Sep-22	Est Oct-22	Est Nov-22	Est Dec-22	Total
1	\$6,699,779	\$7,277,344	\$7,393,676	\$7,011,927	\$8,024,691	\$9,391,697	\$10,312,906	\$10,141,774	\$9,642,133	\$8,639,386	\$7,507,990	\$7,617,436	\$99,660,738
2	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	19,360,611
3	8,313,164	8,890,729	9,007,060	8,625,312	9,638,075	11,005,081	11,926,291	11,755,159	11,255,517	10,252,770	9,121,374	9,230,820	119,021,350
4	7,860,780	8,765,590	11,262,842	9,294,666	8,970,547	8,042,436	9,839,913	9,837,848	9,837,112	9,839,689	9,838,325	9,837,255	113,227,001
5	(452,384)	(125,139)	2,255,782	669,355	(667,528)	(2,962,645)	(2,086,378)	(1,917,311)	(1,418,405)	(413,081)	716,951	606,435	(5,794,348)
6	(1,252)	(2,328)	(4,496)	(4,927)	(7,528)	(13,471)	(17,821)	(18,417)	(18,524)	(17,527)	(14,964)	(11,649)	(132,904)
7	0	0	0	0	(917,137)	0	0	0	0	0	0	0	(917,137)
8	(19,360,611)	(18,200,863)	(16,714,946)	(12,850,275)	(10,572,463)	(10,551,272)	(11,914,004)	(12,404,819)	(12,727,162)	(12,550,707)	(11,367,930)	(9,052,559)	(19,360,611)
9	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	1,613,384	19,360,611
10	(\$18,200,863)	(\$16,714,946)	(\$12,850,275)	(\$10,572,463)	(\$10,551,272)	(\$11,914,004)	(\$12,404,819)	(\$12,727,162)	(\$12,550,707)	(\$11,367,930)	(\$9,052,559)	(\$6,844,389)	(\$6,844,389)

Note 1> Accounting adjustment due to the Company's implementation of a new customer connect system that resulted in Energy Management billing discrepancies.

Two issues were identified with load management credits on RSL-1 customer bills:

1. In Mar 2022, customers on heating and cooling system load management were credited on average \$8 versus \$5 on their bills.
2. From Jan to May 18, 2022, an incorrect non-fuel energy rate was used to calculate the cap on credit amounts.

Necessary fixes have been made in the customer connect system.

12 Month Period Ended December 2021
Results Below Feed: Schedule C-2 P1

	Forecast	Ratio	True-Up
62.23% Energy	8,373,108	62.23%	(4,259,355)
37.77% Demand	5,081,700	37.77%	(2,585,034)
	13,454,808	100.00%	(6,844,389)

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Calculation of ECCR Revenues
January 2023 - December 2023

Line No.	Month	Jurisdictional mWh Sales	Revenues
1	January	2,980,334	\$8,777,686
2	February	2,569,180	7,710,673
3	March	2,726,531	7,825,013
4	April	2,891,010	8,059,735
5	May	3,471,532	9,417,712
6	June	3,879,782	10,827,374
7	July	4,120,823	11,685,390
8	August	4,092,490	11,781,141
9	September	3,733,584	10,955,731
10	October	3,281,428	9,719,182
11	November	2,777,618	8,231,277
12	December	3,010,475	8,490,515
13	Total	39,534,786	\$113,481,430

Program Description and Progress

Program Title: Home Energy Check

Program Description: The Home Energy Check is a residential energy audit program that provides residential 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 the opportunity to inform customers about incentives and bill savings that may be available through DEF's energy efficiency and demand response programs, while also educating and encouraging customers to implement energy-saving practices.

Program Projections - January 2023 - December 2023: DEF estimates that 25,000 customers will participate in this program during the projection period. In addition, Assistance Kits will be available for up to 20,000 qualifying low-income customers through this program.

Program Fiscal Costs - January 2023 - December 2023: Costs for this program are projected to be \$4,760,883.

Program Progress Summary: As of June 30, 2022, 16,420 customers have participated in this program this year. DEF will continue to inform customers about cost effective energy efficiency measures that will provide savings through this Program.

