Gunster

March 7, 2025

Writer's E-Mail Address: bkeating@gunster.com

VIA E-PORTAL

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

Re: Docket NO. 20250000-OT

Dear Mr. Teitzman:

Attached for electronic filing on behalf of Florida Public Utilities Company, please find the Company's corrected Annual Conservation Report, filed in accordance with Rule 25-17.0021(5), F.A.C .

Should you have any questions whatsoever, please do not hesitate to contact me. Thank you for your assistance in this matter.

Sincerely,

/s/*Beth Keating*
Beth Keating
Gunster, Yoakley & Stewart, P.A.
215 South Monroe St., Suite 618
Tallahassee, FL 32301
(850) 521-1706

MEK
Cc://(Barrett)

2024 ANNUAL CONSERVATION REPORT

Florida Public Utilities Company

Revised March 7, 2025

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1 Introduction

This document presents Florida Public Utilities Company's (FPUC) annual report on demand-side management (DSM) activities, detailing actual results achieved for its approved 2024 DSM goals in compliance with 25-17.0021 (5) FAC. FPUC's conservation goals, established in 2014 and approved under Order No. PSC-14-0696-FOF-EU (December 29, 2014), serve as the benchmark for evaluating 2024 performance. The company's 2015 DSM Plan, designed to meet these goals, introduced significant program changes, which were implemented following the approval of Consummating Order No. PSC-15-0326-PAA-EG (August 11, 2015).

2 Comparison to 2014 Goals

Tables 2-1 through 2-6 summarize FPUC's 2024 demand and energy conservation savings for residential, commercial/industrial, and total categories, comparing them to the 2014 goals at both the generator and meter. Order No. PSC-14-0696-FOF-EU specifies goals only at the generator level. For Tables 2-4 through 2-6, meter-level goals are adjusted for losses. Detailed performance of individual programs is provided in Section 3.0.

Table 2-1 Residential Class Programs (At the Generator)

Year	Winter Peak (MW) Reduction			Summer Peak (MW) Reduction			GWh Energy Reduction		
	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance
2011	0.470	0.130	265.12%	0.770	0.200	285.59%	1.650	0.510	224.22%
2012	0.350	0.130	159.58%	0.540	0.200	167.39%	1.160	0.510	127.48%
2013	0.390	0.130	197.50%	0.630	0.200	212.53%	1.340	0.510	163.45%
2014	0.430	0.130	230.77%	0.680	0.200	240.00%	1.480	0.510	190.20%
2015	0.428	0.012	3464.61%	0.756	0.036	2000.46%	1.459	0.023	6245.17%
2016	0.263	0.015	1655.35%	0.462	0.046	903.69%	0.894	0.030	2879.31%
2017	0.248	0.018	1279.48%	0.440	0.056	686.59%	0.849	0.038	2134.26%
2018	0.225	0.022	920.68%	0.399	0.067	495.88%	0.769	0.045	1608.60%
2019	0.107	0.025	428.00%	0.188	0.078	241.03%	0.387	0.053	730.38%
2020	0.142	0.028	507.86%	0.253	0.089	283.43%	0.488	0.060	812.74%
2021	0.095	0.031	307.28%	0.167	0.099	168.98%	0.3177	0.067	474.21%
2022	0.101	0.034	297.05%	0.174	0.107	162.62	0.3196	0.073	437.80%
2023	0.058	0.036	161.88%	0.098	0.117	83.37%	0.190	0.078	243.29%
2024	0.056	0.039	144.46%	0.096	0.123	77.95%	0.185	0.084	220.20%

Table 2-2 Commercial/Industrial Class Programs (At the Generator)

