EARTHJUSTICE

June 11, 2024

VIA ELECTRONIC FILING

Adam J. Teitzman
Office of Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, Florida 32399-0850

Re: Docket Nos. 20240025-EI, Duke Energy Florida Petition for Rate Increase

Dear Mr. Teitzman,

On behalf of Intervenors Florida Rising and League of United Latin American Citizens ("LULAC"), I have enclosed the testimony and exhibits of MacKenzie D. Marcelin. Please file these documents in Docket No. 20240025-EI. Please contact me if there are any questions regarding this filing.

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy and correct copy of the foregoing was served on this 11th day of June, 2024, via electronic mail on:

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DATED this 11th day of June, 2024

/s/ Bradley Marshall
Attorney

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Rate Increase by Duke Energy Florida, LLC	)	DOCKET NO. 20240025-EI

TESTIMONY OF MACKENZIE D. MARCELIN

ON BEHALF OF

FLORIDA RISING AND LEAGUE OF UNITED LATIN AMERICAN CITIZENS

JUNE 11, 2024

Q. Please state your name and business address.

A. My name is MacKenzie Marcelin. My business address is 10800 Biscayne Blvd Suite 1050, Miami, FL 33161.

Q. What is your current position?

A. I am the Climate Justice Director at Florida Rising.

Q. What are your duties as Climate Justice Director?

A. In my role I am responsible for developing campaign strategies that address the climate crisis from a racial justice lens at the local, state, and federal levels. I am also tasked with designing and implementing actions and events to mobilize base, allies, and partners toward key climate justice policy wins. Lastly, I develop and activate natural disaster response and manage disaster response initiative work.

Q. Please summarize your qualifications and work experience.

A. In 2019, I was hired as a climate justice organizer at Florida Rising where I began my organizing work in climate justice. My general qualifications include organizing for 6 years and organizing multiple energy justice campaigns. I have experienced electricity disconnections and know the hardships they can cause. I have personally experienced energy insecurity, and as a Floridian, have had to engage in preparation for multiple hurricanes. I have a Bachelor of Arts in History from the University of Florida, with a focus on the Black experience, race, and inequality. My litigation experience is limited; however, I have participated in a few dockets at the Florida Public Service Commission.

Q. Have you ever testified before the Florida Public Service Commission before?

A. Yes, I have participated in a few dockets at the Florida Public Service Commission advocating on behalf of Florida Rising's values of racial and economic justice and for Florida Rising's members, who are mostly black and brown, and are facing

high energy burdens due to high electric bill costs. In Docket Nos. 20190015-EG, 20190016-EG, 20190018-EG, 20190020-EG, 20190021-EG, *In re: Commission review of numeric conservation goals*, I gave testimony to the importance of energy efficiency in helping customers lower energy bills, especially for low-income communities and communities of color. For more information, please see a transcript of my remarks here: http://www.psc.state.fl.us/library/filings/2019/08186-2019/08186-2019.pdf. In Docket No. 20200219-EI, *In re: Petition to initiate emergency rulemaking to prevent electric utility shutoffs, by League of United Latin American Citizens, Zoraida Santana, and Jesse Moody*, I gave testimony to the importance of halting electric power disconnections for the health of members of low-income communities. For more information, please see a transcript of my remarks here: http://www.psc.state.fl.us/library/filings/2020/11330-2020/11330-2020.pdf. In Docket No. 202000181-EU, *In re: Proposed amendment of Rule 25-17.0021, F.A.C., Goals for Electric Utilities*, I gave testimony to the importance of energy efficiency in helping customers lower energy bills, especially for low-income communities and communities of color. For more information, please see a video of my remarks here: http://psc-fl.granicus.com/MediaPlayer.php?view_id=2&clip_id=3368 and here: http://psc-fl.granicus.com/MediaPlayer.php?view_id=2&clip_id=3335.

Q. Have you ever testified as a formal witness before the Florida Public Service Commission?

A. Yes, in the FPL Rate Case I submitted formal testimony on behalf of Florida Rising (Docket 20210015-EI). That testimony can be found here: https://www.floridapsc.com/pscfiles/library/filings/2021/06451-2021/06451-

2021.pdf. On June 5, 2024, I filed formal testimony in the energy-efficiency goal setting proceedings (Docket Nos. 20240012, 20240013, 20240014, 20240016, and 20240017). That testimony can be found here: https://www.floridapsc.com/pscfiles/library/filings/2024/04599-2024/04599-2024.pdf. On June 6, 2024, I filed formal testimony in the TECO rate case (Docket No. 20240026-EI). That testimony can be found here: https://www.floridapsc.com/pscfiles/library/filings/2024/04673-2024/04673-2024.pdf.

Q. On whose behalf are you testifying in this proceeding?

A. Florida Rising and the League of United Latin American Citizens of Florida (also known as "LULAC").

Q. What is Florida Rising?

A. We are a people-powered organization made up of members advancing economic and racial justice across Florida. We build independent political power that centers historically marginalized communities so everyday Floridians can shape the future. As an organization, we engaged in the 2019 FEECA Hearings, intervened in the 2021 FPL Rate Case, commented on the energy-efficiency rulemaking proceeding (Docket No. 20200181), including in the Rule hearing, commented in some of the fuel dockets and storm recovery dockets, and, in addition to this proceeding, have intervened in the Tampa Electric Company Rate Case and FEECA case, happening at the same time as this case.

Q. Does Florida Rising have members in Duke Energy Florida's service territory?

A. Yes, Florida Rising has members in Duke Energy Florida's ("Duke") service territory. We have at least 53 active members in Pinellas County and a number of

Duke members in the Orlando area, plus additional members scattered throughout the rest of Duke's territory. Also, Florida Rising as an organization pays electric bills to Duke for our office located in Duke's service territory.

Q. Why is Florida Rising in this proceeding?

A. As mentioned before, Florida Rising is an organization made up of members focused on empowering marginalized communities to advance racial and economic justice across Florida. In our climate justice work we want a future where the frontline and most impacted communities are at the center of energy policy, disaster response, and all climate change initiatives.

As I discuss below, Duke's residential customers, including Florida Rising's members, face some of the highest electricity bills in the nation. Our members face an affordability crisis between rising rents and rising electricity bills. While the Florida Public Service Commission does not regulate rental prices, it is supposed to regulate electricity prices.

Florida's dependency on fossil fuels has led to our current energy system polluting our communities, fueling our climate crisis, and leading many in dire economic straits. These issues in our energy system have an unequal and harmful impact on Black, Brown, and low-income communities. A 2020 report by ACEEE found that low-income, Black, Hispanic, and Native American households face higher energy burdens than the average household.[1] Rising housing costs, insurance costs, and stagnant wages have made Florida unaffordable, leaving families with high energy burdens. The financial hardship is forcing people to make tough choices between keeping the lights on or paying for groceries or prescription medications or living in hot and unsafe housing conditions. All the while, major utility companies have been experiencing record profits over the last

few years.

Florida has been experiencing an uptick in climate disasters like extreme heat, sea level rise, flooding, and severe storms, which are leaving our neighborhoods and infrastructure vulnerable. Record high heat days,[2] stronger and more frequent storms,[3] and other climate disasters are a direct result of our energy system's reliance on dirty fossil fuels. The increase in extreme heat days means that more energy and access to A/C are a requirement in Florida for keeping our homes healthy, habitable, and cool. Stronger and more frequent storms threaten the reliability of our electrical grid, causing loss of property to our state and an increase in illness and death. The increase in extreme disasters places an unfair burden on communities' colors and often leads them into a more vulnerable state than before.

Finally, one of the many reasons Florida Rising is participating in this proceeding is we believe that Florida must transition to a clean energy system with more community members included in the decision-making. If we do that, we can ensure that everyone has access to clean, affordable energy that creates jobs and is environmentally friendly and resilient against natural disasters.

Q. Have you looked at how Duke ranks nationally when it comes to residential electricity bills?

A. Yes, according to the most recent data from the Energy Information Administration ("EIA"), for 2023, Duke had the fifth highest electricity bills in the nation with an average monthly residential electricity bill of $186.56 (for utilities with more than 100,000 residential customers).

Q. How did you determine this?

A. I simply calculated the average monthly revenue per residential customer for each

utility and state and combined the data together. All of these calculations are included in my electric bill comparisons from the EIA 2023 data and are attached as Exhibit MM-1.

Q. Is this a standard-practice for comparing electric bills?

A. Yes, the EIA calculates the average residential electric bills itself using this methodology and compares average monthly bills across utilities and states using this method every year.

Q. How do Florida-utilities frequently do "bill" comparisons?

A. They frequently do "bill" comparisons using a standardized 1,000 kWh assumption.

Q. What's your opinion regarding that kind of comparison?

A. It is an arbitrary and misleading comparison. Consumers do not pay bills based off of 1,000 kWh of usage; they pay bills off of actual usage. Florida utilities often have higher rates above 1,000 kWh of usage, and most average above 1,000 kWh of usage. Most utilities out of state have consumers that use less than 1,000 kWh of usage. Thus, 1,000 kWh of usage frequently understates the actual bills Florida consumers pay, while overstating the actual bills others pay.

Q. Have you looked at the impact of Duke's proposed rate increase in this case?

A. Yes. Duke is proposing to increase base rates for residential customers for 1,000 kWh from a current $83.91 to $108.05 in 2027, about a $25 increase in base rates in electric bills. This is a jarring increase and can lead to an increase in energy burden for communities in the Duke Energy territory. Also, with the increase in storm activity and the volatile fuel prices, storm fees or fuel price fees can be tacked on that will make the overall bill much higher.

Q. Have you evaluated Duke's Energy Efficiency performance?

A. Yes. Although Duke has been meeting most of their goals (and, in most cases, are greatly exceeding their goals), they have been failing to meet their winter peak residential MW goals. I would note that for Florida Rising's members, the most important part of their goals are the energy reductions as that helps customers lower their electric bills, and last year, Duke exceeded those goals by 646%, as shown in Exhibit MM-2. However, compared to national averages, its savings are still rather small. A common way of comparing actual performance on energy efficiency between utilities is to look at the total amount of energy each utility saved in a year as a percent of that utility's total retail sales for the same year. This gives a fair comparison of how each utility is doing, since in absolute numbers, a small utility with excellent energy efficiency achievements won't save as much total energy as a huge utility with abysmal performance.

In 2021, the latest year for which the analysis has been completed, the national average for energy savings as a percent of total retail sales was 0.68%. SACE Energy Efficiency in the Southeast Report (March 2023), attached as Exhibit MM-3, at 4. In that same year, Duke achieved 0.09%. *Id.* at 24. Duke achieved 0.14% in 2023. I have prepared a workpaper supporting these calculations and attached it as Exhibit MM-4.

Q. Have you looked at Duke's proposals regarding its curtailable and interruptible customers?

A. Yes. I support Duke's proposed cuts. As it stands, the interruptible service and curtailable service represent almost half of Duke's spending on energy conservation. I have attached Duke's 2023 spending report as Exhibit MM-5. The Interruptible Service itself cost ratepayers $48,337,004 last year, and as residential customers represent the majority of revenue for Duke, this means most of that

money is coming from residential customers. I have also attached Exhibit MM-6, which shows that these customers have not had any power interrupted or curtailed within the last five years, and Duke has no forecast for any interruptions in the future. Because Duke has sufficient resources to ensure these customers are not being interrupted or curtailed, it is hard to see the benefit of paying these customers almost $50 million a year. Therefore, I support Duke's proposal to cut the credit rates to these customers and would support even deeper cuts.

Q. Please summarize your testimony.

A. Duke's residential customers, including Florida Rising members, already pay some of the highest residential electricity bills in the nation. For many, limiting access to the energy we all need to survive in this modern day would perpetuate and exacerbate inequality, particularly for low-income and communities of color already facing systemic burdens. A fair and just energy system should ensure that all Floridians, especially the most vulnerable of us, have access to the affordable energy we need to live a quality life.

Q. Does this conclude your testimony?

A. Yes, it does.

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[1] Ariel Drehobl, Lauren Ross, & Roxana Ayala, American Council for an Energy-Efficient Economy, How High Are Household Energy Burdens? at 9-13 (2020), https://www.aceee.org/research-report/u2006.

[2] Ian Livingston, *Florida is roasting in extreme heat and on pace for a record-warm year*, Washington Post (Aug. 11, 2023), https://www.washingtonpost.com/weather/2023/08/11/florida-record-heat-climate-summer/.

[3] Nat'l Oceanic & Atmospheric Admin., *NOAA predicts above-normal 2024 Atlantic hurricane season* (May 23, 2024), https://www.noaa.gov/news-release/noaa-predicts-above-normal-2024-atlantic-hurricane-season.

UTILITY CHARATERISTICS							RESIDENTIAL			
							Revenue	Sales	Customers	Average Monthly Bill
2023	12	4176	Connecticut Light & Power Co	CT	Investor Owned	Preliminary	171,504.495	658,907.802	902,974	$204.27
2023	12	19547	Hawaiian Electric Co Inc	HI	Investor Owned	Preliminary	59,345.787	142,163.588	275,966	$201.30
2023	12	18454	Tampa Electric Co	FL	Investor Owned	Preliminary	115,903.382	669,610.173	748,020	$191.95
2023	12	9216	Imperial Irrigation District	CA	Political Subdivisic	Preliminary	19,013.000	90,132.000	140,906	$189.40
2023	12	6455	Duke Energy Florida, LLC	FL	Investor Owned	Preliminary	263,919.575	1,381,306.078	1,773,314	$186.56
2023	12	11804	Massachusetts Electric Co	MA	Investor Owned	Preliminary	95,998.035	283,682.630	554,670	$177.37
2023	12	195	Alabama Power Co	AL	Investor Owned	Preliminary	241,561.000	1,584,829.000	1,327,562	$173.78
2023	12	6452	Florida Power & Light Co	FL	Investor Owned	Preliminary	676,900.190	4,511,051.000	5,179,817	$170.11
2023	12	733	Appalachian Power Co	WV	Investor Owned	Preliminary	72,095.000	496,453.000	350,306	$169.65
2023	12	40228	Rappahannock Electric Coop	VA	Cooperative	Preliminary	32,189.000	243,616.000	165,828	$169.53
2023	12	5027	Delmarva Power	MD	Investor Owned	Preliminary	37,005.648	188,775.907	170,787	$168.80
2023	12	19497	United Illuminating Co	CT	Investor Owned	Preliminary	45,291.596	145,240.272	258,658	$167.19
2023	12	55937	Entergy Texas Inc.	TX	Investor Owned	Preliminary	57,425.439	430,254.335	450,506	$167.12
2023	12	16609	San Diego Gas & Electric Co	CA	Investor Owned	Preliminary	55,422.187	133,144.194	383,150	$166.61
2023	12	14328	Pacific Gas & Electric Co.	CA	Investor Owned	Preliminary	279,981.000	873,051.000	1,868,939	$165.64
2023	12	3046	Duke Energy Progress - (NC)	SC	Investor Owned	Preliminary	29,025.966	216,663.456	143,242	$165.23
2023	12	15472	Public Service Co of NH	NH	Investor Owned	Preliminary	48,093.717	200,597.954	298,361	$164.73
2023	12	14006	Ohio Power Co	OH	Investor Owned	Preliminary	118,382.000	610,191.000	611,660	$162.57
2023	12	733	Appalachian Power Co	VA	Investor Owned	Preliminary	98,316.000	629,611.000	463,562	$162.43
2023	12	12685	Entergy Mississippi LLC	MS	Investor Owned	Preliminary	53,025.240	383,286.983	383,816	$162.27
2023	12	5860	Empire District Electric Co	MO	Investor Owned	Preliminary	23,681.835	160,605.578	139,947	$162.01
2023	12	11171	Long Island Power Authority	NY	State	Preliminary	145,391.643	703,531.838	1,028,815	$160.74
2023	12	12686	Mississippi Power Co	MS	Investor Owned	Preliminary	22,512.925	165,930.509	156,882	$160.67
2023	12	3249	Central Hudson Gas & Elec Corp	NY	Investor Owned	Preliminary	33,910.000	160,089.000	219,551	$159.78
2023	12	19876	Virginia Electric & Power Co	NC	Investor Owned	Preliminary	20,442.576	150,107.640	108,262	$159.19
2023	12	14715	PPL Electric Utilities Corp	PA	Investor Owned	Preliminary	138,385.326	798,650.267	787,988	$158.87
2023	12	22053	Kentucky Power Co	KY	Investor Owned	Preliminary	21,053.102	193,741.852	130,995	$158.31
2023	12	3265	Cleco Power LLC	LA	Investor Owned	Preliminary	31,350.000	287,265.000	251,458	$155.64
2023	12	1613	Berkeley Electric Coop Inc	SC	Cooperative	Preliminary	16,825.000	121,082.000	110,849	$155.48
2023	12	803	Arizona Public Service Co	AZ	Investor Owned	Preliminary	147,150.340	955,819.212	1,242,360	$155.41
2023	12	3266	Central Maine Power Co	ME	Investor Owned	Preliminary	80,113.730	285,984.210	511,550	$155.28
2023	12	1179	Versant Power	ME	Investor Owned	Preliminary	22,402.940	73,513.493	129,738	$154.79
2023	12	17637	Southern Maryland Elec Coop Inc	MD	Cooperative	Preliminary	23,878.296	205,134.684	156,946	$154.28
2023	12	13407	Nevada Power Co	NV	Investor Owned	Preliminary	89,269.881	564,630.756	905,298	$153.35
2023	12	12390	Metropolitan Edison Co	PA	Investor Owned	Preliminary	73,529.175	404,001.838	415,324	$153.25
2023	12	13214	The Narragansett Electric Co	RI	Investor Owned	Preliminary	54,641.872	176,351.479	310,132	$151.79
2023	12	5070	Delaware Electric Cooperative	DE	Cooperative	Preliminary	15,360.000	106,301.000	103,287	$151.72
2023	12	14716	Pennsylvania Power Co	PA	Investor Owned	Preliminary	21,267.368	120,502.859	123,849	$150.66
2023	12	16572	Salt River Project	AZ	Political Subdivisic	Preliminary	103,035.000	865,708.000	1,044,438	$148.69
2023	12	14154	Orange & Rockland Utils Inc	NY	Investor Owned	Preliminary	25,884.105	104,059.929	162,420	$147.88
2023	12	17633	Southern Indiana Gas & Elec Co	IN	Investor Owned	Preliminary	16,550.347	99,802.696	133,060	$146.89
2023	12	12745	Modesto Irrigation District	CA	Political Subdivisic	Preliminary	12,903.303	71,203.081	102,862	$146.65
2023	12	15270	Potomac Electric Power Co	MD	Investor Owned	Preliminary	74,307.900	405,844.258	479,584	$146.46
2023	12	17539	Dominion Energy South Carolina, Inc	SC	Investor Owned	Preliminary	93,175.000	673,948.000	680,200	$141.75
2023	12	54913	NSTAR Electric Company	MA	Investor Owned	Preliminary	58,816.000	212,202.000	441,362	$141.58
2023	12	15474	Public Service Co of Oklahoma	OK	Investor Owned	Preliminary	57,181.870	472,786.981	496,215	$141.56
2023	12	7140	Georgia Power Co	GA	Investor Owned	Preliminary	338,244.940	2,549,518.147	2,405,579	$140.95
2023	12	17718	Southwestern Public Service Co	TX	Investor Owned	Preliminary	27,477.624	225,257.837	221,164	$140.45

2023	12	3046	Duke Energy Progress - (NC)	NC	Investor Owned	Preliminary	238,234.289	1,674,734.884	1,337,277	$139.87
2023	12	4922	Dayton Power & Light Co	OH	Investor Owned	Preliminary	21,340.877	145,067.000	140,413	$139.85
2023	12	56697	Ameren Illinois Company	IL	Investor Owned	Preliminary	74,864.551	466,036.096	541,275	$138.46
2023	12	11241	Entergy Louisiana LLC	LA	Investor Owned	Preliminary	101,467.550	909,065.097	953,932	$137.84
2023	12	13478	Entergy New Orleans, LLC	LA	Investor Owned	Preliminary	18,911.765	146,023.163	187,464	$137.56
2023	12	88888	US Total	US		Preliminary	18,726,006.832	119,052,479.286	141,496,756	$137.54
2023	12	814	Entergy Arkansas LLC	AR	Investor Owned	Preliminary	75,815.904	613,324.539	605,836	$137.22
2023	12	12470	Middle Tennessee E M C	TN	Cooperative	Preliminary	42,430.000	365,010.000	298,753	$137.13
2023	12	1167	Baltimore Gas & Electric Co	MD	Investor Owned	Preliminary	175,469.240	953,019.478	1,014,307	$137.06
2023	12	9601	Jackson Electric Member Corp - (GA)	GA	Cooperative	Preliminary	31,432.000	303,319.000	235,414	$136.35
2023	12	9617	JEA	FL	Municipal	Preliminary	53,838.000	415,903.000	462,922	$136.31
2023	12	963	Atlantic City Electric Co	NJ	Investor Owned	Preliminary	62,700.262	288,540.834	469,943	$134.28
2023	12	19876	Virginia Electric & Power Co	VA	Investor Owned	Preliminary	350,268.339	2,661,568.087	2,367,849	$133.77
2023	12	5027	Delmarva Power	DE	Investor Owned	Preliminary	40,931.955	244,094.250	273,220	$133.16
2023	12	3542	Duke Energy Ohio Inc	OH	Investor Owned	Preliminary	47,725.597	303,502.436	305,720	$133.16
2023	12	19898	Volunteer Electric Coop	TN	Cooperative	Preliminary	15,508.000	134,623.000	103,320	$133.13
2023	12	16604	City of San Antonio - (TX)	TX	Municipal	Preliminary	68,712.220	626,775.118	853,398	$133.08
2023	12	14711	Pennsylvania Electric Co	PA	Investor Owned	Preliminary	70,354.253	356,692.941	414,946	$132.93
2023	12	15263	The Potomac Edison Company	WV	Investor Owned	Preliminary	24,720.724	215,376.192	133,769	$132.84
2023	12	13216	Nashville Electric Service	TN	Municipal	Preliminary	52,334.000	394,645.000	405,896	$132.51
2023	12	20387	West Penn Power Company	PA	Investor Owned	Preliminary	83,877.550	548,962.477	524,872	$132.37
2023	12	12293	City of Memphis - (TN)	TN	Municipal	Preliminary	42,048.703	360,342.000	377,554	$131.70
2023	12	9094	City of Huntsville - (AL)	AL	Municipal	Preliminary	22,311.000	198,990.000	175,492	$131.58
2023	12	15470	Duke Energy Indiana, LLC	IN	Investor Owned	Preliminary	112,268.549	807,880.968	788,920	$131.36
2023	12	9324	Indiana Michigan Power Co	IN	Investor Owned	Preliminary	54,762.552	352,743.007	420,796	$130.26
2023	12	9417	Interstate Power and Light Co	IA	Investor Owned	Preliminary	49,417.892	309,655.252	414,637	$129.28
2023	12	9324	Indiana Michigan Power Co	MI	Investor Owned	Preliminary	13,920.964	95,853.658	112,380	$129.23
2023	12	10421	Knoxville Utilities Board	TN	Municipal	Preliminary	26,332.000	217,232.000	190,846	$129.05
2023	12	5416	Duke Energy Carolinas, LLC	SC	Investor Owned	Preliminary	95,457.027	735,133.690	560,921	$128.09
2023	12	3408	City of Chattanooga - (TN)	TN	Municipal	Preliminary	19,317.000	157,572.000	160,446	$127.73
2023	12	14354	PacifiCorp	WA	Investor Owned	Preliminary	18,727.751	173,246.932	114,013	$127.25
2023	12	10000	Evergy Metro	KS	Investor Owned	Preliminary	23,768.659	214,833.298	243,183	$126.37
2023	12	5487	Duquesne Light Co	PA	Investor Owned	Preliminary	54,259.650	255,009.880	432,904	$125.37
2023	12	12698	Evergy Missouri West	MO	Investor Owned	Preliminary	32,643.599	293,147.459	304,030	$124.92
2023	12	3916	Cobb Electric Membership Corp	GA	Cooperative	Preliminary	22,723.713	199,638.412	198,874	$124.71
2023	12	15263	The Potomac Edison Company	MD	Investor Owned	Preliminary	41,711.192	293,059.130	237,554	$124.32
2023	12	10171	Kentucky Utilities Co	KY	Investor Owned	Preliminary	64,947.884	561,065.978	449,052	$123.98
2023	12	15248	Portland General Electric Co	OR	Investor Owned	Preliminary	118,019.363	778,459.314	820,631	$123.42
2023	12	9336	CORE Electric Cooperative	CO	Cooperative	Preliminary	21,066.000	147,811.000	163,278	$122.57
2023	12	24211	Tucson Electric Power Co	AZ	Investor Owned	Preliminary	42,182.158	248,973.474	407,394	$122.31
2023	12	13998	Ohio Edison Co	OH	Investor Owned	Preliminary	33,593.415	213,784.329	259,762	$121.57
2023	12	19436	Union Electric Co - (MO)	MO	Investor Owned	Preliminary	116,031.250	1,156,194.489	1,066,688	$121.34
2023	12	7601	Green Mountain Power Corp	VT	Investor Owned	Preliminary	33,543.000	158,115.000	225,952	$120.74
2023	12	9273	Indianapolis Power & Light Co	IN	Investor Owned	Preliminary	54,911.100	425,933.000	462,848	$119.74
2023	12	20847	Wisconsin Electric Power Co	WI	Investor Owned	Preliminary	126,244.784	669,278.087	1,044,937	$118.50
2023	12	15500	Puget Sound Energy Inc	WA	Investor Owned	Preliminary	162,044.048	1,206,885.457	1,083,522	$117.12
2023	12	14940	PECO Energy Co	PA	Investor Owned	Preliminary	137,639.952	913,340.763	1,206,638	$116.34
2023	12	4254	Consumers Energy Co - (MI)	MI	Investor Owned	Preliminary	196,259.982	1,066,096.402	1,651,181	$115.90
2023	12	13780	Northern States Power Co	WI	Investor Owned	Preliminary	26,024.320	169,640.901	219,113	$115.75
2023	12	5109	DTE Electric Company	MI	Investor Owned	Preliminary	244,751.036	1,216,036.458	2,061,665	$115.41

2023	12	10005	Evergy Kansas South, Inc	KS	Investor Owned	Preliminary	29,019.228	227,343.743	301,496	$114.69
2023	12	13756	Northern Indiana Pub Serv Co	IN	Investor Owned	Preliminary	49,059.283	261,029.181	427,217	$114.30
2023	12	4226	Consolidated Edison Co-NY Inc	NY	Investor Owned	Preliminary	312,100.000	937,871.000	2,690,647	$114.18
2023	12	14063	Oklahoma Gas & Electric Co	OK	Investor Owned	Preliminary	65,358.525	719,383.655	704,612	$114.12
2023	12	5416	Duke Energy Carolinas, LLC	NC	Investor Owned	Preliminary	260,536.645	2,119,431.788	1,893,953	$112.84
2023	12	16534	Sacramento Municipal Util Dist	CA	Political Subdivisio	Preliminary	56,601.702	398,415.169	588,308	$112.83
2023	12	20856	Wisconsin Power & Light Co	WI	Investor Owned	Preliminary	49,897.166	304,165.785	433,061	$112.03
2023	12	14354	PacifiCorp	OR	Investor Owned	Preliminary	71,321.933	588,790.319	544,147	$111.09
2023	12	13511	New York State Elec & Gas Corp	NY	Investor Owned	Preliminary	100,412.336	607,658.300	730,728	$110.77
2023	12	11208	Los Angeles Department of Water & Power	CA	Municipal	Preliminary	144,865.817	617,623.841	1,404,314	$110.72
2023	12	22500	Evergy Kansas Central, Inc	KS	Investor Owned	Preliminary	33,328.707	261,909.239	341,128	$110.43
2023	12	10000	Evergy Metro	MO	Investor Owned	Preliminary	24,729.053	204,449.025	272,897	$110.02
2023	12	14127	Omaha Public Power District	NE	Political Subdivisio	Preliminary	35,085.000	320,092.000	359,834	$109.66
2023	12	17166	Sierra Pacific Power Co	NV	Investor Owned	Preliminary	37,201.385	244,461.076	328,103	$109.45
2023	12	689	Connexus Energy	MN	Cooperative	Preliminary	13,729.680	106,073.739	133,140	$109.23
2023	12	9191	Idaho Power Co	ID	Investor Owned	Preliminary	72,947.271	580,903.905	517,807	$108.45
2023	12	12796	Monongahela Power Co	WV	Investor Owned	Preliminary	44,502.187	356,807.198	335,017	$108.29
2023	12	16183	Rochester Gas & Electric Corp	NY	Investor Owned	Preliminary	34,897.000	202,005.000	290,313	$108.23
2023	12	13573	Niagara Mohawk Power Corp.	NY	Investor Owned	Preliminary	158,100.245	944,599.210	1,422,009	$107.39
2023	12	17543	South Carolina Public Service Authority	SC	State	Preliminary	17,494.937	166,756.790	182,208	$106.66
2023	12	11249	Louisville Gas & Electric Co	KY	Investor Owned	Preliminary	39,874.686	318,360.535	383,602	$106.24
2023	12	9726	Jersey Central Power & Lt Co	NJ	Investor Owned	Preliminary	98,198.806	727,299.773	967,516	$105.45
2023	12	19446	Duke Energy Kentucky	KY	Investor Owned	Preliminary	18,565.305	130,405.926	138,101	$104.29
2023	12	12825	NorthWestern Energy LLC - (MT)	MT	Investor Owned	Preliminary	43,096.410	287,975.377	325,066	$102.93
2023	12	17470	PUD No 1 of Snohomish County	WA	Political Subdivisio	Preliminary	45,610.000	420,381.000	344,120	$101.85
2023	12	13781	Northern States Power Co - Minnesota	MN	Investor Owned	Preliminary	117,007.900	749,329.128	1,221,183	$101.47
2023	12	15477	Public Service Elec & Gas Co	NJ	Investor Owned	Preliminary	185,817.447	1,020,279.892	1,959,635	$101.06
2023	12	20860	Wisconsin Public Service Corp	WI	Investor Owned	Preliminary	42,712.100	261,740.287	409,646	$100.08
2023	12	25177	Dakota Electric Association	MN	Cooperative	Preliminary	9,989.000	77,043.000	107,477	$100.03
2023	12	3755	Cleveland Electric Illum Co	OH	Investor Owned	Preliminary	13,073.642	82,935.688	131,996	$99.71
2023	12	20169	Avista Corp	WA	Investor Owned	Preliminary	31,938.969	283,329.165	243,524	$99.18
2023	12	11479	Madison Gas & Electric Co	WI	Investor Owned	Preliminary	14,679.000	73,937.000	144,597	$99.15
2023	12	18429	City of Tacoma - (WA)	WA	Municipal	Preliminary	19,862.745	198,927.518	172,189	$97.85
2023	12	3660	PUD No 1 of Clark County - (WA)	WA	Political Subdivisio	Preliminary	25,503.000	281,537.000	215,343	$96.55
2023	12	5701	El Paso Electric Co	TX	Investor Owned	Preliminary	19,727.000	144,641.000	311,326	$96.24
2023	12	12647	ALLETE, Inc.	MN	Investor Owned	Preliminary	12,872.436	95,435.954	125,346	$93.54
2023	12	17833	City Utilities of Springfield - (MO)	MO	Municipal	Preliminary	8,451.876	86,763.251	104,507	$93.40
2023	12	20169	Avista Corp	ID	Investor Owned	Preliminary	16,844.233	149,225.258	126,548	$91.89
2023	12	12341	MidAmerican Energy Co	IA	Investor Owned	Preliminary	51,710.451	552,174.367	628,525	$89.05
2023	12	15270	Potomac Electric Power Co	DC	Investor Owned	Preliminary	26,453.527	156,761.776	281,792	$88.59
2023	12	15473	Public Service Co of NM	NM	Investor Owned	Preliminary	41,318.000	293,918.000	490,439	$87.95
2023	12	11018	Lincoln Electric System	NE	Municipal	Preliminary	11,627.296	121,398.000	133,839	$86.75
2023	12	4110	Commonwealth Edison Co	IL	Investor Owned	Preliminary	223,082.330	1,645,277.264	2,958,052	$84.39
2023	12	14354	PacifiCorp	UT	Investor Owned	Preliminary	78,206.542	730,886.595	934,426	$84.11
2023	12	15466	Public Service Co of Colorado	CO	Investor Owned	Preliminary	121,493.742	874,709.903	1,353,213	$83.93
2023	12	3989	City of Colorado Springs - (CO)	CO	Municipal	Preliminary	19,589.742	146,023.710	211,787	$83.87
2023	12	14354	PacifiCorp	WY	Investor Owned	Preliminary	11,888.916	106,552.284	117,975	$83.39
2023	12	16868	City of Seattle - (WA)	WA	Municipal	Preliminary	40,453.006	318,531.249	454,320	$79.32

Stephanie A. Cuello
SENIOR COUNSEL

March 1, 2024

VIA ELECTRONIC FILING

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

Re: *Demand Side Management Annual Report for Calendar Year 2023*; Undocketed

Dear Mr. Teitzman:

In accordance with Rule 25-17.0021(5), F.A.C., please find attached for filing Duke Energy Florida, LLC's (DEF) Demand Side Management Annual Report for calendar year 2023.

