

**FLORIDA PUBLIC SERVICE COMMISSION
EXHIBIT INDEX**

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FPSC - COMMISSION CLERK

FOR THE RULEHEARING DATED 05/02/2023 IN DOCKET 20200181-EI

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Docket No. 20200181-EI
Exhibit List for Entry into Rule Hearing Record
(May 2, 2023)

EXH #	Witness	I.D. # As Filed	Exhibit Description	Issue Nos.	Entered
1	SACE	SACE-1	Energy Efficiency in the Southeast Report Excerpt		
2	SACE	SACE-2	Fuel Cost Whitepaper Excerpt		
3	LULAC & ECOSWF	LULAC-3	Presentation for Rule Hearing		
4	LULAC & ECOSWF	LULAC-4	Florida Utility Rate, Usage and Bill Data 1990-2021 (2022 for IOUs and JEA)		

EXHIBIT NO. _____

DOCKET NO: 20200181

WITNESS:

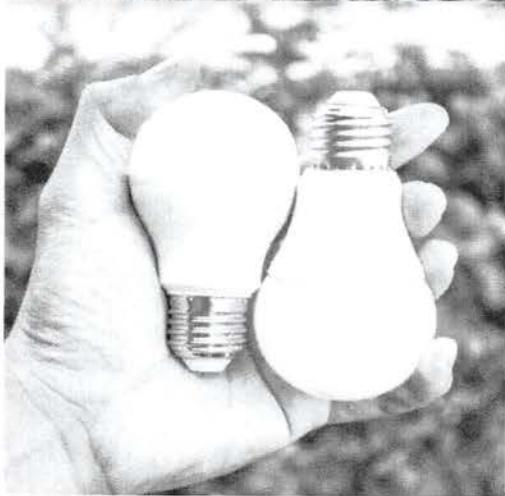
PARTY:

BRIEF TITLE OR DESCRIPTION OF THE DOCUMENT:

Energy Efficiency in the Southeast Report Excerpt

PROFFERED BY: SACE

ENERGY EFFICIENCY IN THE SOUTHEAST



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.

Proper citation for this report:

Southern Alliance for Clean Energy (2023).
Energy Efficiency in the Southeast, Fifth Annual Report.

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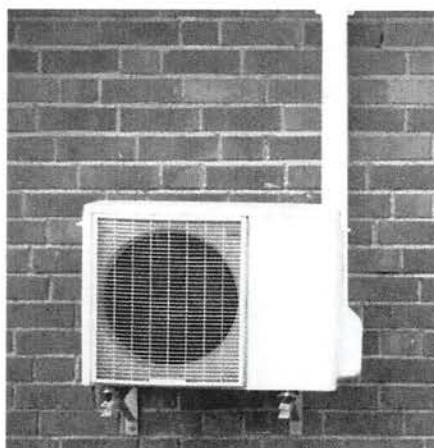
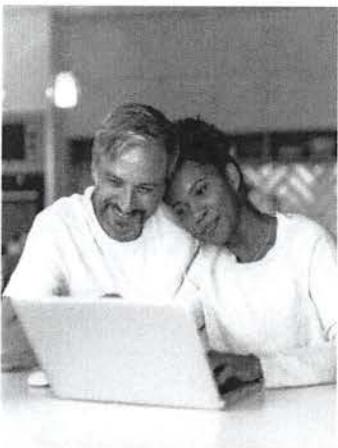
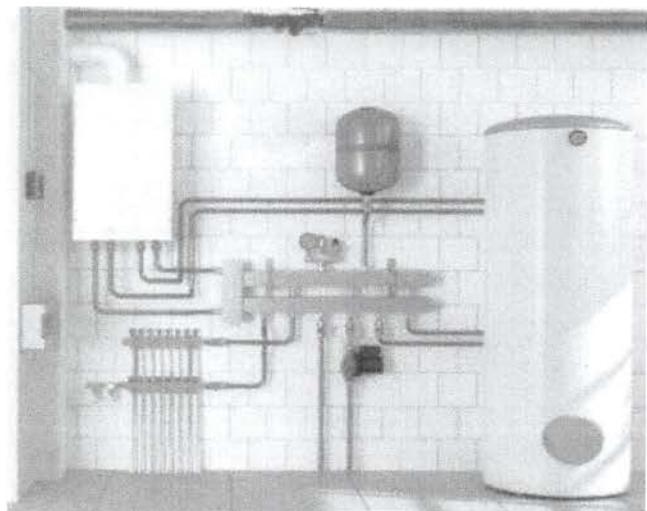
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INTRODUCTION

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.** 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



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
Southeast	0.19%

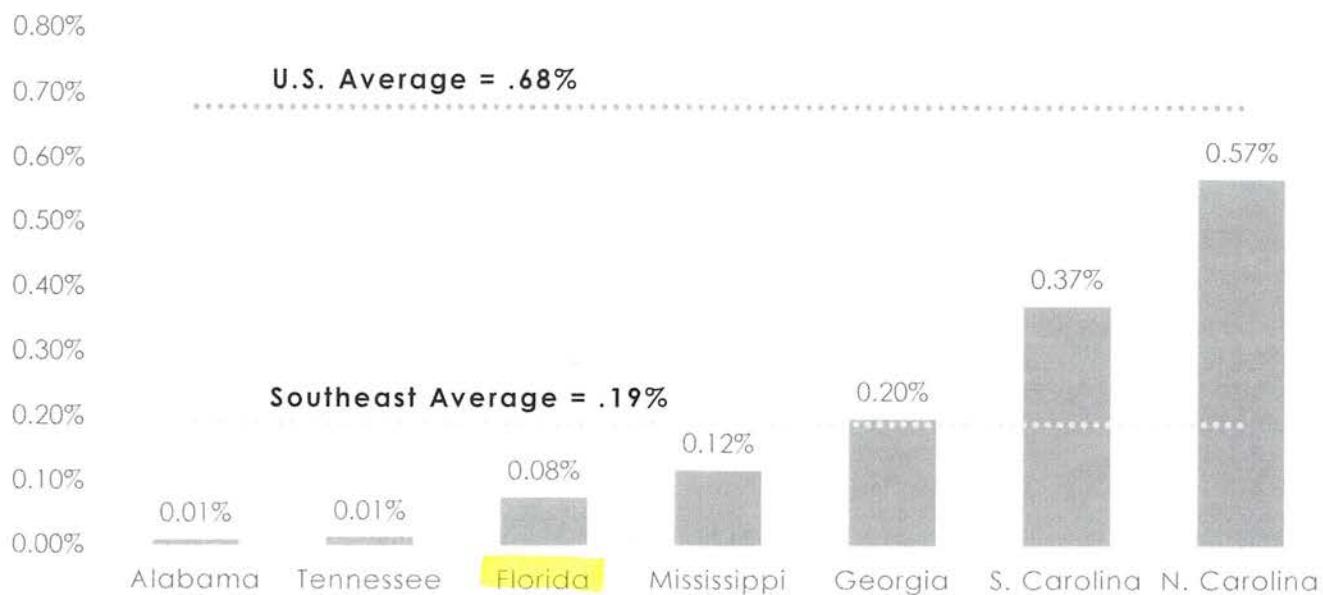
Throughout the rest of the U.S., states have found ways to maintain high levels of savings even as customer adoption and program penetration increased over time. Not only are the South and Southeast¹ performance outliers relative to all other regions, they have also consistently been the only ones that 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.

2021 ENERGY SAVINGS AS A % RETAIL ELECTRIC SALES



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.