Year	Winter Peak (MW) Reduction			Summer Peak (MW) Reduction			GWh Energy Reduction		
	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance
2011	0.080	0.060	39.40%	0.120	0.230	-46.67%	0.410	0.780	-47.07%
2012	0.050	0.060	-23.36%	0.070	0.230	-69.44%	0.200	0.780	-74.20%
2013	0.040	0.060	-31.92%	0.060	0.230	-72.60%	0.180	0.780	-77.26%
2014	0.130	0.060	116.67%	0.200	0.230	-13.04%	0.700	0.780	-10.25%
2015	0.002	0.010	-78.20%	0.004	0.012	-67.00%	0.008	0.055	-86.28%
2016	0.039	0.008	389.50%	0.072	0.027	165.74%	0.143	0.078	82.71%
2017	0.000	0.009	-100.00%	0.000	0.031	-100.00%	0.000	0.094	-100.00%
2018	0.000	0.018	-100.00%	0.043	0.039	9.15%	0.109	0.115	-5.56%
2019	0.000	0.018	-100.00%	0.010	0.045	-77.56%	0.0269	0.148	-81.79%
2020	0.001	0.018	-93.94%	0.018	0.052	-65.42%	0.0442	0.168	-73.70%
2021	0.002	0.018	-88.88%	0.004	0.058	-93.10%	0.0073	0.182	-95.98%
2022	0.000	0.027	-100.00%	0.000	0.058	-100.00%	0.0000	0.202	-100.00%
2023	0.000	0.027	-100.00%	0.000	0.065	-100.00%	0.0000	0.202	-100.00%
2024	0.006	0.027	20.75%	0.011	0.071	15.80%	0.0028	0.229	9.96%

Table 2-3 Total Savings Across All Programs and Classes (At the Generator)

Year	Winter Peak (MW) Reduction			Summer Peak (MW) Reduction			GWh Energy Reduction		
	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance
2011	0.560	0.190	193.84%	0.890	0.430	107.87%	2.070	1.290	60.18%
2012	0.380	0.190	101.65%	0.610	0.430	40.70%	1.360	1.290	5.50%
2013	0.430	0.190	125.06%	0.690	0.430	60.02%	1.520	1.290	17.90%
2014	0.560	0.190	194.74%	0.890	0.430	106.98%	2.180	1.290	68.99%
2015	0.430	0.022	1854.24%	0.760	0.057	1233.55%	1.467	0.078	1780.69%
2016	0.302	0.023	1215.05%	0.533	0.073	630.75%	1.036	0.108	859.54%
2017	0.248	0.027	819.65%	0.440	0.087	406.31%	0.849	0.132	543.20%
2018	0.225	0.040	461.38%	0.442	0.106	316.80%	0.877	0.160	448.42%
2019	0.107	0.043	248.84%	0.198	0.123	160.98%	0.414	0.201	206.00%
2020	0.143	0.046	311.50%	0.271	0.141	192.54%	0.532	0.228	233.26%
2021	0.097	0.049	198.48%	0.171	0.157	109.10%	0.325	0.249	130.52%
2022	0.101	0.061	167.55%	0.174	0.169	129.44%	0.3196	0.275	116.21%
2023	0.580	0.063	92.50%	0.098	0.182	53.60%	0.190	0.293	64.77%
2024	0.062	0.066	93.85%	0.107	0.194	55.20%	0.188	0.313	60.06%

*Total Achieved Energy of .188 GWh and the 60.06 % Variance has been revised to show the correct summation of the combined GWh savings from Residential (.185) and Commercial (.0028) programs in 2024.

Table 2-4 Residential Class Programs (At the Meter)

Year	Winter Peak (MW) Reduction			Summer Peak (MW) Reduction			GWh Energy Reduction		
	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance
2011	0.450	0.110	323.30%	0.740	0.200	268.14%	1.580	0.480	227.76%
2012	0.320	0.110	192.90%	0.510	0.200	155.29%	1.110	0.480	130.75%
2013	0.370	0.110	235.68%	0.600	0.200	198.39%	1.280	0.480	167.24%
2014	0.410	0.110	272.73%	0.650	0.200	225.00%	1.420	0.480	195.83%
2015	0.390	0.011	3463.73%	0.689	0.033	2000.30%	1.416	0.022	6245.22%
2016	0.240	0.014	1654.92%	0.421	0.042	903.61%	0.867	0.029	2879.33%
2017	0.226	0.016	1279.14%	0.401	0.051	686.53%	0.824	0.037	2134.28%
2018	0.205	0.020	920.43%	0.364	0.061	495.84%	0.746	0.044	1608.61%
2019	0.118	0.023	513.04%	0.206	0.071	29.01%	0.399	0.048	831.58%
2020	0.128	0.024	536.25%	0.231	0.084	275.12%	0.473	0.055	859.98%
2021	0.086	0.028	307.28%	0.151	0.089	168.98%	0.286	0.060	474.21%
2022	0.091	0.031	293.54%	0.157	0.152	153.59%	0.288	0.066	436.36%
2023	0.053	0.032	145.92%	0.088	0.152	75.15%	0.171	0.066	219.30%
2024	0.051	0.035	130.22%	0.086	0.111	70.27%	0.167	0.076	198.49%