Program Description and Progress

Program Title: Residential Incentive Program

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

Program Projections - January 2023 - December 2023: DEF estimates that 14,379 completions will be performed through this program during the projection period.

Program Fiscal Costs - January 2023 - December 2023: Costs for this program are projected to be \$4,539,440.

Program Progress Summary: As of June 30, 2022, DEF has provided incentives to customers for a total of 4,328 measure installations.

Program Description and Progress

Program Title: Neighborhood Energy Saver Program

Program Description: The Neighborhood Energy Saver Program is designed to assist customers in selected neighborhoods where approximately 50% of the households have incomes equal to or less than 200% of the poverty level as established by the U.S. Government. DEF or a third-party contractor directly installs energy conservation measures, identified through an energy assessment, in customer homes to increase energy efficiency. Customers also receive a comprehensive package of energy education materials which inform them on ways to better manage their energy usage. The energy conservation measures are installed, and energy efficiency education is provided at no cost to the participants.

Program Projections - January 2023 - December 2023: DEF's projections assume that energy conservation measures will be installed in 5,250 homes. Consistent with terms of the Memo of Understanding included in DEF's 2021 Rate Settlement Agreement (see Order No. PSC-2021-0202-AS-EI), the projection includes the targeted increase of 5% or 250 homes above the projected participation included in DEF's 2020 Program Plan.

Program Fiscal Costs for January 2023 - December 2023: Costs for this program are projected to be \$5,817,805.

Program Progress Summary: As of June 30, 2022, DEF has installed measures on 2,256 homes.

Program Description and Progress

Program Title: Low-Income Weatherization Assistance Program

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

Program Projections - January 2023 - December 2023: It is estimated that energy efficiency weatherization measures will be installed on approximately 244 residential homes.

Program Fiscal Costs - January 2023 - December 2023: Costs for this program are projected to be \$481,087.

Program Progress Summary: As of June 30, 2022, measures have been installed on 60 homes through this program. DEF continues to work to engage with the weatherization agencies and recently added Rebuild Tampa Bay to the list of agencies participating in the program.

Program Description and Progress

Program Title: Load Management Program (Residential & Commercial)

Program Description: The Residential Load Management Program (a/k/a EnergyWise) is a voluntary program that incorporates direct control of selected customer equipment to reduce system demand during winter and summer peak capacity periods and/or emergency conditions by temporarily interrupting selected customer appliances for specified periods of time. Residential customers have a choice of options and receive a credit on their monthly electric bills depending on the load control options selected and their monthly kWh usage. The Commercial program was closed to new participants as of July 20, 2000. During 2021, this program provided approximately 667 MWs of winter and 392 MWs of summer peak-shaving capacity during high load periods. Approximately 434,000 customers participated in the program.

Program Projections - January 2023 - December 2023: During this period, DEF anticipates adding 2,500 new participants to this program.

Program Fiscal Costs - January 2023 - December 2023: Program costs during this period are projected to be \$38,877,746.

Program Progress Summary: Through June 30, 2022, DEF added a total of 369 new participants to this program. DEF continues to seek opportunities to increase participation in the program.

Program Description and Progress

Program Title: Business Energy Check Program

Program Description: The Business Energy Check Program provides no-cost energy audits at non-residential facilities. This program acts as a motivational tool to identify, evaluate, and inform consumers about cost-effective, energy saving measures that can be installed at their facility. The Business Energy Check Program serves as the foundation for the Better Business Program.

Program Projections - January 2023 - December 2023: It is estimated that 400 customers will participate in this program during the projection period.

Program Fiscal Costs - January 2023 - December 2023: Costs for this program are projected to be \$736,298.

Program Progress Summary: As of June 30, 2022, DEF has performed a total of 60 commercial audits.

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 insulation, duct leakage and repair, demand-control ventilation, high efficiency energy recovery ventilation and HVAC-optimization-qualifying measures.

Program Projections - January 2023 - December 2023: DEF's 2023 projected costs are based on the measures and projected participation included in the 2020 Program Plan and include approximately \$605,000 in incentives to customers.

Program Fiscal Costs - January 2023 - December 2023: Costs for this program are projected to be \$2,072,098.

Program Progress Summary: As of June 30, 2022, DEF has provided \$193,313 in incentives to 96 customers through this program and expects to provide an additional \$480,000 through year-end.