EXHIBIT NO. 2

DOCKET NO: 20200181

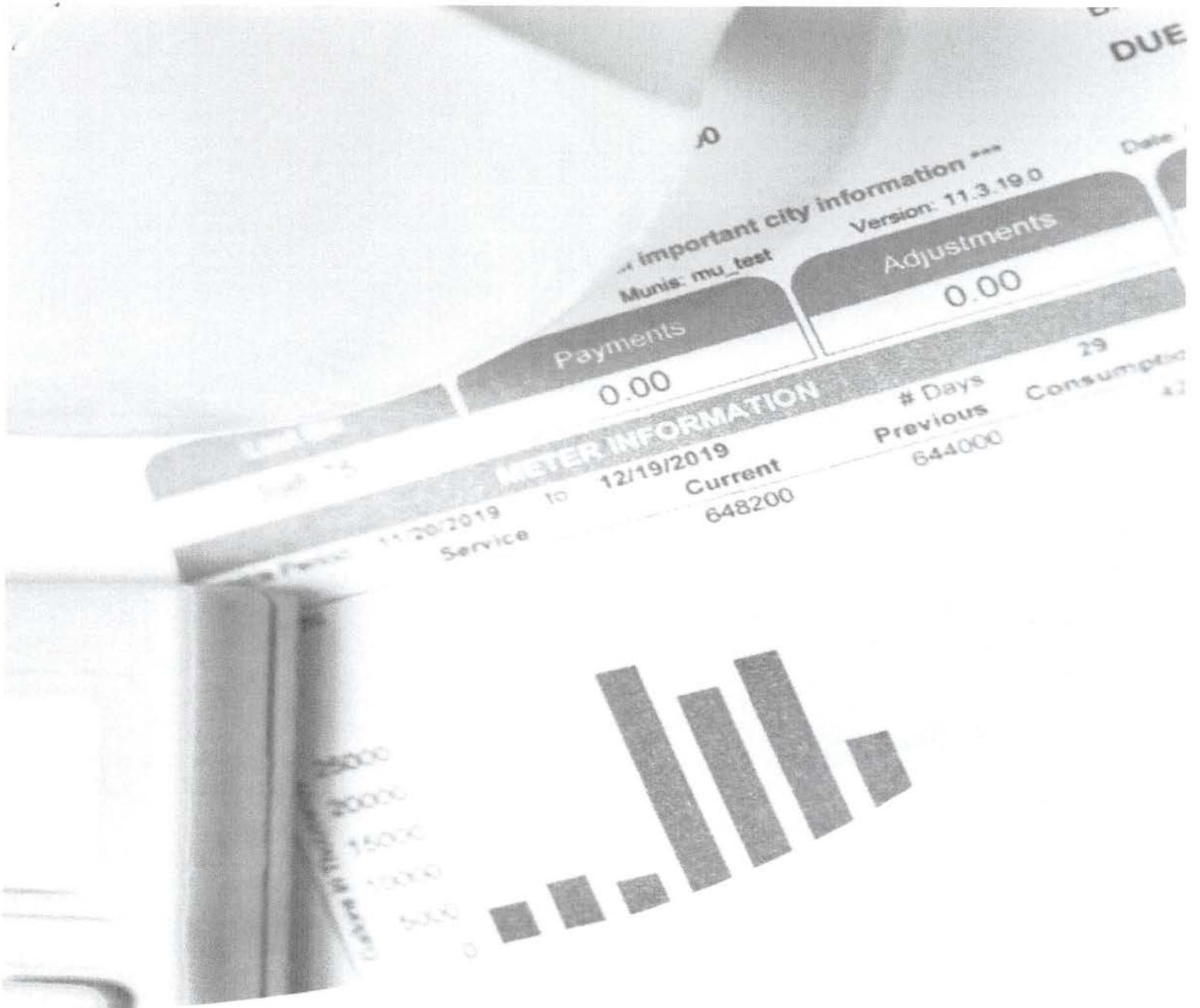
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PARTY:

BRIEF TITLE OR DESCRIPTION OF THE DOCUMENT:

Fuel Cost Whitepaper Excerpt

PROFFERED BY: SACE



SOUTHERN ALLIANCE FOR CLEAN ENERGY

DECODING FUEL COSTS IN ELECTRIC RATES

DECODING FUEL COSTS IN ELECTRIC BILLS

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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.

Proper citation for this report:

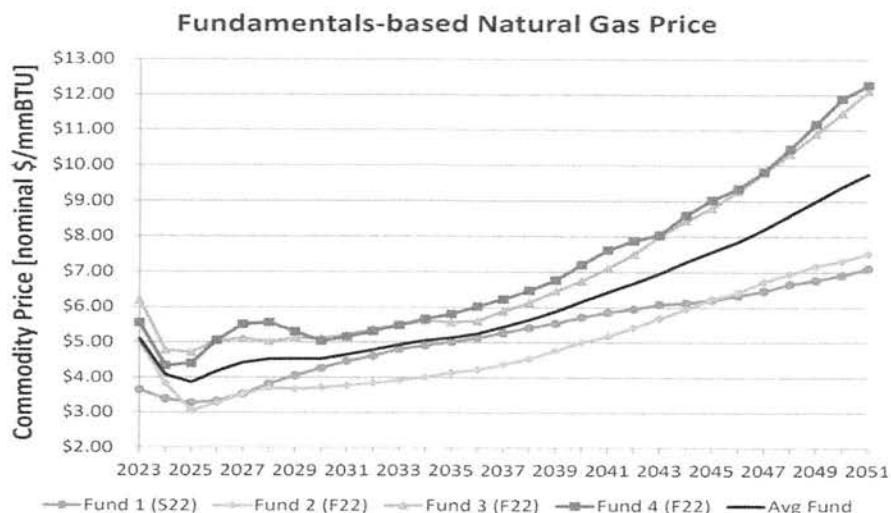
Southern Alliance for Clean Energy (2023).
Decoding Fuel Costs in Electric Bills

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In fact, this trend continues today despite the recent increases in gas prices. At its March 22, 2023 stakeholder meeting Duke Energy presented a chart, shown here as Figure 4, of gas price forecasts it plans to use in its upcoming 2023 Carbon Plan and Integrated Resource Plan to be filed September 1, 2023. Those forecasts tend to assume gas prices will decrease to approximately between \$3-4.80/MMBtu in 2025 and not rise back above \$6/MMBtu until 2036-2044. Duke's 2022 Carbon Plan included 2,000 MW of new gas capacity by 2029.

Figure 4. Gas Price Forecasts Presented by Duke Energy in 2023 Carbon Plan IRP Stakeholder Meeting



Source: Duke Energy Carolinas Resource Plans Stakeholder Meeting 3 slides, virtual meeting March 22, 2023, available online at pccdukeenergy.com/-/media/gdfs-carolinas/in-support/march-22-meeting-slide.ppt.

FUEL COST TRENDS IN FLORIDA

Below we'll use the three largest investor-owned utilities in Florida to show just how much the fuel cost pass-through portion of electric bills has changed since 2020. The charts and analysis are based on rate schedules and filings from Florida Power & Light (FPL), Duke Energy Florida (DEF), and Tampa Electric Company (TECO) to the Florida Public Service Commission (PSC). For each of these utilities we calculated four different portions that make up the total average monthly electric bill: fixed fee, fuel charges, energy charges, and other charges. The other category includes non-fuel riders on the bill to pay for things like storm restoration and recovery and storm hardening, energy efficiency, and environmental cleanup. Since 2010 these three Florida utilities increased combined gas generation capacity by over 7,000 MW.

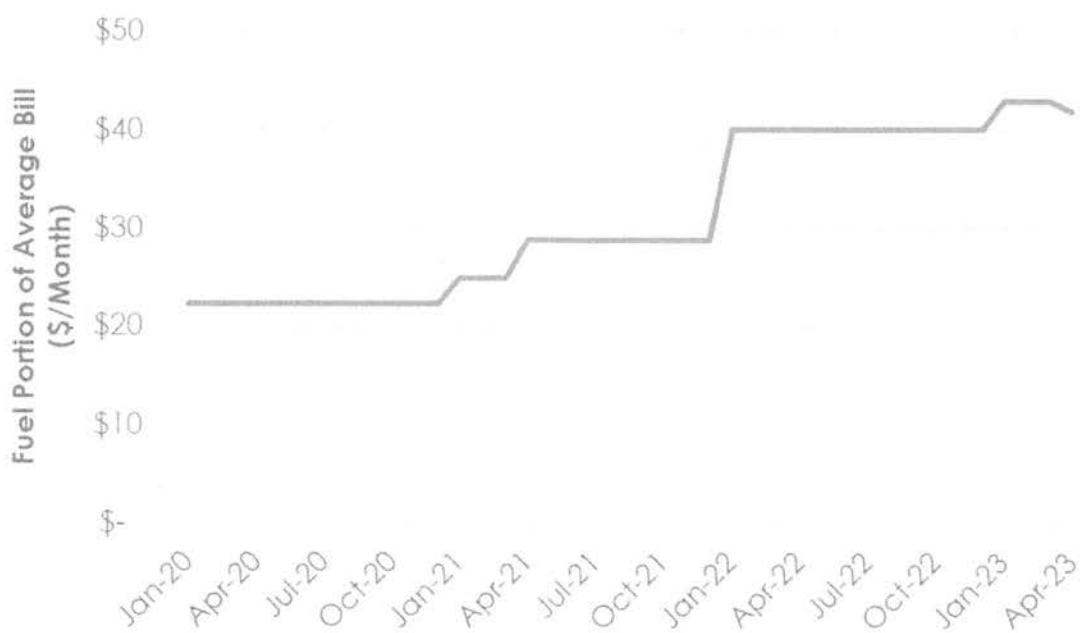
The trends and timelines are similar: Florida utilities did not forecast the sharp increase in gas prices in 2021, so they began filing to adjust Fuel Cost Recovery Factors at various times in 2021, 2022, and early 2023. The utilities had significantly under-recovered gas costs in 2022 which were recently approved for recovery on customer bills starting this month. The impact on customer bills from the 2022 under-recovered costs were mitigated as the Commission allowed the utilities to offset those costs against projected 2023 over-recovery of fuel costs. But the Fuel Cost Recovery Factors today are still far above levels in 2020, 2021, and 2022.

FLORIDA POWER & LIGHT

FPL is the largest electric utility in Florida and has taken its customers on a fuel cost rollercoaster over the last two years. FPL met 70% of its customers' demand with gas in 2020.⁴

In 2021 FPL's residential customers used an average of 1,116 kilowatt-hours (kWh) per month. Keeping that usage level steady, we see that the fuel portion of the average electric bill went from \$22/month in 2020 to peak at \$43/month in early 2023 before dropping slightly to \$42/month in April of 2023, as seen in Figure 5.⁵ The PSC has already approved another slight reduction in FPL's Fuel Cost Recovery Factor for May 2023, from \$0.03656/kWh to \$0.03224/kWh. This will bring the fuel cost portion of the bill to \$37/month for the average FPL customer. If prices remain as forecasted, the fuel portion of the bill could remain at that \$37/month level for the rest of 2023. Despite the recent and expected drop, the fuel portion of the bill adds an additional \$15-20 each month to electric bills or \$180-250 per year compared to 2020.