Table 2-5 Commercial/Industrial Class Programs (At the Meter)

Year	Winter Peak (MW) Reduction			Summer Peak (MW) Reduction			GWh Energy Reduction		
	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance
2011	0.080	0.050	52.10%	0.120	0.200	-41.81%	0.390	0.750	-47.45%
2012	0.040	0.050	-12.20%	0.070	0.200	-65.00%	0.190	0.750	-74.39%
2013	0.040	0.050	-22.00%	0.060	0.200	-71.52%	0.170	0.750	-77.42%
2014	0.120	0.050	140.00%	0.190	0.200	-5.00%	0.670	0.750	-10.67%
2015	0.002	0.009	-78.27%	0.004	0.011	-67.07%	0.007	0.053	-86.28%
2016	0.036	0.007	389.30%	0.065	0.025	166.17%	0.138	0.076	82.71%
2017	0.000	0.008	-100.00%	0.000	0.028	-100.00%	0.000	0.091	-100.00%
2018	0.000	0.016	-100.00%	0.039	0.036	10.14%	0.105	0.112	-5.56%
2019	0.000	0.017	-100.00%	0.010	0.041	-73.43%	0.003	0.135	-79.41%
2020	0.001	0.017	-94.18%	0.016	0.047	-65.3%	0.043	0.152	-71.80%
2021	0.002	0.016	-87.50%	0.004	0.052	-76.92%	0.007	0.164	-95.73%
2022	0.000	0.024	-100.00%	0.000	0.052	-100.00%	0.000	0.182	-100.00%
2023	0.000	0.027	-100.00%	0.000	0.065	-100.00%	0.000	0.202	-100.00%
2024	0.005	0.024	15.80%	0.010	0.064	20.80%	0.021	0.175	9.96%

Table 2-6 Total Savings Across All Programs and Classes (At the Meter)

Year	Winter Peak (MW) Reduction			Summer Peak (MW) Reduction			GWh Energy Reduction		
	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance
2011	0.530	0.160	237.79%	0.850	0.410	105.81%	1.970	1.230	60.99%
2012	0.370	0.160	128.80%	0.580	0.410	40.91%	1.300	1.230	5.67%
2013	0.410	0.160	155.16%	0.650	0.410	59.45%	1.450	1.230	18.06%
2014	0.540	0.160	237.50%	0.850	0.410	107.32%	2.090	1.230	69.92%
2015	0.392	0.020	1853.73%	0.692	0.052	1233.44%	1.423	0.076	1780.70%
2016	0.275	0.021	1214.70%	0.486	0.067	630.86%	1.005	0.105	859.55%
2017	0.226	0.025	819.42%	0.401	0.079	406.27%	0.824	0.128	543.20%
2018	0.205	0.036	461.24%	0.403	0.097	317.14%	0.851	0.155	448.43%
2019	0.118	0.039	303.56%	0.216	0.112	192.86%	0.426	0.183	233.30%
2020	0.129	0.041	316.32%	0.247	0.128	193.28%	0.515	0.207	249.20%
2021	0.088	0.044	200.00%	0.154	0.142	108.45%	0.293	0.224	130.54%
2022	0.091	0.044	206.81%	0.157	0.142	110.56%	0.288	0.224	128.57 %
2023	0.053	0.063	92.50%	0.088	0.182	53.60%	0.171	0.264	58.38 %
2024	0.970	0.063	92.50%	0.097	0.180	53.60%	0.187	0.282	58.38 %

Summary of FPUC's 2024 DSM Goal Performance

Residential programs continued to perform well, achieving **144.46%** of their winter demand goal and **220.20%** of their energy savings goal, though summer demand lagged at **77.95%**. Meanwhile, commercial programs remained significantly under target, achieving only **15.80%** of their summer demand goal, **20.75%** of their winter demand goal, and just **9.96%** of their energy savings goal. The combined total for both sectors resulted in **55.20%** of the summer demand goal, **93.85%** of the winter demand goal, and **66.38%** of the energy savings goal. While residential performance drove overall results, commercial program underperformance continues to be a major challenge

3 Existing Programs and 2014 Goals

FPUC's 2015 Demand-Side Management Plan was approved in August 2015. Under this plan, FPUC implemented the following programs.