Thank you for your assistance in this matter. Please feel free to call me at (850) 521-1425 should you have any questions concerning this filing.

Sincerely,

/s/ Stephanie A. Cuello

Stephanie A. Cuello

SAC/clg
Attachments

cc: Michael Barrett, FPSC, Division of Economics, MBarrett@PSC.STATE.FL.US

106 East College Avenue, Suite 800 ▪ Tallahassee, Florida 32301
Phone: 850.521.1425 ▪ Fax: 727.820.5041 ▪ Email: stephanie.cuello@duke-energy.com

DUKE ENERGY FLORIDA, LLC (DEF)
SUMMARY OF 2023 DEMAND SIDE MANAGEMENT ACHIEVEMENTS

The Commission Approved Goals for 2020-2024 presented in the "Comparison of Cumulative Achieved MW & GWH Reductions with Public Service Commission Established Goals" represent DEF's annual DSM goals as established by the Commission in Order PSC-2019-0509-EG. The Total Achievements represent the actual MW and GWH savings resulting from DEF's Commission approved demand side management (DSM) programs.

In 2023, DEF's DSM programs performed well and delivered energy and demand savings that exceeded the Commission approved winter MW, summer MW and GWH goals for the residential and commercial sector on an overall combined basis.

For the residential sector, DEF performed 36,915 home energy audits in 2023. DEF provided incentives to residential customers for 11,878 energy efficiency measures. These measures are expected to provide significant savings to customers as they all target heating and cooling end uses. Our low-income customers were served through our Neighborhood Energy Saver Program and Low-Income Weatherization Program with approximately 6,030 homes participating. DEF also added approximately 2,916 residential customers to its Residential Load Management program. These customers will benefit from ongoing bill credits. In addition, approximately 433,000 customers participated in the Residential Load Management program during 2023, contributing about 638 MW of winter peak-shaving capacity and 352 of MW of summer peak-shaving capacity for use during high load periods.

	Audit Type			
	Walk-Through, BERS, and Computer Assisted	Online	Phone	Total
Residential	10,033	23,985	2,897	36,915
Non Residential	441	0	38	479

For the commercial sector, DEF performed 479 commercial energy audits, providing incentives to commercial customers through its commercial business programs.

Additionally, DEF plans to continue to effectively promote its energy conservation programs and educate customers about energy efficiency. DEF, in partnership with local universities and industry alliances, continues to utilize the Technology Development Program to test and evaluate the potential for new and emerging technologies to support future program offerings to customers. Through the Technology Development Program, DEF continues its Vehicle to Grid Ford Lighting EV technology study to test opportunities with EV batteries and bidirectional (two-way) energy flow on the grid.

DUKE ENERGY FLORIDA
2023
COMPARISON OF CUMULATIVE ACHIEVED MW & GWH REDUCTIONS at the Generator
PUBLIC SERVICE COMMISSION ESTABLISHED GOALS ORDER PSC-2020-0274-PAA-EG

RESIDENTIAL

YEAR	WINTER PEAK MW REDUCTION COMMISSION TOTAL ACHIEVED**	WINTER PEAK MW REDUCTION COMMISSION APPROVED GOAL*	WINTER PEAK MW REDUCTION % VARIANCE	SUMMER PEAK MW REDUCTION COMMISSION TOTAL ACHIEVED**	SUMMER PEAK MW REDUCTION COMMISSION APPROVED GOAL*	SUMMER PEAK MW REDUCTION % VARIANCE	GWH ENERGY REDUCTION COMMISSION TOTAL ACHIEVED**	GWH ENERGY REDUCTION COMMISSION APPROVED GOAL*	GWH ENERGY REDUCTION % VARIANCE
2020	31	32	-5%	18	16	13%	35	9	277%
2021	47	60	-22%	28	29	-5%	60	15	288%
2022	71	85	-16%	43	41	5%	109	19	467%
2023	101	107	-5%	63	53	19%	159	21	646%
2024		128			63			23	

COMMERCIAL / INDUSTRIAL

YEAR	WINTER PEAK MW REDUCTION COMMISSION TOTAL ACHIEVED**	WINTER PEAK MW REDUCTION COMMISSION APPROVED GOAL*	WINTER PEAK MW REDUCTION % VARIANCE	SUMMER PEAK MW REDUCTION COMMISSION TOTAL ACHIEVED**	SUMMER PEAK MW REDUCTION COMMISSION APPROVED GOAL*	SUMMER PEAK MW REDUCTION % VARIANCE	GWH ENERGY REDUCTION COMMISSION TOTAL ACHIEVED**	GWH ENERGY REDUCTION COMMISSION APPROVED GOAL*	GWH ENERGY REDUCTION % VARIANCE
2020	24	5	354%	46	8	460%	40	6	582%
2021	34	10	244%	70	15	363%	62	10	531%
2022	39	15	166%	75	21	255%	65	12	432%
2023	69	20	253%	102	27	280%	75	14	454%
2024		24			32			14	

TOTAL

YEAR	WINTER PEAK MW REDUCTION COMMISSION TOTAL ACHIEVED**	WINTER PEAK MW REDUCTION COMMISSION APPROVED GOAL*	WINTER PEAK MW REDUCTION % VARIANCE	SUMMER PEAK MW REDUCTION COMMISSION TOTAL ACHIEVED**	SUMMER PEAK MW REDUCTION COMMISSION APPROVED GOAL*	SUMMER PEAK MW REDUCTION % VARIANCE	GWH ENERGY REDUCTION COMMISSION TOTAL ACHIEVED**	GWH ENERGY REDUCTION COMMISSION APPROVED GOAL*	GWH ENERGY REDUCTION % VARIANCE
2020	54	37	45%	64	24	168%	75	15	395%
2021	81	70	16%	98	44	120%	122	25	382%
2022	110	99	11%	118	63	89%	174	31	453%
2023	171	126	35%	164	79	107%	234	35	571%
2024		152			95			37	

*2020-2024 Goals are based on ORDER NO. PSC-2020-0274-PAA-EG, issued August 3, 2020
**Figures are rounded to the nearest whole number and are at the Generator

DUKE ENERGY FLORIDA
2023
COMPARISON OF ANNUAL ACHIEVED MW & GWH REDUCTIONS at the Generator
WITH PUBLIC SERVICE COMMISSION ESTABLISHED ANNUAL GOALS*

RESIDENTIAL

YEAR	WINTER PEAK MW REDUCTION TOTAL ACHIEVED**	WINTER PEAK MW REDUCTION COMMISSION APPROVED GOAL*	WINTER PEAK MW REDUCTION % VARIANCE	SUMMER PEAK MW REDUCTION TOTAL ACHIEVED**	SUMMER PEAK MW REDUCTION COMMISSION APPROVED GOAL*	SUMMER PEAK MW REDUCTION % VARIANCE	GWH ENERGY REDUCTION TOTAL ACHIEVED**	GWH ENERGY REDUCTION COMMISSION APPROVED GOAL*	GWH ENERGY REDUCTION % VARIANCE
2020	31	32	-5%	18	16	13%	35	9	277%
2021	16	28	-42%	10	14	-26%	25	6	305%
2022	25	25	0%	16	12	29%	49	4	1203%
2023	30	22	36%	19	11	70%	50	2	2244%
2024		21			11			1	

COMMERCIAL / INDUSTRIAL

YEAR	WINTER PEAK MW REDUCTION TOTAL ACHIEVED**	WINTER PEAK MW REDUCTION COMMISSION APPROVED GOAL*	WINTER PEAK MW REDUCTION % VARIANCE	SUMMER PEAK MW REDUCTION TOTAL ACHIEVED**	SUMMER PEAK MW REDUCTION COMMISSION APPROVED GOAL*	SUMMER PEAK MW REDUCTION % VARIANCE	GWH ENERGY REDUCTION TOTAL ACHIEVED**	GWH ENERGY REDUCTION COMMISSION APPROVED GOAL*	GWH ENERGY REDUCTION % VARIANCE
2020	24	5	354%	46	8	460%	40	6	582%
2021	11	5	124%	24	7	248%	22	4	454%
2022	5	5	1%	5	6	-17%	3	2	25%
2023	30	5	510%	27	6	377%	10	1	654%
2024		5			5			1	

TOTAL

YEAR	WINTER PEAK MW REDUCTION TOTAL ACHIEVED**	WINTER PEAK MW REDUCTION COMMISSION APPROVED GOAL*	WINTER PEAK MW REDUCTION % VARIANCE	SUMMER PEAK MW REDUCTION TOTAL ACHIEVED**	SUMMER PEAK MW REDUCTION COMMISSION APPROVED GOAL*	SUMMER PEAK MW REDUCTION % VARIANCE	GWH ENERGY REDUCTION TOTAL ACHIEVED**	GWH ENERGY REDUCTION COMMISSION APPROVED GOAL*	GWH ENERGY REDUCTION % VARIANCE
2020	54	37	45%	64	24	168%	75	15	395%
2021	27	33	-18%	34	21	65%	47	10	363%
2022	29	29	0%	21	18	14%	52	6	743%
2023	60	27	122%	46	17	172%	61	4	1631%
2024		25			16			2	

*2020-2024 Goals are based on ORDER NO. PSC-2020-0274-PAA-EG, issued August 3, 2020
Figures are rounded to the nearest whole number and are **at the Generator

Demand Side Management Annual Report

Utility: DUKE ENERGY FLORIDA, LLC.
Program Name: Home Energy Check
Program Start Date: 1991, modifications approved in 2021
Reporting Period: 2023

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2020	1,647,440	1,647,440	25,000	1.52%	31,560	31,560	1.92%	6,560
2021	1,673,995	1,648,995	50,000	3.03%	21,732	53,292	3.23%	3,292
2022	1,700,215	1,675,215	75,000	4.48%	37,725	91,017	5.43%	16,017
2023	1,726,425	1,701,425	100,000	5.88%	36,915	127,932	7.52%	27,932
2024	1,752,362	1,727,362	125,000	7.24%				

cols b,c,d,e are based on DEF's 2020 Program Plan approved by the Commission in Docket 20200054-EG

Annual Demand & Energy Savings (during the reporting period)	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Winter kW Reduction	0.23	0.24	8,576	9,027
Summer kW Reduction	0.14	0.15	5,198	5,472
Annual kWh Reduction	611.88	644.03	22,587,714	23,774,374

Utility Cost per Installation:	$134
Total Program Cost of the Utility ($000):	$4,932
Net Benefits of Measures Installed During Reporting Period ($000):	N/A

Demand Side Management Annual Report

Utility: DUKE ENERGY FLORIDA, LLC.
Program Name: Residential Incentive Program (f/k/a Home Energy Improvement)
Program Start Date: 1996 with modifications approved in 2006, 2015, and 2020
Reporting Period: 2023

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program/Measure Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program/Measure Participants	Actual Cumulative Number of Program/Measure Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2020	1,647,440	1,647,440	17,350	1.05%	19,200	19,200	1.17%	1,850
2021	1,673,995	1,673,995	33,283	1.99%	15,140	34,340	2.05%	1,058
2022	1,700,215	1,700,215	48,418	2.85%	10,318	44,658	2.63%	-3,760
2023	1,726,425	1,726,425	62,797	3.64%	11,878	56,536	3.27%	-6,261
2024	1,752,362	1,752,362	76,458	4.36%				

cols b,c,d,e are based on DEF's 2020 Program Plan approved by the Commission in Docket 20200054-EG

Annual Demand & Energy Savings (during the reporting period)	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Winter kW Reduction	0.42	0.44	4,931	5,190
Summer kW Reduction	0.23	0.24	2,714	2,856
Annual kWh Reduction	617.52	649.96	7,334,861	7,720,202

Utility Cost per Installation:	$328
Total Program Cost of the Utility ($000):	$3,890
Net Benefits of Measures Installed During Reporting Period ($000):	-$899

Demand Side Management Annual Report

Utility: DUKE ENERGY FLORIDA, LLC.
Program Name: Low Income Weatherization Assistance
Program Start Date: May 2000 with modifications approved in 2005, 2015, 2017 & 2018
Reporting Period: 2023

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program/Measure Participants*	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program/Measure Participants*	Actual Cumulative Number of Program/Measure Participants*	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2020	1,647,440	443,161	244	0.06%	139	139	0.03%	-105
2021	1,673,995	450,305	488	0.11%	133	272	0.06%	-216
2022	1,700,215	457,358	745	0.16%	134	406	0.09%	-339
2023	1,726,425	464,408	1,001	0.22%	184	590	0.13%	-411
2024	1,752,362	471,385	1,257	0.27%				

cols b,c,d,e are based on DEF's 2020 Program Plan approved by the Commission in Docket 20200054-EG

Annual Demand & Energy Savings (during the reporting period)	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Winter kW Reduction	1.12	1.18	206	217
Summer kW Reduction	0.74	0.78	137	144
Annual kWh Reduction	2,091.96	2,201.86	384,920	405,142

Utility Cost per Installation:	$1,423
Total Program Cost of the Utility ($000):	$262
Net Benefits of Measures Installed During Reporting Period ($000):	-$230

Demand Side Management Annual Report

Utility: DUKE ENERGY FLORIDA, LLC.
Program Name: Neighborhood Energy Saver
Program Start Date: 2007 with modifications approved in 2015, 2018, 2020 and 2021
Reporting Period: 2023

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants*	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants*	Actual Cumulative Number of Program Participants*	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2020	1,647,440	443,161	5,000	1.13%	950	950	0.21%	-4,050
2021	1,673,995	450,305	10,000	2.22%	537	1,487	0.33%	-8,513
2022	1,700,215	457,358	15,250	3.33%	4,771	6,258	1.37%	-8,992
2023	1,726,425	464,408	20,500	4.41%	5,846	12,104	2.61%	-8,396
2024	1,752,362	471,385	25,750	5.46%				

cols b,c,d,e are based on DEF's 2020 Program Plan approved by the Commission in Docket 20200054-EG

Annual Demand & Energy Savings (during the reporting period)	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Winter kW Reduction	1.62	1.70	9,455	9,952
Summer kW Reduction	1.08	1.14	6,317	6,648
Annual kWh Reduction	3,006.56	3,164.51	17,576,337	18,499,721

Utility Cost per Installation:	$1,134
Total Program Cost of the Utility ($000):	$6,627
Net Benefits of Measures Installed During Reporting Period ($000):	-$6,150

Demand Side Management Annual Report

Utility: DUKE ENERGY FLORIDA, LLC.
Program Name: Residential Load Management (a/k/a Residential Energy Management, Energy-Wise)
Program Start Date: January 1981, revision approved May 2000, 2nd revision approved 2006, 3rd revision approved 2015
Reporting Period: 2023

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2020	1,647,440	1,208,538	2,500	0.21%	2,735	2,735	0.23%	235
2021	1,673,995	1,232,593	5,000	0.41%	1,604	4,339	0.35%	-661
2022	1,700,215	1,256,313	7,500	0.60%	767	5,106	0.41%	-2,394
2023	1,726,425	1,280,023	10,000	0.78%	2,916	8,022	0.63%	-1,978
2024	1,752,362	1,303,460	12,500	0.96%				

cols b,c,d,e are based on DEF's 2020 Program Plan approved by the Commission in Docket 20200054-EG
col f., Annual Number of Program Participants represents new accounts added to the program each year.

Annual Demand & Energy Savings (during the reporting period)	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Winter kW Reduction	1.92	2.02	5,599	5,893
Summer kW Reduction	1.35	1.42	3,937	4,143
Annual kWh Reduction	0.00	0.00	0	0

Utility Cost per Installation: *	$71
Total Program Cost of the Utility ($000):**	$30,761
Net Benefits of Measures Installed During Reporting Period ($000):	$17,738

Utility cost per Installation is based on the total, cumulative number of year-end participants.
*****Utility program costs for this program include incentives paid to eligible participants.***

Total Program Participants at End of Year 433,000

Demand Side Management Annual Report

Utility: DUKE ENERGY FLORIDA, LLC.
Program Name: Business Energy Check
Program Start Date: 1991
Reporting Period: 2023

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2020	178,557	178,557	400	0.22%	429	429	0.24%	29
2021	181,015	180,615	800	0.44%	287	716	0.40%	-84
2022	183,346	183,346	1,200	0.65%	146	862	0.47%	-338
2023	185,608	185,608	1,600	0.86%	479	1,341	0.72%	-259
2024	187,771	187,771	2,000	1.07%				

cols b,c,d,e are based on DEF's 2020 Program Plan approved by the Commission in Docket 20200054-EG

Annual Demand & Energy Savings (during the reporting period)	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Winter kW Reduction	0.03	0.04	17	17
Summer kW Reduction	0.08	0.08	37	39
Annual kWh Reduction	451.02	471.21	216,037	225,711

Utility Cost per Installation:	$1,185
Total Program Cost of the Utility ($000):	$568
Net Benefits of Measures Installed During Reporting Period ($000):	N/A

Demand Side Management Annual Report

Utility: DUKE ENERGY FLORIDA, LLC.
Program Name: Smart $aver Business (f/k/a Better Business)
Program Start Date: April 1996 with modifications approved in 2006, 2015, 2016 and 2018
Reporting Period: 2023

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2020	178,557	178,557	2,589	1.45%	951	951	0.53%	-1,638
2021	181,015	181,015	5,048	2.79%	167	1,118	0.62%	-3,930
2022	183,346	183,346	7,384	4.03%	172	1,290	0.70%	-6,094
2023	185,608	185,608	9,603	5.17%	216	1,506	0.81%	-8,097
2024	187,771	187,771	11,712	6.24%				

cols b,c,d,e are based on DEF's 2020 Program Plan approved by the Commission in Docket 20200054-EG

Annual Demand & Energy Savings (during the reporting period)	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Winter kW Reduction	21.80	22.78	4,710	4,921
Summer kW Reduction	6.26	6.54	1,352	1,412
Annual kWh Reduction	44,110.19	46,085.49	9,527,802	9,954,465

Utility Cost per Installation:	$8,109
Total Program Cost of the Utility ($000):	$1,752
Net Benefits of Measures Installed During Reporting Period ($000):	-$917

Demand Side Management Annual Report

Utility: DUKE ENERGY FLORIDA, LLC.
Program Name: Smart $aver Custom (f/k/a Florida Custom Incentive Program)
Program Start Date: 1991
Reporting Period: 2023

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2020	178,557	178,557	200	0.11%	134	134	0.08%	-66
2021	181,015	181,015	390	0.22%	21	155	0.09%	-235
2022	183,346	183,346	571	0.31%	0	155	0.08%	-416
2023	185,608	185,608	743	0.40%	0	155	0.08%	-588
2024	187,771	187,771	906	0.48%				

cols b,c,d,e are based on DEF's 2020 Program Plan approved by the Commission in Docket 20200054-EG

Annual Demand & Energy Savings (during the reporting period)	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Winter kW Reduction	0.0	0.0	0	0
Summer kW Reduction	0.0	0.0	0	0
Annual kWh Reduction	0	0	0	0

Utility Cost per Installation:	0
Total Program Cost of the Utility ($000):	$214
Net Benefits of Measures Installed During Reporting Period ($000):	-$218

Demand Side Management Annual Report

Utility: DUKE ENERGY FLORIDA, LLC.
Program Name: Commercial Energy Management
Program Start Date: April 1996 - (Closed to new participants effective May 2000)
Reporting Period: 2023

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2020	178,557	0	0	0.00%	0	0	0.00%	0
2021	181,015	0	0	0.00%	0	0	0.00%	0
2022	183,346	0	0	0.00%	0	0	0.00%	0
2023	185,608	0	0	0.00%	0	0	0.00%	0
2024	187,771							

cols b,c,d,e are based on DEF's 2020 Program Plan approved by the Commission in Docket 20200054-EG

Annual Demand & Energy Savings (during the reporting period)	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Winter kW Reduction	---	---	0.0	0.0
Summer kW Reduction	---	---	0.0	0.0
Annual kWh Reduction	---	---	0.0	0.0

Utility Cost per Installation:	$10,379
Total Program Cost of the Utility ($000): *	$612
Net Benefits of Measures Installed During Reporting Period ($000):	N/A

**** Utility cost per Installation is based on the total, cumulative number of year-end participants.***
***** Utility program costs for this program include incentives paid to eligible participants.***

****Total NET Participants at the End of the Year*** 59

Demand Side Management Annual Report

Utility: DUKE ENERGY FLORIDA, LLC.
Program Name: Standby Generation
Program Start Date: April 1993 with revisions approved 2006, 2015 and 2016
Reporting Period: 2023

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2020	178,557	178,557	10	0.01%	5	5	0.00%	-5
2021	181,015	181,005	20	0.01%	5	10	0.01%	-10
2022	183,346	183,326	35	0.02%	3	13	0.01%	-22
2023	185,608	185,573	50	0.03%	4	17	0.01%	-33
2024	187,771	187,721	65	0.03%				

cols b,c,d,e are based on DEF's 2020 Program Plan approved by the Commission in Docket 20200054-EG

Annual Demand & Energy Savings (during the reporting period)	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Winter kW Reduction	640	668	2,559	2,674
Summer kW Reduction	640	668	2,559	2,674
Annual kWh Reduction	0	0	0	0

Utility Cost per Installation: *	$32,338
Total Program Cost of the Utility ($000):**	$6,047
Net Benefits of Measures Installed During Reporting Period ($000):	$6,962

**** Utility cost per Installation is based on the total, cumulative number of year-end participants.***
***** Total program costs for this program include incentives paid to eligible participants.***

Total NET Participants at End of Year 187

Demand Side Management Annual Report

Utility: DUKE ENERGY FLORIDA, LLC.
Program Name: Interruptible Service
Program Start Date: November 1992 - (Rate Schedule IS-1 is closed to new customers, and IS-2 became effective June 1996.)
Reporting Period: 2023

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2020	178,557	697	16	2.30%	7	7	1.00%	-9
2021	181,015	681	26	3.82%	4	11	1.62%	-15
2022	183,346	671	30	4.47%	2	13	1.94%	-17
2023	185,608	667	36	5.40%	1	14	2.10%	-22
2024	187,771	661	44	6.66%				

cols b,c,d,e are based on DEF's 2020 Program Plan approved by the Commission in Docket 20200054-EG

Annual Demand & Energy Savings (during the reporting period)	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Winter kW Reduction	20,000	20,896	20,000	20,896
Summer kW Reduction	20,000	20,896	20,000	20,896
Annual kWh Reduction	0	0	0	0

Utility Cost per Installation: *	$279,405
Total Program Cost of the Utility ($000): **	$48,337
Net Benefits of Measures Installed During Reporting Period ($000):	$47,086

**** Utility cost per Installation is based on the total, cumulative number of year-end participants.***
***** Utility program costs for this program include incentives paid to eligible participants.***

Total NET Participants at End of Year 173

Demand Side Management Annual Report

Utility: DUKE ENERGY FLORIDA, LLC.
Program Name: Curtailable Service
Program Start Date: November 1992 - (Rate Schedule CS-1 is closed to new customers, and CS-2 became effective June 1996.)
Reporting Period: 2023

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants*	Actual Cumulative Number of Program Participants**	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2020	178,557	697	1	0.14%	0	0	0.00%	-1
2021	181,015	696	1	0.14%	0	0	0.00%	-1
2022	183,346	696	2	0.29%	0	0	0.00%	-2
2023	185,608	695	2	0.29%	1	1	0.14%	-1
2024	187,771	695	3	0.43%				

cols b,c,d,e are based on DEF's 2020 Program Plan approved by the Commission in Docket 20200054-EG

Annual Demand & Energy Savings (during the reporting period)	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Winter kW Reduction	1,614.0	1,614.0	1,614.0	1,614.0
Summer kW Reduction	---	---	1,614.0	1,614.0
Annual kWh Reduction	---	---	0.0	0.0

Utility Cost per Installation: *	$377,599
Total Program Cost of the Utility ($000): **	$1,888
Net Benefits of Measures Installed During Reporting Period ($000):	$5,430

**** Utility cost per Installation is based on the program costs divided by the number of accounts participating in this program.***
***** Utility program costs for this program include incentives paid to eligible participants.***

Total NET Participants at End of Year 5

SOUTHERN ALLIANCE FOR CLEAN ENERGY

ENERGY EFFICIENCY IN THE SOUTHEAST

FIFTH ANNUAL REPORT

cleanenergy.org Southern Alliance for Clean Energy

MARCH 2023

ENERGY EFFICIENCY IN THE SOUTHEAST

FIFTH ANNUAL REPORT

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ABOUT SOUTHERN ALLIANCE FOR CLEAN ENERGY

The Southern Alliance for Clean Energy is a nonprofit organization that promotes responsible and equitable energy choices to ensure clean, safe and healthy communities throughout the Southeast. As a leading voice for energy policy in our region, SACE is focused on transforming the way we produce and consume energy in the Southeast.

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Southern Alliance for Clean Energy (2023).

Energy Efficiency in the Southeast, Fifth Annual Report.

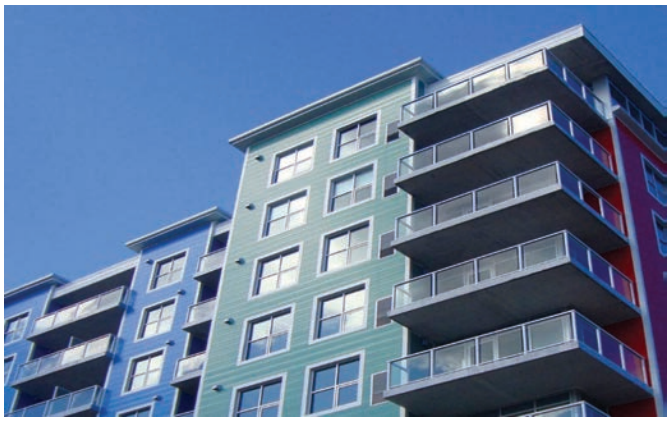
CONTENTS

INTRODUCTION

Energy efficiency is a proven low-cost clean energy resource, but Southeastern utilities and regulators continue to underinvest and deprioritize it. As a result, households in many Southeastern states have some of the highest electricity usage and monthly energy bills in the nation. The fifth annual "Energy Efficiency in the Southeast" report examines the connection between energy efficiency and utility integrated resource planning, and the impacts that new federal investments will have on energy efficiency deployment in the region.

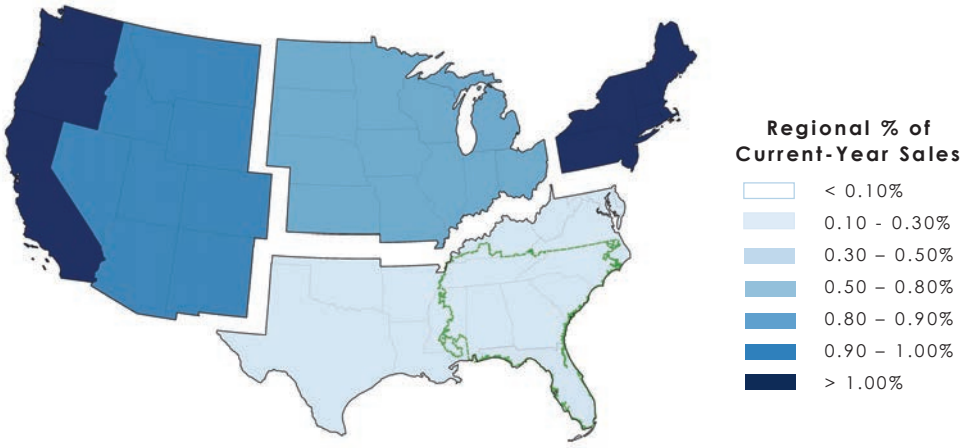
The COVID-19 pandemic had a particularly large impact on efficiency in the Southeast, resulting in savings declines that pushed the region further below the national average in 2020. In 2021, a few Southeastern utilities saw partial rebounds in their annual efficiency savings from the previous year, while others continued to slide.

This year's "Energy Efficiency in the Southeast" report documents recent policy developments and trends in electric utility efficiency data from 2021. **Utility energy efficiency programs are scored primarily on the basis of energy saved in 2021 as a percentage of the utility's total electricity sales.** Projected utility spending data in this report is used specifically for comparison to projected new federal spending on efficiency. All other comparisons of utility energy efficiency program performance are based on the primary metric of percentage annual electric savings described above. Additional policy context is then added along with comparisons to state, regional, and national averages that highlight recent trends. The appendices include data for each of the utilities that fall within the scope of this report.



EFFICIENCY PERFORMANCE OF THE SOUTHEAST, STATES, AND UTILITIES

ENERGY PERFORMANCE OF U.S. REGIONS



**Area outlined in green are the utilities in the "Southeast" region covered in this report.*

REGION-TO-REGION COMPARISON

The Southeast has consistently lagged far behind other regions and the nation as a whole on utility energy efficiency performance. Since the start of the COVID-19 pandemic in early 2020, the region's downward slide has continued, in both absolute and relative terms. In 2021, total efficiency savings in the Southeast were approximately 25% lower than before the pandemic. Unfortunately, current policies and practices (or lack thereof) in the Southeast continue to be a barrier to attaining higher efficiency savings for customers, even as skyrocketing fossil gas prices drive up electricity bills.

ENERGY PERFORMANCE OF U.S. REGIONS

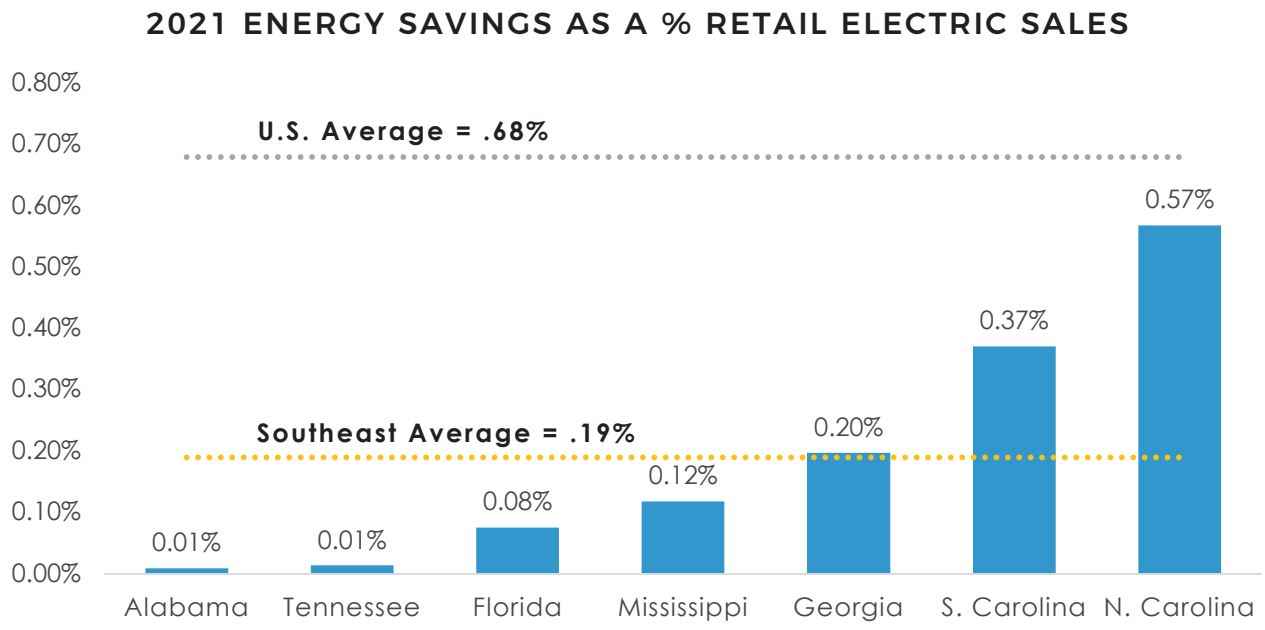
REGION	PERCENTAGE
Pacific West	1.64%
Northeast	1.13%
Mountain West	0.85%
Midwest	0.78%
U.S. Average	0.68%
South	0.27%
Southeast	**0.19%**

Throughout the rest of the U.S., states have found ways to maintain high levels of savings even as customer adoption and program penetration increased over time. Not only are the South and Southeast[1] performance outliers relative to all other regions, they have also consistently been the only ones that are below the national average – and as a result the only ones who are dragging the national average downwards. If the South is removed from the calculation, efficiency performance for all other regions would jump from 0.68% up to 1.04%, more than five times higher than savings in the Southeast region covered in this report.