Figure 5. Monthly Fuel Charge on Average Florida Power & Light Residential Customer Bill
January 2020 – April 2023



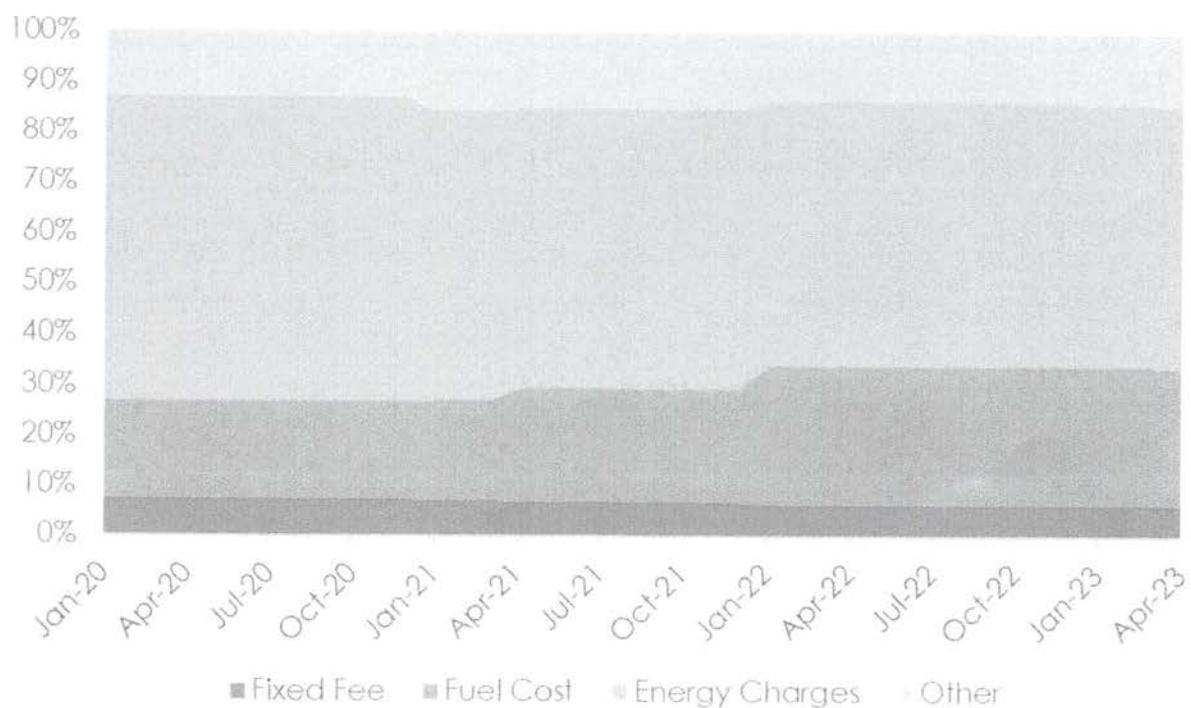
Source: Southern Alliance for Clean Energy Analysis of FPL Rate Documents

⁴ For more on the changes in the generation mix used by FPL and other utilities, see SACE's 2022 Tracking Decarbonization in the Southeast Report at cleanenergy.org/wp-content/uploads/Tracking-Decarbonization-in-the-Southeast-Fourth-Annual-Report.pdf.

⁵ In January 2022 Gulf Power merged into FPL, though the customers of legacy FPL and legacy Gulf still have different rates. The rate calculations presented here for FPL are for customers in the FPL legacy service territory.

Other portions of FPL residential customer bills have changed since 2020 as well. The portion of the bill based on fixed fees and energy rates went up 14-15% between January 2020 and April 2023, while the other portion of the bill increased 49% and the fuel portion of the bill increased 88% over that same time period. Because the fuel portion of the bill has increased more than the overall bill increase, that portion of the bill went from making up 19% of the total bill in 2020 to 25% of the total bill today, as seen in Figure 6. That means that the average FPL residential customer is paying \$39 more each month today than in January 2020, an increase that is exacerbated by the increase in fuel costs passed on to customers.

Figure 6. Average Percent of Florida Power & Light Residential Monthly Bill by Bill Component



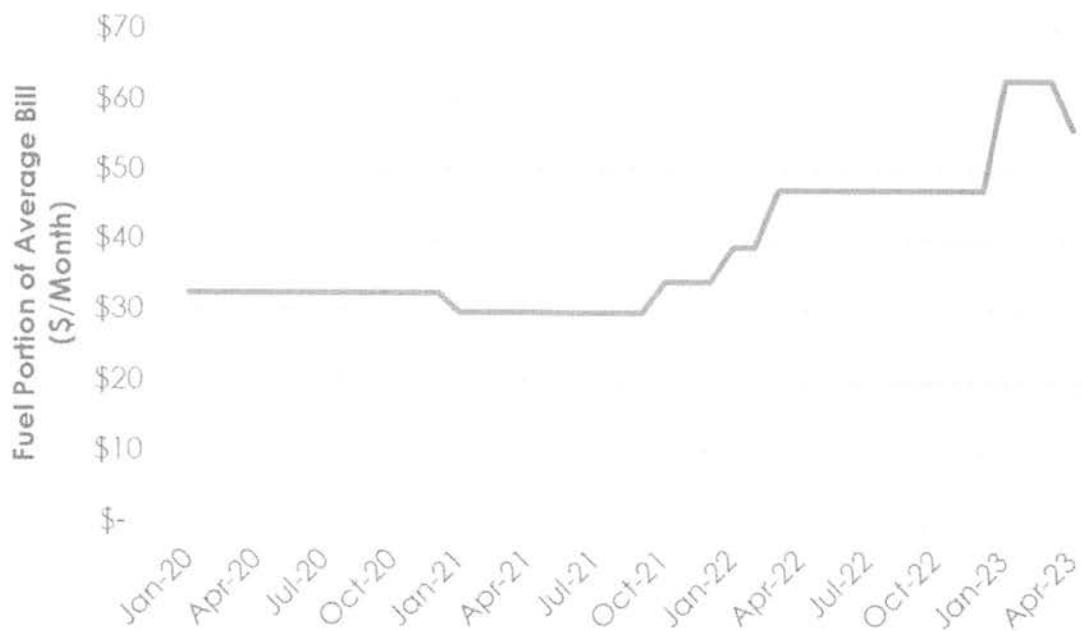
Source: Southern Alliance for Clean Energy Analysis of FPL Rate Documents

DUKE ENERGY FLORIDA

DEF is another large electric utility that serves customers in Florida. DEF met 87% of electric demand with gas in 2020.

Keeping the usage flat at the 2021 average residential monthly usage of 1,045 kWh, the fuel charge portion of the bill increased from \$33/month in January 2020 to peak at \$63/month in early 2023 to drop slightly to \$56/month today, as seen in Figure 7. That means an average customer is paying an additional \$23 each month or \$281 each year on fuel costs compared to three years ago.

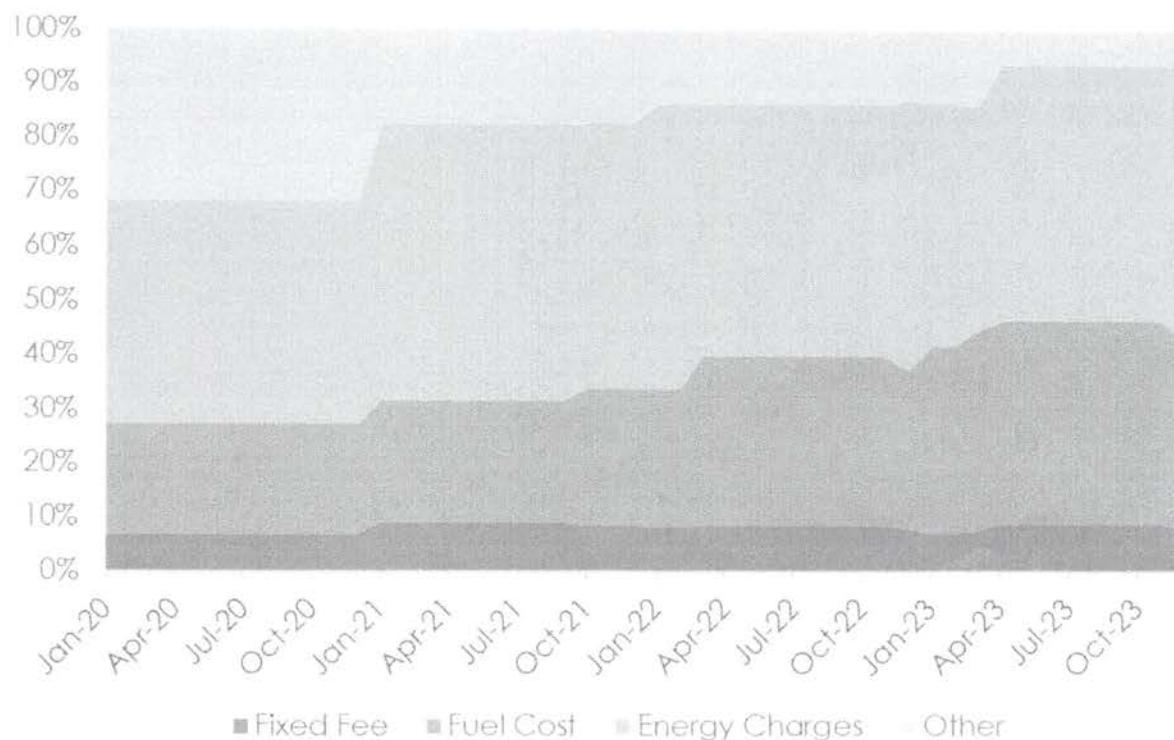
Figure 7. Monthly Fuel Charge on Average Duke Energy Florida Residential Customer Bill
January 2020 – April 2023



Source: Southern Alliance for Clean Energy Analysis of DEF Rate Documents

The fuel cost portion of the average DEF residential customer has increased significantly more than any other portion of the bill since January 2020. It increased 72% compared to the 19% increase in the fixed fee and the 8% increase in the energy rate portion. The other portion declined over that time period. Thus the fuel portion went from being 21% of the total average electric bill in 2020 to 38% of the total average electric bill today, as seen in Figure 8.