- Residential Energy Survey
- Residential Heating and Cooling Upgrade
- Commercial Heating and Cooling Upgrade
- Commercial Chiller
- Commercial Reflective Roof

Tables 3-1 through 3-7 present the performance for each of the programs.

Table 3-1 Residential Energy Survey Current Participation and Expected Future Savings

Year	Number of Customers	Number of Eligible Customers	Annual Program Participants	Cumulative Program Participants	Total Penetration Level
2015	23,284	23,284	354	354	1.52%
2016	23,335	23,335	280	634	2.72%
2017	23,387	23,387	180	814	3.48%
2018	23,513	23,513	148	962	4.09%
2019	23,639	23,639	123	1085	4.58%
2020	24,573	24,573	83	1168	4.75%
2021	25,299	25,299	108	1276	5.04%
2022	25,565	25,565	74	1,350	5.28%
2023	25,738	25,738	154	1,504	5.84%
2024	25,996	25,996	120	1,624	6.24%

Year	Actual/ Projected Participants	Reduction Per Installation			Total Annual Reduction		
		kWh	Winter kW	Summer kW	kWh	Winter kW	Summer kW
At The Meter							
2015	354	141	0.057	0.049	50,065	20	17
2016	280	141	0.057	0.049	39,599	16	14
2017	180	141	0.057	0.049	25,457	10	9
2018	148	141	0.057	0.049	20,931	8	7
2019	123	141	0.057	0.049	17,343	7	6
2020	83	141	0.057	0.049	11,703	4.7	4.1
2021	108	141	0.057	0.049	15,228	6.1	5.2
2022	74	141	0.057	0.049	10,434	4.3	3.6
2023	154	141	0.057	0.049	21,714	8.778	7.5
2024	120	141	0.057	0.049	16,920	6.84	5.88
At The Generator							
2015	354	146	0.063	0.054	51,613	22	19
2016	280	146	0.063	0.054	40,824	18	15
2017	180	146	0.063	0.054	26,244	11	10
2018	148	146	0.063	0.054	21,578	9	8
2019	123	146	0.063	0.054	17,985	8	7
2020	83	146	0.063	0.054	12,118	5.2	4.5
2021	108	146	0.063	0.054	15,768	6.8	5.8
2022	74	146	0.063	0.054	10,804	4.7	4.0
2023	154	146	0.063	0.054	22,484	9.7	8.3
2024	120	146	0.063	0.054	17,520	7.56	6.48

Table 3-2 Residential Heating & Cooling Upgrade Current Participation and Expected Future Savings

Year	Number of Customers	Number of Eligible Customers	Annual Program Participants	Cumulative Program Participants	Total Penetration Level
2015	23,284	23,284	373	373	1.60%
2016	23,335	23,335	226	599	2.57%
2017	23,387	23,387	218	817	3.49%
2018	23,513	23,513	198	1015	4.32%
2019	23,639	23,639	101	1116	4.72%
2020	24,573	24,573	126	1242	5.05%
2021	25,299	25,299	90	1332	3.56%
2022	25,565	25,565	92	1424	5.57%
2023	25,738	25,738	50	1,474	5.72%
2024	25,996	25,996	50	1,524	5.86%