Program Description and Progress

Program Title: Smart \$aver Custom Incentive Program (f/k/a Florida Custom Incentive Program)

Program Description: The Smart \$aver Custom Incentive Program is designed to encourage customers to make capital investments for energy efficiency measures which reduce peak KW and provide energy savings. This program provides incentives for individual custom projects, which are cost effective, but not otherwise addressed through DEF's prescriptive 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 Projections - January 2023 - December 2023: DEF estimates that 60 customers will participate in the program during the projection period.

Program Fiscal Costs - January 2023 - December 2023: Costs for this program are projected to be \$590,129.

Program Progress Summary: As of June 30, 2022, no customers have participated in this program. However, continued evaluation of measures is taking place for participation.

Program Description and Progress

Program Title: Standby Generation

Program Description: The Standby Generation Program is a demand control program that is designed to reduce DEF's system demand based on control of customer equipment. It is a voluntary program available to commercial and industrial customers who have on-site generation capability and are willing to reduce their DEF demand when necessary. This program is offered to customers through DEF's General Service Load Management-2 (GSLM-2) rate schedule.

Program Projections - January 2023 - December 2023: DEF estimates that 6 new installations will be completed during the projection period.

Program Fiscal Costs - January 2023 - December 2023: Expenses for this program are projected to be \$5,775,310.

Program Progress Summary: As of June 30, 2022, there are currently a total of 185 accounts participating in this program.

Program Description and Progress

Program Title: Interruptible Service

Program Description: Interruptible Service is a direct load control DSM program in which customers contract to allow DEF to interrupt their electrical service during times of capacity shortages during peak or emergency conditions. In return, customers receive a monthly credit on their bill based on their monthly peak demand.

Program Projections - January 2023 - December 2023: 3 new accounts are estimated to sign up for this program during the projection period.

Program Fiscal Costs - January 2023 - December 2023: Costs for this program are projected to be \$48,567,597.

Program Progress Summary: As of June 30, 2022, there are currently a total of 175 accounts participating in this program.

Program Description and Progress

Program Title: Curtailable Service

Program Description: Curtailable Service is an indirect load control DSM program in which customers contract to curtail or reduce a portion of their electric load during times of capacity shortages. The curtailment is managed by the customer when notified by DEF. In return, customers receive a monthly rebate for the curtailable portion of their load.

Program Projections - January 2023 - December 2023: DEF is projecting to add 1 new participant during the projection period.

Program Fiscal Costs - January 2023 - December 2023: Costs for this program are projected to be \$2,921,327.

Program Progress Summary: As of June 30, 2022, there are 4 customers participating in this program.

Program Description and Progress

Program Title: Technology Development

Program Description: The Technology Development Program allows DEF to investigate technologies that support the development of cost-effective demand reduction and energy efficiency programs.

Program Projections - January 2023 - December 2023: DEF has partnered with various research organizations including, the University of South Florida (USF), the University of Central Florida (UCF) and the Electric Power Research Institute (EPRI) to evaluate energy efficiency, energy storage, demand response, and smart-charging technologies. Several research projects associated with these four focus areas will continue and/or launch in 2023:

- Energy Management Circuit Breakers
- Smart Charging for Electric Transportation
- Smart Appliances for Demand Response (CTA-2045)
- USF Renewable Energy Storage
- Persistent Wi-Fi for Demand Side Management
- UCF Long Duration Energy Storage
- Home Energy Management System Demand Response
- Residential Energy Storage Demand Response
- EPRI programs (energy efficiency, energy storage, integration of renewable resources, electric transportation infrastructure)
- Vehicle to Grid Pilot

Program Fiscal Costs - January 2023 - December 2023: Costs for this program are projected to be \$800,000.

Program Progress Summary: The following provides a summary of projects that DEF is currently supporting through this program:

- Energy Management Circuit Breaker (EMCB) Project: This project will continue to explore the potential for developing a Florida program for customer circuit breakers that include communication, metering and remote operation for potential applications including energy efficiency, demand response and integration of distributed energy resources. A field pilot consisting of 10 customer homes was installed and operational data was collected from appliances. In 2020, DEF

Program Description and Progress

upgraded the EMCB hardware to new commercial grade units and upgraded the communications path to prepare for large-scale implementation by the vendor. This upgrade is giving DEF the opportunity to test units and infrastructure that could be implemented in large scale. We will continue to test smart breaker applications including smart breakers that have electric vehicle charging capabilities in 2023. DEF will document the operation of these breakers and assess the cost-effectiveness for potential EE and DR programs.