Figure 8. Average Percent of Duke Energy Florida Residential Monthly Bill by Bill Component



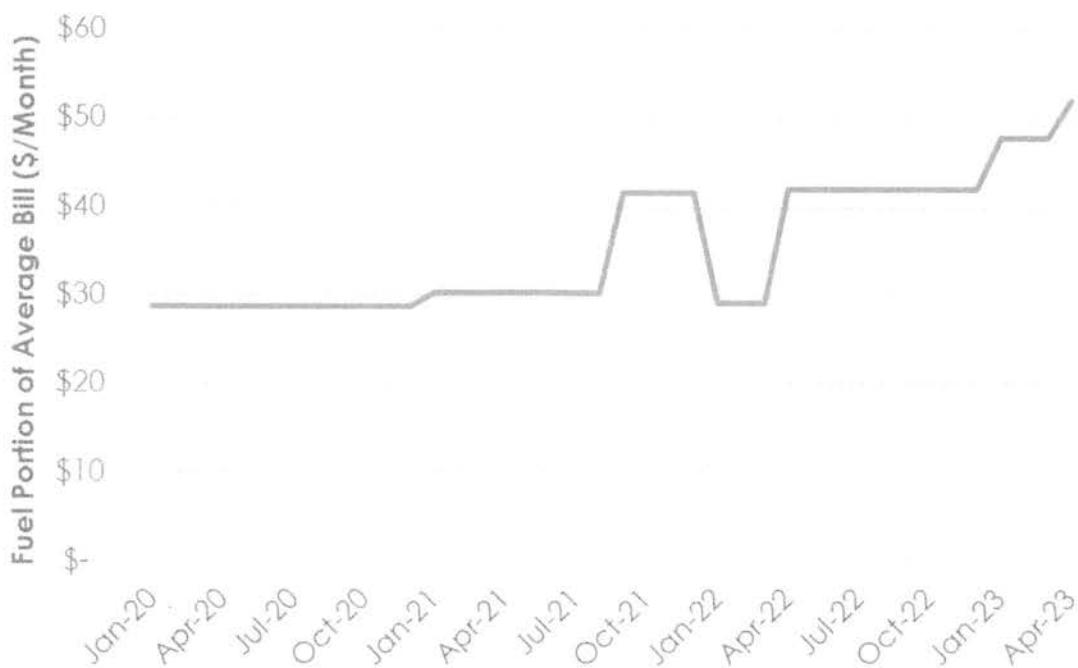
Source: Southern Alliance for Clean Energy Analysis of DEF Rate Documents

TAMPA ELECTRIC

TECO, another large electric utility in Florida, serves the Tampa area. Gas made up 86% of its generation mix in 2020.

In 2021 TECO's residential customers used an average of 1,162 kWh each month. Using that usage level to calculate bills, the fuel portion of electric bills increased from \$29/month in 2020 to \$52/month in April 2023, as seen in Figure 9. That means TECO residential customers are paying an average of \$19-23 more each month or \$267 each year on fuel charges in 2023 compared to 2020.

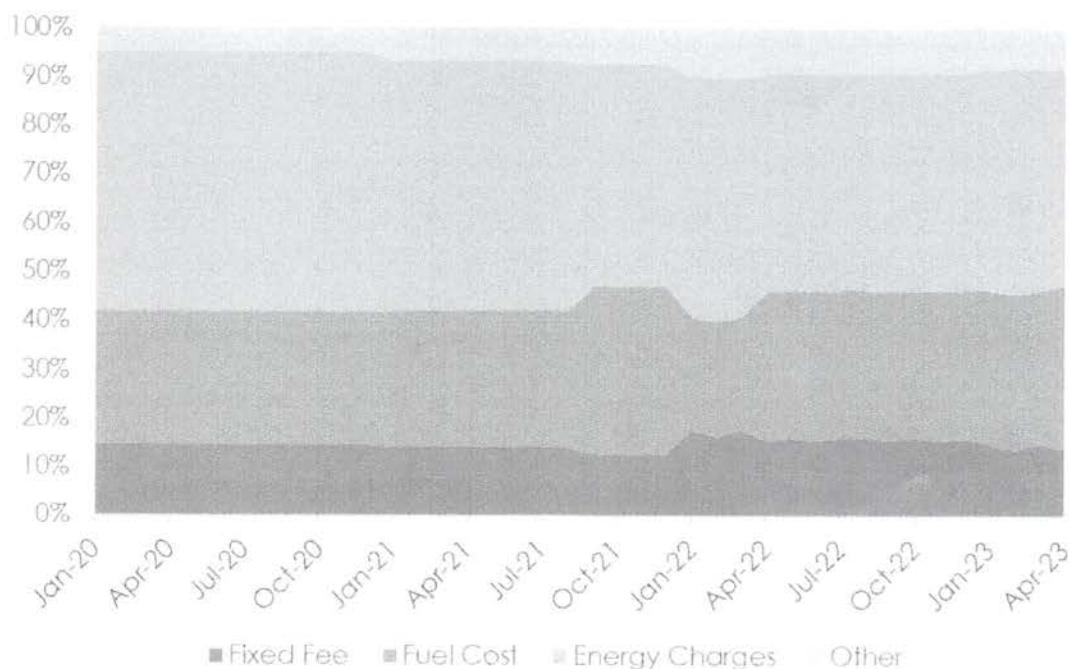
Figure 9. Monthly Fuel Charge on Average TECO Residential Customer Bill
January 2020 – April 2023



Source: Southern Alliance for Clean Energy Analysis of TECO Rate Documents

The fuel portion of the average TECO residential bill has seen the largest absolute increase between January 2020 and April 2023 (\$23), though because the other portion of the bill started small in 2020 it has seen the largest percentage increase (148%). The fuel portion increased 81% over that time period, whereas the fixed fee and energy portions increased 43% and 23% respectively. Overall, average monthly electric bills have increased from \$104 to \$153, meaning an average customer is paying \$49 more per month or \$588 more per year in 2023 than in 2020. Even as the overall average TECO electric bill has increased, the fuel portion of the bill has gone from 27% of the total bill in 2020 to 34% in April 2023, as seen in Figure 10.

Figure 10. Average Percent of TECO Residential Monthly Bill by Bill Component



Source: Southern Alliance for Clean Energy Analysis of TECO Rate Documents

The other portion of the bill has moved around as well. Starting in January 2022 the Storm Protection Plan rider increased from \$0.00239/kWh to \$0.00329/kWh and the Clean Energy Transition Mechanism was introduced at \$0.00441/kWh. So, the other portion of the bill started at 5% of the total bill in 2020, increased to 10% of the bill in January 2022, and settled to 8% of the total bill in 2023.

FUTURE TRENDS IN FLORIDA

Revised Fuel Cost Recovery Factors for FPL, DEF, and TECO went into effect in April 2023, with the assumption that they would remain unchanged for the rest of 2023.⁶ Most of these Fuel Cost Recovery Factors decreased slightly, except for TECO's, but remain much higher than they were in 2020. These latest Factors are based on the latest gas price forecasts. However, as we have seen over the past 3 years, gas price forecasts can be very wrong, so Fuel Cost Recovery Factors in Florida can still change in 2023 if actual gas prices do not track with current forecasts.

⁶ A lower projected fuel rate was approved for FPL to begin on May 1, 2023. See Order No. PSC-2023-0122-PCO-EI.