Year	Actual/ Projected Participants	Reduction Per Installation			Total Annual Reduction		
		kWh	Winter kW	Summer kW	kWh	Winter kW	Summer kW
At The Meter							
2015	373	3,661	0.99	1.80	1,365,553	369	671
2016	226	3,661	0.99	1.80	827,386	224	407
2017	218	3,661	0.99	1.80	798,098	216	392
2018	198	3,661	0.99	1.80	724,878	196	356
2019	101	3,661	0.99	1.80	369,761	100	182
2020	126	3,661	0.99	1.80	461,286	124	227
2021	90	3,661	0.99	1.80	329,490	89	162
2022	92	3,661	0.99	1.80	309,212	91	166
2023	50	3,661	0.99	1.80	183,050	49.5	90
2024	50	3,661	0.99	1.80	183,050	49.5	90
At The Generator							
2015	373	3,774	1.087	1.976	1,407,777	405	737
2016	226	3,774	1.087	1.976	852,969	246	447
2017	218	3,774	1.087	1.976	822,776	237	431
2018	198	3,774	1.087	1.976	747,292	215	391
2019	101	3,774	1.087	1.976	381,174	110	199
2020	126	3,774	1.087	1.976	475,524	137	249
2021	90	3,774	1.087	1.976	339,660	98	178
2022	92	3,774	1.087	1.976	339,698	101	182
2023	50	3,774	1.087	1.976	188,700	54.4	98
2024	50	3,774	1.087	1.976	188,700	54.4	98

Table 3-3 Commercial Heating & Cooling Current Participation and Expected Future Savings

Year	Number of Customers	Number of Eligible Customers	Annual Program Participants	Cumulative Program Participants	Total Penetration Level
2015	4,275	4,275	2	2	0.05%
2016	4,275	4,275	4	6	0.14%
2017	4,275	4,275	0	6	0.14%
2018	4,275	4,275	0	6	0.14%
2019	4,275	4,275	0	6	0.14%
2020	4,243	4,275	1	7	0.16%
2021	4,396	4,396	2	9	2.05%
2022	4,467	4,467	0	9	2.01%
2023	4,481	4,481	0	9	2.01%
2024	4,446	4,446	5	14	3.14%

Year	Actual/ Projected Participants	Reduction Per Installation			Total Annual Reduction		
		kWh	Winter kW	Summer kW	kWh	Winter kW	Summer kW
At The Meter							
2015	2	3,661	0.99	1.80	7,322	2	4
2016	4	3,661	0.99	1.80	14,644	4	7
2017	0	3,661	0.99	1.80	0	0	0
2018	0	3,661	0.99	1.80	0	0	0
2019	0	3,661	0.99	1.80	0	0	0
2020	1	3,661	0.99	1.80	3,661	.99	1.8
2021	2	3,661	0.99	1.80	7,322	1.98	3.6
2022	0	3,661	0.99	1.80	0	0	0
2023	0	3,661	0.99	1.80	0	0	0
2024	5	3,661	0.99	1.80	18,305	4.95	9
At The Generator							
2015	2	3,774	1.09	1.98	7,548	2	4
2016	4	3,774	1.09	1.98	15,097	4	8
2017	0	3,774	1.09	1.98	0	0	0
2018	0	3,774	1.09	1.98	0	0	0
2019	0	3,774	1.09	1.98	0	0	0
2020	1	3,774	1.09	1.98	3,774	1.09	1.98
2021	2	3,774	1.09	1.98	7,548	2.18	3.96
2022	0	3,774	1.09	1.98	0	0	0
2023	0	3,774	1.09	1.98	0	0	0
2024	5	3,774	1.09	1.98	18,870	5.45	9.9

Table 3-4 Commercial Chiller Current Participation and Expected Future Savings

Year	Number of Customers	Number of Eligible Customers	Annual Program Participants	Cumulative Program Participants	Total Penetration Level
2015	4,275	4,275	0	0	0.00%
2016	4,275	4,285	1	1	0.02%
2017	4,275	4,294	0	1	0.02%
2018	4,275	4,317	0	1	0.02%
2019	4,275	4,340	0	1	0.02%
2020	4,275	4,364	0	1	0.02%
2021	4,396	4,396	0	1	0.02%
2022	4,467	4,467	0	1	0.02%
2023	4,481	4,481	0	1	0.02%
2024	4,446	4,446	0	1	0.02%