- Smart Charging for Electric Transportation: Testing includes analysis of residential and public charging, vehicle charging programs and Electric Vehicle Supply Equipment (EVSE) control technology.
- Smart Appliance Demand Response Project: The CTA-2045 standard provides for a modular communications interface to residential appliances for demand management. CTA-2045 (EcoPort) also provides standard signals for DSM to control appliances. DEF, in partnership with EPRI, tested: CTA-2045 thermostats, heat pump water heaters, electric water heaters, pool pump/timers and electric vehicle chargers. DEF also tested retrofit devices that could bring the features of CTA-2045 to existing appliances including water heaters, pool pumps, and electric vehicle chargers. The functionality and commercialization of devices utilizing this standard are being verified in field demonstrations for potential program development. In 2023, the testing of CTA-2045 equipped appliances will include local control through Home Energy Management Systems.
- USF Renewable Energy Storage System: This project will evaluate the use of a customer-sited energy storage system and a solar photovoltaic (PV) installation to renewably control customer demand, including high demand spikes from fast electric vehicle charging. DEF will also determine the feasibility of a potential DSM program using the solar and energy storage systems. The renewable energy storage system will also have the capability to supply loads during a prolonged utility outage (due to storms, etc.). This project has an online dashboard that is open to the public and provides solar, energy storage and load data (<https://dashboards.epri.com/duke-usfsp-parking>).
- Persistent Wi-Fi for Demand Side Management Project: This project will design and test hardware and software to enable persistent connection of utility demand response equipment utilizing customer-provided internet connection in a secure Wi-Fi configuration.

Program Description and Progress

- **UCF Long-Duration Energy Storage Project:** This project is a collaboration with UCF to document the value of long duration customer-side energy storage systems. Long duration energy storage (4 hours+) may be best achieved by employing technologies other than Lithium Ion. This project is using the technology at UCF's Microgrid Control lab to directly test a long duration vanadium flow battery energy storage system in multiple use cases, including integration of solar PV, operation, and control of smart building loads for demand response and study of battery performance.
- **Home Energy Management for Energy Efficiency and Demand Response:** This project will develop software, firmware and applications for a Smart Home Gateway that will enable demand response. The Smart Home Gateway currently includes processing and communications capabilities to perform on-site operations including receiving energy data from the AMI meter. DEF plans to develop local control integration with CTA-2045 (EcoPort) appliances and the Eaton Energy Management Circuit Breaker (EMCB) to test water heater, pool pump, electric vehicle service equipment and thermostats demand response. DEF also plans to develop bindings to control common IoT devices, such as commonly available thermostats, lighting, smart plugs, etc. Demand response capabilities will be developed using the CTA-2045 and Open ADR protocols. DEF will document this project for a potential Energy Efficiency and Demand Response Program.
- **Residential Energy Storage Demand Response:** This project will test the potential for Demand Response from Residential Energy Storage Systems commonly integrated with Solar PV Renewable Energy Systems. This project will utilize a Demand Response Aggregator to control a group of volunteer customers' energy storage systems during demand response events. This project's goals are to quantify the capability of these energy storage systems to provide demand response, verify the ability of the Aggregator to control these energy storage resources and study the customer experience of participating in demand response events. The results of this study will inform the feasibility of utilizing residential energy storage systems to support a residential demand response program.
- **Vehicle to Grid Pilot:** This project will test the capabilities of electric vehicles to supply the grid with demand response and provide backup power to homes during outages. A particular emphasis will be to evaluate potential interaction with other customer owned Distributed Energy Resources (DER) such as rooftop solar.

Program Description and Progress

Program Title: Qualifying Facility

Program Description: This program supports the costs to administer and facilitate the interconnection and purchase of as-available energy and firm energy and capacity from qualifying facilities (QFs), including those that utilize renewable sources and distributed energy resources.