But we can turn this long-standing deficiency into an opportunity. While other regions show how much higher efficiency saving performance can be, finding the next batch of efficiency savings can be more expensive and more challenging for them. By contrast, historic underinvestment on efficiency in the South and Southeast means that we still have abundant, low-cost efficiency resources available. Because of this, the South and Southeast are effectively the strategic efficiency reserve for our nation! Capturing this efficiency potential now will produce much needed economic benefits for the Southeast, and could accelerate our transition to clean energy.

STATE RANKINGS IN THE SOUTHEAST

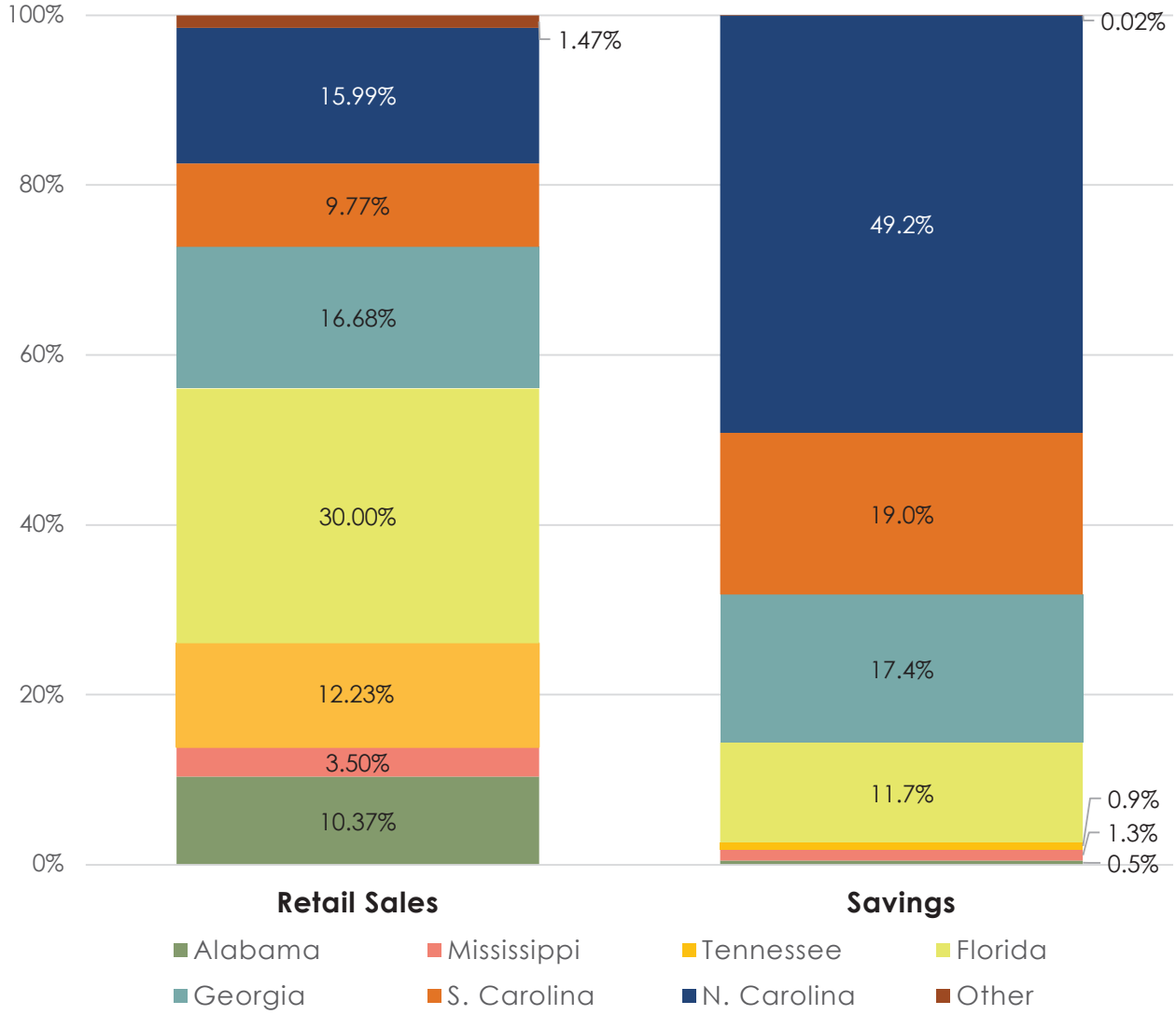
To provide an equitable, unbiased comparison of efficiency performance for states of various sizes in the Southeast, SACE uses a standard metric that compares the percentage of annual efficiency savings to total retail electricity consumption.



In 2021, efficiency performance in most Southeastern states continued to be lower than their pre-pandemic levels. While South Carolina and Georgia saw modest efficiency savings increases over their performance in 2020, Tennessee had yet another steep decline, with savings levels that are now 95% lower than they were just five years ago. While North and South Carolina continued to pull the regional average up, all Southeastern states were below the national average in 2021.

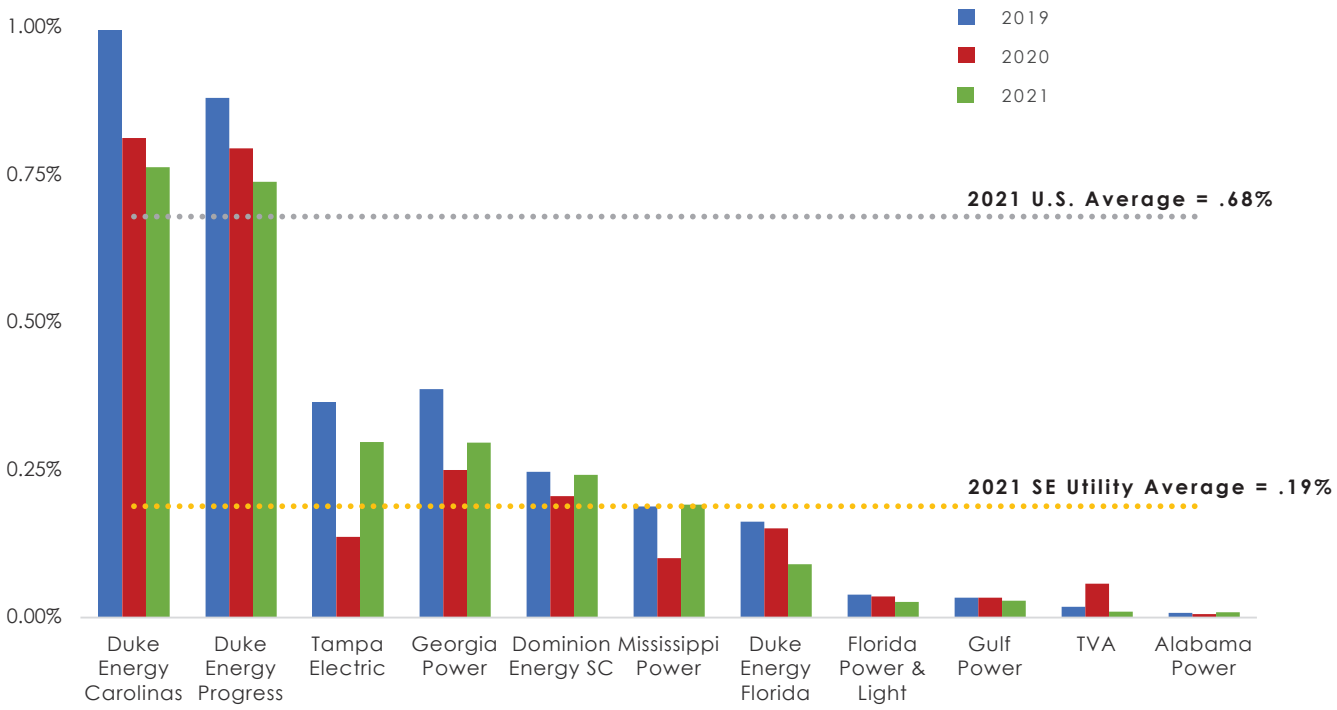
[1] The Southeast falls within a portion of the South region. Please see appendix A for map.

SOUTHEAST STATES SHARE OF REGIONAL 2021 SALES AND SAVINGS



Only two states in the Southeast, North and South Carolina, deliver substantially more efficiency savings relative to their share of total retail electric sales (26% of regional electric sales vs. 68% of efficiency savings). Georgia's share of efficiency savings is slightly more than its share of electric sales. Efficiency savings in Florida, Tennessee, Mississippi, and Alabama are far below their proportionate share, indicating that their customers are being deprived of valuable efficiency resources.

EFFICIENCY PERFORMANCE OF MAJOR SOUTHEASTERN UTILITIES



MAJOR UTILITIES IN THE SOUTHEAST

Tampa Electric, Georgia Power, Mississippi Power, and Dominion South Carolina saw partial rebounds from deep savings declines in 2020, though Tampa Electric and Georgia Power still trailed their pre-pandemic performance.

Duke's savings continued to decline across the board, though its performance in the Carolinas continues to lead in the Southeast.

TVA's savings fell to the bottom with Alabama Power, completing a 95% slide in efficiency savings since 2017. Annual savings in 2021 remained very low at both Florida Power & Light and Gulf Power, which then merged in 2022.

EFFICIENCY REDUCES FOSSIL FUEL EMISSIONS

Energy efficiency is a crucial tool for attaining carbon reduction goals. Even at savings levels that are far below potential, efficiency is still helping the Southeast to retire its aging fleet of fossil fuel power plants, reduce the need for more expensive fossil gas generation, and make the transition to renewable energy more affordable. In 2021, efficiency eliminated an estimated 1,534 gigawatt hours (GWh) of energy waste across the Southeast, enough to power 136,942 homes and avoid approximately one million tons of carbon emissions last year.

NEW FEDERAL FUNDING FOR ENERGY EFFICIENCY

With the passage of the Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA) in 2022, the federal government is making an unprecedented investment in clean energy, which could include as much as $62 billion for energy efficiency. Individual residents and businesses can take advantage of generous rebates and federal tax credits, and local governments can compete for grants and loans worth billions of dollars. The Southeast will receive nearly $1.8 billion in non-competitive formula allocations to expand existing Weatherization Assistance Programs (WAP), as well as new energy efficiency and electrification rebates that will be administered by individual states through the Home Energy Performance-Based Whole House Rebates (HOMES) and High-Efficiency Electric Home Rebate Program for Low- and Moderate-Income Households (HEERA) programs.

UTILITY ENERGY EFFICIENCY INVESTMENTS OVER TEN-YEARS AND NEW ENERGY EFFICIENCY FEDERAL FUNDING DOLLARS AVAILABLE

FUNDING SOURCE	UTILITY INVESTMENT	FEDERAL: BIL	FEDERAL: IRA REBATES	TOTAL FEDERAL $
Alabama	$59,829	$47,489	$145,639	$193,128
Florida	$800,548	$93,648	$346,326	$439,973
Georgia	$382,361	$84,313	$218,995	$303,308
Mississippi	$163,126	$28,078	$104,780	$132,858
North Carolina	$1,190,278	$89,776	$209,225	$299,001
South Carolina	$608,000	$42,582	$137,303	$179,885
Tennessee	$203,070	$66,347	$167,267	$233,614
Southeast	**$3,407,213**	**$452,233**	**$1,329,534**	**$1,781,767**

Numbers in $ Thousands. Ex. $1,781,767 = $1,718,767,000
BIL = Bipartisan Infrastructure Law; IRA = Inflation Reduction Act

While not a formula allocation like those on the table above, if citizens and businesses access the new energy efficiency tax credits on a roughly proportionate basis, that would bring an additional $1.9 billion for energy efficiency in the Southeast. Taken together, these formula allocated funds and consumer tax credits could roughly equal utility spending on energy efficiency over the next ten years, based on a continuation of 2021 utility efficiency budget levels.

THE SOUTHEAST: OUR NATION'S STRATEGIC EFFICIENCY RESERVES

The Southeast has consistently lagged behind the rest of the nation on energy efficiency, but a massive infusion of federal funding creates an opportunity for our region to take a big step forward. Only a portion of the federal funding will be automatically allocated to individual states, while large portions of the new funds will flow through competitive grants and consumer tax credits. **Our region has a tremendous opportunity to untap our efficiency potential.** But to ensure maximum financial benefit flows to our region, Southeastern states, utilities, and customers will need to aggressively pursue these funds.

IT IS BOTH, NOT EITHER OR

Some utilities in the Southeast, like FPL and TVA, have incorrectly argued in the past that building codes and federal standards make utility energy efficiency programs unnecessary. Yet utilities and states with similar or higher codes and standards in other parts of the country have still managed to deliver savings that are many times higher than the Southeast. With the new federal funding from the BIL and IRA, Southeastern utilities may once again roll out similar arguments, but it would be a mistake to dial back utility efficiency program investment. While new federal efficiency tax credits and rebate programs have rightly garnered attention, their annualized spending levels for the Southeast region are roughly equivalent to annual spending on utility efficiency programs. Not only would it be a mistake for utilities to reduce their efficiency investments in response to new federal spending, the IRA includes language specifically cautioning against it.

But remember, efficiency performance in the South has long trailed other regions. Combining traditional utility energy efficiency programs with the new federal spending provides a unique chance for the Southeast to make up for lost time by capturing untapped efficiency resources. There can be little doubt states and utilities in other regions will be doing so, potentially leaving us even further behind if we do not seize this once in a lifetime moment.

TO MAXIMIZE BENEFITS, UTILITIES, AND STATES MUST ALIGN THEIR EFFICIENCY PROGRAMS

New federal rebate programs for energy efficiency and electrification will be administered by state energy offices, and expanded tax credits will be implemented through the IRS. How well these new programs align with utility efficiency programs will have significant implications for customers. To avoid confusion and maximize energy saving benefits for customers, utilities and state energy offices will need to proactively coordinate their efforts. This should include finding ways to leverage federal programs, both rebates and tax credits, and existing utility energy efficiency program offerings together. Providing clear marketing information and creating convenient ways for customers to access all available incentives is also important. Utility Commissions can also play an important role by updating regulations where needed, ensuring utilities' efficiency programs are aligned with the new federal incentives, and requiring utilities to appropriately reflect the impacts of BIL and IRA in their integrated resource plans.

EFFICIENCY AS AN ENERGY RESOURCE

ENERGY EFFICIENCY IN INTEGRATED RESOURCE PLANNING

Demand-side management, which includes energy efficiency, has long been recognized as a least-cost energy resource and a valuable alternative to traditional supply-side power generation. This is because it is often cheaper to invest in helping customers cut energy waste, rather than build more expensive power generation to supply it. The benefits of energy efficiency programs include reduced demand for power generation, reduced risk from fuel price volatility and power plant construction cost overruns, and improved grid reliability – especially during extreme weather and times of peak demand. There is a myriad of non-energy benefits of efficiency as well, like pollution reduction, job creation, and improved health and comfort, but these benefits are typically not considered during utility resource planning.

Utilities can include efficiency resources in resource planning in a variety of ways, typically comparing the cost of energy efficiency program investments by the utility against the cost of serving the same energy needs with power generation. However, some important energy efficiency benefits, like fuel price hedging and improved utility system resilience, are often excluded. Ultimately, only efficiency savings from utility programs are considered in resource selection as part of the resource planning process, although savings that are assumed to occur outside of such programs are important for estimating future energy demand. But not all utility resource planning includes this comparison of cost effectiveness between efficiency resources and supply resources.

EFFICIENCY RESOURCE PLANNING IN SOUTHEASTERN STATES VARIES CONSIDERABLY

The grid reliability and financial benefits of energy efficiency are tremendous. But there is a tension between what is best for customers and the financial interests of utility companies, which frequently leads utilities to downplay efficiency options during resource planning. Stakeholders like SACE have an important role to play in advocating for increased attention to energy efficiency as a resource. This is especially needed here in the Southeast, where historic underinvestment in efficiency has contributed to energy consumption that is far higher than the national average, forcing customers to foot some of the highest bills in the country. Resource planning practices vary considerably across states and utilities, especially in regard to how efficiency is factored into utility resource planning.

ALABAMA

Alabama does not require utilities to conduct formal integrated resource planning. What Alabama Power files with the Commission as its resource plan lacks even the most basic elements of other utilities' IRPs, namely disclosure of its modeling assumptions and consideration of energy efficiency as an alternative to supply-side resources. Failure to conduct transparent integrated resource planning is a big part of why Alabama consistently has the worst efficiency performance in the Southeast, and its customers have among the nation's highest electricity consumption and monthly bills.

FLORIDA

Utilities in Florida do not conduct formal integrated resource planning, instead they produce what is called a Ten Year Site Plan each year. The only efficiency included in the TYSP are savings levels established in a separate efficiency goalsetting process that occur once every five years. These savings levels are often among the lowest in the nation for major electric utilities. The Ten Year Site Plan process does not include analysis to determine whether higher levels of utility investment in energy efficiency would reduce total utility system costs for customers.

GEORGIA

Historically, Georgia Power used prescribed efficiency savings levels in the IRPs it files with the Georgia PSC every three years, but in 2022 the Georgia PSC ordered the utility to allow both demand response and energy efficiency to compete head-to-head against supply-side resources in the utility's next resource planning process in 2025. The aim is to identify economically optimal levels of efficiency investment.

MISSISSIPPI

IRP rules were established in Mississippi for the first time in 2019. After many years with energy efficiency programs in a "QuickStart" phase, the Commission rolled its efficiency policies into the new IRP rules. However, in the first cycle of resource planning under the new rules, both Entergy and Mississippi Power submitted resource plans that were demonstrably inferior to the plans submitted by their sister companies in other states. Their IRPs did not move the needle on efficiency, though the utilities indicated intentions to grow their efficiency savings after the plans were finalized. How or whether energy efficiency requirements in future IRPs will be strengthened remains to be seen.

NORTH CAROLINA

North Carolina has combined its IRP process for Duke's two utilities into a single proceeding that covers both the IRP and the Carbon Plan, where Duke Energy Carolinas and Duke Energy Progress evaluate resources to meet future needs, reliability requirements, and carbon reduction targets. While the North Carolina regulations do not specify levels of energy efficiency, the North Carolina Utilities Commission has directed Duke to look at both its proposed level of energy efficiency and a higher level of energy efficiency.

SOUTH CAROLINA

The South Carolina PSC now has regulatory oversight for integrated resource planning by three electric utility systems – Duke, Dominion, and the state-owned public utility Santee Cooper. In the wake of the VC Summer nuclear power plant debacle, South Carolina's Energy Freedom Act (Act 62) established new responsibilities for electric utilities around resource planning, and directed the Commission to oversee compliance with the new law. One outcome of the changes is that the Commission has directed utilities to evaluate certain levels of energy efficiency savings, in particular requiring that Dominion evaluates savings levels up to 2% of annual retail sales in its 2023 IRP.

TENNESSEE

The Tennessee Valley Authority once sought to be a leader on energy efficiency in resource planning, and for two cycles it showed that substantial investments in efficiency were warranted. However, its actions never lived up to its plans, and TVA's most recent IRP essentially eliminated efficiency as a resource. Following a congressional oversight letter criticizing the utility's poor record on energy efficiency and other clean energy resources, TVA has promised to do better in its next IRP, which is slated to begin in 2023 or 2024. But whether or how that will happen also remains to be seen.

THE IMPACT OF FEDERAL EFFICIENCY PROGRAMS

A massive infusion of federal funding for energy efficiency over the next decade from the BIL and IRA has significant implications for utility resource planning, both in substance and process. Additional efficiency savings resulting from these federal programs will impact future demand forecasts for electric utilities. Federal efficiency rebate programs could also help to propel utility efficiency programs to achieve higher savings levels. It is also possible that utilities ignore those opportunities or even argue against utility investment due to the new federal funding. As a matter of process, utilities should diligently explore the implications of new federal efficiency spending, though some will likely claim that uncertainty about the specific future impacts on energy demand justifies ignoring it for now. Ultimately, it will be up to stakeholders and regulators to ensure utility resource plans appropriately consider and incorporate the impacts of IRA and BIL on utility resource planning.

MANUFACTURED HOUSING AND EFFICIENCY

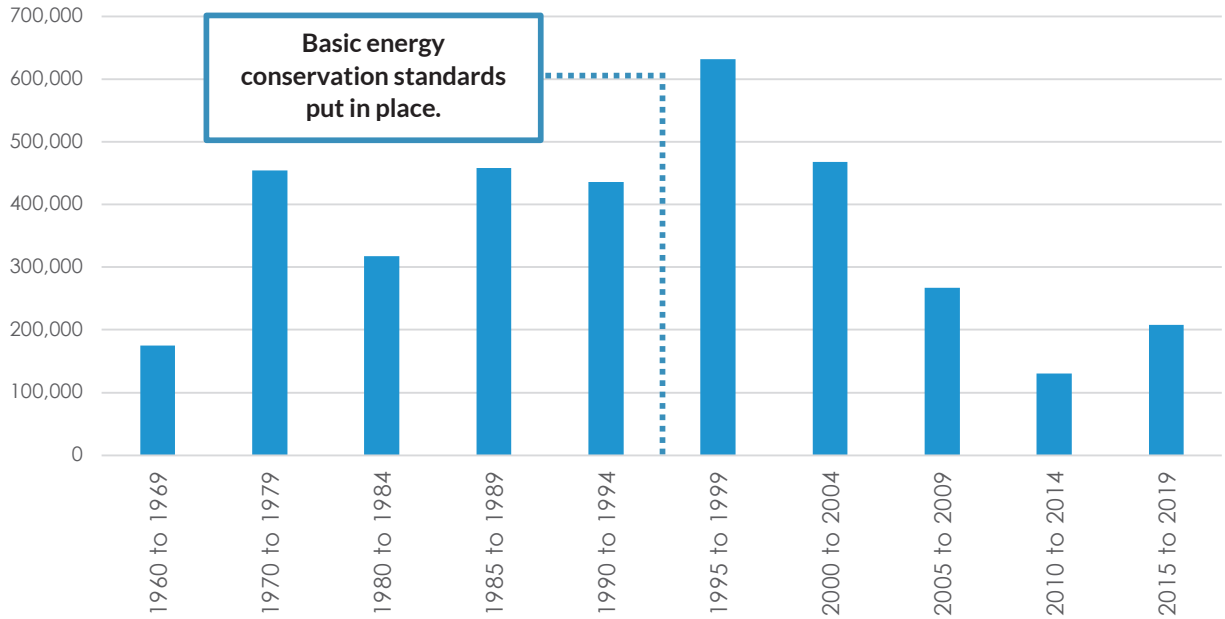
Manufactured housing, also known as mobile homes, have the highest energy consumption per square foot of any housing type, making them a prime candidate for energy efficiency improvements. On average, manufactured homes use about 50% more electricity than single- or multi-family homes. The majority of residents of manufactured homes are low- and fixed-income households, with annual income that is about half of the average for single family homes. In the Southeast, there are few examples of utility energy efficiency programs specifically targeting this housing segment, and there is almost no reporting of participation by manufactured home residents in standard utility efficiency programs. In 2021, the Georgia Public Service Commission directed Georgia Power to fund efficiency projects in manufactured homes, which could be the start of a trend across the Southeast.

MANUFACTURED HOMES IN THE SOUTHEAST BY STATE

STATE	MANUFACTURED HOMES	PERCENTAGE OF MANUFACTURED HOUSING IN U.S.	NATIONAL RANKING
Florida	831,641	10%	1
North Carolina	581,328	7%	3
Georgia	373,960	4%	5
South Carolina	367,358	4%	6
Alabama	296,231	4%	8
Tennessee	267,878	3%	10
Mississippi	196,763	2%	14
Southeast	2,915,132	35%	

There are 8.4 million manufactured homes in the U.S. and 2.9 million, or about 35% of them, are in the Southeast. Manufactured homes represent a little over 11% of the Southeast's residential housing stock. Florida, North Carolina, and Georgia are all in the top five states for total manufactured homes.

DISTRIBUTION OF MANUFACTURED HOME UNITS IN THE SOUTH BY YEAR BUILT



In 1976 standards were established to ensure the longevity of manufactured homes, and basic energy conservation standards for manufactured homes were put in place in 1994. Unfortunately, many of the manufactured homes in the South[2] were built after the longevity standards were enacted but before the creation of energy conservation standards. Thus, much of the manufactured housing stock is long-lasting but extremely inefficient.

[2] U.S. Census Bureau 2016-2020 ACS 5-year Public Use Microdata Samples (PUMS) West South Central, South Atlantic, East South Central Unit Records. ACS data groups manufactured homes in the "mobile homes" category of unit structure type. The Southeast falls within a portion of the South region. Please see appendix A for map.

UTILITY COMPANY PROFILES

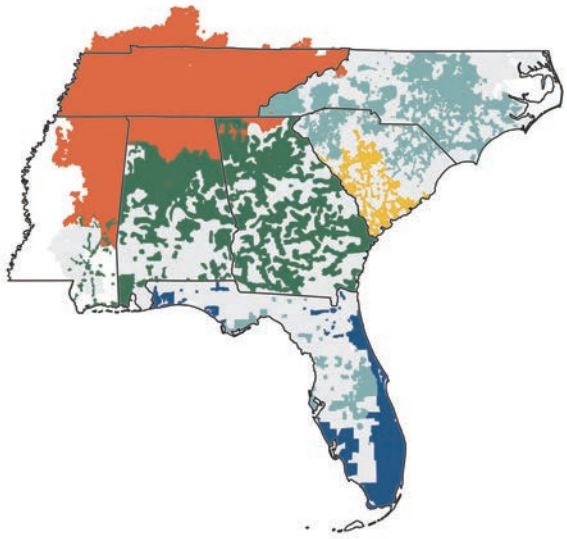
DUKE ENERGY

DOMINION ENERGY

SOUTHERN COMPANY

TVA

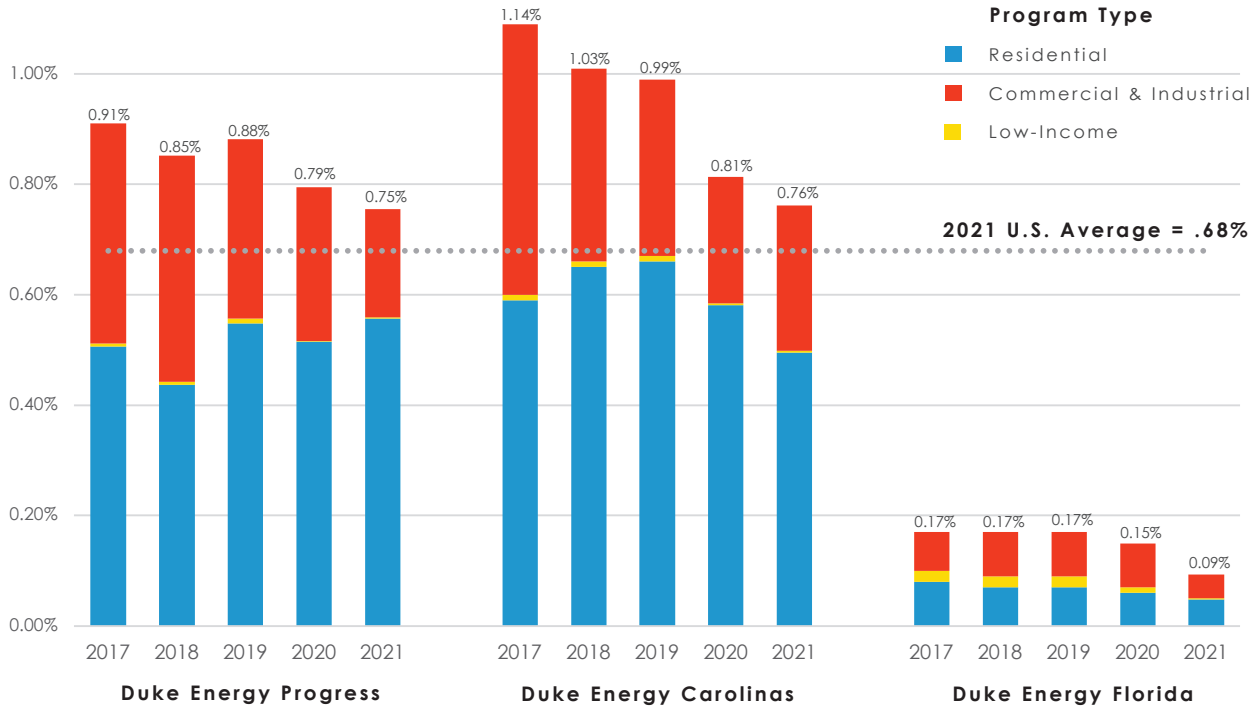
NEXTERA



DUKE ENERGY

Duke Energy is one of the largest electric holding companies in the country. It operates three electric utilities in the Southeast, including Duke Energy Florida, Duke Energy Progress and Duke Energy Carolinas. **Duke Energy Carolinas** serves approximately 2.7 million customers in North and South Carolina. **Duke Energy Progress** serves approximately 1.6 million customers in North and South Carolina. **Duke Energy Florida** serves approximately 1.8 million customers in Florida. Duke Energy also has utilities in Indiana, Ohio, and Kentucky that are not included here.

DUKE ENERGY | ENERGY SAVINGS AS % OF RETAIL ELECTRIC SALES



EFFICIENCY'S CONTRIBUTION TO NC'S CARBON REDUCTION TARGETS

North Carolina is the only state in the Southeast to have formally committed to cutting carbon emissions from its electricity sector. In its inaugural Carbon Plan, the North Carolina Utility Commission's final order adopted Duke's proposed efficiency savings goal, which was nominally 1% of "eligible" retail sales.[3] Following our modeling that included savings of 1.5% of total retail sales, the Commission also directed DEP and DEC to seek a more aspirational goal of 1.5% savings of eligible retail sales, and include this higher savings level as an alternate modeling scenario in its next Carbon Plan/Integrated Resource Plan (CPIRP).

On its face, this appears to represent progress, even if incremental, but it is worth noting that even at this level Duke will continue to lag behind average savings achieved by peer utilities around the country. Because Duke removes opt-out customers from its retail sales figure before calculating efficiency savings, the utility's current 1% target of so-called "eligible sales" is actually lower than its actual savings performance in recent years. Nevertheless, Duke has indicated a desire to pursue several new "enablers" for achieving higher efficiency and demand-side savings, and the Commission directed the utility to file corresponding applications and rulemaking requests for consideration that could open up additional savings opportunities.

STRUGGLING TO SERVE DUKE'S LOW-INCOME CUSTOMERS

In the wake of the COVID-19 pandemic, efficiency savings for Duke's low-income customers have taken a devastating turn for the worse. In 2020 and 2021, efficiency savings from Duke's income qualified programs in Florida fell by a whopping 75% compared to 2019. In the Carolinas, Duke's income qualified efficiency program savings fell by 77%, and savings for its residential multifamily housing program fell by 84%. Given the recent financial impacts of the pandemic and rising inflation, this decline could not have come at a worse time for low-income households. Labor shortages and supply chain issues have further complicated the return to pre-pandemic savings in these programs, but hopefully soon they will again reach full capacity and grow to meet the full scale of customer needs.