Year	Actual/ Projected Participants	Reduction Per Installation			Total Annual Reduction		
		kWh	Winter kW	Summer kW	kWh	Winter kW	Summer kW
At The Meter							
2015	0	81,943	31.70	42.80	0	0	0
2016	1	81,943	31.70	42.80	81,943	32	43
2017	0	81,943	31.70	42.80	0	0	0
2018	0	81,943	31.70	42.80	0	0	0
2019	0	81,943	31.70	42.80	0	0	0
2020	0	81,943	31.70	42.80	0	0	0
2021	0	81,943	31.70	42.80	0	0	0
2022	0	81,943	31.70	42.80	0	0	0
2023	0	81,943	31.70	42.80	0	0	0
2024	0	81,943	31.70	42.80	0	0	0
At The Generator							
2015	0	84,477	34.80	47.00	0	0	0
2016	1	84,477	34.80	47.00	84,477	35	47
2017	0	84,477	34.80	47.00	0	0	0
2018	0	84,477	34.80	47.00	0	0	0
2019	0	84,477	34.80	47.00	0	0	0
2020	0	84,477	34.80	47.00	0	0	0
2021	0	84,477	34.80	47.00	0	0	0
2022	0	81,943	31.70	42.80	0	0	0
2023	0	81,943	31.70	42.80	0	0	0
2024	0	81,943	31.70	42.80	0	0	0

Table 3-5 Commercial Reflective Roof Current Participation and Expected Future Savings

Year	Number of Customers	Number of Eligible Customers	Annual Program Participants	Cumulative Program Participants	Total Penetration Level
2015	13,600	13,600	0	0	0.00%
2016	13,600	13,600	17	17	0.13%
2017	13,600	13,600	0	17	0.13%
2018	13,600	13,600	43	60	0.44%
2019	13,600	13,600	11	71	0.44%
2020	7,243	7,243	16	87	1.20%
2021	4,396	4,396	0	87	1.97%
2022	4,467	4,467	0	87	1.94%
2023	4,481	4,481	0	87	1.94%
2024	4,446	4,446	1	88	1.97%

Year	Actual/ Projected Participants	Reduction Per Installation			Total Annual Reduction		
		kWh	Winter kW	Summer kW	kWh	Winter kW	Summer kW
At The Meter							
2015	0	2,450	0.00	0.91	0	0	0
2016	17	2,450	0.00	0.91	41,650	0	15
2017	0	2,450	0.00	0.91	0	0	0
2018	43	2,450	0.00	0.91	105,350	0	39
2019	11	2,450	0.00	0.91	26,950	0	10.1
2020	16	2,450	0.00	0.91	39,200	0	14.56
2021	0	2,450	0	0.91	0	0	0
2022	0	2,450	0	0.91	0	0	0
2023	0	2,450	0	0.91	0	0	0
2024	1	2,450	0	0.91	2,450	0	.91
At The Generator							
2015	0	2,526	0.00	0.99	0	0	0
2016	17	2,526	0.00	0.99	42,938	0	17
2017	0	2,526	0.00	0.99	0	0	0
2018	43	2,526	0.00	0.99	108,607	0	43
2019	11	2,526	0.00	0.99	27,786	0	10
2020	16	2,526	0.00	0.99	40,416	0	16
2021	0	2,526	0.00	0.99	0	0	0
2022	0	2,526	0.00	0.99	0	0	0
2023	0	2,526	0.00	0.99	0	0	0
2024	1	2,526	0.00	0.99	2,526	0.00	0.99

Summary of DSM Program Participation

Residential

The Residential Energy Survey Program reached its highest penetration level in 2024 at 6.24%, continuing a steady upward trend. While 120 new participants joined, this was a drop from 154 in 2023 but still stronger than 2020-2022. Despite customer growth from 23,284 in 2015 to 25,996 in 2024, participation rates haven't kept pace, indicating a need for stronger engagement efforts. Sustaining or increasing participation will be key to long-term program success.

The Residential Heating & Cooling Upgrade Program reached a penetration level of 5.86% in 2024, continuing its steady growth. However, annual participation remained at 50 new participants, the same as in 2023 and significantly lower than peak years like 2015-2018, when participation exceeded 200 per year. Despite customer growth from 23,284 in 2015 to 25,996 in 2024, participation rates have slowed, suggesting potential barriers to adoption.