EXHIBIT NO. 3

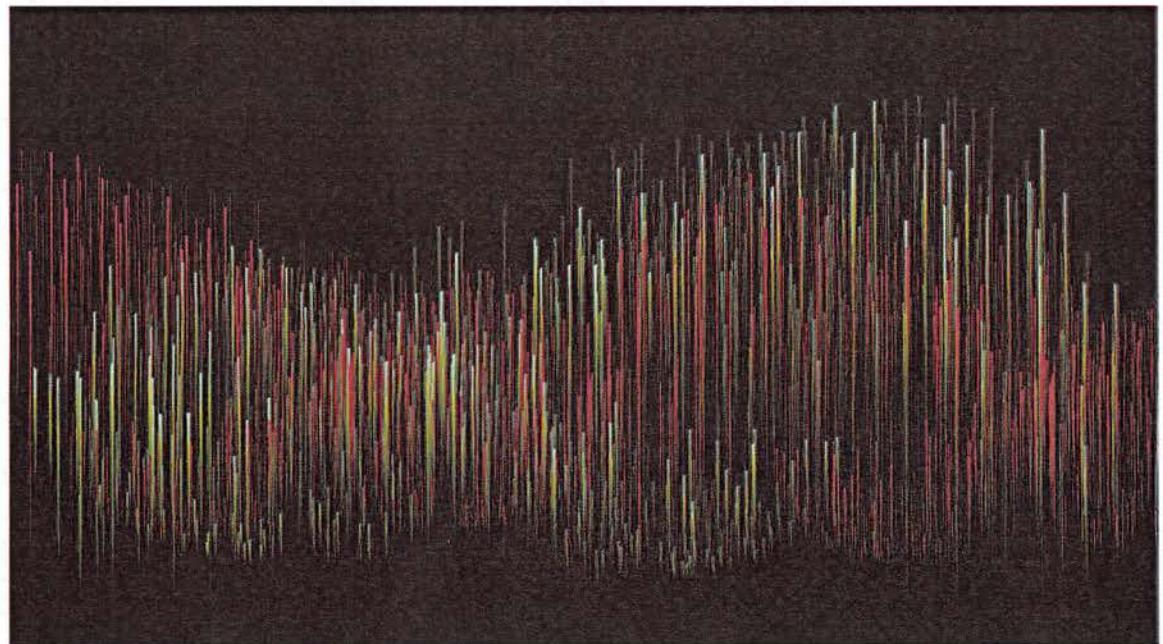
DOCKET NO: 20200181-EU

PARTY: League of United Latin American Citizens of Florida ("LULAC") & Environmental Confederation of Southwest Florida ("ECOSWF")