Following Duke's most recent rate case in North Carolina, in early 2021 the Commission ordered the creation of a year-long Low-Income Affordability Collaborative (LIAC). The final report from the LIAC states that approximately 29% of DEC and DEP residential account holders fall below 200% of the Federal Poverty Guideline, and therefore qualify for Duke's income qualified efficiency programs. This equates to an estimated 900,000 households meeting the low-income criteria, with approximately 490,000 struggling with arrears (unpaid bills). The majority of recommended actions in the LIAC report relate to expanding efficiency programs to improve energy bill affordability for low-income households, but the Commission took no direct action in response to the report.

RECENT STRIDES TO EXPAND LOW-INCOME EFFICIENCY OFFERINGS

Rate case settlement agreements between Duke, SACE, and our advocacy partners represented by the Southern Environmental Law Center have nevertheless produced tangible results in other ways. In 2022, Duke submitted an application to the Commission for a pilot program that we co-designed, which is aimed at delivering deep efficiency improvements at no cost to participants for low-income households with very high energy use. Duke will also work with us this year to develop a pilot program to serve low-income renters in multifamily buildings.

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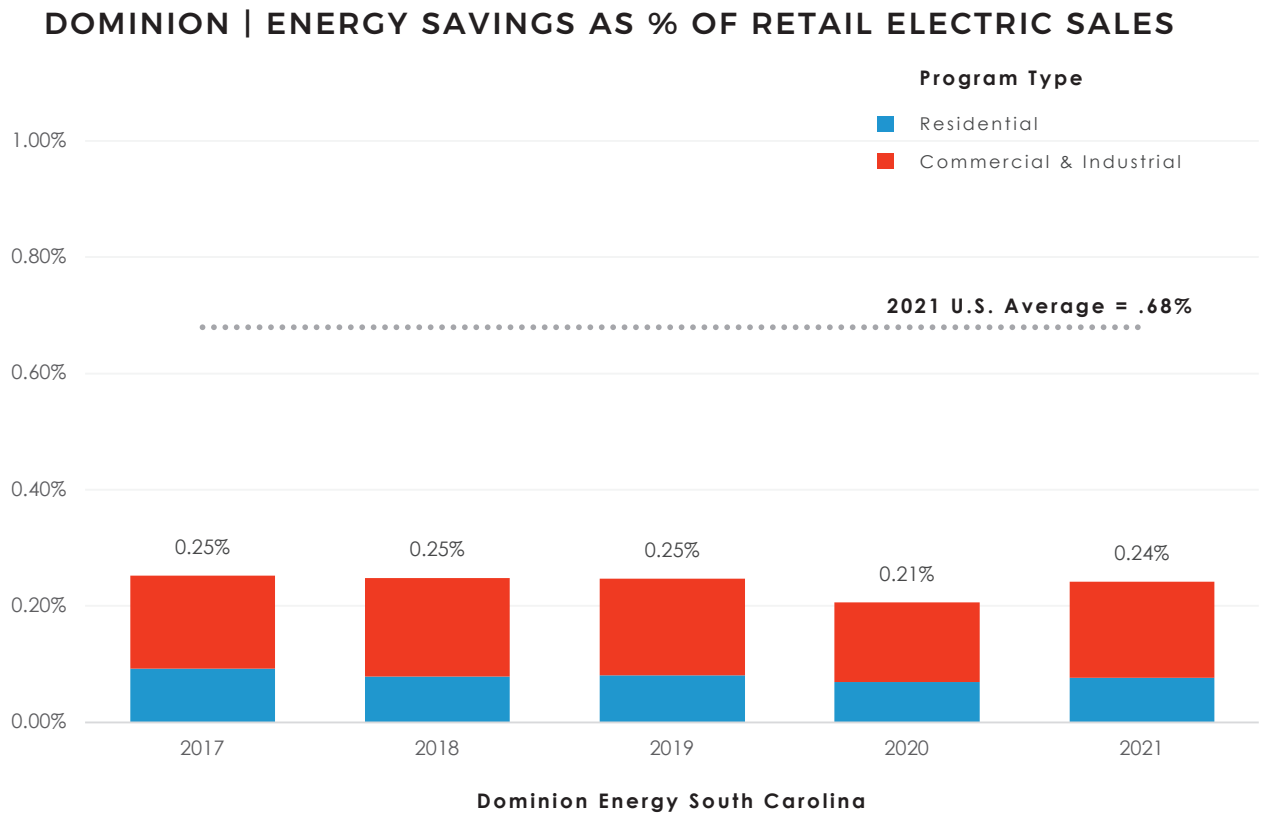
[3] In contrast with past precedent and conventional methods used by monitoring organizations like ACEEE, SACE, and others, the calculation method Duke proposed redefined the target by removing opted-out commercial and industrial customers from the retail sales figure used to calculate the percentage of efficiency savings. This change in how efficiency savings are calculated results in a less ambitious efficiency savings target than Duke had agreed to following the merger of Progress Energy and Duke Energy Carolinas.

Also from the rate case settlement, Duke filed an application for Tariffed On-Bill financing to cover the upfront cost of major efficiency improvements, with repayment collected over time on a customer's bill. If approved, the program will be open to all customers regardless of income. In DEP's most recent South Carolina rate case, the South Carolina Public Service Commission approved a settlement agreement between Duke, SACE, and our advocacy partners represented by the Southern Environmental Law Center that requires the utility to double the amount of spending for the its low-income efficiency programs in the state. Separately, after years of advocacy, DEP also filed an application for a deep efficiency weatherization program currently offered only to customers of DEC. Taken together, these are encouraging steps toward much needed expansion of efficiency program offerings to Duke's low-income customers in the Carolinas.

DOMINION ENERGY SOUTH CAROLINA

Dominion Energy operates electric utilities in Virginia and the Carolinas, but only the South Carolina utility is within the geographic region of this study. **Dominion Energy South Carolina** serves 771,620 customers.



EVEN WITH UNAMBITIOUS GOALS, STILL FALLING SHORT

Dominion Energy South Carolina's annual efficiency savings level is only about one third of the national average, and is even below its in-state neighbor, Duke Energy. For years, Dominion has set only modest efficiency savings goals for itself, and yet it has still consistently fallen short of attaining them. This divergence between the utility's efficiency savings forecast and its actual savings performance was recently raised before the South Carolina Public Service Commission by the Office of Regulatory Staff, who noted the problem it creates for the utility's load forecast during resource planning. In response, the Commission ordered the utility to better align its efficiency savings and load forecast, but unfortunately Dominion used this order not as a nudge to find solutions to actually achieve its savings targets, but instead as justification for lowering its savings goals going into the 2023 IRP.

IF DOMINION CAN'T DO IT, WHO CAN?

Dominion's low savings targets in its 2023 IRP appears to be plainly out of step with the Commission's previous order rejecting Dominion's 2020 IRP, which directed the utility to increase efficiency to 1% annual savings through 2024 and model higher savings levels all the way up to 2% in future IRPs. Instead, Dominion is once again arguing that only savings levels that are well under 1% are achievable. The Commission's 2020 order on Dominion's IRP also specifically directed the utility to engage stakeholders in iterative development of the higher-savings level scenarios, but stakeholders were denied any such opportunity, despite participating in numerous meetings with the utility that were meant to fulfill Commission requirements.

Dominion continues to double down with arguments that it can only achieve very modest efficiency savings levels. If that is so, perhaps it is time the utility was relieved of the responsibility to do something it either can't or won't do, in favor of a new energy efficiency program implementer who can get the job done.

LOW-INCOME EFFICIENCY PROGRAMS IN LIMBO

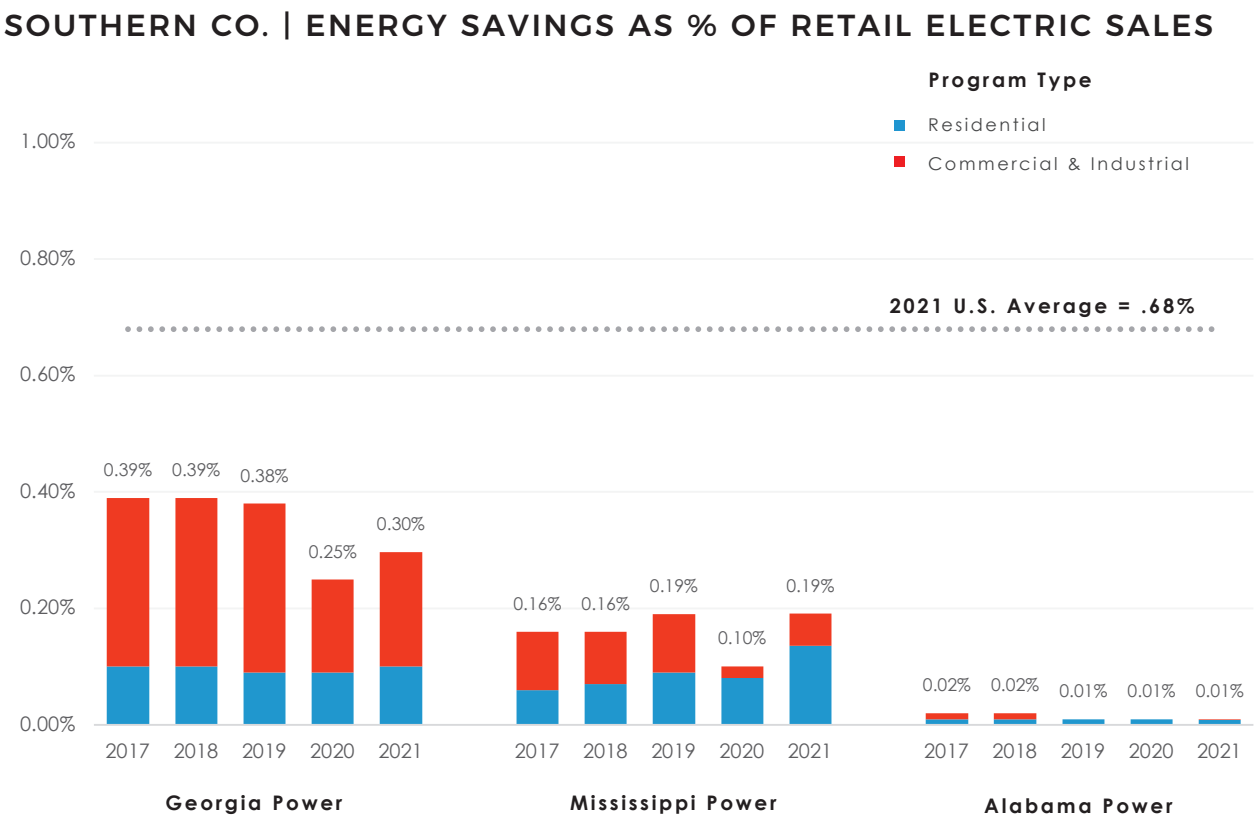
As part of its 2020 IRP process, Dominion indicated that it would double participation in its low-income Neighborhood Energy Efficiency Program (NEEP). This was an encouraging development, for which we applaud both DESC and the Commission. Unfortunately, Dominion's actual efficiency savings in pandemic-impacted 2020 and 2021 fell considerably, with low-income program performance seeing particularly sharp declines.

Dominion's 2021 rate case also had major energy efficiency implications. In settlement negotiations Dominion committed $15 million of shareholder funds for a new deep efficiency retrofit program for low-income customers. That program has not yet been implemented, but is expected to begin April 1, 2023.

SOUTHERN COMPANY

Southern Company is a holding company with three electric utility subsidiaries, all within the geographic scope of this report. **Alabama Power** serves approximately 1.5 million homes, businesses, and industries across the southern two-thirds of Alabama. **Georgia Power** serves approximately 2.6 million customers in all or parts of 155 of the state's 159 counties. **Mississippi Power** serves approximately 190,000 customers within 23 counties in southeastern Mississippi.

Historically, there have been big differences in energy efficiency policies and the company's utility efficiency savings performance in these states.



THE GEORGIA COMMISSION ORDERS HIGHER EFFICIENCY SAVINGS

In Georgia Power's 2019 Integrated Resource Plan, the Commission directed the utility to increase its efficiency savings targets by 15%, an incremental but meaningful step forward. Unfortunately, Georgia Power's efficiency programs went the wrong direction and savings levels fell during the COVID-19 pandemic far more than peer utilities and the national average, ultimately undermining achievement of the higher savings targets.

In the 2022 IRP, the Commission once again ordered Georgia Power to increase its efficiency savings targets by another 15% for each of the next three years, on top of the 15% it had already ordered in the previous IRP. As a result of this decision, customers are expected to receive approximately half a billion dollars in bill savings from efficiency measures that will be implemented over the next three years.

EFFICIENCY TO GO HEAD-TO-HEAD WITH POWER GENERATION

In another major development in the 2022 IRP, the Commission required Georgia Power to allow demand side resources like energy efficiency to compete head-to-head against traditional power plants in the utility's next IRP. This is a best practice for IRPs that has been historically elusive in the Southeast. Considering that higher levels of efficiency resulted in the lowest total cost resource portfolio in the 2022 IRP, it will be exciting to see higher levels of efficiency analyzed in Georgia Power's next IRP.

PRIORITIZING THE EFFICIENCY NEEDS OF MANUFACTURED HOUSING

The 2022 IRP also designated program funding and savings targets specifically for efficiency improvements in manufactured homes. Because of the prevalence of this housing type in the Southeast, their high energy use per square foot, and frequent overlap with low- and fixed-income households, these efficiency investments are expected to produce significant benefits. Going forward, we hope other states will want to follow suit. In fact, the first carryover for this new manufactured home efficiency program is with Georgia Power's sister company, Mississippi Power.

AFTER THE WHISTLE: MISSISSIPPI POWER ANNOUNCES EFFICIENCY EXPANSION

Mississippi Power filed its first ever IRP in 2021 under the state's new rules. Although it was a bust for energy efficiency, soon afterward the utility announced plans to roughly double its annual efficiency savings to about 0.5% over the next few years. Mississippi Power has quite a way to go to attain this goal, and even if successful it will still trail behind most major utilities, but it is a step in the right direction.

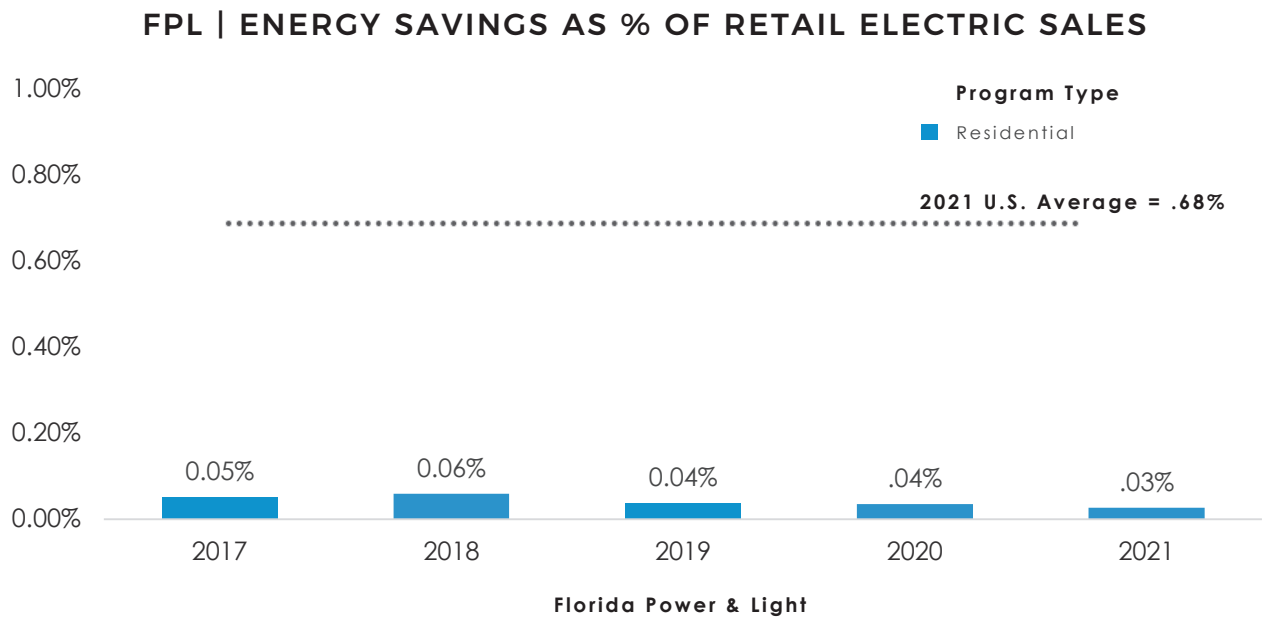
NO NEWS IS BAD NEWS IN ALABAMA

Alabama Power is the outlier among Southern Company subsidiaries for not conducting a formal and public integrated resource plan, nor evaluating efficiency as a resource for meeting customers' future energy needs. Unfortunately, the old adage that no news is good news doesn't apply to energy efficiency in Alabama, where Southern Company's subsidiary Alabama Power continues to be the lowest performing major utility in our region and among the worst in the nation.

The utility's only current offerings are a rebate for smart thermostats and another for water heaters. The latter program is premised on converting only gas water heaters to electric, which we conceptually support, but ironically it is clear the true intent of this program is to increase electricity usage and boost the utility's revenues.

FLORIDA POWER & LIGHT

Florida Power & Light is a subsidiary of NextEra Energy. FPL serves over 5.6 million customers in the northwestern, southern, and eastern portions of Florida, representing more than half of all electric customers in the state.



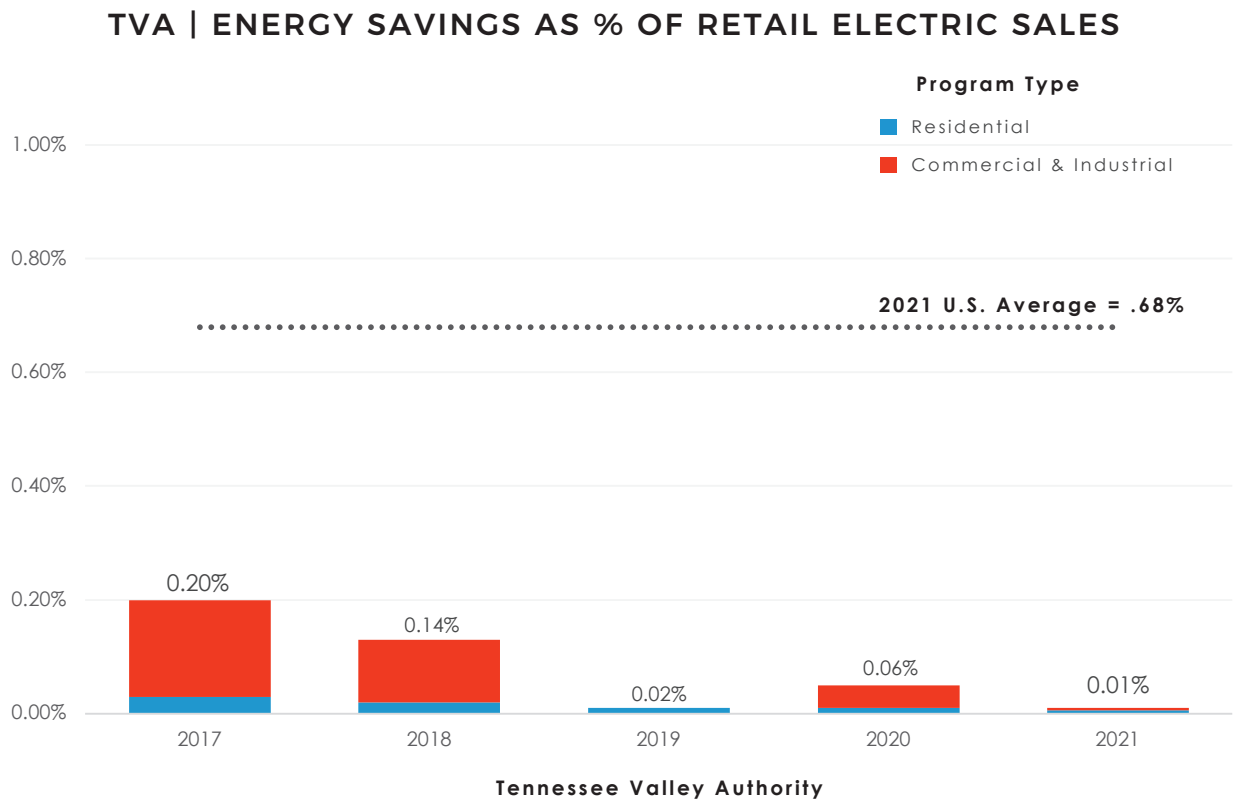
Florida Power & Light's efficiency performance has historically been among the lowest in the Southeast, and in 2021 its annual savings declined even below 2020 levels. Because FPL generates over half of all electric sales in Florida, its decisions surrounding energy efficiency have enormous repercussions for the entire state, and particularly for FPL's more than five million customers. Unfortunately, FPL has consistently resisted expanding energy saving programs – both as a matter of policy and as a matter of company practice.

In June 2022, FPL's parent company, NextEra, announced a commitment to achieve "Real Zero" carbon emissions by 2045, and distinguished its intentions from those of other utilities that rely on buying carbon offsets to justify continuing to use fossil fuels to generate power. Instead, to achieve its decarbonization goal, FPL plans to replace existing fossil fuel generation with *"a diverse mix of solar, battery storage, existing nuclear, green hydrogen and other renewable sources."* Conspicuously missing from FPL's decarbonization strategy, however, is any mention of energy efficiency.

Without a plan to expand efficiency, the least cost energy resource, FPL's transition to clean energy will be more expensive, and it risks exacerbating existing energy equity problems. For customers who already struggle to afford high bills, energy efficiency is an essential service that will remain important as we transition to clean energy. For this and many other reasons, energy efficiency should be a first-choice resource for decarbonizing the grid… even at FPL.

TENNESSEE VALLEY AUTHORITY

The federally-owned **Tennessee Valley Authority** serves approximately 4.9 million customers in Tennessee, Alabama, Georgia, Kentucky, Mississippi, North Carolina, and Virginia.



LACK OF EFFICIENCY INVESTMENT DRIVES USAGE AND COSTS UP FOR CUSTOMERS

The Tennessee Valley Authority once promised to be a leader in energy efficiency, but in practice, the utility's efficiency investments have never lived up to those promises. Instead, TVA relies ever more on fossil gas for power generation and has no real strategy for cutting energy waste to reduce demand or the need for expensive power generation.

For the past decade, TVA has underspent on energy efficiency, and in 2018 it ended its standard efficiency rebate programs altogether. The only residential efficiency program TVA now offers is for low-income weatherization, and its funding and energy savings through that program lag behind its utility peers. TVA's historic lack of efficiency investment perpetuates unnecessary energy waste and leads to significantly higher energy bills. In 2021 residential customers in Tennessee consumed nearly 34% more electricity than the national average – making it once again the second highest state for residential electricity consumption in the country. Unfortunately, TVA continues to head in the wrong direction, and in 2021 fell to new lows, with its annual energy efficiency savings tied for the bottom alongside Alabama Power.

INEFFICIENT HOMES EXACERBATE WINTER POWER OUTAGES

Without energy efficiency, customers struggle to cool and heat inefficient homes during extreme hot or cold weather, causing energy demand to skyrocket, as it did on Christmas Eve 2022 across a large part of the Southeast region. This in turn placed extreme stress on the power grid, and TVA had to implement rolling blackouts throughout the Valley during Winter Storm Elliott to maintain the stability of the grid that covers most of the United States. These were just the latest reminder that continued failure to invest in energy efficiency can have devastating consequences when power consumption demands are pushed to the max. If TVA had consistently made prudent investments in energy efficiency, instead of repeatedly slashing funding for its efficiency programs, it could have insulated the grid from demand spikes, and potentially prevented the need for rolling outages.

RETIRING COAL PLANTS: EFFICIENCY VS. FOSSIL GAS

TVA has announced its plan to replace two of its retiring coal plants, Cumberland and Kingston, by constructing new fossil gas power plants. These two projects would lock TVA customers into carbon-emitting power for decades to come. Instead, a focus on renewable energy and energy efficiency could ramp up to replace these retiring coal plants and negate the need to build new fossil gas pipelines. Ultimately, the best route for deciding how to replace these and other major generation retirements is through an IRP. TVA is required to complete an IRP every five years, so it will need to start its resource planning process soon. However, TVA has indicated it will not start its next IRP until late 2023, meaning it will likely miss its five-year requirement.

CONGRESS INVESTIGATES TVA OVER EFFICIENCY AND CLEAN ENERGY

On January 13, 2022, the House Energy & Commerce Committee sent an oversight letter to TVA inquiring about its practices and policies on energy efficiency, solar, rate setting, carbon reductions, and funding it provided for anti-Clean Air Act lobbying. TVA's response included cherry-picked figures and long debunked arguments, but TVA did commit to increasing its investment in energy efficiency following its next IRP.

FEDERAL FUNDING CREATES A NEW OPPORTUNITY FOR EFFICIENCY AT TVA

Both its pending IRP and new funding opportunities resulting from the BIL and IRA create the conditions for TVA to become the energy efficiency leader it once promised to be. The question is whether TVA will take the opportunity this time and make good on those promises. The IRA is particularly impactful to TVA and its customers because it allows tax-exempt entities, like TVA, to take advantage of financial incentives that lower the cost of clean energy resources like solar, storage, and wind. In addition, new federal spending on energy efficiency will further reduce the need for fossil fuel power generation, thereby accelerating and lowering the cost of making the transition to a clean energy grid.

STATE PROFILES

ALABAMA
FLORIDA
GEORGIA
MISSISSIPPI
NORTH CAROLINA
SOUTH CAROLINA
TENNESSEE

View Appendix A for details on state coverage.

ALABAMA

The Alabama Public Service Commission is a three-person regulatory-body for Alabama Power. The Tennessee Valley Authority is regulated by a nine-member Board of Directors. Since TVA is a federal agency, board members are appointed by the President and confirmed by the U.S. Senate. PowerSouth Energy Cooperative is managed by its board.

ALABAMA ENERGY EFFICIENCY PERFORMANCE

UTILITY	% EE
Southeast Average	0.19%
PowerSouth	0.02%
Alabama Power	0.01%
Alabama Average	**0.01%**
Tennessee Valley Authority	0.01%

In a state without policy, regulatory oversight, or utility leadership on energy efficiency, Alabama's largest utilities, Alabama Power and TVA, are regularly the worst performing in the region.

Alabama Power does not perform integrated resource planning with stakeholder involvement or the kind of regulatory oversight that is standard practice in the industry for major utilities. When the utility does undergo resource planning at all, it is conducted behind closed doors, lacks meaningful regulatory oversight, and excludes key resources like energy efficiency.

It is hardly surprising, then, that Alabama has the nation's 4th highest monthly residential energy consumption and third highest energy bills. Extraordinarily high energy bills and high rates of poverty and inequality create the conditions for unaffordable energy burdens, with no remedy in sight.

FLORIDA

The Florida Public Service Commission is a five-person regulatory body that has jurisdiction over the largest electric utilities on goal-setting for energy efficiency. Commissioners are appointed by the state's governor and confirmed by the Florida Senate. Investor-owned utilities regulated by the Florida PSC include Tampa Electric Company, Duke Energy Florida, and Florida Power & Light. The Florida PSC also oversees energy efficiency goal-setting for select public utilities in the state including Orlando Utilities Commission, JEA, and the Florida Public Utilities Company.

FLORIDA ENERGY EFFICIENCY PERFORMANCE

UTILITY	% EE
Orlando Utilities Commission	0.30%
Tampa Electric Company	0.30%
Southeast Average	0.19%
JEA	0.17%
Duke Energy Florida	0.09%
Florida Average	**0.08%**
Florida Public Utilities Company	0.04%
Florida Power & Light	0.03%

Florida utilities are heavily reliant on fossil gas, which provides approximately 70% of the state's total power generation. Therefore, when gas prices spike, like they did in the aftermath of Russia's invasion of Ukraine, customer bills rise steeply. Unfortunately, major Florida utilities like FPL have failed to make meaningful investment in energy efficiency resources, leading to more gas being burned, with higher costs passed on to all customers. Meanwhile, insufficient utility efficiency program offerings simultaneously deprive families of a valuable tool to save money on their power bills.

The unfortunate truth is that power bills today are higher than ever in Florida, and hard-working families need greater access to energy efficiency programs to help them manage their bills. After a nearly three-year process, the Commission has yet to modernize its rules to encourage meaningful utility energy efficiency goals and programs. Until there is real reform to Florida's energy efficiency rules, the state's major electric utilities will continue to be near the bottom of national rankings on efficiency performance.

By cutting energy waste, efficiency is the best tool for helping individual customers to quickly lower their energy bills, while also reducing the overall cost of providing power over time, which brings financial benefit to the general body of customers as a whole. But unless the Commission takes action, the existing efficiency rules will still be a major barrier to lowering energy bills for customers. Time and again, Florida's efficiency rules and practices have been far out of step with the rest of the nation, and used by Florida utilities to limit, rather than increase, energy savings opportunities for customers.

Florida utilities commonly argue that lost revenues from energy efficiency program savings results in a subsidy paid by other customers. This argument falls flat on several counts. To begin with, economic benefits of reducing energy consumption accrue to all customers. Moreover, in a state with a growing population and customer base, utility revenues continue to increase and earnings remain high, so efficiency savings do not result in unrecovered lost revenues that need to be collected. For instance, FPL consistently earns an 11.8% return on equity - the top of its authorized range and above the national average – even when fuel price spikes drive customer bills up. Given this level of earnings, scaled-up customer energy efficiency programs do not justify a utility filing a rate case to recover claims of lost revenue.

The vast majority of states require major utilities to undertake integrated resource planning under the oversight of Commission IRP rules and with opportunities for public scrutiny and input. Florida's Ten Year Site Plan process falls short of these standards, both in terms of transparency and evaluation of energy efficiency as a resource. Instead of determining the best level of energy efficiency investment through IRP analysis, Florida utilities just assume they will meet minimal requirements established through the state's broken energy efficiency goal setting rule – never evaluating the level of efficiency investment that will produce the lowest system cost. As a result, customers are on the hook to pay for even more expensive power generation, which has contributed to today's over-reliance on fossil gas generation in the Sunshine State.

GEORGIA

The Georgia Public Service Commission is a five-person elected-body that has authority over Georgia Power. Municipal utilities in Georgia have local authority over decision-making and cooperatives in the state – including Oglethorpe Power Corporation – are managed by their member-elected boards. The Tennessee Valley Authority is regulated by a nine-member Board of Directors. Since TVA is a federal agency, board members are appointed by the President and confirmed by the U.S. Senate.

GEORGIA ENERGY EFFICIENCY PERFORMANCE

UTILITY	% EE
Georgia Power	0.30%
Georgia Average	**0.20%**
Southeast Average	0.19%
Oglethorpe	0.07%
Tennessee Valley Authority	0.01%
Municipal Utilities	0.00%

In 2021, the Georgia Public Service Commission directed Georgia Power to set aside $1.5 million specifically for efficiency projects in manufactured homes, which could be the start of a trend across the Southeast. According to Georgia Power representatives, the program is expected to be very cost effective, producing between $1.60 - $1.80 in energy savings for each program dollar spent. Soon after the Georgia Commission's decision, sister company Mississippi Power indicated that it too would be offering a manufactured housing efficiency program, a trend we hope will continue soon in other Southeastern states.

MISSISSIPPI

The Mississippi Public Service Commission is a three-person elected-body that has authority over Entergy Mississippi and Mississippi Power. The Tennessee Valley Authority is regulated by a nine-member Board of Directors. Since TVA is a federal agency, board members are appointed by the President and confirmed by the U.S. Senate.

MISSISSIPPI ENERGY EFFICIENCY PERFORMANCE

UTILITY	% EE
Entergy Mississippi	0.22%
Southeast Average	0.19%
Mississippi Power	0.19%
Mississippi Average	**0.12%**
Tennessee Valley Authority	0.00%

Mississippi's recently established integrated resource planning rules, unfortunately, delivered no additional energy efficiency in its first planning cycle. But since then both Mississippi Power and Entergy Mississippi have indicated plans to increase efficiency savings in annual Energy Delivery Plans filed with the Commission.