Program Projections - January 2023 - December 2023: DEF, on behalf of its customers, will continue to engage with interested parties wanting to provide cogeneration, renewable, or distributed resource, (DR) power to DEF. Discussions are expected to include potential projects, designs, commitments, grid access, and the Florida Public Service Commission's QF rules with renewable, energy storage, and combined heat and power parties. DEF expects most parties to explore renewable small power production and options to transact with DEF as the technologies advance, markets and incentives remain in place, technology costs decline, technology accessibility becomes common, and natural gas prices remain volatile or increase. DEF expects that the number of potential QFs that engage the company will remain steady for 2023; therefore, DEF requires planning, forecasting, screening techniques and robust QF business practices as the size and number of QFs and DRs continues to evolve. For example, DEF will engage in continued research and analytics to support grid interconnections, good faith and non-discriminatory contract negotiations, system impact studies and thorough state jurisdictional interconnection processes. DEF will attempt to monitor the existing potential QFs under development inside DEF's balancing authority for: land control, permitting, interconnection and/or transmission study progress, construction, financing, insurance, and performance. DEF will continue to prudently administer all executed and in-service QF contracts for compliance and defend, on behalf of its customers, against all disputes or claims originating from QFs/DRs. Finally, DEF will unwind, coordinate, and engage with one existing natural gas-fired cogeneration QF, since this contract is expiring at the end of 2023.

Program Fiscal Costs - January 2023 - December 2023: Costs for this program are projected to be \$1,068,800.

Program Progress Summary: For 2022, DEF has approximately 412 MW under firm wholesale purchase contracts from in-service QFs and 6 non-firm as-available energy QF contracts. The total firm capacity from cogeneration facilities is 334 MW and the total firm capacity from renewable facilities is 78 MW. Approximately 34 MW of renewables, on average are delivering energy to the company under DEF's non-firm COG-1 tariff contract. DEF continues to monitor the potential COG-1 renewable QFs that are under

Program Description and Progress

development in its balancing authority. DEF is managing over 4,100 MW as of June 2022 of renewables/distributed energy resources in its state and FERC jurisdictional generation interconnection queues. Further, DEF continues to prudently administer all in-service QF contracts for compliance and potential new contract negotiations underpinned by DEF's most current full avoided cost, on behalf of its customers.

**Duke Energy Florida
Energy Conservation Cost Recovery
January 2022 - December 2022
Approved Capital Structure and Cost Rates**

FPSC Docket No. 20220002-EG
Duke Energy Florida, LLC
Witness: Karla Rodriguez
Revised Exhibit No. ___(KR-1P)
Schedule C-6
Page 1 of 2

	(1)	(2)	(3)	(4)	(5)	(6)
	Jurisdictional Rate Base Adjusted Retail (\$000s)	Cap Ratio	Cost Rate	Weighted Cost	Revenue Requirement Rate	Monthly Revenue Requirement Rate
1 Common Equity	\$ 7,191,027	44.08%	9.85%	4.34%	5.81%	0.4842%
2 Long Term Debt	6,202,596	38.02%	4.14%	1.57%	1.57%	0.1308%
3 Short Term Debt	173,823	1.07%	0.45%	0.00%	0.00%	0.0000%
4 Cust Dep Active	166,911	1.02%	2.47%	0.03%	0.03%	0.0025%
5 Cust Dep Inactive	1,519	0.01%			0.00%	0.0000%
6 Invest Tax Cr	200,576	1.23%	7.21%	0.09%	0.11%	0.0092%
7 Deferred Inc Tax	2,376,787	14.57%			0.00%	0.0000%
8 Total \$	16,313,240	100.00%		6.03%	7.52%	0.6267%

	ITC split between Debt and Equity**:	Ratio	Cost Rate	Ratio	Ratio	ITC	Weighted ITC	After Gross-up	
9	Common Equity	7,191,027	54%	9.9%	5.29%	73.4%	0.09%	0.0660%	0.088%
10	Preferred Equity	-	0%				0.09%	0.0000%	0.000%
11	Long Term Debt	6,202,596	46%	4.14%	1.92%	26.6%	0.09%	0.0240%	0.024%
12		13,393,624	100%		7.21%			0.0900%	0.112%