DESCRIPTION: Presentation for Rule Hearing

Florida Energy Efficiency and Conservation Act Rule Hearing

May 2, 2023

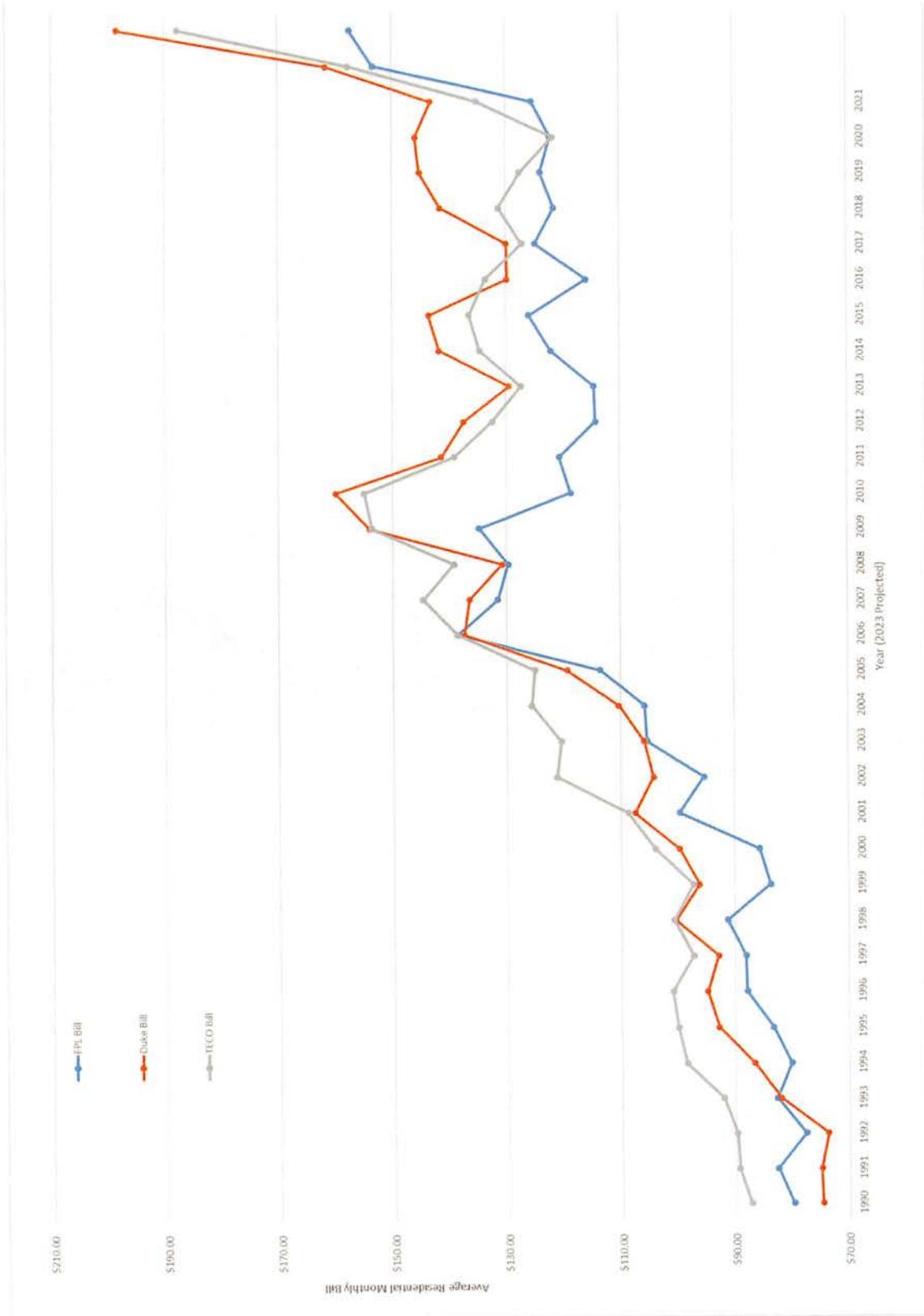


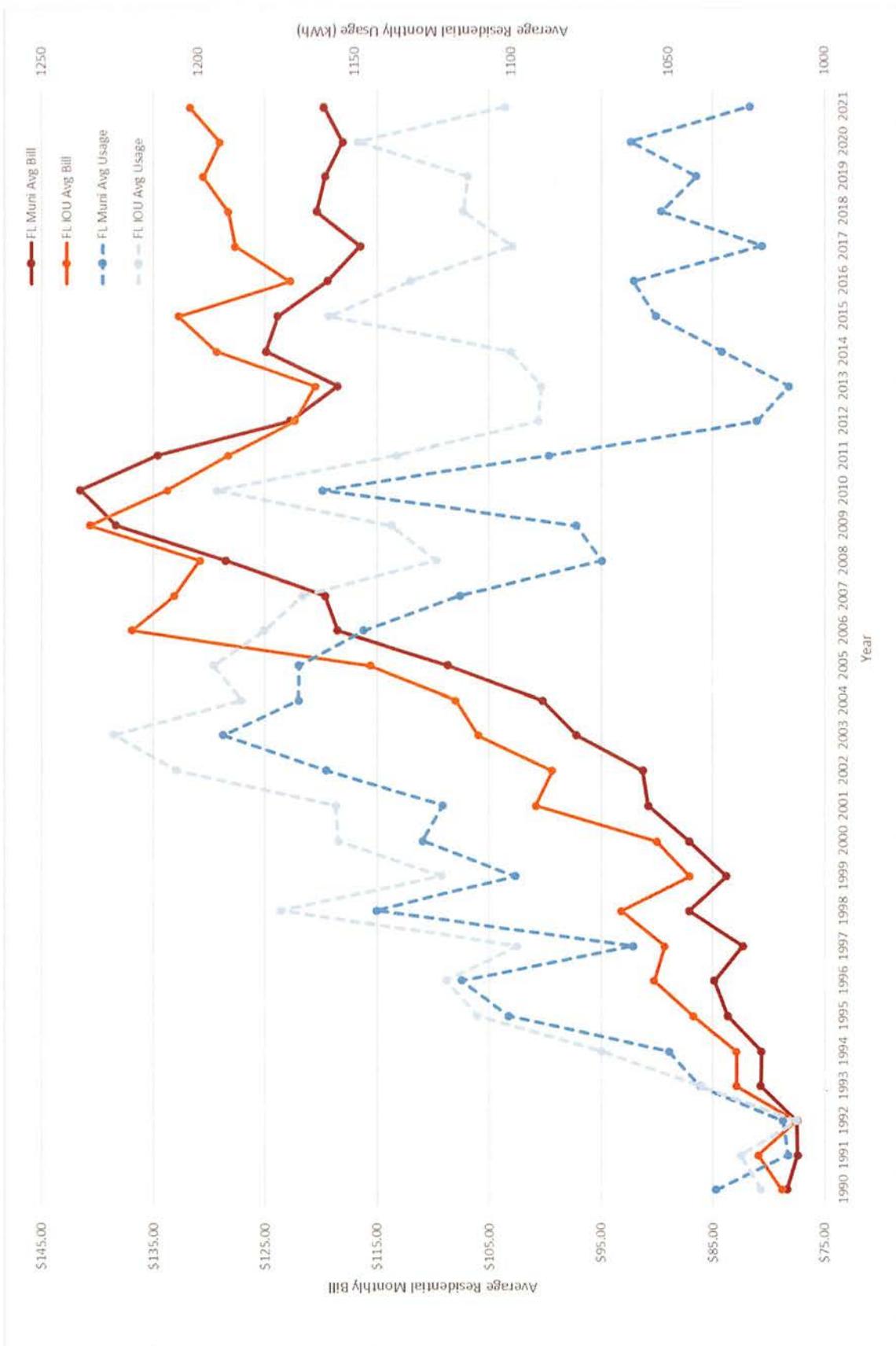
2021 Average Monthly Bill- Residential

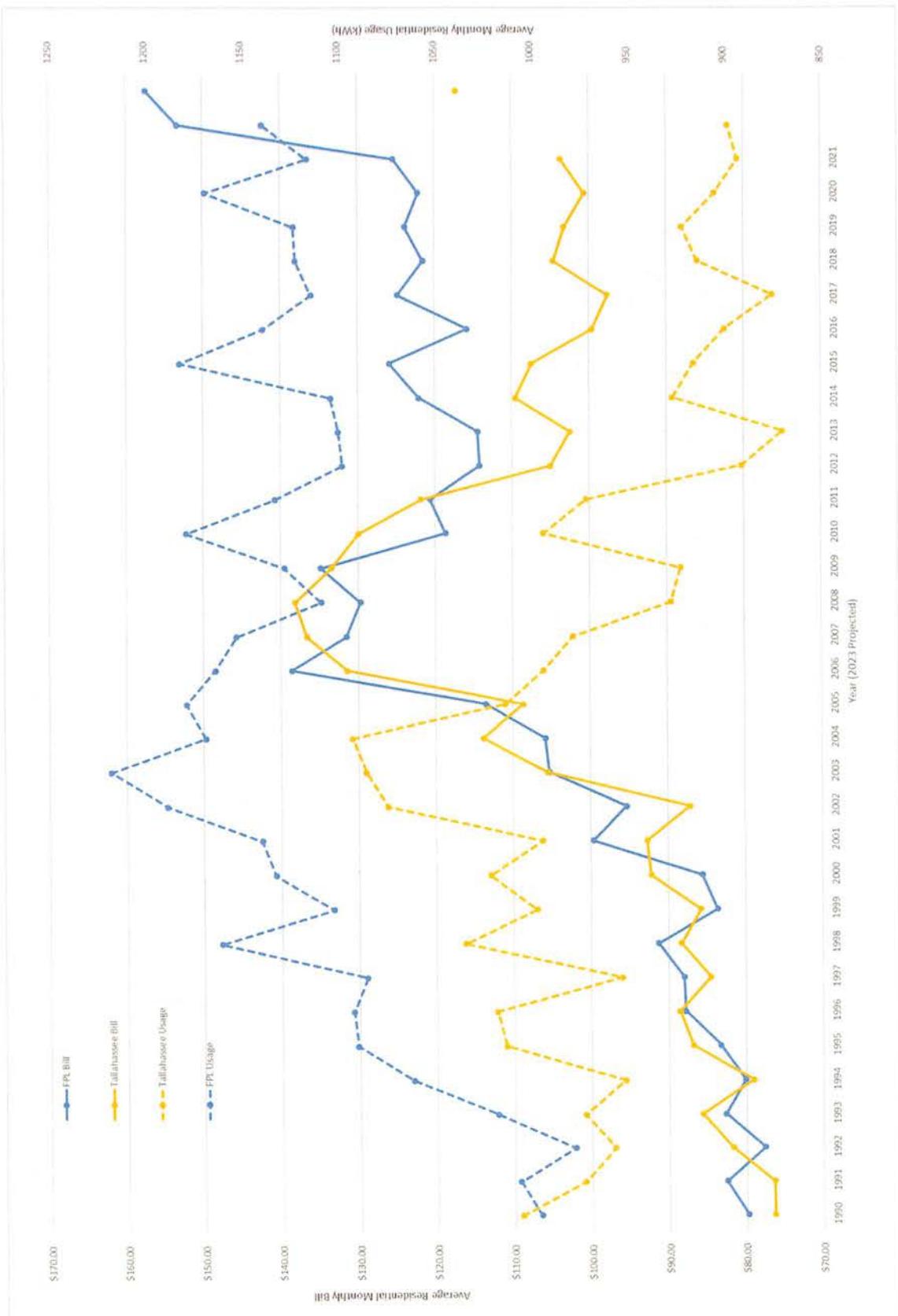
(Data from forms EIA-861- schedules 4A-D, EIA-861S and EIA-861U)

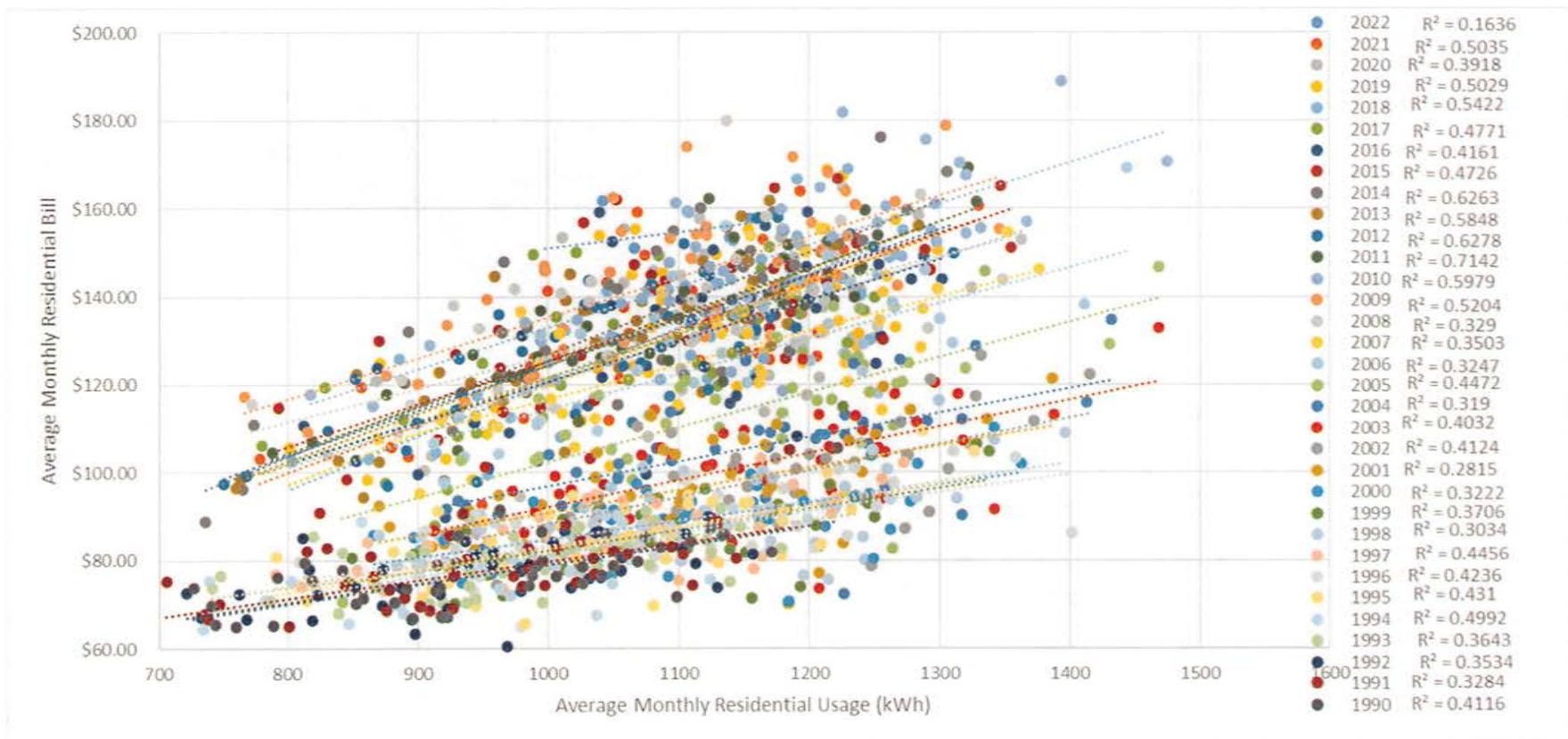
Rank	State	Number of Customers	Average Monthly Consumption (kWh)	Average Price (cents/kWh)	Average Monthly Bill (Dollar and cents)
1	Hawaii	443,535	531	33.49	177.78
2	Connecticut	1,530,251	713	21.91	156.21
3	Alabama	2,308,226	1,140	12.96	147.75
4	South Carolina	2,426,703	1,078	12.86	138.65
5	Massachusetts	2,840,311	596	22.89	136.37
6	Mississippi	1,321,576	1,171	11.56	135.31
7	Georgia	4,560,653	1,072	12.51	134.11
8	Alaska	292,451	594	22.55	133.89
9	Texas	11,815,251	1,094	12.11	132.40
10	Louisiana	2,126,155	1,192	11.02	131.37
11	Arizona	2,953,823	1,048	12.54	131.35
12	Tennessee	3,016,642	1,183	11.07	130.98
13	Virginia	3,551,532	1,094	11.96	130.92
14	Florida	9,917,113	1,096	11.90	130.40
15	Rhode Island	446,320	585	22.30	130.40
16	West Virginia	863,647	1,066	12.15	129.61
17	Maryland	2,395,954	973	13.12	127.62
18	Indiana	2,948,803	946	13.37	126.51
19	New Hampshire	638,267	631	19.85	125.24
20	Kentucky	2,032,575	1,084	11.50	124.67
21	South Dakota	412,657	1,019	12.22	124.50
22	Arkansas	1,436,246	1,098	11.27	123.69
23	California	13,883,994	542	22.82	123.67
24	North Carolina	4,774,592	1,063	11.32	120.38
25	Oklahoma	1,818,813	1,088	11.00	119.69