After years of low performance, in 2021 Mississippi Power filed a plan with the Commission that would roughly double its efficiency savings over the next seven years to 0.5% of its 2020 retail sales. Because the pandemic reduced total retail sales in 2020, Mississippi Power's target makes its proposed savings appears higher than it would otherwise be if future efficiency savings were divided by the expected retail sales figures in a more typical year. And 0.5% is still far lower than most of its utility peers nationally. But Mississippi Power's plan to increase its efficiency savings is still a step in the right direction. In the near term, Mississippi Power is seeking additional savings by including large general service customers in its portfolio, expanding its behavioral energy efficiency program, and adding multifamily and manufactured housing efficiency offerings.

In 2021, Entergy Mississippi's efficiency savings rebounded 30% from its performance in 2020. It proposes increasing its annual budget from $11 million to a bit over $16 million in 2023.

NORTH CAROLINA

The North Carolina Utilities Commission is a seven-member government agency that regulates Duke Energy Carolinas and Duke Energy Progress. Cooperatives in the state are managed by their local boards, while the states municipal utilities are managed by local government.

NORTH CAROLINA ENERGY EFFICIENCY PERFORMANCE

UTILITY	% EE
Duke Energy Carolinas	0.76%
Duke Energy Progress	0.74%
North Carolina Average	**0.57%**
North Carolina Cooperatives	0.26%
Southeast Average	0.19%
North Carolina Municipals	0.02%

EFFICIENCY'S ROLE FOR DECARBONIZATION

North Carolina's commitment to decarbonization following the enactment of House Bill 951 in the fall of 2021 creates a new impetus for expanding energy efficiency savings. As the least cost strategy for reducing emissions from fossil fuel generation, increased investment in efficiency is key to making the transition to a clean energy grid affordable for all. Programs that assist low- and moderate-income households to capture efficiency savings and lower their energy bills should be prioritized and expanded in order to ensure that the benefits of our shift to clean energy are equitable, and meet the needs of customers who are already struggling to afford essential electric utility service.

Ultimately, the North Carolina Utilities Commission is responsible for developing the state's carbon plan. But in its inaugural cycle, the Commission largely adopted Duke Energy's proposed decarbonization plan. This result was disappointing given the considerable input from clean energy organizations (like SACE) showing that higher levels of renewable energy and energy efficiency investment could reduce the cost of Duke's plan by as much as 19% and avoid new investments in expensive and polluting new fossil gas generation.[4] However, the Commission did set an aspirational goal for Duke to pursue savings of at least 1.5% of "eligible load," and directed the utility to seek regulatory approval for several potential enablers of additional savings. Going forward, Carbon Planning and Integrated Resource Planning processes will be combined and occur every two years.

NEW FEDERAL FUNDING CAN TURBOCHARGE DECARBONIZATION

The BIL and IRA have the potential to rapidly accelerate North Carolina's decarbonization efforts. These new laws will greatly improve the economics of many clean energy resources, but energy efficiency is in for a particularly significant boost. The state is receiving formula allocations for energy efficiency and high efficiency electrification rebates totaling $209 million and nearly $90 million in expanded Weatherization Assistance Program funding. Individual residents and businesses can take advantage of generous federal tax credits, and local governments can compete for grants and loans worth billions of dollars. In short, these federal funds will further expand the impact of efficiency in the state while reducing the cost of complying with the state's greenhouse gas reduction targets.

[4] Synapse Energy Economics, Inc. Carbon-Free by 2050: Pathways to Achieving North Carolina's Power Sector Carbon Requirements at Least Cost to Ratepayers. July 20, 2022. Available at: https://cleanenergy.org/wp-content/uploads/2022-07-20-Synapse-Report-w-Attach-PUBLIC- -REDACTED- -E-100-Sub-179.pdf.

How all of these new federal funds will be deployed in North Carolina remains to be seen, but utilities could play a major role to maximize benefits for their customers. If utilities leverage their own spending on efficiency with the federal funds, more customers will be served with deeper overall efficiency savings. In parts of the state where no utility efficiency programs are currently offered, delivery of federal funds could meet a long-underserved need – while hopefully setting the stage for local utilities to start offering their own programs soon. States that are proactive in their approach to efficiency are likely to see the greatest gains, and North Carolina is uniquely positioned for this once-in-a-generation opportunity

SOUTH CAROLINA

The South Carolina Public Service Commission is a seven-member regulatory body that oversees Duke Energy Carolinas, Duke Energy Progress, Dominion Energy South Carolina, and the Integrated Resource Plan for state-owned Santee Cooper.

SOUTH CAROLINA ENERGY EFFICIENCY PERFORMANCE

UTILITY	% EE
Duke Energy Carolinas	0.76%
Duke Energy Progress	0.74%
South Carolina Average	**0.37%**
Dominion Energy South Carolina	0.24%
Southeast Average	0.19%
Santee Cooper	0.06%

DOMINION REQUIRED TO SHIFT COURSE AFTER IRP REJECTION

Soon after Act 62 went into effect, the PSC rejected Dominion's 2021 IRP, citing failure to comply with the new law's requirements to analyze higher levels of energy efficiency. Going forward, the Commission directed Dominion to comply with several new resource planning requirements including:

- Increasing efficiency savings to at least 1% annual savings
- Modeling higher efficiency savings in its next IRP, all the way up to 2% annual savings
- Changing its resource modeling software system, and providing access to intervenors
- Convening regular stakeholder engagement meetings throughout the IRP process

On January 31, 2023, Dominion filed its most recent draft IRP, which will now be reviewed by intervenors (including SACE) and the Commission.

STAKEHOLDERS TO HELP INFORM NEW SAVINGS POTENTIAL AT DUKE

Duke Energy fared better before the Commission in its 2021 IRP, which was approved. However, the Commission found that Duke had underestimated efficiency savings by limiting future participation to historic levels, and by not considering increased market acceptance and emerging technologies. It also indicated that Duke should prioritize longer-lived efficiency measures, rather than relying so heavily on short term behavioral programs. Duke's next IRP to be filed in 2023 must reflect work with stakeholders on these issues, a direct statement regarding which stakeholder recommendations the utility did and did not include in its analysis of energy efficiency market potential.

SANTEE COOPER'S IRP NOW UNDER PSC JURISDICTION

For the first time, Santee Cooper is conducting integrated resource planning under the oversight of the Public Service Commission. Under this new arrangement, both the utility and stakeholders are trying to figure out how energy efficiency will fit into its forthcoming IRP, and how stakeholder input will be incorporated. Some of the key questions relate to the need to distinguish between forecasted utility and non-utility efficiency savings levels; incorporating the impacts of new federal funding for efficiency; and understanding the relationship between supply resource planning at Santee Cooper and efficiency for the cooperative utilities that consume the majority of Santee Cooper's generating output.

MAJOR DIFFERENCES IN ENERGY EFFICIENCY PORTFOLIO OVERSIGHT

Beyond resource planning, there are other key differences in how each utility's overall energy efficiency portfolio is regulated. Dominion submits a plan to the Commission every five years, detailing all of its proposed efficiency programs, along with forecasted spending and savings levels. Duke does not come before the Commission for approval of its efficiency portfolio, instead submitting individual program applications on a rolling basis. The Commission does not provide regulatory oversight for Santee Cooper's energy efficiency programs, savings, or spending, which is under the purview of the Santee Cooper board of directors.

CONCLUSION

It is high time for the Southeast to cash in on its lucrative and largely untapped energy efficiency reserves! The national average for annual efficiency savings across all regions except the South is 1.04%, five times higher than what utilities in the Southeast achieved in 2021. Now that the disruption the COVID-19 pandemic had on energy efficiency measures continues to pass, Southeast utilities can work to close the energy savings gap to be more in line with national peer utilities and substantially lower energy waste and reduce monthly energy bills for customers.

As the least-cost energy resource, increased investment in energy efficiency reduces total utility system costs, making it cheaper to meet customer energy needs. Integrated resource planning policies in the Carolinas and Georgia already contain critical building blocks on which a significant expansion of energy efficiency could be made, thereby offsetting the need for more expensive power generation. By contrast, to use low-cost energy efficiency as an alternative to traditional power generation, Florida, Alabama, Mississippi, and the Tennessee Valley Authority will need to make significant improvements in their IRP policies and practices. In all Southeastern states, regulators will have to provide additional guidance and increased oversight to utilities to ensure future utility resource plans fully recognize and maximize the financial benefit of energy efficiency for customers.

New federal energy efficiency programs enacted through the Bipartisan Infrastructure Law and Inflation Reduction Act have the potential to substantially accelerate the deployment of energy efficiency in the Southeast. If our region gets its fair share, these new federal programs could double efficiency savings in the Southeast relative to existing utility efficiency programs. This once-in-a-generation infusion of federal funding for energy efficiency presents a tremendous opportunity, particularly if state agencies and local utilities work together to leverage their combined funding and marketing efforts. Regardless, the new federal funds for energy efficiency will reduce energy consumption in the region, which must now be factored into future utility resource plans.

Manufactured homes are a prime candidate for targeted energy efficiency programs. This is due to their high energy consumption relative to other housing types, the fact that the majority of manufactured home residents are low- and fixed income, and the prevalence of this housing type in the Southeast region. To date the Southeast has few examples of utility energy efficiency programs specifically targeting this housing segment, but that appears to be beginning to change with a shift in Georgia and Mississippi.

Ultimately, energy efficiency is key to accelerating our transition to a clean energy grid, and making electricity affordable for everyone. Efficiency can help to speed up the retirement of polluting and outdated legacy fossil fuel power plants. It can also offset the need to build new power generation, while decreasing our dependence on fossil gas. Additionally, investing in energy efficiency can reduce the cost of new renewable energy investments and help to maintain grid reliability, including during severe weather incidents. With so many benefits, the key to energy efficiency is, quite simply, to just do it.

DATA SOURCES, METHODS, AND ASSUMPTIONS

The primary metric in this report is net energy savings as a percentage of current-year retail sales. SACE relies on two sources for historical efficiency savings, annual energy efficiency reports that utilities are required to file by state regulators and Energy Information Administration Form 861. In most cases, regulatory reporting requirements for investor-owned utilities allow SACE to gather detailed performance and budget data on specific programs on an annual basis. Nearly all of our data for municipal and co-op utilities come from EIA Form 861. In some cases, we opt to use EIA data even when program-level data is available for the sake of consistency when it comes to the reporting year, which may reflect the fiscal year in utility filings or other types of reports, and to include savings from programs that are outside the utility's main portfolio of energy efficiency programs.

EIA's reporting instructions have shifted over the years to direct utilities to report data at the meter rather than at the generator, and to clarify who is responsible for reporting (utility or nonutility demand-side management administrators). As a result, there is greater confidence in the consistency and reliability of more recent data that primarily only requires adjustments to utilities that report gross savings. Due to the fact that some utilities report net savings reflecting technical adjustments to energy efficiency program impacts, while others do not, we apply a net to gross ratio of 83.9% where gross savings are reported.

DSM/EE spending is inclusive of the total expenditures for each program approved or certified by a utility's respective regulator. Our review of data specific to programs may not reflect sub-programs, add-ons, or pilot programs if they are not tracked or reported by the utility. For example, income-qualified spending reflects standalone programs only.

Accumulated energy efficiency demand savings (MW) represents the maximum peak reduction to gross system demand. To capture the "maximum peak" and assign a nominal capacity to efficiency, SACE uses the summer demand reduction reported for programs and measures.

For the comparison with other regions of the country, our Southeast regional average is compared to regional and national averages from data sources such as EIA and research in ACEEE's Annual Energy Efficiency Scorecard. Our regional energy savings calculation differs from typical calculations of the U.S. 'South' region due to different geography of electric utility service areas and data sources included.

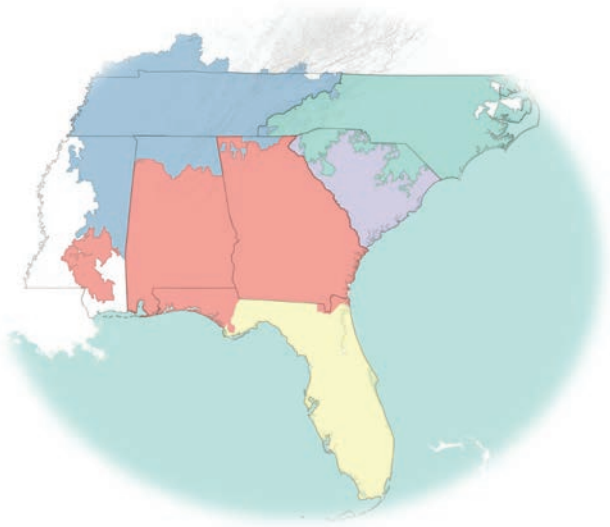
State formula funding allocations from the federal Bipartisan Infrastructure Law and Inflation Reduction Act were sourced from DOE announcements in March 23, 2022 and November 2, 2022, respectively. The comparison to utility energy efficiency program spending over the same ten-year period was developed by carrying forward annual utility spending at 2021 levels reported through Energy Information Administration Form 861.

The number of manufactured homes in Southeastern states was sourced from the 2020 American Community Survey. The age of manufactured homes was sourced from General Housing Data in the 2021 American Housing Survey, using year built and census division. Results for the South were created by aggregating data from the South Atlantic, East South Central, and West South Central Divisions.

APPENDICES

APPENDIX A: GEOGRAPHIC COVERAGE

The geographic coverage of data encompasses Southeastern utilities outside of the PJM/MISO regions. The states of Alabama, Florida, Georgia, and South Carolina are fully covered; relatively small portions of the North Carolina and Tennessee are served by utilities that participate in PJM (thus while statewide reports for these states are relatively comprehensive, they may not align exactly with other data sources); only portions of Mississippi and Kentucky that are parts of TVA or the Southern Planning Area are included.



APPENDIX B: ENERGY EFFICIENCY SAVINGS DATA

Retail sales, annual savings from energy efficiency, and percentage savings as a percentage of current-year retail sales are available for download. Please note that appendices for previous reports in the series reflect slightly different methodology such as a lower net to gross ratio and were calculated using savings as a % of prior-year sales, rather than current-year.

For utility system and individual utility data for 2016-2020, please visit our website to access the appendix.

ADDITIONAL RESOURCES FROM SACE

The Southern Alliance for Clean Energy (SACE) releases annual reports covering clean energy and transportation topics in the Southeast. We invite you to view all of our reports, white papers, and other technical resources and select reports below.

Tracking Decarbonization in the Southeast, *Fourth Annual Report. (2022)*

Solar in the Southeast, *Fifth Annual Report. (2022)*

Transportation Electrification in the Southeast, *Third Annual Report. (2022)*

Total Combined							
Utility	Total GWh Savings @ Generator	Correction Factor	GWh Savings @ meter	Total Retail Sales (@ meter)	Energy Savings as %of Total Retail Sales	US Average*	*2021 SACE EE Report
FPL	83.92	0.951655848	79.86295878	127,904	0.062439766	0.68	
Duke	61	0.950086593	57.95528219	40,832	0.141935938		
OUC	10.34	0.96246387	9.951876419	7,155	0.139089817		
TECO	59.9	0.946969671	56.72348329	20,791	0.272827104		
JEA	8.16	0.963386728	7.861235698	12295	0.063938477		

Residential					
Utility	Total GWh Savings @ Generator	Correction Factor	GWh Savings @ meter	Total Retail Sales (@ meter)	Energy Savings as %of Total Retail Sales
FPL	33.97	0.951655848	32.32774916	127,904	0.02527501
Duke	50	0.950086593	47.50432966	40,832	0.116340933
OUC	1.856	0.96246387	1.786332943	7,155	0.024966219
TECO	29.6	0.946969671	28.03030226	20,791	0.134819404
JEA	3.61	0.963386728	3.477826087	12,295	0.028286507

Commercial and Industrial					
Utility	Total GWh Savings @ Generator	Correction Factor	GWh Savings @ meter	Total Retail Sales (@ meter)	Energy Savings as %of Total Retail Sales
FPL	49.95	0.951655848	47.53520962	127,904	0.037164756
Duke	10	0.950086593	9.500865932	40,832	0.023268187
OUC	8.489	0.96246387	8.170355795	7,155	0.114190857
TECO	30.3	0.946969671	28.69318103	20,791	0.138007701
JEA	4.55	0.963386728	4.383409611	12295	0.035651969

Total					
Utility	Total GWh Savings	Residential GWh Savings	Commercial and Industrial GWh Savings	Residential Savings% of Total	Commercial Savings % of Total
FPL	83.92	33.97	49.95	40.48%	59.52%
Duke	61	50	10	81.97%	16.39%
OUC	10.34	1.856	8.489	17.95%	82.10%
TECO	59.9	29.6	30.3	49.42%	50.58%
JEA	8.16	3.61	4.55	44.24%	55.76%

Correction Factor Calculation Chart				
Utitlity	@ Meter	@ Generator	Correction Factor	Source of Data
FPL	15,093,375	15,860,119	0.951655848	Residential Low Income (Pg. 9)
Duke	22,587,714	23,774,374	0.950086593	Home Energy Check (Pg. 3)
OUC	3,232,330	3,358,391	0.96246387	Commerical Indoor Lighting Rebate (Pg. 3-19)
TECO	15,954,456	16,847,906	0.946969671	Neighborhood Weatherization (Pg. 47)
JEA	4,252,100	4,413,700	0.963386728	Commercial Perscriptive Lighting (Pg. 10)

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FPSC - COMMISSION CLERK

Stephanie A. Cuello
SENIOR COUNSEL

May 1, 2024

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. 20240002-EG

Dear Mr. Teitzman:

On behalf of Duke Energy Florida, LLC ("DEF"), please find enclosed for electronic filing in the above-referenced docket:

- DEF's Petition for Approval of True-Up Amount for the Period January 2023 through December 2023; and
- Direct Testimony of Karla Rodriguez with attached Exhibit No. KR-1T.

Thank you for your assistance in this matter and if you have any questions, please feel free to contact me at (850) 521-1425.

Sincerely,

/s/ Stephanie A. Cuello

Stephanie A. Cuello

SAC/clg
Attachments

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Energy Conservation Cost Recovery Clause	Docket No. 20240002-EG Filed: May 1, 2024

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

Pursuant to Order No. PSC-2024-0028-PCO-EG, issued February 6, 2024, in the above-referenced docket, Duke Energy Florida, LLC ("DEF" or "the Company") petitions the Florida Public Service Commission ("Commission") for approval of an over-recovery of $3,699,623 as DEF's adjusted net true-up amount for the period January 2023 through December 2023. In support of this petition, DEF states:

1. The name and address of the affected agency are:

   Florida Public Service Commission
   2540 Shumard Oak Boulevard
   Tallahassee, Florida 32399-0850

2. The Petitioner's name and address are:

   Duke Energy Florida, LLC
   299 First Avenue North
   St. Petersburg, Florida 33701

Notices, orders, pleadings and correspondence to be served upon DEF in this proceeding should be directed to:

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3. DEF is a public utility subject to the Commission's jurisdiction pursuant to Chapter 366, Florida Statutes (F.S.). Pursuant to Section 366.82, F.S., and Rule 25-17.015, Florida Administrative Code (F.A.C.), DEF recovers its reasonable and prudent unreimbursed costs for conservation audits, conservation programs and implementation of DEF's conservation plan through the Energy Conservation Cost Recovery ("ECCR") clause. DEF has substantial interests in the proper calculation and recovery of its ECCR factor and the final true-up which is used in the computation of the ECCR factor.

4. DEF seeks Commission approval of an over-recovery of $3,699,623 as the adjusted net true-up amount for the period January 2023 through December 2023. DEF's final adjusted net true-up amount for the period January 2023 through December 2023 was calculated consistent with the methodology set forth in Schedule 1 attached to Commission Order No. 10093, dated June 19, 1981. This calculation and supporting documentation are contained in Exhibit KR-1T, an exhibit attached to the prefiled testimony of DEF's witness Karla Rodriguez, which is being filed in conjunction with this petition.

5. As reflected on Schedule CT-1 of Exhibit KR-1T to Ms. Rodriguez' testimony, the adjusted net true-up for the period January 2023 through December 2023 is an over-recovery of $3,699,623, which is the difference of the actual true-up over-recovery of $9,254,377 and the estimated/actual true-up over-recovery of $5,554,754.

WHEREFORE, DEF respectfully requests that the Commission approve an over-recovery of $3,699,623 as the final adjusted net true-up amount for the period January 2023 through December 2023.

Respectfully submitted this 1st day of May, 2024.

Respectfully submitted,

/s/ Stephanie A. Cuello
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CERTIFICATE OF SERVICE
Docket No. 20240002-EG

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic mail to the following this 1st day of May, 2024.

/s/ Stephanie A. Cuello
Attorney

Jacob Imig / Carlos Marquez / Saad Farooqi Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 jimig@psc.state.fl.us CMarquez@psc.state.fl.us sfarooqi@psc.state.fl.us 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 Jon C. Moyle, Jr. FIPUG 118 North Gadsden Street Tallahassee, FL 32301 jmoyle@moylelaw.com mqualls@moylelaw.com Maria Jose Moncada / William P. Cox Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408-0420 maria.moncada@fpl.com will.p.cox@fpl.com James W. Brew / Laura Wynn Baker / Sarah B. Newman Stone Mattheis Xenopoulos & Brew, P.C. PCS Phosphate –White Springs 1025 Thomas Jefferson Street, NW Eighth Floor, West Tower Washington, DC 20007 jbrew@smxblaw.com lwb@smxblaw.com sbn@smxblaw.com Peter J. Mattheis / Michael K. Lavanga / Joseph R. Briscar Stone Mattheis Xenopoulos & Brew, PC NUCOR 1025 Thomas Jefferson Street, NW Eighth Floor, West Tower Washington, DC 20007 pjm@smxblaw.com mkl@smxblaw.com jrb@smxblaw.com	W. Trierweiler / M. Wessling /P. Christensen /O. Ponce / A. Watrous / C. Rehwinkel Office of Public Counsel 111 West Madison Street, Room 812 Tallahassee, FL 32399-1400 trierweiler.walt@leg.state.fl.us wessling.mary@leg.state.fl.us christensen.patty@leg.state.fl.us ponce.octavio@leg.state.fl.us watrous.austin@leg.state.fl.us rehwinkel.charles@leg.state.fl.us Kenneth A. Hoffman Florida Power & Light Company 134 W. Jefferson Street Tallahassee, FL 32301-1713 ken.hoffman@fpl.com Beth Keating Florida Public Utilities Company 215 South Monroe Street, Suite 601 Tallahassee, FL 32301 bkeating@gunster.com Derrick Craig Florida Public Utilities Company 208 Wildlight Avenue Yulee, FL 32097 dcraig@chpk.com Michelle D. Napier Florida Public Utilities Company 1635 Meathe Drive West Palm Beach, FL 33411 mnapier@fpuc.com Paula K. Brown Tampa Electric Company P.O. Box 111 Tampa, FL 33601 regdept@tecoenergy.com

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 20240002-EG

Energy Conservation and Cost Recovery Final True-up for the Period January through December 2023

DIRECT TESTIMONY OF Karla Rodriguez

May 1, 2024

Q. Please state your name and business address.

A. My name is Karla Rodriguez. My business address is 299 1st Ave N, St. Petersburg, FL 33701.

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

A. I am employed by Duke Energy Business Services, LLC, as Lead Strategy & Collaboration Manager in the Portfolio Regulatory Strategy and Support department. Duke Energy Business Services and Duke Energy Florida, LLC ("DEF" or "the Company") are both wholly owned subsidiaries of Duke Energy Corporation.

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

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

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to compare DEF's 2023 actual energy conservation program costs with actual revenues collected through the Company's Energy Conservation Cost Recovery ("ECCR") Clause during the period January 2023 through December 2023. The Company relies upon the information presented in my testimony and exhibit in the conduct of its affairs.

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

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

- Home Energy Check
- Residential Incentive
- Neighborhood Energy Saver
- Low-Income Weatherization Assistance Program
- Load Management (Residential and Commercial)
- Business Energy Check
- Better Business a/k/a Smart $aver Business
- Smart $aver Custom Incentive
- Standby Generation

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

Q. Do you have any exhibits to your testimony?

A. Yes, Exhibit KR-1T entitled, "Duke Energy Florida, LLC Energy Conservation Adjusted Net True-Up for the Period January 2023 through December 2023." There are six (6) schedules included in this exhibit.

Q. Will you please explain your exhibit?

A. Yes. Exhibit KR-1T presents Schedules CT-1 through CT-6. Schedules CT-1 to CT-4 set out actual costs incurred for all programs during the period from January 2023 through December 2023. These schedules also illustrate variances between actual costs and previously projected values for the same time period. Schedule CT-5 provides a brief summary of each conservation program that includes a program description, program accomplishments, annual program expenditures, significant program cost variances versus projections and a program progress summary over the twelve-month period ending December 2023. Schedule CT-6 is DEF's capital structure and cost rates.

Q. Would you please discuss Schedule CT-1?

A. Yes. Schedule CT-1 line 14 shows that DEF's actual end-of-period ECCR true-up for December 31, 2023, was an over-recovery of $3,699,623, including principal and interest.

Q. What does Schedule CT-2 show?

A. The four pages of Schedule CT-2 provide an annual summary of conservation program revenues as well as itemized conservation program costs for the period January 2023 through December 2023 detailing actual, estimated and variance calculations by program. These costs are directly attributable to DEF's Commission-approved programs.

Q. Would you please discuss Schedule CT-3?

A. Yes. Page one of Schedule CT-3 provides actual conservation program costs by month for the period January 2023 through December 2023. Page two of Schedule CT-3 presents program revenues by month offset by expenses, a calculation of the end of period net true-up for each month, and the total for the year. Page three provides the monthly interest calculation. Page four of Schedule CT-3 provides conservation account numbers for the 2023 calendar year.

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

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

Q. Would you please discuss Schedule CT-5?

A. Yes. Schedule CT-5 provides a brief summary of each conservation program that includes a program description, program accomplishments, annual program expenditures, significant program cost variances versus projections and a program progress summary for the 2023 calendar year.

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

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

Q. What capital structure and cost rates did DEF rely on to calculate the revenue requirement rate of return for the period January 2023 through December 2023?

A. DEF used the capital structure and cost rates consistent with the language in Order No. PSC-2020-0165-PAA-EU and Order No. PSC-2022-0357-FOF-EI. The capital structure and cost rates relied on to calculate the revenue requirement rate of return for the period January 2023 through December 2023 are shown on Schedule CT-6.

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

A. The actual data used in calculating the actual true-up amounts is from DEF's records unless otherwise indicated. These records are kept in the regular course of DEF's business in accordance with general accounting principles and practices, provisions of the Uniform System of Accounts as prescribed by the Federal Energy Regulatory

Commission and any accounting rules and orders established by this Commission. Pursuant to Rule 25-17.015(3), F.A.C., DEF provides a list of all account numbers used for conservation cost recovery during the period January 2023 through December 2023 on Schedule CT-3 page 4.

Q. Does this conclude your Direct Testimony?

A. Yes.

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Witness: Karla Rodriguez
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Schedule CT-1
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Duke Energy Florida, LLC
Energy Conservation Adjusted Net True-Up
For the Period January 2023 through December 2023

Line No.			
1	**Actual End of Period True-Up (Over) / Under Recovery**		
2	Beginning Balance	$7,706,868	
3	Principal (CT 3, Page 2 of 4)	(8,901,192)	
4	Interest (CT 3, Page 3 of 4)	(353,185)	
5	Prior True-Up Refund	(7,706,868)	
6	Adjustments	0	(9,254,377)
7	**Less: Estimated True-Up from August 2023 Filig (Over)/Under Recovery**		
9	Beginning Balance	7,706,868	
10	Principal	(5,255,295)	
11	Interest	(299,459)	
12	Prior True-Up Refund	(7,706,868)	
13	Adjustments	0	(5,554,754)
14	Variance to A/ E Filing		($3,699,623)

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Duke Energy Florida
Witness: Karla Rodriguez
Exhibit KR-1T
Schedule CT-2
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Duke Energy Florida, LLC
Analysis of Energy Conservation Program Costs
Actual vs. Estimated
For the Period January 2023 through December 2023

Line No.	Program	Actual	Estimated	Difference
1	Depreciation Amortization & Return	5,642,504	5,774,606	(132,102)
2	Payroll & Benefits	11,943,633	12,227,832	(284,199)
3	Materials & Supplies	591,771	363,765	228,006
4	Outside Services	3,406,450	3,929,704	(523,253)
5	Advertising	592,284	848,561	(256,276)
6	Incentives	85,894,476	88,578,001	(2,683,525)
7	Vehicles	346,837	338,959	7,878
8	Other	658,731	641,091	17,640
9	Program Revenues	0	0	0
10	Total Program Costs	109,076,687	112,702,518	(3,625,831)
11	*Less:*			
12	Conservation Clause Revenues	110,271,011	$110,250,945	20,066
13	Prior True-Up	7,706,868	7,706,868	(0)
14	True-Up Before Interest	(8,901,192)	(5,255,295)	(3,645,897)
15	Adjustment	0	0	0
16	Interest Provision	(353,185)	(299,459)	(53,726)
17	End of Period True-Up	(9,254,377)	(5,554,754)	(3,699,623)

( ) Reflects Over-Recovery
** Certain schedules may not foot/crossfoot due to rounding of decimals in files.