Commercial

The Commercial Heating & Cooling Upgrade Program showed a slight improvement in 2024, reaching a 3.14% penetration level, the highest to date. However, annual participation has remained inconsistent, with only five new participants in 2024, following three consecutive years of zero participation. The program saw minimal growth between 2017 and 2023, with cumulative participation stagnating at nine customers until 2024's small uptick. While the total number of eligible customers has gradually increased, overall engagement remains low, indicating a need for targeted outreach to drive adoption.

The Commercial Chiller Program has seen virtually no growth over the past decade, with a total penetration level stuck at 0.02% since 2016. Only one customer participated in 2016, and no additional participation has occurred from 2017 to 2024. Despite a gradual increase in the number of eligible customers, engagement has remained nonexistent. The program's stagnation suggests a need for a complete reassessment of outreach strategies, incentives, and potential barriers to adoption to encourage participation.

The Commercial Reflective Roof Program has shown sporadic participation, reaching a 1.97% penetration level in 2024 with just one new participant. The program saw its most significant growth between 2016 and 2020, with cumulative participants rising from 0 to 87, but participation has stalled since 2021, with only one additional customer in the last four years.

3.1 PROGRAM COSTS

The per installation cost and total program cost for FPUC for each program for 2024 are presented in Tables 3-6. The total program costs are based on the actual 2024 direct costs to each program sub-ledger, and the Cost Per Installation is the direct cost divided by the number of program participants.

Table 3-6 Program Costs

Program	2024 Per Installation Cost	2024 Total Program Cost
Commercial Chiller	$0	$0
Commercial Energy Consultation	$52.72	$1,160
Commercial Heating & Cooling	$100.40	$502
Commercial Reflective Roofing	$1,757	$1,757
Residential Energy Survey	$32.91	$3,950
Residential Heating & Cooling	$212.46	$10,623

3.2 NET BENEFITS

The annual net benefits for each program are shown in Table 3-7 based on the 2024 program cost (direct + indirect costs) versus avoided costs for electricity generation, transmission, and distribution developed for the 2015 Demand-Side Management Plan. In order to have a single avoided energy and capacity cost for evaluating the cost-effectiveness of the conservation programs, the avoided purchase power costs for each program were weighted and averaged using the Net Energy for Load for the Northeast and Northwest Divisions, respectively.

Table 3-7 Annual Net Benefits

Program	2024 Annual Net Benefits
Commercial Chiller	($50,004)
Commercial Heating & Cooling	($3,004)
Commercial Reflective Roofing	($58,951)
Residential Energy Survey	($194,263)
Residential Heating & Cooling	$27,555

3.3 OTHER CONSERVATION ACTIVITIES

Since implementing the 2015 DSM plan, FPU has focused on educating customers and contractors about its new programs. Given the small size of FPU's Commercial/Industrial customer base, achieving program goals has remained challenging, a trend that continued in 2024. FPU remains dedicated to working with industry partners and contractors to promote its Commercial Heating and Cooling, Commercial Reflective Roof, and Commercial Chiller programs. The company will continue investing in educational and marketing efforts to increase awareness and participation. Looking ahead, FPUC sees the development of its 2025 DSM program as a key opportunity to enhance commercial engagement by expanding program offerings and accessibility.

Conservation Demonstration & Development (CDD)

FPUC's ongoing CDD project was initially expected to be completed in 2023 but faced technical complications, extending efforts into 2024. This initiative aimed to evaluate technologies and systems that enhance electrical efficiency for select large commercial and industrial customers by optimizing voltage balance across supply phases, thereby reducing kW demand and overall energy consumption. However, FPUC and the participating industrial customer were unable to reach an agreement with the equipment provider on the optimal location. Despite multiple attempts to identify a contingency site, the decision was made to permanently pause this CDD effort. Moving forward, FPUC will shift focus toward overhauling and enhancing residential CDD projects, prioritizing energy efficiency advancements in that sector.

Community Outreach

FPUC hosted an in-person conservation event at the Peppertree community in Fernandina Beach, a fixed-income community. During the event, FPUC gathered resident feedback and introduced low-income program proposals to launch in 2025, including the FPUC Efficiency First Low-Income Program. This initiative aims to coordinate the installation of smart home energy kits in pre-identified fixed-income communities that meet income eligibility criteria. Similar in-person energy conservation events have been a cornerstone of the current 10-year DSM plan, shaping program development through direct community engagement.