Breakdown of Revenue Requirement Rate of Return between Debt and Equity:

13	Total Equity Component (Lines 1 and 9)	5.898%
14	Total Debt Component (Lines 2, 3, 4, and 11)	1.624%
15	Total Revenue Requirement Rate of Return	7.522%

Notes:

Effective Tax Rate: 25.345%

Column:

- (1) Per Order No. PSC-2020-0165-PAA-EU, issued May 20, 2020, approving amended joint motion modifying WACC methodology
- (2) Column (1) / Total Column (1)
- (3) Per Order No. PSC-2020-0165-PAA-EU, issued May 20, 2020, approving amended joint motion modifying WACC methodology
Line 6 and Line 12, the cost rate of ITC's is determined under Treasury Regulation section 1.46-6(b)(3)(ii).
- (4) Column (2) x Column (3)
- (5) For equity components: Column (4) / (1-effective income tax rate/100)
- * For debt components: Column (4)
- ** Line 6 is the pre-tax ITC components from Lines 9 and 11
- (6) Column (5) / 12

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

FPSC Docket No. 20220002-EG
Duke Energy Florida, LLC
Witness: Karla Rodriguez
Revised Exhibit No. ___(KR-1P)
Schedule C-6
Page 2 of 2

	(1)	(2)	(3)	(4)	(5)	(6)
	Jurisdictional Rate Base Adjusted Retail (\$000s)	Cap Ratio	Cost Rate ***	Weighted Cost	Revenue Requirement Rate	Monthly Revenue Requirement Rate
1 Common Equity	\$ 7,789,166	44.42%	10.10%	4.49%	6.01%	0.5008%
2 Long Term Debt	6,866,328	39.15%	4.06%	1.59%	1.59%	0.1325%
3 Short Term Debt	49,998	0.29%	0.90%	0.00%	0.00%	0.0000%
4 Cust Dep Active	165,599	0.94%	2.47%	0.02%	0.02%	0.0017%
5 Cust Dep Inactive	1,507	0.01%			0.00%	0.0000%
6 Invest Tax Cr	287,202	1.64%	7.27%	0.12%	0.15%	0.0125%
7 Deferred Inc Tax	2,377,124	13.55%			0.00%	0.0000%
8 Total \$	17,536,925	100.00%		6.22%	7.77%	0.6475%

	ITC split between Debt and Equity**:	Ratio	Cost Rate	Ratio	Ratio	ITC	Weighted ITC	After Gross-up	
9	Common Equity	7,789,166	53%	10.1%	5.37%	73.8%	0.12%	0.0886%	0.119%
10	Preferred Equity	-	0%				0.12%	0.0000%	0.000%
11	Long Term Debt	6,866,328	47%	4.06%	1.90%	26.2%	0.12%	0.0314%	0.031%
12	ITC Cost Rate	14,655,494	100%		7.27%			0.1200%	0.150%

	<u>Breakdown of Revenue Requirement Rate of Return between Debt and Equity:</u>	
13	Total Equity Component (Lines 1 and 9)	6.129%
14	Total Debt Component (Lines 2, 3 , 4 , and 11)	1.641%
15	Total Revenue Requirement Rate of Return	7.770%

Notes:

Effective Tax Rate: 25.345%

Column:

- (1) Per Order No. PSC-2020-0165-PAA-EU, issued May 20, 2020, approving amended joint motion modifying WACC methodology
- (2) Column (1) / Total Column (1)
- (3) Per Order No. PSC-2020-0165-PAA-EU, issued May 20, 2020, approving amended joint motion modifying WACC methodology
Line 6 and Line 12, the cost rate of ITC's is determined under Treasury Regulation section 1.46-6(b)(3)(ii).
- (4) Column (2) x Column (3)
- (5) For equity components: Column (4) / (1-effective income tax rate/100)
- * For debt components: Column (4)
- ** Line 6 is the pre-tax ITC components from Lines 9 and 11
- (6) Column (5) / 12

*** Consistent with Par. 2.b. in DEF's 2021 Settlement approved in FPSC Order No. PSC-2021-0202-AS-EI, the cost rate on common equity has been increased by 25 basis points to 10.10%