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Duke Energy Florida, LLC
Actual Energy Conservation Program Costs Per Program
For the Period January 2023 through December 2023

Line No.	Program	Depreciation Amortization & Return	Payroll & Benefits	Vehicles	Outside Services	Materials & Supplies	Advertising	Incentives	Other	Sub-Total	Program Revenues (Credit)	Total
1	Home Energy Check	0	3,373,512	122,091	196,746	73,479	215,944	844,801	105,052	4,931,626	0	4,931,626
2	Residential Incentive Program	0	1,218,140	47,456	163,347	59,729	161,106	2,136,844	103,674	3,890,296	0	3,890,296
3	Business Energy Check	0	414,316	6,145	40,596	49,206	31,439	0	25,952	567,655	0	567,655
4	Better Business a/k/a Smart $aver Business	0	1,001,345	2,073	130,748	915	27,785	552,876	35,853	1,751,596	0	1,751,596
5	Technology Development	0	231,221	48,138	43,371	51,135	0	0	3,901	377,765	0	377,765
6	Smart $aver Custom Incentive	0	106,619	231	81,002	85	10,026	0	15,545	213,508	0	213,508
7	Interruptible Service	716,346	647,969	31,717	2,813	59,085	0	46,824,365	54,709	48,337,004	0	48,337,004
8	Curtailable Service	0	34,991	0	938	2,540	0	1,839,031	10,494	1,887,993	0	1,887,993
9	Load Management (Residential & Commercial)	4,926,158	2,030,056	41,052	2,120,578	102,098	48,950	22,061,784	55,571	31,386,248	0	31,386,248
10	Low Income Weatherization Assistance	0	144,550	2,187	1,765	848	0	104,802	7,646	261,798	0	261,798
11	Standby Generation	0	377,154	20,134	11,906	12,697	0	5,604,128	21,257	6,047,277	0	6,047,277
12	Qualifying Facility	0	672,652	903	0	46	0	0	3,250	676,851	0	676,851
13	Neighborhood Energy Saver	0	201,432	4,055	380,521	1,483	97,035	5,925,846	16,519	6,626,891	0	6,626,891
14	Conservation Program Admin	0	1,489,676	20,656	232,118	178,423	0	0	199,307	2,120,180	0	2,120,180
15	Total All Programs	5,642,504	11,943,633	346,837	3,406,450	591,771	592,284	85,894,476	658,731	109,076,687	0	109,076,687

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Duke Energy Florida, LLC
Vaiance in Energy Conseervation Program Costs
12 Months Actual vs. 12 Months Estimated

Line No.	Program	Depreciation Amortization & Return	Payroll & Benefits	Vehicles	Outside Services	Materials & Supplies	Advertising	Incentives	Other	Sub-Total	Program Revenues (Credit)	Total
1	Home Energy Check	0	(55,875)	(2,909)	(153,327)	34,184	(194,775)	229,982	24,552	(118,168)	0	(118,168)
2	Residential Incentive Program	0	(41,304)	(4,259)	4,757	44,604	(87,589)	209,230	(1,566)	123,871	0	123,871
3	Business Energy Check	0	(29,573)	(500)	(43,703)	14,668	1,803	0	(4,354)	(61,660)	0	(61,660)
4	Better Business a/k/a Smart $aver Business	0	(37,322)	(1,026)	(23,367)	(2,469)	(4,777)	159,702	(1,643)	89,099	0	89,099
5	Technology Development	0	(35,524)	4,034	(47,399)	6,972	0	0	(102)	(72,018)	0	(72,018)
6	Smart $aver Custom Incentive	0	(4,654)	(172)	2,716	(1,085)	(4,444)	(20,000)	(202)	(27,841)	0	(27,841)
7	Interruptible Service	3,961	(49,105)	(2,838)	0	35,141	0	(1,666,459)	(4,240)	(1,683,541)	0	(1,683,541)
8	Curtailable Service	0	20,696	0	0	2,540	0	(640,754)	6,818	(610,700)	0	(610,700)
9	Load Management (Residential & Commercial)	(136,063)	(24,249)	(455)	(36,228)	54,008	16,701	(1,236,463)	(2,794)	(1,365,544)	0	(1,365,544)
10	Low Income Weatherization Assistance	0	(35,302)	697	1,531	54	(100)	(1,660)	2,697	(32,083)	0	(32,083)
11	Standby Generation	0	(30,725)	(2,955)	7,228	(4,257)	0	128,111	(1,493)	95,909	0	95,909
12	Qualifying Facility	0	(52,111)	(887)	(55,000)	(250)	0	0	(1,286)	(109,534)	0	(109,534)
13	Neighborhood Energy Saver	0	14,017	(425)	(114,789)	391	16,903	154,787	509	71,394	0	71,394
14	Conservation Program Admin	0	76,833	19,574	(65,672)	43,506	0	0	744	74,985	0	74,985
15	Total All Programs	(132,102)	(284,199)	7,878	(523,253)	228,006	(256,276)	(2,683,525)	17,640	(3,625,831)	0	(3,625,831)

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Duke Energy Florida
Witness: Karla Rodriguez
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Schedule CT-2
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Duke Energy Florida, LLC
Estimated Energy Conservation Program Costs Per Program
For the Period January 2023 through December 2023

Line No.	Program	Depreciation Amortization & Return	Payroll & Benefits	Vehicles	Outside Services	Materials & Supplies	Advertising	Incentives	Other	Sub-Total	Program Revenues (Credit)	Total
1	Home Energy Check	0	3,429,387	125,000	350,073	39,295	410,719	614,819	80,500	5,049,793	0	5,049,793
2	Residential Incentive Program	0	1,259,444	51,716	158,591	15,126	248,695	1,927,614	105,240	3,766,425	0	3,766,425
3	Business Energy Check	0	443,890	6,645	84,300	34,539	29,635	0	30,306	629,315	0	629,315
4	Better Business a/k/a Smart $aver Business	0	1,038,667	3,099	154,115	3,384	32,562	393,174	37,496	1,662,497	0	1,662,497
5	Technology Development	0	266,745	44,103	90,769	44,163	0	0	4,003	449,783	0	449,783
6	Smart $aver Custom Incentive	0	111,273	403	78,286	1,170	14,470	20,000	15,748	241,349	0	241,349
7	Interruptible Service	712,385	697,074	34,555	2,813	23,944	0	48,490,825	58,950	50,020,546	0	50,020,546
8	Curtailable Service	0	14,295	0	938	0	0	2,479,784	3,676	2,498,693	0	2,498,693
9	Load Management (Residential & Commercial)	5,062,221	2,054,306	41,508	2,156,807	48,091	32,249	23,298,247	58,365	32,751,792	0	32,751,792
10	Low Income Weatherization Assistance	0	179,852	1,489	235	794	100	106,462	4,949	293,881	0	293,881
11	Standby Generation	0	407,879	23,090	4,678	16,954	0	5,476,017	22,750	5,951,368	0	5,951,368
12	Qualifying Facility	0	724,763	1,789	55,000	296	0	0	4,536	786,385	0	786,385
13	Neighborhood Energy Saver	0	187,415	4,480	495,310	1,092	80,131	5,771,059	16,009	6,555,497	0	6,555,497
14	Conservation Program Admin	0	1,412,843	1,081	297,790	134,917	0	0	198,564	2,045,195	0	2,045,195
15	Total All Programs	5,774,606	12,227,832	338,959	3,929,704	363,765	848,561	88,578,001	641,091	112,702,518	0	112,702,518

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Duke Energy Florida, LLC
Actual Conservation Program Costs by Month
For the Period January 2023 through December 2023

Line No.	Program	January	February	March	April	May	June	July	August	September	October	November	December	Total
1	Home Energy Check	314,665	344,936	320,405	420,016	412,794	652,126	433,584	403,521	471,761	450,257	368,027	339,533	4,931,626
2	Residential Incentive Program	266,886	236,902	262,289	281,380	314,356	383,495	324,071	331,452	420,639	397,316	345,175	326,335	3,890,296
3	Business Energy Check	39,997	43,376	47,273	55,170	46,570	44,287	46,177	57,499	62,280	54,284	35,313	35,429	567,655
4	Better Business a/k/a Smart $aver Business	124,114	145,163	168,373	141,438	125,287	114,453	161,112	216,480	176,591	172,009	95,077	111,499	1,751,596
5	Technology Development	20,634	24,477	51,934	29,591	34,533	28,028	47,401	21,581	52,022	21,770	18,055	27,739	377,765
6	Smart $aver Custom Incentive	13,596	16,689	25,760	18,837	18,115	22,065	25,170	17,781	15,156	16,670	11,209	12,462	213,508
7	Interruptible Service	4,355,310	4,070,724	4,199,491	3,836,784	4,057,221	3,802,570	4,311,772	3,680,101	3,800,712	3,773,772	3,927,495	4,521,053	48,337,004
8	Curtailable Service	233,215	205,049	164,055	174,324	144,467	108,388	24,154	76,594	456,587	107,368	96,824	96,968	1,887,993
9	Load Management (Residential & Commercial)	3,383,855	2,553,305	2,475,010	2,277,418	2,366,249	2,675,779	2,823,846	2,820,246	2,794,322	2,493,162	2,089,019	2,634,037	31,386,248
10	Low Income Weatherization Assistance	15,396	23,547	30,400	14,343	33,492	24,066	10,614	16,151	34,086	17,735	19,150	22,818	261,798
11	Standby Generation	480,198	481,532	528,138	471,001	525,124	489,068	513,375	502,296	499,805	532,288	489,803	534,648	6,047,277
12	Qualifying Facility	60,504	61,083	63,481	58,600	60,294	60,348	57,526	53,962	56,998	57,365	41,293	45,397	676,851
13	Neighborhood Energy Saver	427,918	20,011	1,126,886	554,192	18,191	1,418,107	588,468	697,054	483,727	683,385	603,744	5,207	6,626,891
14	Conservation Program Admin	143,478	138,698	191,783	125,380	168,588	183,036	158,624	243,227	110,248	158,205	242,956	255,957	2,120,180
15	Total All Programs	9,879,767	8,365,491	9,655,279	8,458,473	8,325,282	10,005,816	9,525,896	9,137,944	9,434,932	8,935,586	8,383,139	8,969,082	109,076,687
16	Less: Base Rate Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Net Recoverable (CT-3,Page 2, Line 4)	9,879,767	8,365,491	9,655,279	8,458,473	8,325,282	10,005,816	9,525,896	9,137,944	9,434,932	8,935,586	8,383,139	8,969,082	109,076,687

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Energy Conservation Adjustment
Calculation of True-Up
January 2023 - December 2023

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Line No.		Act January	Act February	Act March	Act April	Act May	Act June	Act July	Act August	Act September	Act October	Act November	Act December	Total
1	ECCR Revenues	$8,556,739	$7,145,949	$8,171,424	$8,419,998	$8,645,278	$10,176,466	$11,185,332	$11,718,556	$11,485,164	$9,446,159	$7,635,284	$7,684,662	$110,271,011
2	Prior Period True-Up Over/(Under) Recovery	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	7,706,868
3	ECCR Revenues Applicable to Period	9,198,978	7,788,188	8,813,663	9,062,237	9,287,517	10,818,705	11,827,571	12,360,795	12,127,403	10,088,398	8,277,523	8,326,901	117,977,879
4	ECCR Expenses	9,879,767	8,365,491	9,655,279	8,458,473	8,325,282	10,005,816	9,525,896	9,137,944	9,434,932	8,935,586	8,383,139	8,969,082	109,076,687
5	True-Up This Period (Over)/Under Recovery	680,788	577,303	841,616	(603,764)	(962,235)	(812,889)	(2,301,675)	(3,222,851)	(2,692,470)	(1,152,812)	105,617	642,181	(8,901,192)
6	Current Period Interest	(26,361)	(22,404)	(17,717)	(15,330)	(16,441)	(17,705)	(22,133)	(32,191)	(42,697)	(48,466)	(48,018)	(43,722)	(353,185)
7	Adjustments	0	0	0	0	0	0	0	0	0	0	0	0	0
8	True-Up & Interest Provision Beginning of Period	(7,706,868)	(6,410,201)	(5,213,064)	(3,746,926)	(3,723,781)	(4,060,218)	(4,248,573)	(5,930,142)	(8,542,945)	(10,635,873)	(11,194,912)	(10,495,075)	(7,706,868)
9	GRT Refunded	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Prior Period True-Up Over/(Under) Recovery	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	642,239	7,706,868
11	End of Period Net True-Up	($6,410,201)	($5,213,064)	($3,746,926)	($3,723,781)	($4,060,218)	($4,248,573)	($5,930,142)	($8,542,945)	($10,635,873)	($11,194,912)	($10,495,075)	($9,254,377)	($9,254,377)

Duke Energy Florida, LLC
Energy Conservation Cost Recovery
Calculation of Interest Provision
January 2023 - December 2023

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Line No.		Act January	Act February	Act March	Act April	Act May	Act June	Act July	Act August	Act September	Act October	Act November	Act December	Total
1	Beginning True-Up Amount (C3, Page 7, Lines 7 & 8)	($7,706,868)	($6,410,201)	($5,213,064)	($3,746,926)	($3,723,781)	($4,060,218)	($4,248,573)	($5,930,142)	($8,542,945)	($10,635,873)	($11,194,912)	($10,495,075)	
2	Ending True-Up Amount Before Interest (C3, Page 7, Lines 5,7-10)	(6,383,840)	(5,190,660)	(3,729,209)	(3,708,451)	(4,043,777)	(4,230,868)	(5,908,009)	(8,510,754)	(10,593,176)	(11,146,446)	(10,447,057)	(9,210,655)	
3	Total Beginning & Ending True-Up (Line 1 + Line 2)	(14,090,708)	(11,600,861)	(8,942,273)	(7,455,377)	(7,767,557)	(8,291,085)	(10,156,582)	(14,440,896)	(19,136,121)	(21,782,320)	(21,641,969)	(19,705,729)	
4	Average True-Up Amount (50% of Line 3)	(7,045,354)	(5,800,430)	(4,471,136)	(3,727,688)	(3,883,779)	(4,145,543)	(5,078,291)	(7,220,448)	(9,568,061)	(10,891,160)	(10,820,985)	(9,852,865)	
5	Interest Rate: First Day Reporting Business Month	4.37%	4.61%	4.66%	4.85%	5.02%	5.14%	5.11%	5.35%	5.35%	5.36%	5.32%	5.33%	
6	Interest Rate: First Day Subsequent Business Month	4.61%	4.66%	4.85%	5.02%	5.14%	5.11%	5.35%	5.35%	5.36%	5.32%	5.33%	5.32%	
7	Total (Line 5 & Line 6) (Line 5 + Line 6)	8.98%	9.27%	9.51%	9.87%	10.16%	10.25%	10.46%	10.70%	10.71%	10.68%	10.65%	10.65%	
8	Average Interest Rate (50% of Line 7)	4.49%	4.64%	4.76%	4.94%	5.08%	5.13%	5.23%	5.35%	5.36%	5.34%	5.33%	5.33%	
9	Interest Provision (Line 4 * Line 8) / 12	($26,361)	($22,404)	($17,717)	($15,330)	($16,441)	($17,705)	($22,133)	($32,191)	($42,697)	($48,466)	($48,018)	($43,722)	($353,185)

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Duke Energy Florida, LLC
Conservation Account Numbers
For the Period January 2023 - December 2023

Line No.	Account	Product	Program
1	0908000	HEHC	Home Energy Check
1	0909000	HEHC	Home Energy Check (Advertising)
2	0908000	SSHEI	Residential Incentive Program
2	0909000	SSHEI	Residential Incentive Program (Advertising)
3	0908000	NRAOS	Business Energy Check
3	0909000	NRAOS	Business Energy Check (Advertising)
4	0908000	NRBBUS	Better Business a/k/a Smart $aver Business
4	0909000	NRBBUS	Better Business a/k/a Smart $aver Business (Advertising)
5	0908000	TECDEV	Technology Development
6	0908000	NRPRSC	Smart $aver Custom Incentive
6	0909000	NRPRSC	Smart $aver Custom Incentive (Advertising)
7	0908000	IRRSVC	Interruptible Service
8	0908000	PWRSHR	Curtailable Service
9	0908000	PWRMGR	Load Management - Residential
9	0908002	PWRMGR	Load Management - Residential (Amortization of Load Mgmt Switches)
9	0909000	PWRMGR	Load Management - Residential (Advertising)
9	0182398	PWRMGR	Load Management - Residential (Switch installation)
9	0182309	PWRMGR	Load Management - Residential (Amortization of Load Mgmt Switches)
10	0908000	COMLM	Load Management - Commercial
11	0908000	WZELEC	Low Income Weatherization Assistance
11	0909000	WZELEC	Low Income Weatherization Assistance (Advertising)
12	0908000	STBGEN	Standby Generation
13	0908000	PPCOGN	Qualifying Facility
14	0908000	HWLI	Neighborhood Energy Saver
14	0909000	HWLI	Neighborhood Energy Saver (Advertising)
15	0908000	NOPROD	Conservation Program Admin

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

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Line No.	Program Demand (D) or Energy (E)	Beginning Balance	ACT January	ACT February	ACT March	ACT April	ACT May	ACT June	ACT July	ACT August	ACT September	ACT October	ACT November	ACT December	Total
1	**Interruptible Service (D)**														
2	Investments		$0	$398,103	$93,722	$177,711	$260,173	$0	$162,456	$38,632	$0	$190,307	$0	$57,936	$1,379,039
3	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
4	Depreciation Base		1,910,826	1,910,826	2,308,929	2,402,651	2,580,362	2,840,535	2,840,535	3,002,990	3,041,622	3,041,622	3,231,929	3,231,929	
5															
6	Depreciation Expense		31,848	31,848	38,483	40,045	43,007	47,343	47,343	50,051	50,695	50,695	53,867	53,867	539,092
7															
8	Cumulative Investment	1,910,826	1,910,826	2,308,929	2,402,651	2,580,362	2,840,535	2,840,535	3,002,990	3,041,622	3,041,622	3,231,929	3,231,929	3,289,865	3,289,865
9	Less: Accumulated Depreciation	298,055	329,903	361,751	400,234	440,279	483,286	530,629	577,972	628,023	678,718	729,413	783,280	837,147	837,147
10	Net Investment	1,612,771	1,580,923	1,947,178	2,002,417	2,140,083	2,357,249	2,309,906	2,425,018	2,413,599	2,362,904	2,502,516	2,448,649	2,452,718	2,452,718
11	Average Investment		1,596,847	1,764,050	1,974,797	2,071,250	2,248,666	2,333,577	2,367,462	2,419,308	2,388,251	2,432,710	2,475,582	2,450,683	
12	Return on Average Investment (Note 1)		10,672	11,789	13,197	13,842	15,028	15,595	15,822	16,168	15,961	16,258	16,544	16,378	177,254
13															
14	Program Total		$42,520	$43,637	$51,680	$53,887	$58,035	$62,938	$63,165	$66,219	$66,656	$66,953	$70,411	$70,245	$716,346
15	**Residential Energy Management - Load Management Switches (D)**														
16	Expenditures Booked Directly to Plant		$137,108	$243,528	$424,134	$117,482	$369,751	$155,770	$411,846	$382,378	$327,327	$823,939	$363,975	$1,226,844	$4,984,083
17	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
18	Closings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
19	Amortization Base		23,846,051	23,281,678	22,767,583	22,248,190	21,568,034	21,098,136	20,561,939	20,365,901	19,866,732	19,226,708	19,307,362	19,124,200	
20															
21	Amortization Expense		397,442	388,036	379,467	370,811	359,474	351,643	342,706	339,438	331,119	320,452	321,796	318,743	4,221,127
22															
23	Cumulative Investment	24,241,727	23,587,484	23,219,400	22,739,900	21,873,962	21,631,858	20,720,183	20,815,541	20,298,639	19,762,152	19,515,203	19,463,496	20,011,748	20,011,748
24	Less: Accumulated Depreciation	16,028,862	15,634,954	15,411,378	14,887,211	14,274,602	14,022,221	13,306,419	13,332,636	12,772,795	12,240,100	11,489,663	11,395,777	11,035,928	11,035,928
25	Net Investment	8,212,864	7,952,530	7,808,022	7,852,689	7,599,360	7,609,637	7,413,764	7,482,904	7,525,844	7,522,052	8,025,540	8,067,719	8,975,820	8,975,820
26	Average Investment		8,082,697	7,880,276	7,830,355	7,726,024	7,604,499	7,511,701	7,448,334	7,504,374	7,523,948	7,773,796	8,046,629	8,521,769	
27	Return on Average Investment (Note 1)		54,017	52,664	52,330	51,633	50,821	50,201	49,778	50,152	50,283	51,953	53,776	56,951	624,559
28															
29	Program Total		$451,459	$440,700	$431,797	$422,444	$410,295	$401,844	$392,484	$389,590	$381,402	$372,405	$375,572	$375,694	$4,845,686
30	**Load Management Upgrade (D)**														
31	Expenditures Booked Directly to Plant		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
33	Investments Booked to CWIP		104	645	652,333	193,323	7,632	7,902	7,656	29,127	993,868	76,981	25,036	404,894	2,399,502
34	Closings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
35	Amortization Base		0	0	0	0	0	0	0	0	0	0	0	0	
36															
37	Amortization Expense		0	0	0	0	0	0	0	0	0	0	0	0	0
38															
39	Cumulative Plant Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Less: Accumulated Depreciation	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Cumulative CWIP Investment	0	104	749	653,082	846,405	854,038	861,939	869,596	898,723	1,892,591	1,969,572	1,994,608	2,399,502	2,399,502
42	Net Plant Investment	0	104	749	653,082	846,405	854,038	861,939	869,596	898,723	1,892,591	1,969,572	1,994,608	2,399,502	2,399,502
43	Average Investment		52	427	326,916	749,744	850,221	857,988	865,767	884,159	1,395,657	1,931,081	1,982,090	2,197,055	
44	Return on Average Investment (Note 1)		0	3	2,185	5,010	5,682	5,734	5,786	5,909	9,328	12,905	13,247	14,683	80,472
45															
46	Program Total		$0	$3	$2,185	$5,010	$5,682	$5,734	$5,786	$5,909	$9,328	$12,905	$13,247	$14,683	$80,472
30	**Summary of Demand & Energy**														
31	Energy		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	Demand		493,979	484,340	485,662	481,341	474,012	470,516	461,435	461,718	457,386	452,263	459,230	460,622	5,642,504
33	Total Return & Depreciation		$493,979	$484,340	$485,662	$481,341	$474,012	$470,516	$461,435	$461,718	$457,386	$452,263	$459,230	$460,622	$5,642,504

Note 1>

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Program Description and Progress

Program Title: Home Energy Check Program

Program Description: The Home Energy Check Program is a residential energy audit program that give customers an analysis of the energy consumption of their residence as well as educational information on how to reduce energy usage and save money. The audit provides Duke Energy Florida, LLC (DEF) an opportunity to promote and directly install cost-effective measures in customer homes and educate and encourage customers to implement energy-saving practices. The Home Energy Check Program is the foundation for other residential demand-side management programs and offers the following types of energy audits:

- Type 1: Free Walk-Through (computer assisted)
- Type 2: Customer Online (Internet Option)
- Type 3: Customer Phone Assisted
- Type 4: Home Energy Rating (BERS/HERS) Audit

The Home Energy Check Program provides residential customers with energy efficiency tips and examples of easily installed, energy-efficiency measures. The program promotes continued customer involvement by demonstrating sustainable and measurable reductions in energy usage through the implementation of low-cost, energy-efficiency measures and energy-saving recommendations. Participants in the program may receive a residential Energy Efficiency Kit that contains energy-saving measures that can be easily installed and utilized by the customer. Contents of this kit are evaluated periodically and may change over time.

Program Accomplishments - January 2023 - December 2023:
36,915 customers participated in this program.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $4,931,626.

Program Progress Summary:
1,104,751 participants have participated in the Home Energy Check Program since inception. DEF will continue to leverage this program to educate customers about cost-effective, energy-efficiency measures they can implement and incentives available for home-energy improvements for which they may be eligible. Additionally, DEF began providing Assistance Kits to low-income customers through this program. The kits contain a number of measures that provide energy efficiency savings to customers.

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Program Description and Progress

Program Title: Residential Incentive Program

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

Program Accomplishments - January 2023 - December 2023:
11,878 measures were implemented through this program resulting in savings of 2.4 Summer MW, 4.4 Winter MW and 6.5 GWh at the generator.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $3,890,296.

Program Progress Summary:
1,120,542 measures have been implemented through this program. This program will continue to be offered to residential customers to provide opportunities for improving the energy efficiency of existing and new homes.

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Program Description and Progress

Program Title: Neighborhood Energy Saver Program

Program Description: DEF's Neighborhood Energy Saver program is designed to provide energy-saving education and assistance to low-income customers. This program targets neighborhoods that meet certain income-eligibility requirements. DEF typically installs energy-saving measures in approximately 4,500 homes.

Program Accomplishments - January 2023 - December 2023:
DEF installed numerous energy-efficiency measures in 5,846 homes.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $6,626,891.

Program Progress Summary:
Since program inception, DEF has installed energy-efficiency measures in 54,878 homes.

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Program Description and Progress

Program Title: Low-Income Weatherization Assistance Program

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

Program Accomplishments - January 2023 - December 2023:
1,636 weatherization measures were installed on 184 residential homes.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $261,798.

Program Progress Summary:
30,207 measures have been implemented through this program. DEF participates in local, state-wide, and national agency meetings to promote the delivery of this program. Meetings with weatherization and other low-income agencies are conducted throughout DEF's territory to encourage customer participation in energy-efficiency programs. This program was recently modified to align the eligibility with that of agencies who provide weatherization services. This change is intended to expand the network of agencies with which DEF can partner.

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Program Description and Progress

Program Title: Residential/Commercial Load Management Program

Program Description: The Residential/Commercial Load Management Program is a voluntary demand response program that provides monthly bill credits to customers who allow DEF to reduce peak demand by controlling service to selected electric equipment through various devices and communication options installed on the customer's premises. These interruptions are at DEF's option, during specified time periods, and generally coincide with hours of peak demand. Residential customers must have a minimum, average, monthly usage of 600 kWh to be eligible to participate in this program.

Program Accomplishments - January 2023 - December 2023:
2,916 residential customers were added to the program. The commercial program has been closed to new participants since 2000.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for the residential/commercial load management program were $31,386,248.

Program Progress Summary:
There were approximately 433,000 residential participants and 59 commercial participants at year-end 2023.

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Program Description and Progress

Program Title: Business Energy Check Program

Program Description: The Business Energy Check Program is a commercial energy audit program that provides commercial customers with an analysis of their energy usage and information about energy-saving practices and cost-effective measures that they can implement at their facilities. The Business Energy Check Program serves as the foundation for the Better Business Program.

Program Accomplishments - January 2023 - December 2023:
479 commercial energy audits were completed.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $567,655.

Program Progress Summary:
44,768 non-residential customers have participated in the Business Energy Check Program since inception. This program continues to educate and inform commercial customers about cost-effective, energy-efficiency improvements.

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Program Description and Progress

Program Title: Better Business a/k/a Smart $aver Business Program

Program Description: This umbrella efficiency program provides incentives to existing commercial, industrial, and governmental customers for heating, air conditioning, ceiling and roof insulation upgrades, duct leakage and repair, demand-control ventilation, cool-roof coating, high-efficiency, energy-recovery ventilation, and HVAC-optimization-qualifying measures.

Program Accomplishments - January 2023 - December 2023:
Incentives were provided to customers for 216 commercial energy efficiency measures through this program.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $1,751,596.

Program Progress Summary:
Incentives have been provided to customers for 23,622 commercial energy-efficiency measures through this program since inception**.**

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Program Description and Progress

Program Title: Smart $aver Custom Incentive Program

Program Description: The Smart $aver Custom Incentive Program (f/k/a Florida Custom Incentive Program) is designed to encourage commercial and industrial customers to make capital investments for energy-efficiency measures which reduce peak demand and provide energy savings. This program provides incentives for individual, custom projects which are cost-effective but not otherwise addressed through DEF's prescriptive incentive programs. Examples of energy-efficient technologies that would be considered under this program include but are not limited to new construction measures and new thermal energy storage systems.

Program Accomplishments - January 2023 - December 2023:
There were 0 customers who participated in this program.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $213,508.

Program Progress Summary:
457 projects have received incentives through this program since inception. This program continues to target customer-specific, energy-efficiency measures not covered through DEF's prescriptive commercial programs.

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Program Description and Progress

Program Title: Standby Generation

Program Description: The Standby Generation Program is a demand response program that allows DEF to reduce system demand by dispatching the customer's standby generator. This is a voluntary program available to commercial and industrial customers who have on-site generation capability.

Program Accomplishments - January 2023 - December 2023:
DEF added four accounts to this program.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $6,047,277.

Program Progress Summary:
There were 187 active/enrolled accounts at year-end 2023, providing 83 of winter MW load control at the generator.

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Program Description and Progress

Program Title: Interruptible Service Program

Program Description: The Interruptible Service Program is a direct load control program that reduces DEF's system demand at times of capacity shortage during peak or emergency conditions.

Program Accomplishments - January 2023 - December 2023:
One account was added to the program.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $48,337,004.

Program Progress Summary:
There were 173 accounts participating in this program in 2023, providing 512 of winter MW load control at the generator.

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Program Description and Progress

Program Title: Curtailable Service Program

Program Description: The Curtailable Service Program is an indirect load control program that reduces DEF's system demand at times of capacity shortage during peak or emergency conditions.

Program Accomplishments - January 2023 - December 2023:
One account was added to this program.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $1,887,993.

Program Progress Summary:
There was a total of 5 NET participants in this program in 2023, providing 56 winter MW of load control at the generator.

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Program Description and Progress

Program Title: Technology Development

Program Description: The Technology Development Program is designed to allow DEF to investigate technologies that support the development of new demand response (DR) and energy-efficiency (EE) programs. This program includes but is not limited to, technological research, field demonstration projects, research on load behavior and demand-side management (DSM) measures and other market-related research.

Program Accomplishments - January 2023 - December 2023:
Several research and development projects were completed, continued and/or launched in 2023.

- Launched a project to evaluate the energy efficiency and demand response capability of an energy storing, ultra-efficient, commercial packaged air conditioner technology that combines dew-point-style sensible cooling with liquid desiccant dehumidification. This technology implements indirect evaporative cooling using a liquid desiccant. This desiccant can be recharged and stored in a tank for use later. This stored energy can be used to make the peak power consumption very low. We are piloting this technology compared to standard packaged units at a volunteer customer site. The energy consumption of this technology will be documented. If the testing is successful, this technology could be included in future EE and DR programs.
- Continued a project to evaluate the demand response capability of the Ford Lightning Electric Pickup Truck in a Vehicle-to-Grid (V2G) configuration. The pilot will consist of lab testing of the vehicle, electric vehicle charger and home integration system. We will also test the system in 4 employee volunteer DEF customer homes. This project will focus on the capabilities of the Ford Lightning EV to provide V2G demand response, Vehicle-to-Home backup power and EV charging control. These systems could be a valuable future potential resource as a component of DEF's DR Portfolio.
- Continued a project with the University of Central Florida (UCF) to document the value of long-duration customer-side energy storage systems. This project is using the technology at UCF's Microgrid Control lab to directly test a long-duration energy storage system. Use cases to be investigated include study of battery performance during charging and discharging, documenting the effects of cycling on battery performance (battery degradation, efficiency, etc.), optimal operation of a battery energy storage system in a distribution system with high penetration of solar energy, control of behind-the-meter distributed energy resources to provide services including, peak capacity management, demand response (consuming or generating), frequency regulation, ramping capability and voltage management.

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Program Description and Progress

- Continued a pilot to develop software, firmware, and applications for a Smart Home Gateway to evaluate the potential for a future home energy management program and its ability to enhance the Company's future energy efficiency and DR programs. The Smart Home Gateway currently includes processing and communications capabilities to perform on-site operations including receiving energy data from the customer's AMI meter, communications using four radios and on-site processing. Capabilities were developed and tested that included enabling appliance demand response using CTA-2045 (EcoPort) local control and enabling local control of Energy Management Circuit Breakers (EMCBs) for monitoring and demand response. These technologies allow automatic control of devices according to the customer's preference, and enabling open-source, utility-demand response using OpenADR. The Smart Home Gateway can also be used to engage customer awareness of how energy is being used in the home. These capabilities will be considered in the development of future EE and DR programs.
- Continued a project with the University of South Florida (USF) to leverage customer-sited solar PV and energy storage at the USF 5th Avenue Garage Microgrid. The system provides load smoothing, islanding, and demand response. A publicly available dashboard that shows live data, project specific facts and the capability of downloading data for further study is available for the site at https://dashboards.epri.com/duke-usfsp-parking. The result of this research may be used for the design of a potentially cost-effective DR program. USF continues its research on microgrid operation.
- Continued the Electric Power Research Institute (EPRI) Solar DPV project for data collection to document customer solar resources with a focus on larger PV arrays with and without energy storage. This project also provides the data stream for the dashboard mentioned above.
- Completed participation in an EPRI project to study the potential of using customer demand response to compensate for variable loads and intermittent renewable generation resources.
- Completed a project that will provide knowledge in methods to utilize customer Wi-Fi infrastructure to develop a dedicated, durable, and secure utility communication channel to connected devices. The project will also provide knowledge on the effectiveness of Wi-Fi-signal-strength-improvement technology. This technology could lead to lower costs and improved cost-effectiveness for existing and future DR and EE programs.
- Completed a project to evaluate the demand response capability of internet-connected residential batteries. Residential batteries potentially offer the ability to provide power reduction for demand response while eliminating any discomfort to the customer (as compared to residential appliance demand response). Certain battery manufacturers have developed technologies that allow for the collection of capacity and charge data, communication protocols for external aggregator software providers, and the ability to dispatch stored energy to serve the needs of the customer or the grid. This project focused on the capabilities of a particular

Program Description and Progress

aggregator to collect data from two battery manufacturers, the feasibility of utilizing aggregation technology for dispatching demand response event commands, and the net impact of these events on shaping demand. Such aggregation system enabled existing units that are already installed by residential customers in DEF territory to be used in this study. The results of this study will be used to develop future demand response programs utilizing customer energy storage.

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

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $377,765.

Program Progress Summary:
DEF continued to focus on researching and testing new technologies which has the potential to provide new programs and create new customer offerings.

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Program Description and Progress

Program Title: Qualifying Facility (QF)

Program Description: The purpose of this program is to meet the objectives and obligations established by Section 366.051, Florida Statutes, and the Commission's rules contained within Chapter 25-17, Florida Administrative Code, regarding the activity and purchase of as-available energy and firm energy and capacity from Qualifying Facilities (QF), including those that utilize renewable sources as defined in Section 366.91, Florida Statutes, pursuant to an as-available tariff, standard offer contract or negotiated contracts.

Under the QF program, DEF facilitates and administers the power purchases from QF and state jurisdictional interconnections. This Program develops standard offer contracts, negotiates, enters, amends, restructures, and terminates non-firm energy, firm energy and capacity contracts entered with qualifying cogeneration, small power producers and renewable facilities.