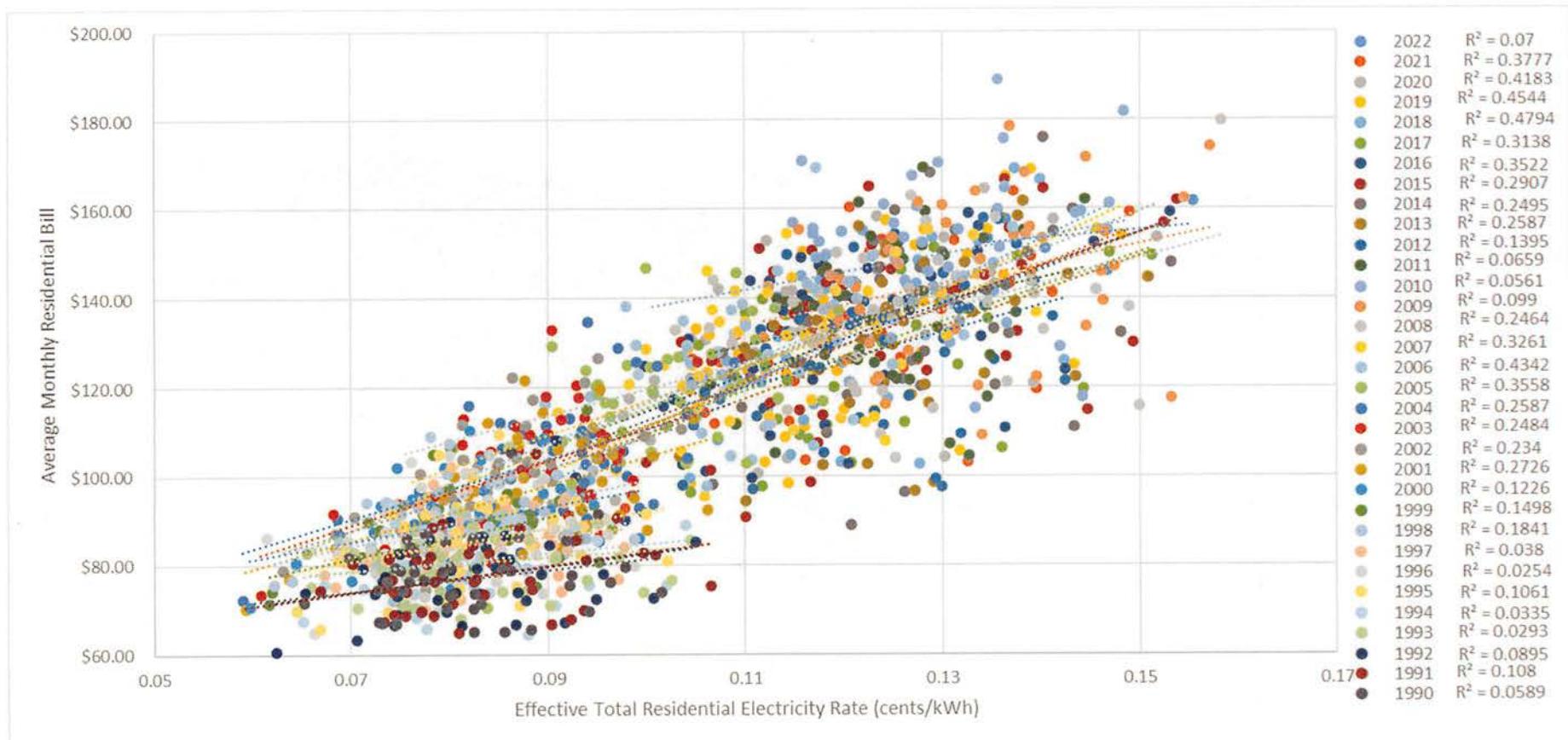
Rank	Year	State	Average Bills
1	2022	HI	\$ 221.56
2	2022	CT	\$ 176.24
3	2022	AL	\$ 171.37
4	2022	TX	\$ 159.29
5	2022	NH	\$ 158.96
6	2022	LA	\$ 156.64
7	2022	GA	\$ 156.45
8	2022	SC	\$ 156.05
9	2022	FL	\$ 155.21
10	2022	MS	\$ 152.34
11	2022	TN	\$ 151.54
12	2022	MA	\$ 150.99
13	2022	VA	\$ 147.59
14	2022	IN	\$ 145.75
15	2022	KY	\$ 145.15
16	2022	OK	\$ 144.23
17	2022	WV	\$ 142.43
18	2022	CA	\$ 142.25
19	2022	MD	\$ 140.91
20	2022	AZ	\$ 139.39
21	2022	PA	\$ 137.70
22	2022	RI	\$ 136.70
23	2022	MO	\$ 134.74
24	2022	AK	\$ 132.61
25	2022	AR	\$ 132.32





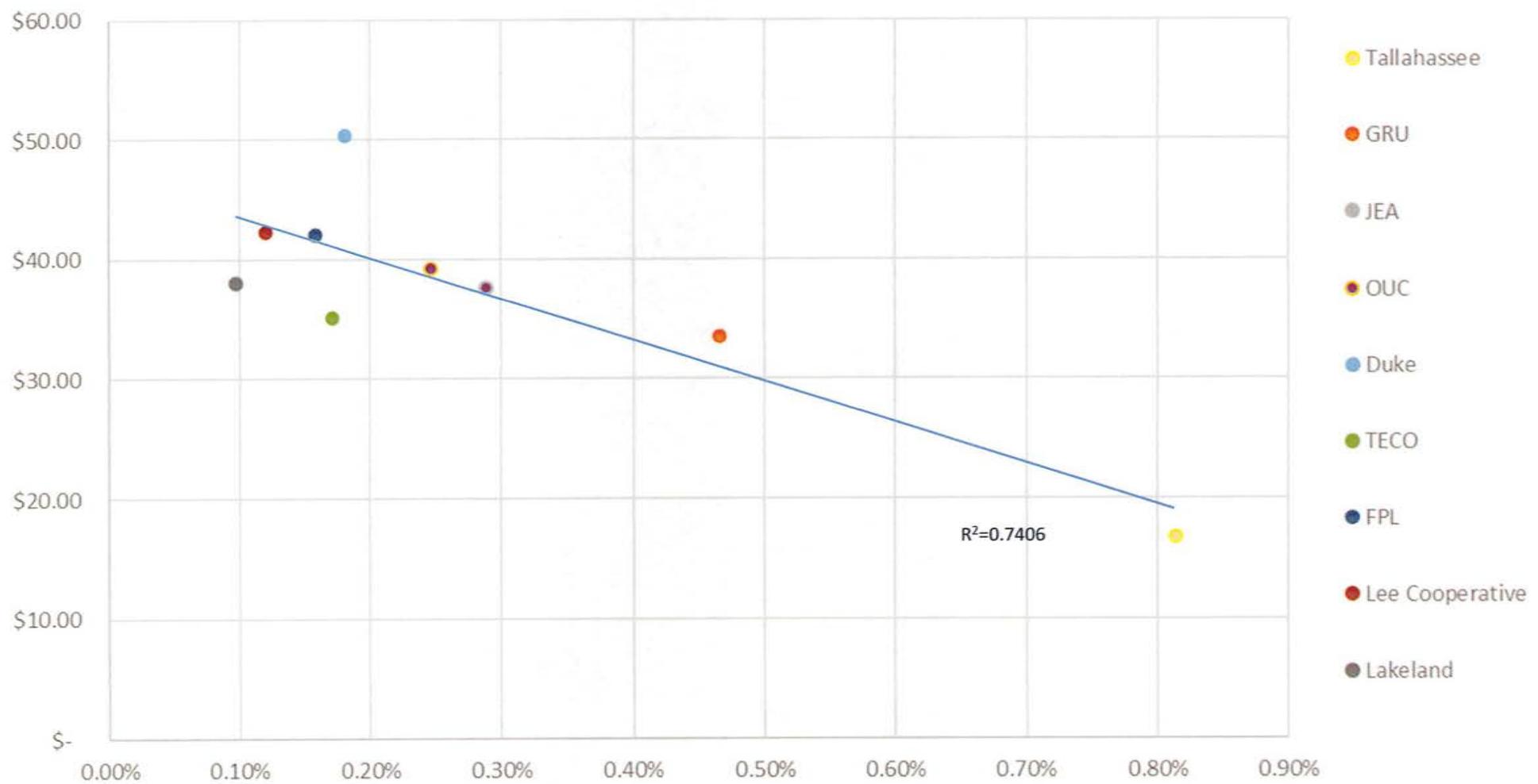






Year	R ² Usage and Bills	R ² Rates and Bills
2021	0.5035	0.3777
2020	0.3918	0.4183
2019	0.5029	0.4544
2018	0.5422	0.4794
2017	0.4771	0.3138
2016	0.4161	0.3522
2015	0.4726	0.2907
2014	0.6263	0.2495
2013	0.5848	0.2587
2012	0.6278	0.1395
2011	0.7142	0.0659
2010	0.5979	0.0561
2009	0.5204	0.099
2008	0.329	0.2464
2007	0.3503	0.3261
2006	0.3247	0.4342
2005	0.4472	0.3558
2004	0.319	0.2587
2003	0.4032	0.2484
2002	0.4124	0.234
2001	0.2815	0.2726
2000	0.3222	0.1226
1999	0.3706	0.1498
1998	0.3034	0.1841
1997	0.4456	0.038
1996	0.4236	0.0254
1995	0.431	0.1061
1994	0.4992	0.0335
1993	0.3643	0.0293
1992	0.3534	0.0895
1991	0.3284	0.108
1990	0.4116	0.0589