Program Accomplishments - January 2023 - December 2023:
Avoided cost and generator interconnection service activity with renewable and distributed resource (DR) developers continued in 2023. DEF provided QF, renewable, or DR-related information to many interested parties who are exploring distributed generation options in Florida. Numerous calls and meetings were held with parties interested in the advancement of their DR project. Meetings were also held with current and existing QF under contract to discuss restructuring and extending existing purchased power agreements. DEF continued evolving its analytics, forecasts and business processes required to support good faith QF-purchased power negotiations and interconnection service.

DEF successfully administered all existing QF-purchased power contracts that are in-service for contractual compliance. As of December 31, 2023, DEF had over 5,100 MW of solar projects in various stages of project development including grid interconnection. There were 114 active project applicants for all generation technologies in DEF's system interconnection process. The QF-purchased power contracts produced more than 2.44 million-MWh for DEF customers during 2023.

Program Fiscal Expenditures - January 2023 - December 2023:
Expenses for this program were $676,851.

Program Progress Summary:
As of December 31, 2023, DEF administered approximately 411 MW of firm capacity contracts from in-service QF, and 5 non-firm as-available energy QF contracts. As of December 31, 2023,

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Program Description and Progress

DEF administered both QF pre-applications for state jurisdictional interconnections, and QF applications for its Federal Energy Regulatory Commission jurisdictional generator interconnection process. 2023 ended with over 3,600 MW of potential QF generators in various stages of development and DEF grid interconnection.

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Cost Recovery Clause
January 2023 - December 2023
Actual Capital Structure and Cost Rates

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		(1) Jurisdictional Rate Base Adjusted Retail ($000s)	(2) Cap Ratio	(3) Cost Rate	(4) Weighted Cost	(5) Revenue Requirement Rate	(6) Monthly Revenue Requirement Rate
1	Common Equity	$ 8,196,604	44.95%	10.10%	4.54%	6.08%	0.5067%
2	Long Term Debt	6,847,837	37.55%	4.60%	1.73%	1.73%	0.1442%
3	Short Term Debt	329,410	1.81%	5.17%	0.09%	0.09%	0.0075%
4	Cust Dep Active	153,259	0.84%	2.61%	0.02%	0.02%	0.0017%
5	Cust Dep Inactive	1,474	0.01%			0.00%	0.0000%
6	Invest Tax Cr	191,599	1.05%	7.60%	0.08%	0.10%	0.0083%
7	Deferred Inc Tax	2,514,030	13.79%			0.00%	0.0000%
8	**Total**	**$ 18,234,213**	**100.00%**		**6.46%**	**8.02%**	**0.6683%**

	ITC split between Debt and Equity**:		Ratio	Cost Rate	Ratio	Ratio	ITC	Weighted ITC	After Gross-up
9	Common Equity	8,196,604	54%	10.1%	5.50%	72.4%	0.08%	0.0579%	0.078%
10	Preferred Equity	-	0%				0.08%	0.0000%	0.000%
11	Long Term Debt	6,847,837	46%	4.60%	2.09%	27.6%	0.08%	0.0221%	0.022%
12	ITC Cost Rate	15,044,440	100%		7.60%			0.0800%	0.100%

	Breakdown of Revenue Requirement Rate of Return between Debt and Equity:		**Monthly Rate for Clauses**
13	Total Equity Component (Lines 1 and 9)	6.158%	**0.00513**
14	Total Debt Component (Lines 2, 3 , 4 , and 11)	1.862%	**0.00155**
15	**Total Revenue Requirement Rate of Return**	8.020%	**0.00668**

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 and Order PSC-2022-0357-FOF-EI approving return on equity trigger.
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

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Commission review of numeric conservation goals (Duke Energy Florida, LLC)

Docket No. 20240013-EG

Dated: May 15, 2024

DUKE ENERGY FLORIDA, LLC'S RESPONSE TO FLORIDA RISING AND LEAGUE OF UNITED LATIN AMERICAN CITIZENS' FIRST SET OF INTERROGATORIES (NOS. 1-52)

Duke Energy Florida, LLC ("DEF"), responds to Florida Rising and the League of United Latin American Citizens ("LULAC"); First Set of Interrogatories (Nos. 1-52), as follows:

INTERROGATORIES

1. Please indicate the season and time of day during which peak demands for DEF typically occur.

Response:
DEF's peak demand typically occurs at hour ending 8am during the winter and at hour ending 5pm during the summer.

2. Please identify DEF's year by year assumptions regarding avoided energy costs that were used to assess cost-effectiveness of efficiency measures and programs, for as many future years as have been forecast. Please specify whether each value is in nominal dollars or in real, inflation-adjusted dollars for a given year. Please also identify the source of these assumptions.

Response:
These are the avoided energy costs in nominal dollars. These are calculated as the marginal cost for the case that includes growth in energy efficiency and demand response programs. Please see the following avoided energy costs in the table below.

$/Mwh	Avoided Energy Cost
2025	41.73
2026	41.41
2027	40.93
2028	42.98
2029	41.95
2030	40.47
2031	39.13
2032	38.12
2033	39.74
2034	41.72
2035	44.21
2036	47.40
2037	49.44
2038	51.85
2039	54.78
2040	55.42
2041	55.62
2042	59.04
2043	61.18
2044	63.39
2045	65.68
2046	68.06
2047	70.52
2048	73.07
2049	75.71

3. Please identify DEF's year by year assumptions regarding avoided capacity costs that were used to assess cost-effectiveness of efficiency measures and programs, for as many future years as have been forecast. Please specify whether each value is in nominal dollars or in real, inflation-adjusted dollars for a given year. Please also identify the source of these assumptions.

Response:
These are the avoided capacity costs in nominal dollars. They are based on the generation, transmission capital, fixed operating and maintenance costs and gas reservation charges for the avoided units. Please see the following avoided capacity costs in the table below.

Year	Avoided Unit	Total Avoided Capacity Costs $/KW - Summer Capacity	Total Avoided Capacity Costs $/KW - Winter Capacity
2029	Brownfield CT 1	$ 176.78	$ 161.86
2030		$ 176.57	$ 161.66
2031		$ 176.37	$ 161.49
2032	Brownfield CT 2	$ 158.92	$ 145.51
2033		$ 160.21	$ 146.69
2034	Avg CT 3 and 4	$ 188.34	$ 172.44
2035		$ 190.09	$ 174.04
2036		$ 191.87	$ 175.67
2037		$ 193.68	$ 177.33
2038		$ 195.52	$ 179.02
2039		$ 197.41	$ 180.74
2040		$ 199.32	$ 182.50
2041		$ 201.27	$ 184.28
2042		$ 203.26	$ 186.10
2043		$ 205.28	$ 187.95
2044		$ 207.34	$ 189.84
2045		$ 209.44	$ 191.76
2046		$ 211.57	$ 193.72
2047		$ 213.75	$ 195.71
2048		$ 215.96	$ 197.74
2049		$ 218.22	$ 199.80

4. Please identify DEF's year by year assumptions regarding avoided capacity reserves, if not included in avoided capacity costs, that were used to assess cost-effectiveness of efficiency measures and programs, for as many future years as have been forecast. If avoided capacity reserves were included in avoided capacity costs, please explain how that was done and what assumptions were used. Please specify whether each value is in nominal dollars or in real, inflation-adjusted dollars for a given year. Please also identify the source of these assumptions.

Response:
The avoided capacity reserve is 20%, which was applied to the avoided capacity costs included in question 3.

5. Please identify DEF's year by year assumptions regarding avoided environmental compliance costs, if not included in avoided capacity and/or avoided energy costs, that were used to assess cost-effectiveness of efficiency measures and programs, for as many future years as have been forecast. If avoided capacity reserves were included in avoided capacity costs, please explain how that was done and what assumptions were used. If avoided future environmental compliance costs were included in such other costs, please explain how that was done and what assumptions were used. Please specify whether each

value is in nominal dollars or in real, inflation-adjusted dollars for a given year. Please also identify the source of these assumptions.

Response:
Avoided environmental compliance costs were embedded in the avoided energy costs.

6. Please identify DEF's year by year assumptions regarding costs of carbon emissions that were used to assess cost-effectiveness of efficiency measures and programs, for as many future years as have been forecast. Please specify whether each value is in nominal dollars or in real, inflation-adjusted dollars for a given year. Please also identify the source of these assumptions.

Response:
DEF assumed zero carbon emission costs.

7. Please identify DEF's year by year assumptions regarding avoided transmission capacity costs (in $/kW) that were used to assess cost-effectiveness of efficiency measures and programs, for as many future years as have been forecast. Please specify whether each value is in nominal dollars or in real, inflation-adjusted dollars for a given year. Please also identify the source of these assumptions.

Response:
Please see document bearing Bates number 20240013-FLRISINGLULACROG1-00000001. The documents bearing Bates number 20240013-FLRISINGROG1-00000001 is confidential: redacted versions are attached hereto and unredacted copies have been submitted with the Florida Public Service Commission along with DEF's Notice of Intent to Request Confidential Classification dated May 15, 2024.

8. Please identify DEF's year by year assumptions regarding avoided distribution capacity costs (in $/kW) that were used to assess cost-effectiveness of efficiency measures and programs, for as many future years as have been forecast. Please specify whether each value is in nominal dollars or in real, inflation-adjusted dollars for a given year. Please also identify the source of these assumptions.

Response:
Please see document bearing Bates number 20240013-FLRISINGLULACROG1-00000002. The documents bearing Bates number 20240013-FLRISINGROG1-00000002 is confidential: redacted versions are attached hereto and unredacted copies have been submitted with the Florida Public Service Commission along with DEF's Notice of Intent to Request Confidential Classification dated May 15, 2024.

9. Please identify DEF's year by year assumptions regarding line loss that were used to convert savings on the customers' side of the meter to generation, for as many future years as have been forecast. Please include assumptions for both energy and peak demand, and specify whether these assumptions are based on average or marginal line loss rates. Please specify whether each value is in nominal dollars or in real, inflation-adjusted dollars for a given year. Please also identify the source of these assumptions.

Response:
An average line loss rate of 5.139% was used in all years to convert energy and peak demand savings on the customers' side of the meter to generation. The nominal demand and energy avoided cost values are adjusted by line loss rate. The source of the assumptions was Rates & Regulatory Planning Department at Duke Energy Florida.

10. Were avoided line losses captured in cost-effectiveness analyses? If so:

a. Please indicate whether higher loss rates were used for peak kW savings than for energy (kWh) savings. If higher loss rates were not used for peak savings than energy savings, please explain why.

b. Please indicate whether marginal (rather than average) loss rates were used. If marginal loss rates were not used, please explain why.

Response:
Yes.

a. The same line loss rates were used for peak kW savings and energy (kWh) savings. Higher line loss rates were not used for peak savings because DEF does not have the meter data necessary to support the determination of a different rate associated with peak kW savings. This is consistent with previous FEECA filings.

b. Average line losses were used. This is consistent with previous FEECA filings.

11. Please identify DEF's year by year assumptions regarding avoided ancillary services that were used to assess cost-effectiveness of efficiency measures and programs, for as many future years as have been forecast. Please specify whether each value is in nominal dollars or in real, inflation-adjusted dollars for a given year. Please also identify the source of these assumptions.

Response:
DEF's cost effectiveness analysis does not include any avoided costs for ancillary services.

12. Please identify DEF's year by year assumptions regarding value of reduced risk that were used to assess cost-effectiveness of efficiency measures and programs, for as many future

years as have been forecast. Here, value of reduced risk includes, but is not limited to: reduced exposure to future fuel price volatility, future environmental regulation compliance costs, uncertainties of demand forecasts and related capital investments. Please specify whether each value is in nominal dollars or in real, inflation-adjusted dollars for a given year. Please also identify the source of these assumptions.

Response:
Consistent with the Commission-accepted practice, DEF does not directly value risk or the reduction of risk in the evaluation of cost effectiveness for these measures and programs. DEF examines the range of cost and reliability outcomes for the proposed measures and programs through the evaluation of fuel sensitivities (high and low fuel price forecasts), carbon price sensitivities, and the examination of impacts on the generation reserve margin.

13. Please identify DEF's year by year assumptions regarding discount rate that were used to assess cost-effectiveness of efficiency measures and programs, for as many future years as have been forecast. Please specify whether the discount rate used is real or nominal. Please also identify the source of these assumptions.

Response:
The discount rate from the TYSP that was used to assess cost effectiveness was 6.83% which was used for all years. This nominal rate represents DEF's weighted cost of capital.

14. Please identify DEF's year by year assumptions regarding reduced credit and collection costs as result of customers who participate in efficiency programs being better able to meet future bill payment obligations, that were used to assess cost-effectiveness of efficiency measures and programs, for as many future years as have been forecast. Please specify whether each value is in nominal dollars or in real, inflation-adjusted dollars for a given year. Please also identify the source of these assumptions.

Response:
DEF's cost effectiveness analysis does not include any assumptions for reduced credit and collection costs.

15. Please provide DEF's loss of load probability (LOLP) for each year of the study period without any capacity expansion or DSM additions. Please identify any documents supporting these figures.

Response:
DEF has not prepared a utility loss of load probability (LOLP) study in the last several years. Loss of probability was not included in the study.

16. Please identify all market potential studies Mr. Herndon has worked on during the last decade.

Response:

Mr. Herndon has worked on the following market potential studies during the last decade:

1. Duke Energy Florida DSM Market Potential Study (2019)
2. Florida Power & Light DSM Market Potential Study (2019)
3. Florida Public Utilities Company DSM Market Potential Study (2019)
4. Gulf Power DSM Market Potential Study (2019)
5. JEA DSM Market Potential Study (2019)
6. Orlando Utilities Commission DSM Market Potential Study (2019)
7. Tampa Electric Company DSM Market Potential Study (2019)
8. Duke Energy North Carolina DSM Market Potential Study (2023)
9. Duke Energy South Carolina DSM Market Potential Study (2023)
10. Duke Energy North Carolina DSM Market Potential Study (2020)
11. Duke Energy South Carolina DSM Market Potential Study (2020)
12. Duke Energy North Carolina DSM Market Potential Study (2016)
13. Duke Energy South Carolina DSM Market Potential Study (2016)
14. Duke Energy Ohio DSM Market Potential Study (2018)
15. Duke Energy Ohio DSM Market Potential Study (2015)
16. Duke Energy Indiana DSM Market Potential Study (2021)
17. Duke Energy Indiana DSM Market Potential Study (2018)
18. El Paso Electric DSM Market Potential Study (2024)
19. Georgia Power Company Achievable Energy-Efficiency Potentials Assessment (2018)
20. Georgia Power Company Achievable Energy-Efficiency Potentials Assessment (2015)
21. Los Angeles Department of Water and Power Energy Efficiency Potential Study (2016)
22. Santee Cooper DSM Market Potential Study (2023)
23. Santee Cooper EE Market Potential Study (2019)

17. Of the market potential studies identified in Interrogatory 14, please indicate which were for electric utilities, which were for gas utilities, and which were for dual-fuel utilities.

Response:

DEF assumes that this Interrogatory was intended to refer to Interrogatory 16 and answers accordingly. To DEF's knowledge, Florida Public Utilities Company is a dual-fuel (electric and natural gas) utility, while JEA and LADWP are electric and water utilities. The remaining utilities identified in Interrogatory 16 are electric utilities.

18. Of the market potential studies identified in Interrogatory 14, please indicate whether or not each study excluded savings from measures that failed the participant test without financial incentives.

Response:

DEF assumes that this Interrogatory was intended to refer to Interrogatory 16 and answers accordingly. The screening criteria applied for each market potential study Resource Innovations conducts is individually determined based on the purpose of the study and the particular regulatory rules in each jurisdiction. The participant test was applied as a screening metric for cost effectiveness in the first seven studies listed in response to Interrogatory No. 16, which were developed for the 2019 FEECA Goals Proceedings. The remaining studies listed did not include the participant test as a screening metric.

19. Of the market potential studies identified in Interrogatory 14, please indicate whether or not each study excluded savings from measures with a payback of less than 2 years.

Response:
DEF assumes that this Interrogatory was intended to refer to Interrogatory 16 and answers accordingly. The screening criteria applied for each market potential study Resource Innovations conducts is individually determined based on the purpose of the study and the particular regulatory rules in each jurisdiction. The two-year payback criterion used in Florida to screen for free riders was included for the first seven studies listed in response to Interrogatory No. 16, which were developed for the 2019 FEECA Goals Proceedings. The remaining studies listed did not include two-year payback as a screening metric.

20. Please identify and explain all reasons which support the use of a two-year payback screen as the mechanism for addressing free ridership.

Response:
Rule 25-17.0021(3) requires consideration of free riders in each utilities' projections of numerical goals. The FPSC has used a payback screen of two years since 1991 as a proxy for free ridership. The two-year screen is intended to minimize the payment of incentives to customers for energy efficiency measures that they would do on their own without an incentive from the utility. DEF believes that it is reasonable to assume that customers will make rational economic decisions to implement measures with less than a two-year payback without incentives from the utility.

The issue was contested again in the 2014 goals proceeding and the Commission found that "No persuasive evidence was presented for the alternate methodologies suggested by the intervenors. We have consistently approved goals based on this methodology in our previous DSM goal setting proceedings. While the selection of the most appropriate approach to account for free riders as required by Rule 25-17.0021(3), F.A.C., is discretionary, the overwhelming evidence in this case suggests that the discretionary balance point continues to be a two-year payback period." (Docket No. 20130200, Order No. PSC-14-0696-FOF-EU).

21. Please explain whether DEF is aware of any other state or utility that eliminates all measures with a two-year payback from analyses of efficiency potential. If so, please identify the states and/or utilities, and please identify references for any states or utilities listed. Please identify any related energy efficiency market potential studies of which DEF is aware that rely on a two-year payback screen to address free ridership.

Response:
DEF is not aware of any such state or utility that eliminates all measures with a two-year payback, but likewise does not possess detailed knowledge of other states' regulatory framework for addressing DSM goals nor other utilities' analytical framework for addressing free ridership.

22. Please explain whether DEF believes that all measures with a payback of less than two years necessarily have very high free rider rates, regardless of the program design (target market, delivery strategy, incentive levels, etc.)? If so, what is the basis for that belief? Please explain in detail and provide references to all studies, reports and documents relied upon in forming that belief.

Response:
No, DEF does not believe that all measures with a payback of less than two years necessarily have very high free rider rates, regardless of the program design. Understanding consumers' actions and motivations regarding efficiency measures is complex. There are a number of factors that can influence the adoption of efficiency measures including, but not limited to, behavioral factors, lack of knowledge and awareness, and aesthetics and appearance. It is important to note that, DEF continues to believe that the two-year payback screen is an accepted and reasonable means to ensure that its proposed DSM goals appropriately consider free-ridership.

23. Please explain whether DEF believes that upfront cost is the only barrier to market adoption of all efficiency measures? If so, what is the basis for that belief? If not, please identify all other major market barriers that could lead to less than economically optimal levels of investment in energy efficiency measures.

Response:
No, it is not DEF's position that upfront cost is the only barrier to market adoption of all efficiency measures. There are a number of other factors that can impact the adoption of efficiency measures including, but not limited to, customer awareness and understanding, personal preferences, renter vs homeowner, other home improvements that take priority, alternative financial opportunities, time constraints, homeowner association restrictions, and lifestyle.

24. Please explain whether there a free rider rate above which DEF believes it would be inappropriate to run an efficiency program? If so, what is that free rider rate cut-off? Please

explain the basis for the value proposed. If not, why is it appropriate for a market potential study to exclude savings potential from measures that have short payback periods?

Response:
DEF does not screen its energy efficiency measures or programs by a free-ridership rate. DEF utilized the accepted approach of utilizing the two-year payback screen as a means to ensure the appropriate consideration of potential free-ridership from customers as a whole in the determination DSM Goals.

Generally, the longer the payback period that is used to screen measures for consideration of free ridership the fewer the number of measures that will exceed that payback period. Therefore, utilizing a longer payback period would likely screen out more measures and at some point would only allow a very limited number of measures to be considered for inclusion in programs used to determine the Company's DSM goals.

25. Please list all measures that were excluded through the economic analysis because they had a payback of less than two years, along with the Technical Potential (TP) associated with each of those measures. Please include the incremental annual and cumulative annual MWh for these measures in each year from 2020 to 2029.

Response:
The measure screening was done at the measure permutation level (i.e. by segment and vintage), and the measure permutations were not included because they had a payback of less than two years for the RIM and TRC scenarios.

The TP for measures not included in the economic analysis because they had a payback of less than two years was not calculated as part of the study, but TP results for individual measures have been provided in DEF's Response to FL Rising & LULAC's POD 1-2. Incremental annual and cumulative annual MWh for these measures is not applicable as these measures were not included in the measure adoption forecast analysis.

Please see document bearing Bates numbers 20240013-FLRISINGLULACROG1-00000003 through 20240013-FLRISINGROG1-00000035. The documents bearing Bates number 20240013-FLRISINGROG1-00000003 through 20240013-FLRISINGROG1-00000035 are confidential: redacted versions are attached hereto and unredacted copies have been submitted with the Florida Public Service Commission along with DEF's Notice of Intent to Request Confidential Classification dated May 15, 2024.

26. Please explain why cost-effectiveness from the Utility Cost Test (UCT) perspective was not analyzed, in addition to the RIM, TRC, and PCT tests.

Response:
Commission's rules nor the historic practice used to evaluate cost effectiveness of DSM measures and programs call for the calculation of the Utility Cost Test.

27. Please indicate which of the following utility system benefits were included under the RIM test: (1) Avoided energy costs; (2) Avoided capacity costs; (3) Avoided transmission and distribution system costs; (4) Avoided line losses; (5) Avoided future environmental compliance costs; (6) Avoided ancillary services costs; (7) The value of risk mitigation associated with efficiency measures (e.g. reduced risk to future fuel price volatility); and (8) Reduced credit and collection costs associated with efficiency making it easier for customers to afford and pay their electricity bills. If any of the above-listed utility system benefits were not included, please explain why.

Response:

Avoided energy costs, avoided capacity costs, avoided transmission and distribution system costs, and avoided line losses were included in the RIM evaluation. The remaining items were not included in the RIM evaluation because they are not consistent with the provisions of FPSC Rule 25-17.0021 which states that "The goals shall be based on the total cost-effective kilowatt and kilowatt-hour savings reasonably achievable through demand-side management". Additionally, the remaining values/benefits are not included in the defined benefits for the RIM test identified in "Cost Effectiveness Manual for Demand Side Management Programs" (adopted in Docket No. 891324-EU, Order No. 24745) and DEF does not have the necessary data or agreed upon methodologies to support the quantification of these items. The additional values beyond those include in the RIM analysis do not affect kilowatt and kilowatt hour savings.

28. Please indicate which of the following utility system benefits were included under the TRC test: (1) Avoided energy costs; (2) Avoided capacity costs; (3) Avoided transmission and distribution system costs; (4) Avoided line losses; (5) Avoided future environmental compliance costs; (6) Avoided ancillary services costs; (7) The value of risk mitigation associated with efficiency measures (e.g. reduced risk to future fuel price volatility); and (8) Reduced credit and collection costs associated with efficiency making it easier for customers to afford and pay their electricity bills. If any of the above-listed utility system benefits were not included, please explain why.

Response:

Avoided energy costs, avoided capacity costs, avoided transmission and distribution system costs, and avoided line losses were included in the TRC evaluation. The remaining items were not included in the TRC evaluation because they are not consistent with the provisions of FPSC Rule 25-17.0021 which states that "The goals shall be based on the total cost-effective kilowatt and kilowatt-hour savings reasonably achievable through demand-side management". These additional values do not affect kilowatt and kilowatt hour savings. Additionally, the remaining values are not included in the benefits for the TRC test identified in the "Cost Effectiveness Manual for Demand Side Management Programs",(Docket No. 891324-EU, Order No. 24745) and DEF does not have data nor agreed upon methodologies to support the quantification of these items.

29. Please indicate which of the following utility system benefits were included under the PCT test: (1) Avoided energy costs; (2) Avoided capacity costs; (3) Avoided transmission and distribution system costs; (4) Avoided line losses; (5) Avoided future environmental compliance costs; (6) Avoided ancillary services costs; (7) The value of risk mitigation associated with efficiency measures (e.g. reduced risk to future fuel price volatility); and (8) Reduced credit and collection costs associated with efficiency making it easier for customers to afford and pay their electricity bills. If any of the above-listed utility system benefits were not included, please explain why.

Response:
None of these benefits were included in the PCT test. Per the description of the benefits for the PCT test included in the Cost Effectiveness Manual for Demand Side Management Programs (Docket No. 891324-EU, Order No. 24745), the benefits for the PCT test include reductions in the participating customer's bill, incentives, and any applicable tax credits.

30. In DEF's view, would it be accurate to state that the RIM test addresses the perspective only of non-participants, as participants typically see bills go down even if rates go up slightly? If not, why not?

Response:
No. The Rate Impact Measure test is an indirect measure of the long-term impact of a program on customer rates. Measures that are cost effective under RIM test theoretically will reduce rates over time for all customers, both participants and non-participants.

31. Given that the TRC test is meant to address a societal perspective, please indicate whether any of the following societal benefits were included under that test: (1) The value of non-electric fuel savings (e.g. gas savings); (2) The value of water savings; (3) The value of any operation and maintenance cost savings; (4) The value of participant non-energy benefits; (5) The value to society of reduced emissions of greenhouse gases and/or other pollutants; or (6) The value to society of reduced health care costs. If any of the above-listed categories of societal benefits were not included in TRC analyses, please explain why not.

Response:
It is not appropriate to include externalities, also referred to as "non-energy benefits" (NEB), such as those listed by Florida Rising, in the TRC cost-effectiveness test. The TRC test can be described to be from a "societal perspective" because it combines participant costs with utility benefits and therefore is intended to represent an overall resource perspective. Therefore, inclusion of NEBs is inconsistent with the intent of the TRC test. The components included in the TRC test only include those that address electric impacts as listed in Commission's Cost-Effectiveness Manual and DEF's response to FL Rising & LULAC ROG 1-28.

32. Please explain how the load forecasting DEF provided to RI as part of the Technical Potential Study (TPS) considered adoption of naturally occurring (i.e., without a utility funded program) energy efficiency measures above baseline measure adoption by customers.

Response:
Please see document bearing Bates numbers 20240013-FLRISINGLULACROG1-00000036 through 20240013-FLRISINGLULACROG1-00000086. The documents bearing Bates numbers 20240036-FLRISINGROG1-0000XXXX through 20240013-FLRISINGROG1-00000086 are confidential: redacted versions are attached hereto and unredacted copies have been submitted with the Florida Public Service Commission along with DEF's Notice of Intent to Request Confidential Classification dated May 15, 2024.

33. Please explain whether these load forecasts assumed that there would be no additional adoption by customers of any energy efficiency measures above baseline code and standards. Please identify all documents supporting this explanation.

Response:
These load forecasts assumed that there would be additional adoption by customers of energy efficiency measures above baseline code and standards. Factors driving efficiency improvements include new building and end-use standards, the availability of more efficient technology options, and declining costs for high-efficient technologies. A significant amount of current and expected market conditions are incorporated: end-use number of units, saturation rates and estimated stock efficiency by building type (single family, multi-family and mobile homes).

34. Please provide a list of naturally occurring (i.e., without a utility funded program) energy efficiency measures above baseline measures that were considered in the load forecasting provided by you to RI as part of the TPS.

Response:
Please refer to attachments provided in FL Rising & LULAC ROG 1-32

35. The TPS prepared RI prepared for DEF states that "Resource Innovations verified with DEF's forecasting group that the baseline sales forecasts incorporated two known sources of naturally-occurring efficiency." Exhibit JH-4 at page 32. Please explain what is meant by a "known source." Please explain whether there were any unknown sources or any additional known sources, and please explain what those sources were.

Response:

As described in Section 5.1.1 of DEF's Technical Potential Study, the term "known sources" means a source of naturally-occurring efficiency that could impact the energy efficiency savings identified and are implicit and thus accounted for in the historical and forecasted load data. The "known sources" of naturally occurring efficiency referred to are: (a) the impacts of the Florida Building Code and of federal equipment standards (collectively, Codes and Standards) and (b) baseline measure adoption of already implemented Energy Efficiency (EE) technologies and measures. DEF is not aware of any unknown sources, but to the extent they exist, they would also be accounted for in the load data.

36. Is it your contention that the load forecasts utilized by RI in this proceeding assumed that your customers would adopt zero additional energy efficiency measures above baseline codes and standards over the next 10 years? If so, please explain all bases for this contention and identify all documents supporting this contention.

Response:
No.

37. If it is your contention that the load forecasts utilized by RI in this proceeding assumed that your customers would adopt zero additional energy efficiency measures above baseline codes and standards over the next 10 years, please explain whether you contend that zero additional energy efficiency measures above baseline codes and standards would be adopted in the absence of utility-sponsored DSM programs.

Response:
N/A

38. If you do not contend that zero additional energy efficiency measures above baseline codes and standards would be adopted in the absence of utility-sponsored DSM programs over the next 10 years, please explain whether you contend the load forecasts that you supplied to RI are accurate.

Response:
Yes, DEF contends the load forecasts supplied to RI are accurate.

39. Please provide the actual annual spending DEF has expended on demand-side management ("DSM") programs for the years 2016, 2017, and 2018. Please provide the annual spending for these years by DSM program, including a breakdown of the annual amount expended on rebates/incentives and non-rebate/non-incentive costs. Please include the portfolio level expenditures (i.e., spending not allocated to individual programs) for the years 2016, 2017, and 2018, and please include the total expenditures for these years.

Response:
Please see the following documents on the Florida Public Service Commission's Website that will show the annual spending for these years by DSM program, including a breakdown of the annual amount expended on rebates/incentives and non-rebate/non-incentive costs.

1. DEF's Petition of True-Up Amount and Direct Testimony of Lori J. Cross with attached exhibits for the period January 2016 through December 2016 in Docket No. 20170002-EG, Document No. 04460-17;

2. DEF's Petition of True-Up Amount and Direct Testimony of Lori J. Cross with attached exhibits for the period January 2017 through December 2017 in Docket No. 20180002-EG, Document No. 03355-2018;

3. DEF's Petition of True-Up Amount and Direct Testimony of Lori J. Cross with attached exhibits for the period January 2018 through December 2018, in Docket No. 20190002-EG, Document No. 04056-2019; The total annual DSM program costs are as follows:
2016 - $109,155,438
2017 - $107,890,962
2018 - $112,863,333

40. Please explain DEF's proposed levels of participation, budget, peak MW savings and energy savings for the program in each of the next 10 years. Please compare those proposed future levels to actual participation, spending and savings levels for DEF's low income programs over each of the past five years.

Response:
The proposed levels of participation, budget, peak MW savings and energy savings for each program for the next ten years are prepared and evaluated by each Program Manager who have detailed knowledge of the programs and years of industry experience.

Please see document bearing Bates numbers 20240013-FLRISINGLULACROG1-00000087 through 20240013-FLRISINGLULACROG1-00000092 for the comparison of levels for DEF's low-income programs

41. Please describe the methodology used to determine the number of eligible customers for your low income efficiency program(s) as presented in DEF's most recent Demand Side Management Annual Report.

Response:
The number of eligible customers for both the Neighborhood Energy Saver and the Low-Income Weatherization Assistance Program reported in the 2024 Annual Report was based on the number of eligible customers included in the 2020 Program Plan filing. The eligible

customers included in the Program Plan filing was based on the number of customer accounts in DEF's service territory with income levels at or below 200% of the poverty level based on 2010 U.S Census block data with an assumed growth rate of 2% annually.

42. For each month between January 2020 and the present please indicate: a) the total number of disconnect notices issued due to non-payment of bills, b) the actual number of disconnections,

Response:
DEF objects to Interrogatory No. 42 as irrelevant, immaterial, overburdensome, and not likely to lead to the discovery of admissible evidence.

43. Please indicate the annual cost of disconnections to the utility (both gross and net of corresponding fees collected from disconnected customers).

Response:
DEF objects to Interrogatory No. 43 as irrelevant, immaterial, overburdensome, and not likely to lead to the discovery of admissible evidence.

44. From January 2020 through the present, please indicate the total number of customers whose outstanding electric bills were deemed uncollectible, the total amount for each year in dollars, and the amount of uncollectible bill costs (direct and indirect) associated with this timeframe that the company has, or expects, to recover from its customers.

Response:
DEF objects to Interrogatory No. 44 as irrelevant, immaterial, overburdensome, and not likely to lead to the discovery of admissible evidence.

45. Please provide actual administrative costs, at the measure level, for each of your energy efficiency programs implemented from 2020-2024. For any costs that are not distinguished by measure, please explain why not, and provide the actual administrative costs at the most granular level possible.

Response:
DEF does not track or report administrative costs at the measure level. The most granular level DEF tracks administrative costs is at the program level.
Please see the table below which provides actual program administrative costs for years 2020-2023. 2024 actuals are not yet available.

Duke Energy Florida, LLC
Actual Energy Conservation Administrative Costs per Program

1	Program	2020	2021	2022	2023	2024
	Home Energy Check	3,419,336	3,439,044	3,277,640	3,870,881	NA
	Residential Incentive	1,906,558	1,449,214	1,381,305	1,592,346	NA
	Business Energy Check	528,093	504,111	449,898	536,216	NA
	Better Business (incl. C/I New Const)	1,139,989	1,130,532	1,118,711	1,170,934	NA
	Technology Development	496,504	444,012	261,504	377,765	NA
	Florida Custom Incentive Program	514,947	235,414	252,010	203,482	NA
	Interruptible Service	300,153	341,398	511,577	796,293	NA
	Curtailable Service	40,822	61,399	30,913	48,963	NA
	Load Management (Res & Comm)	30,727,709	4,365,060	4,171,122	4,349,356	NA
	Low Income Weatherization	102,976	110,718	171,679	156,996	NA
	Standby Generation	447,552	313,843	337,957	443,149	NA
	Qualifying Facility	3,259,637	850,524	894,795	676,851	NA
	Neighborhood Energy Saver	279,068	209,538	717,925	604,010	NA
	TOTAL PROGRAM COSTS	43,163,346	13,454,808	13,577,037	14,827,243	NA

1 - 2024 Actuals not yet available

46. Please indicate if these same administrative costs were used as assumptions for the corresponding measures in the DSM/EE potential study on which your 2025-2034 proposed goals are based. If not, please indicate why not and provide the administrative cost assumptions that were used in the potential study and the basis for those assumptions.

Response:
Yes. DEF used the average of the actual administrative costs to develop the administrative cost per kwh assumption for the residential energy efficiency measures and for the commercial energy efficiency measures.

47. Referring to page 19 of witness Duff's direct testimony, which energy efficiency measures does Duke provide incentives for under the Residential Incentive Program? Please provide a list of measures and their respective incentives.

Response:
Customers who use over 600 kWh receive credits shown in the box below. If a customer uses less, their credits are prorated.

Residential Load Management	
Measure	Incentive
Res Pool Pump	$2.5 per month
Res Water Heating	$3.5 per month
Res HVAC (cl/ht)	$5 March-Nov/$8 Dec-Feb
Connected Strip DHW	$3.5 per month
Connected HP DHW	$3.5 per month

48. Refer to page 19 of witness Duff's direct testimony regarding DEF's load control program.

a. What "selected customer electrical equipment" is included in DEF's load control program?

b. Please explain the terms of DEF's load control operations, including the maximum length of time that a device can be prevented from operating both continuously and cumulatively over course the course of a daily peak.

c. Please detail the form and size of the incentive a customer receives for participating in this program.

Response:

a. The following appliances may be eligible for DEF's residential load control program: Water Heater, Central Electric Cooling System, Central Electric Heating System, Swimming Pool Pump
b. Please see page 2 RATE SCHEDULE RSL-1 under Interruption Schedules.
c. Please see page 2 RATE SCHEDULE RSL-1 under Load Management Credit Amounts. Both can be find on the Duke Energy website: Index of Rate Schedules - Duke Energy (duke-energy.com)

49. Refer to page 20 of witness Duff's direct testimony regarding DEF's customer "Assistance Kits."

a. What specific energy saving measures are included in the Assistance Kits for calendar years 2022-25?

b. Does DEF consider recipients of these kits to be free riders? Why or why not?

Response:

a.

HEC - Single-Family Assistance Kits	
Item Description	**Qty.**
Tier 1 Smart Strip	1
Pipe Insulation 3 Foot Pc.	2
9 Watt LED A-Lamp, Dim, 25,000Hrs	5
Foam Tape Rolls	2
Switch & Outlet Gasket Pack 10/ea.	1
Hot Water Gauge	1
Bimetal Refrigerator Thermometer	1
Dual Thread Faucet Aerator 1.0GPM	2
Earth Massage Showerhead 1.5GPM	1
Pipe Sealing Tape	1

HEC - Multi-Family Assistance Kits	
Item Description	**Qty.**
9 Watt LED A-Lamp	4
Bimetal Refrigerator Freezer Thermometer	1
Stick On Room Thermometer	1
Tier 1 Smart Strip	1
3/4" Pile Insulation	2

b. Assistance Kits recipients are not considered to be a free rider, as the recipient has not previously participated in energy efficiency and must complete a Home Energy Check (HEC) prior to receiving kit. Additionally, the HEC kit is directly tied to participating in HEC, meaning that they could not receive the kit absent participating in the program. The kits actively promote energy efficiency through the kit measures, serving as a gateway for a customer to make behavior modification and/or equipment upgrades through Home Energy Improvement measures, as detailed within the recommendations as noted in the HEC report.

50. Refer to page 21 of witness Duff's direct testimony regarding DEF's efforts to increase access to energy efficiency for renters. Has DEF considered approaches to prevent participating property owners from using DEF's investment in efficiency upgrades as a pretext to increase rents? If so, how does DEF plan to protect tenants from upward rent pressure? If not, why not?

Response:
DEF is not legally permitted to prevent property owners from increasing rents to tenants regardless of participation in efficiency upgrades or otherwise. DEF plans to educate and provide opportunities and incentives to property owners to install efficiency upgrades which allows energy savings to be realized by renters/tenants.

51. Please refer to the table at on page 22 of witness Duff's direct testimony. For each of DEF's existing and proposed programs, please provide a list of all the measures that comprise the totals included under the columns for "EXISTING/KEEP," "NEW," and "DROP," respectively.

Response:

Please see document bearing Bates numbers 20240013-FLRISINGLULACROG1-00000093 through 20240013-FLRISINGLULACROG1-00000096.

52. Please provide the following information regarding DEF's curtailable and interruptible classes (e.g., CS, CS-2, CS-3, CST-2, CST-3, IS, IS-2, IST-2, SS-2, SS-3, etc.).

a. Please provide a list of events where DEF's curtailable/interruptible customers have been curtailed/interrupted in each of the past five years including the number of customers involved, duration of the event, reduction in kW and kWh for each customer, savings realized, incentives or compensation paid and calculation of payments, and average and per customer percent of total load represented by each event.

b. Please forecast the same information requested for in subpart a) for the years 2025-2034, or for as many years as possible.

c. Please explain whether there is a limit on the number of times (or hours) DEF's curtailable/interruptible customers can be curtailed/interrupted.

d. Please provide the compensation customers receive for being curtailable or interruptible. Please provide the calculation to support this compensation.

e. Please explain how much (if any) notice curtailable/interruptible customers receive before curtailment/interruption.

f. Please provide how many of DEF's curtailable/interruptible customers have backup generation.

g. Please provide the total impact on demand (in MW) due to DEF's ability to curtail/interrupt customers.

h. Please provide the total cost savings that come from DEF's interruptible/curtailable load being interruptible/curtailable.

i. Please explain whether DEF's interruptible/curtailable customers have any option to refuse being interrupted/curtailed. If they do have the option, please explain whether this has occurred and under what circumstances.

j. Please explain whether DEF's interruptible/curtailable customers, even if they do not have the option to refuse being interrupted/curtailed, can take power anyway. If they can take power anyway, please explain whether this has occurred and under what circumstances.

Response:

a. No system events requiring customer to be curtailed or interrupted have taken place in the last five years.

b. There is no event forecast for years 2025-2034.

c. There is no limit on the number of times a customer can be interrupted or curtailed on the CS-2, CS-3, CST-2, CST-3, IS-2, IST-2, SS-2, SS-3 Tariffs.

d. Customers receive a base credit of $7.72 per kW of On-Peak demand for the Interruptible (IS-2, IST-2) and Curtailable (CS-2, CS-3, CST-2, CST-3) programs. The level of compensation is set forth in the tariff and was approved by the Commission in the 2021 Settlement Agreement. SS-2 customer capacity credit shall be the greater of 1; $1.170 per kW times the Specified Standby Capacity, or 2; The sum of the daily maximum 30-minute kW demand of actual standby use occurring during On-peak periods times $0.557/kW times the appropriate Billing Month Factor shown in part 3.B as set forth in the tariff and was approved by the commission in the 2021 Settlement Agreement. SS-3 customer capacity credit shall be the greater of 1; $0.877 per kW times the Specified Standby Capacity, or 2; The sum of the daily maximum 30-minute kW demand of actual standby use occurring during On-peak periods times $0.418/kW times the appropriate Billing Month Factor shown in part 3.B as set forth in the tariff and was approved by the commission in the 2021 Settlement Agreement.

e. Notifications are provided fifteen minutes before interruption or curtailment. Every Large Account Manager informs their respective customers about the Duke Energy notification system.

f. 102 locations out of the 178 customers participating in Curtailable and Interruptible programs have backup generation; however, this only accounts for 14% of the curtailable/interruptible load enrolled in the program.

g. Interruptible/Curtailable peak load reduction capability is 316MW in 2023 winter.

h. DEF projects that the total savings from the Interruptible/Curtailable and Standby Generation programs will have a CPVRR value of $29.9 million in the years 2023-2027.

i. Curtailable (CS-2, CS-3, CST-2, CST-3, SS-3) customers have the option to not participate in a declared event because the curtailment is done manually by the customer, but penalties apply for non-compliant load. Historically, all Curtailable customers have participated. Interruptible (IS-2, IST-2, SS-2) customers do not have an opt-out capability because Duke Energy has controls to stop the flow of energy to their locations.

j. There is no option for Interruptible (IS-2, IST-2, SS-2) customers because Duke Energy has controls to stop the flow of energy to their locations. As explained above, Curtailable Service (CS-2, CS-3, CST-2, CST-3, SS-3) customers do have the option to refuse curtailment.

DECLARATION

I sponsored the answer to Interrogatory No. 16-19, 25, 31 and 35 from Florida Rising and LULAC's First Set of Interrogatories to Duke Energy Florida, LLC (Nos. 1-52) in Docket No. 20240013-EG, and the responses are true and correct based on my personal knowledge.

Jim Herndon, Vice President, Advisory Services, Resource Innovations

Date: 5/15/24

DEF's Response to FL Rising & LULAC's ROG 1 (1-52)
Q7

REDACTED
DOCUMENTS BEARING BATES NUMBER 20240013-FLRISINGLULACROG1-00000001
IS REDACTED IN ITS ENTIRETY

DEF's Response to FL Rising & LULAC's ROG 1 (1-52)
Q8

REDACTED
DOCUMENTS BEARING BATES NUMBER 20240013-FLRISINGLULACROG1-00000002
IS REDACTED IN ITS ENTIRETY

DEF's Response to FL Rising & LULAC's ROG 1 (1-52)
Q25

REDACTED
DOCUMENTS BEARING BATES NUMBER 20240013-FLRISINGLULACROG1-00000003 THROUGH 20240013-FLRISINGROG1-00000035 ARE REDACTED IN THEIR ENTIRETY

DEF's Response to FL Rising & LULAC's ROG 1 (1-52)
Q32

REDACTED
DOCUMENTS BEARING BATES NUMBER 20240013-FLRISINGLULACROG1-00000036 THROUGH 20240013-FLRISINGROG1-00000086 ARE REDACTED IN THEIR ENTIRETY

	2019							2020						
DSM Residential Low Income Programs	PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS	PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS
Low Income Weatherization	500	373	0.5	0.2	0.4	$ 354,813	$ 277,206	244	139	0.2	0.1	0.2	$ 318,990	$ 193,529
Neighborhood Energy Saver	19,500	19,494	6.3	4.0	9.9	$ 2,994,366	$ 3,686,476	5,000	950	1.7	1.1	1.8	$ 2,562,059	$ 1,146,564
Total Residential Non-Disp	**20,000**	**19,867**	**6.8**	**4.3**	**10.3**	**$ 3,349,179**	**$ 3,963,682**	**5,244**	**1,089**	**1.9**	**1.2**	**2.0**	**$ 2,881,049**	**$ 1,340,093**
Annual FEECA RES Goal @meter			3.9	1.6	1.4					10.2	5.0	3.2		
Comparison Over/(Under)			5.2	0.4	8.9					(8.3)	(3.8)	(1.2)		
Annual FEECA COMM Projected Participation	20,000							5,244						
Comparison Over/(Under) Actual Participation		(133)							(4,155)					
Annual FEECA COMM Projected Costs						$ 3,349,179							$ 2,881,049	
Comparison Over/(Under) Actual Costs							$ 614,503							$ (1,540,956)
***Projected Participation = Homes**														

2021							2022							2023						
PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS	PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS	PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS
244	133	0.1	0.1	0.2	$ 367,239	$ 192,023	244	134	0.1	0.0	0.2	$ 507,281	$ 252,087	244	184	0.2	0.1	0.4	$ 481,087	$ 261,798
5,000	537	0.3	0.2	0.8	$ 4,950,451	$ 524,447	5,000	4,771	8.5	5.7	15.6	$ 6,274,910	$ 5,288,234	5,000	5,846	9.5	6.3	17.6	$ 5,817,805	$ 6,626,891
5,244	**670**	**0.4**	**0.3**	**0.9**	**$ 5,317,691**	**$ 716,470**	**5,244**	**4,905**	**8.6**	**5.8**	**15.8**	**$ 6,782,191**	**$ 5,540,321**	**5,244**	**6,030**	**9.7**	**6.5**	**18.0**	**$ 6,298,892**	**$ 6,888,688**
		9.0	4.5	2.2					8.0	4.1	1.4					7.3	3.8	7.9		
		(8.5)	(4.2)	(1.2)					0.6	1.7	14.4					2.4	2.7	10.1		
5,244							5,244							5,244						
	(4,574)							(339)							786					
					$ 5,317,691							$ 6,782,191							$ 6,298,892	
						$ (4,601,220)							$ (1,241,871)							$ 589,796

2024							2025							2026						
PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS	PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS	PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS
244	n/a	0.5	0.4	0.9	343,500	n/a	256	n/a	0.5	0.7	1.6	$ 428,769	n/a	256	n/a	0.5	0.7	1.6	$ 428,769	n/a
5,000	n/a	9.7	6.5	17.7	5,840,943	n/a	5,250	n/a	8.6	7.2	18.0	$ 4,548,105	n/a	5,250	n/a	8.6	7.2	18.0	$ 4,548,105	n/a
5,244	**-**	**10.3**	**6.9**	**18.6**	**$ 6,184,442**	**$ -**	**5,506**	**-**	**9.1**	**7.9**	**19.6**	**$ 4,976,874**	**$ -**	**5,506**	**-**	**9.1**	**7.9**	**19.6**	**$ 4,976,874**	**$ -**
		10.3	6.9	18.6					9.1	7.9	19.6					9.1	7.9	19.6		
		-	-	-					-	-	-					-	-	-		
5,244							5,506							5,506						
	(5,244)							(5,506)							(5,506)					
					$ 6,184,442							$ 4,976,874							$ 4,976,874	
						$ (6,184,442)							$ (4,976,874)							$ (4,976,874)

2027							2028							2029						
PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS	PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS	PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS
256	n/a	0.5	0.7	1.6	$ 431,626	n/a	256	n/a	0.5	0.7	1.6	$ 431,626	n/a	256	n/a	0.5	0.7	1.6	$ 431,626	n/a
5,250	n/a	9.0	7.5	18.8	$ 4,748,042	n/a	5,250	n/a	9.0	7.5	18.8	$ 4,748,042	n/a	5,250	n/a	9.0	7.5	18.8	$ 4,748,042	n/a
5,506	**-**	**9.5**	**8.3**	**20.4**	**$ 5,179,668**	**$ -**	**5,506**	**-**	**9.5**	**8.3**	**20.4**	**$ 5,179,668**	**$ -**	**5,506**	**-**	**9.5**	**8.3**	**20.4**	**$ 5,179,668**	**$ -**
		9.5	8.3	20.4					9.5	8.3	20.4					9.5	8.3	20.4		
		-	-	-					-	-	-					-	-	-		
5,506							5,506							5,506						
	(5,506)							(5,506)							(5,506)					
					$ 5,179,668							$ 5,179,668							$ 5,179,668	
						$ (5,179,668)							$ (5,179,668)							$ (5,179,668)

2030							2031							2032						
PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS	PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS	PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS
256	n/a	0.5	0.7	1.6	$ 443,215	n/a	256	n/a	0.5	0.7	1.6	$ 443,225	n/a	256	n/a	0.5	0.7	1.6	$ 443,235	n/a
5,250	n/a	9.0	7.5	18.8	$ 4,748,231	n/a	5,250	n/a	9.0	7.5	18.8	$ 4,748,420	n/a	5,250	n/a	9.0	7.5	18.8	$ 4,748,610	n/a
5,506	**-**	**9.5**	**8.3**	**20.4**	**$ 5,191,446**	**$ -**	**5,506**	**-**	**9.5**	**8.3**	**20.4**	**$ 5,191,646**	**$ -**	**5,506**	**-**	**9.5**	**8.3**	**20.4**	**$ 5,191,845**	**$ -**
		9.5	8.3	20.4					9.5	8.3	20.4					9.5	8.3	20.4		
		-	0.0	-					-	-	-					-	-	-		
5,506							5,506							5,506						
	(5,506)							(5,506)							(5,506)					
					$ 5,191,446							$ 5,191,646							$ 5,191,845	
						$ (5,191,446)							$ (5,191,646)							$ (5,191,845)

2033							2034						
PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS	PROJ PART	ACTUAL PART	WMW	SMW	GWH	PROJ COSTS	ACTUAL COSTS
256	n/a	0.4	0.7	1.5	$ 418,544	n/a	256	n/a	0.4	0.7	1.5	$ 418,554	n/a
5,250	n/a	9.0	7.5	18.8	$ 4,748,799	n/a	5,250	n/a	9.0	7.5	18.8	$ 4,748,988	n/a
5,506	**-**	**9.4**	**8.2**	**20.3**	**$ 5,167,343**	**$ -**	**5,506**	**-**	**9.4**	**8.2**	**20.3**	**$ 5,167,543**	**$ -**
		9.4	8.2	20.3					9.4	8.2	20.3		
		-	-	-					-	-	-		
5,506							5,506						
	(5,506)							(5,506)					
					$ 5,167,343							$ 5,167,543	
						$ (5,167,343)							$ (5,167,543)

DEF CURRENT AND PROPOSED MEASURE LIST FOR GOALS DOCKET					
Program Name	**Current Measures - 2020 - 2024**	**Proposed Measures - 2025-2034**	**Existing/Keep**	**New**	**DROP**
Home Energy Check	HEHC - Single Family EE Kit.xlsx	HEHC - Single Family EE Kit.xlsx			
Home Energy Check	M13W: V-Seal Adhesive Weatherstrip 17Ft. Roll	M13W: V-Seal Adhesive Weatherstrip 17Ft. Roll	x		
Home Energy Check	55111-10/ea.: Switch & Outle Gasket Pack 10/ea.	55111-10/ea.: Switch & Outle Gasket Pack 10/ea.	x		
Home Energy Check	AMC109G: Hot Water Gauge	AMC109G: Hot Water Gauge	x		
Home Energy Check	Digital Refigerator Thermometer	Digital Refigerator Thermometer	x		
Home Energy Check	9W LED	9W LED	x		
Home Energy Check	Bathroom Faucet Aerators	Bathroom Faucet Aerators	x		
Home Energy Check	Low Flow Showerhead	Low Flow Showerhead	x		
Home Energy Check	HEHC - Multi Family EE Kit.xlsx	FL_ HEHC - Multi Family EE Kit.xlsx			
Home Energy Check	9W LED	9W LED	x		
Home Energy Check	Refrigerator Thermometer	Refrigerator Thermometer	x		
Home Energy Check	Switch Plate Thermometer	Switch Plate Thermometer	x		
Home Energy Check	HEHC Low Income Asst Kit - SF and MF	HEHC Low Income Asst Kit - SF and MF			
Home Energy Check	9W LEDs	9W LEDs	x		
Home Energy Check	Smart Power Strip	Smart Power Strip	x		
Home Energy Check	Hot Water Pipe Insulation	Hot Water Pipe Insulation	x		
Home Energy Check		Increased Engagement		x	
Residential Incentive Program	14 SEER ASHP MF or MH - Elec Resistance Htg	ASHP - ENERGY STAR/CEE Tier 1: 16 SEER/15.2 SEER2 (from elect resistance)	x		
Residential Incentive Program	Ceiling Insulation (R12 - R38)	Ceiling Insulation(R2 to R38)	x		
Residential Incentive Program	Energy Star Windows	Energy Star Windows	x		
Residential Incentive Program	14 SEER ASHP Base Electric Resistance Heating	ASHP - ENERGY STAR/CEE Tier 1: 16 SEER/15.2 SEER2 (from elect resistance), 9.HSPF	x		
Residential Incentive Program	15 SEER Air Source Heat Pump				x
Residential Incentive Program	Supplemental 14 SEER ASHP base electric resistance heating				x
Residential Incentive Program	16 SEER Central AC	Central AC - ENERGY STAR/CEE Tier 1: 16 SEER/15.2 SEER2	x		
Residential Incentive Program	Ceiling Insulation (R2 to R38)	Ceiling Insulation(R2 to R38)	x		
Residential Incentive Program	Ceiling Insulation (R19 to R38)	Ceiling Insulation(R19 to R38)	x		
Residential Incentive Program	Duct Repair	Duct Repair_SF	x		
Residential Incentive Program		Duct Repair_MH	x		
Residential Incentive Program	Duct Test First Unit	Duct Test First Unit	x		
Residential Incentive Program	Duct Test Additional Unit	Duct Test Additional Unit	x		
Residential Incentive Program	15.2 SEER2 Central AC				x
Residential Incentive Program	15.2 SEER2 ASHP Base Electric Resistance Htg	ASHP - CEE Tier 2: 16.8 SEER/16 SEER2; 9.0 HSPF (from elec resistance)	x		
Residential Incentive Program	15.2 SEER2 ASHP MF or MH - Elec Resist Htg	ASHP - ENERGY STAR/CEE Tier 1: 16 SEER/15.2 SEER2 (from elect resistance), 9.HSPF	x		
Residential Incentive Program	15.2 SEER2 Air Source Heat Pump	ASHP - ENERGY STAR/CEE Tier 1: 16 SEER/15.2 SEER2, 9.0 HSPF	x		
Residential Incentive Program		Ceiling Insulation (R11 to R38)_SF		x	
Residential Incentive Program		Heat Pump Water Heater 50 Gallons-ENERGY STAR		x	
Residential Incentive Program		Heat Pump Water Heater 80 Gallons-ENERGY STAR		x	
New Builder Construction-MF		Ceiling Insulation (R11 to R38)_MF	x		
New Builder Construction-MF		Ceiling Insulation (R2 to R38)_MF	x		
New Builder Construction-MF		New Construction - Whole Home Improvements - Tier 1		x	
New Builder Construction-MF		ASHP - ENERGY STAR/CEE Tier 1: 16 SEER/15.2 SEER2 (from elect resistance), 9.HSPF		x	
Neighborhood Energy Saver	14 SEER ASHP Base Electric Resistance Heating		x		x
Neighborhood Energy Saver	15 SEER Air Source Heat Pump		x		x

DEF CURRENT AND PROPOSED MEASURE LIST FOR GOALS DOCKET					
Program Name	**Current Measures - 2020 - 2024**	**Proposed Measures - 2025-2034**	**Existing/Keep**	**New**	**DROP**
Neighborhood Energy Saver	16 SEER Central AC		x		x
Neighborhood Energy Saver	Ceiling Insulation (R2 to R38)	Ceiling Insulation(R2 to R38)	x		
Neighborhood Energy Saver	Ceiling Insulation (R19 to R38)	Ceiling Insulation(R19 to R38)	x		
Neighborhood Energy Saver	Duct Repair	Duct Repair	x		
Neighborhood Energy Saver	Central AC Tune Up	Central AC Tune Up	x		
Neighborhood Energy Saver	Heat Pump Tune Up	Heat Pump Tune Up	x		
Neighborhood Energy Saver	Energy Star Room AC	Energy Star Room AC	x		
Neighborhood Energy Saver	**Whole House Measure *see below***	**Whole House Measure *see below***			
Neighborhood Energy Saver	NE_SF_Smart Power Strip	Smart Power Strip	x		
Neighborhood Energy Saver	NE_SF_Air Sealing-Infiltration Control **see NES tab	Air Sealing Infiltration Control	x		
Neighborhood Energy Saver	NE_SF_Water Heater Blanket	Water Heater Blanket	x		
Neighborhood Energy Saver	NE_SF_Low Flow Showerhead	Low Flow Showerhead	x		
Neighborhood Energy Saver	NE_SF_Hot Water Pipe Insulation	Hot Water Pipe Insulation	x		
Neighborhood Energy Saver	NE_SF_Faucet Aerator	Bathroom Faucet Aerators	x		
Neighborhood Energy Saver	NT_SF_LED - 9W	LED - 9W_Halogen Baseline	x		
Neighborhood Energy Saver	NT_SF_LED Specialty Lamps-5W Chandelier	LED Specialty Lamps-5W Chandelier	x		
Neighborhood Energy Saver	Window Caulking	Window Caulking	x		
Neighborhood Energy Saver		Weather Stripping		x	
Neighborhood Energy Saver		Filter Whistle		x	
Neighborhood Energy Saver		Smart Thermostat		x	
Low Income Weatherization	Smart Power Strip	Smart Power Strip	x		
Low Income Weatherization	Air Sealing Infiltration Control	Air Sealing-Infiltration Control	x		
Low Income Weatherization	Water Heater Blanket	Water Heater Blanket	x		
Low Income Weatherization	Low Flow Showerhead	Low Flow Showerhead	x		
Low Income Weatherization	Hot Water Pipe Insulation	Hot Water Pipe Insulation	x		
Low Income Weatherization	LED Specialty Lamps - 5W Chandelier	LED Specialty Lamps-5W Chandelier	x		
Low Income Weatherization	Energy Star Refrigerator	Energy Star Refrigerator	x		
Low Income Weatherization	SF New Construction 17 SEER HP & EW				x
Low Income Weatherization	MF New Construction 17 SEER HP & EW				x
Low Income Weatherization	15 SEER Air Source Heat Pump				x
Low Income Weatherization	16 SEER Central AC	Central AC - CEE Tier 2: 16.8 SEER/16 SEER2	x		
Low Income Weatherization	Ceiling Insulation (R2 to R38)	Ceiling Insulation(R2 to R38)	x		
Low Income Weatherization	Ceiling Insulation (R19 to R38)	Ceiling Insulation(R19 to R38)	x		
Low Income Weatherization	Duct Repair	Duct Repair	x		
Low Income Weatherization	Central AC Tune Up	Central AC Tune Up	x		
Low Income Weatherization	Heat Pump Tune Up	Heat Pump Tune Up	x		
Low Income Weatherization	9W LED	LED - 9W_Halogen Baseline	x		
Low Income Weatherization	Faucet Aerators	Bathroom Faucet Aerators	x		
Low Income Weatherization	14 SEER ASHP Base Electric Resistance Heating				x
Low Income Weatherization		120v Heat Pump Water Heater 50 Gallons		x	
Business Energy Check	LED Flood Light	LED Flood Light	x		
Business Energy Check	Smart Strip	Smart Strip	x		
Business Energy Check	Faucet Aerator	Faucet Aerator	x		

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Program Name	**Current Measures - 2020 - 2024**	**Proposed Measures - 2025-2034**	**Existing/Keep**	**New**	**DROP**
Smart $aver Business	Ceiling Insulation (R2 to R38)	Ceiling Insulation(R2 to R38)	x		
Smart $aver Business	Duct Sealing Repair	Commercial Duct Sealing	x		
Smart $aver Business	High Efficiency Chiller	High Efficiency Chiller	x		
Smart $aver Business	High Efficiency PTAC	High Efficiency PTAC	x		
Smart $aver Business	High Efficiency PTHP	High Efficiency PTHP	x		
Smart $aver Business	Wall Insulation	Wall Insulation	x		
Smart $aver Business	BB - Demand Controlled Ventilation-no electric heat	Demand Controlled Ventilation-no electric heat	x		
Smart $aver Business	BB - Demand Controlled Ventilation-electric heat	Demand Controlled Ventilation-electric heat	x		
Smart $aver Business	BB -Duct Repair - non ducted electric heat				x
Smart $aver Business	BB -Duct Repair - ducted electric heat				x
Smart $aver Business	BB -Energy Recovery Ventilation System-no electric heat	Energy Recovery Ventilation System (ERV)	x		
Smart $aver Business	BB -Energy Recovery Ventilation System-electric heat	Energy Recovery Ventilation System (ERV)	x		
Smart $aver Business	BB - C/I Small Heat Pumps - SEER 15 (Replacing Heat Pump)				x
Smart $aver Business	BB - C/I Small Heat Pumps - SEER 15 (Replacing Resistance Heat)				x
Smart $aver Business	BB - Single Package Vertical Units Replacing Straight Cool				x
Smart $aver Business	BB - Single Package Vertical Heat Pumps - replacing SPVHP				x
Smart $aver Business	BB - Large Unitary AC Units (>65,000 Btu/h)				x
Smart $aver Business	BB - Large Heat Pumps (>65,000 Btu/h)	High Efficiency DX	x		
Smart $aver Business	BB - Variable Refrigerant Flow A/C				x
Smart $aver Business	BB - Variable Refrigerant Flow Heat Pump				x
Smart $aver Business	BB - Duct Test First Unit	BB - Duct Test First Unit	x		
Smart $aver Business	BB - Duct Test Additional Units	BB - Duct Test Additional Units	x		
Smart $aver Business		Smart Thermostat		x	
Smart $aver Business		Cool Roof		x	
Smart $aver Business		HE DX Less than 5.4 Tons Elect Heat		x	
Smart $aver Business		Water Source Heat Pump, 2.5 Tons, 17.4 EER, 4.4 COP		x	
Smart $aver Business		Infiltration Reduction - Air Sealing		x	
Smart $aver Business		DX Coil Cleaning 4 Ton HVAC unit		x	
Smart $aver Business		VFD on Cooling Tower Fans 7.5HP		x	
Smart $aver Business		Advanced Rooftop Controller 5 ton HVAC		x	
Smart $aver Business		HE DX 5.4-11.25 Tons Elect Heat (8.5 ton Unit)		x	
Smart $aver Business		VFD on HVAC Pump 7.5 HP		x	
Smart $aver Business		Ductless Mini-Split AC (4 ton Unit)		x	
Smart $aver Business		Ductless Mini-Split 2 ton HP, 17 SEER, 9.5 HSPF (24,000 BTU) 800 Square foot		x	
Smart $aver Business		Occupancy Sensors, Ceiling Mounted		x	
Smart $aver Business		LED Exterior Wall Packs - One 35W LED Wall Pack		x	
Smart $aver Business		Refrigerated Display Case LED Lighting - 60" Refrigerated Case LED Strip		x	
Smart $aver Business		LED Linear - Fixture Replacement - 2x4 LED Troffer		x	
Smart $aver Business		LED Exit Sign - One 5W Single-Sided LED Exit Sign		x	
Smart $aver Custom	Thermal Energy Storage (FL Custom)	Thermal Energy Storage (FL Custom)	x		
Smart $aver Custom	Chiller maintenance (FL Custom)	Chiller maintenance (FL Custom)	x		
Residential Load Management	Res Pool Pump	Res Pool Pump	x		
Residential Load Management	Res Water Heating	Res Water Heating	x		
Residential Load Management	Res HVAC	Res HVAC	x		

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Program Name	**Current Measures - 2020 - 2024**	**Proposed Measures - 2025-2034**	**Existing/Keep**	**New**	**DROP**
Residential Load Management		Connected Strip DHW		x	
Residential Load Management		Connected HP DHW		x	