DSM since 2001 versus Bill Changes since 1995



Redline Attachment 1 – Preferred Alternative

Attachment 1

Rule 25-17.0021, F.A.C. Proposed Revisions in Docket No. 20200181-EU by the
League of United Latin American Citizens of Florida and the
Environmental Confederation of Southwest Florida

Redline Attachment 2 – Keeps RIM

21 utility's most recent planning process, of the total, cost-effective, winter and summer peak
22 demand (KW) and annual energy (KWH) savings reasonably achievable in the residential and
23 commercial-industrial classes through demand-side management. Each utility must also file
24 demand-side management goals developed under ~~two three~~ scenarios: one scenario that
25 includes potential demand-side management programs that pass the Participant and Rate

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

DOCKET NO. 20200181-EU
PAGE 5

1 Impact Measure Tests, and one scenario that includes potential demand-side management
2 programs that pass the Participant and Total Resource Cost Tests, and one scenario that
3 includes potential demand-side management programs that pass the Participant and the Utility
4 Cost Tests, as these terms are used in Rule 25-17.008, F.A.C., with the Utility Cost Test
5 determined using the Rate Impact Measure test, but not including lost revenues from reduced
6 sales as a cost. Each utility must provide a transparent estimate of quantified effects for each
7 goal scenario it submits, including total utility system benefits, average bill savings associated
8 with decreased energy use, rate effects, and bill impacts. Each utility's goal projections must
9 be based on informed by the utility's most recent planning process and must shall reflect the
10 annual KW and KWH savings, over a ten-year period, from potential demand-side
11 management programs with consideration of overlapping measures, rebound effects, free
12 riders, interactions with building codes and appliance efficiency standards, and the utility's

Redline Attachment 3 – Low-income Goal

10 (a) An assessment of the technical potential of available measures; ~~and~~
11 (b) ~~a~~An estimate of the total cost-effective ~~KW kilowatt and KWH kilowatt-hour~~
12 savings reasonably achievable through demand-side management ~~programs~~ in each utility's
13 service area over a ten-year period; ~~and~~
14 (c) Discrete ~~KW and KWH~~ savings for Low Income Customers provided through
15 ~~income qualified~~ demand-side management programs in each utility's service area over a ten-
16 year period. These savings goals shall be proportionate to the population of Low Income
17 customers within the utility's service area. For the purposes of this Rule, the term "Low
18 Income Customer" means households earning at or below two hundred percent (200%) of the
19 Federal Poverty Level, as determined annually by the United States Department of Health and
20 Human Services. "~~Income qualified~~" demand-side management programs are those programs
21 which are designed to serve Low Income Customers.
22 (2) Pursuant to the schedule in an order establishing procedure in the proceeding to
23 establish demand-side management goals, each utility must file a technical potential study.
24 The Commission shall set goals for each utility at least once every five years. The technical
25 potential study must be used to develop the proposed demand-side management goals, and it

CODING: Words underlined are additions; words in struck-through type are deletions from

Redline Attachment 4 – Low-income Exemption

15 efficiency standards, and the utility's latest monitoring and evaluation of conservation
16 programs and measures. In addition, for each potential demand-side management program
17 identified in the proposed goals and in each scenario described above, each utility must provide
18 overall estimated annual program costs over a ten-year period. Any program, or its measures,
19 specifically designated for Low Income Customers shall be excepted from standard cost-
20 effectiveness requirements and free ridership consideration. Each utility's projections shall be
21 based upon an assessment of, at a minimum, the following n...
22 use categories.
23 Residential Market Segment:
24 (Existing Homes and New Construction should be separately evaluated) Major End Use
25 Category

Attachment 5 – 2-Year Payback

15 efficiency standards, and the utility's latest monitoring and evaluation of conservation
16 programs and measures. In addition, for each potential demand-side management program
17 identified in the proposed goals and in each scenario described above, each utility must provide
18 overall estimated annual program costs over a ten-year period. Consideration of overlapping
19 measures, rebound effects, free riders, interactions with building codes and appliance
20 efficiency standards must be based on a transparent, evidence-based methodology that is
21 consistent with industry standard practices, and must be accounted for within the utility's
22 assumptions for naturally occurring energy efficiency adoption outside of utility-administered
23 programs. Free ridership screening shall not be based on simple payback duration. Each
24 utility's projections shall be based upon an assessment of, at a minimum, the following market
25 segments and major end-use categories.

Redline Attachment 6 – UCT Addition

5 demand (KW) and annual energy (KWH) savings reasonably achievable in the residential and
6 commercial-industrial classes through demand-side management. Each utility must also file
7 demand-side management goals developed under two three scenarios: one scenario that
8 includes potential demand-side management programs that pass the Participant and Rate
9 Impact Measure Tests, and one scenario that includes potential demand-side management
10 programs that pass the Participant and Total Resource Cost Tests, and one scenario that
11 includes potential demand-side management programs that pass the Participant and the Utility
12 Cost Tests, as these terms are used in Rule 25-17.008, F.A.C., with the Utility Cost Test
13 determined using the Rate Impact Measure test, but not including lost revenues from reduced
14 sales as a cost. Each utility's goal projections must be based on the utility's most recent
15 planning process and must shall reflect the annual KW and KWH savings, over a ten-year
16 period, from potential demand-side management programs with consideration of overlapping
17 measures, rebound effects, free riders, interactions with building codes and appliance
18 efficiency standards, and the utility's latest monitoring and evaluation of conservation
19 programs and measures. In addition, for each potential demand-side management program
20 identified in the proposed goals and in each scenario described above, each utility must provide
21 overall estimated annual program costs over a ten-year period. Each utility's projections shall
22 be based upon an assessment of, at a minimum, the following market segments and major end-

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U3 =IF((N3+O3+M3)<0.9999,IFERROR(K3/(N3+O3+M3),0))

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0.049 0.12036 = Electric Rate in 2020

1

2 Compa Measure Name NPV Lost NPV Program NPV NPV Gross NPV Net ACH RIM + ACH TRC +

3 DEF T_SF_Energy Star Clothes Dryer \$77 \$163 \$7 \$0 \$249 \$249 \$163 Per Unit 14.2 =IF((N3+O3+M3)<0.9999,IFERROR(K3/(N3+O3+M3),0)) DROP DROP DROP DROP D

4 DEF T_MF_Energy Star Clothes Dryer \$77 \$163 \$7 \$0 \$249 \$249 \$163 Per Unit 14.2 0.450987 0.299111 0.65356361 -\$93 -\$180 DROP DROP DROP DROP D

5 DEF T_MH_Energy Star Clothes Dryer \$77 \$163 \$7 \$0 \$249 \$249 \$163 Per Unit 14.2 0.450987 0.299111 0.65356361 -\$93 -\$180 DROP DROP DROP DROP D

6 DEF N_SF_Energy Star Clothes Dryer \$77 \$163 \$7 \$0 \$249 \$249 \$163 Per Unit 14.2 0.450987 0.299111 0.65356361 -\$93 -\$180 DROP DROP DROP DROP D

7 DEF N_MF_Energy Star Clothes Dryer \$77 \$163 \$7 \$0 \$249 \$249 \$163 Per Unit 14.2 0.450987 0.299111 0.65356361 -\$93 -\$180 DROP DROP DROP DROP D

8 DEF N_MH_Energy Star Clothes Dryer \$77 \$163 \$7 \$0 \$249 \$249 \$163 Per Unit 14.2 0.450987 0.299111 0.65356361 -\$93 -\$180 DROP DROP DROP DROP D

9 DEF T_SF_Energy Star Clothes Washer 420 \$607 \$27 \$0 \$58 \$58 \$607 Per Unit 0.9 0.662447 4.938573 10.4073288 -\$214 \$335 DROP DROP DROP DROP D

10 DEF T_MF_Energy Star Clothes Washer 420 \$607 \$27 \$0 \$58 \$58 \$607 Per Unit 0.9 0.662447 4.938573 10.4073288 -\$214 \$335 DROP DROP DROP DROP D

11 DEF T_MH_Energy Star Clothes Washer 420 \$607 \$27 \$0 \$58 \$58 \$607 Per Unit 0.9 0.662447 4.938573 10.4073288 -\$214 \$335 DROP DROP DROP DROP D

12 DEF N_SF_Energy Star Clothes Washer 420 \$607 \$27 \$0 \$58 \$58 \$607 Per Unit 0.9 0.662447 4.938573 10.4073288 -\$214 \$335 DROP DROP DROP DROP D

13 DEF N_MF_Energy Star Clothes Washer 420 \$607 \$27 \$0 \$58 \$58 \$607 Per Unit 0.9 0.662447 4.938573 10.4073288 -\$214 \$335 DROP DROP DROP DROP D

14 DEF N_MH_Energy Star Clothes Washer 420 \$607 \$27 \$0 \$58 \$58 \$607 Per Unit 0.9 0.662447 4.938573 10.4073288 -\$214 \$335 DROP DROP DROP DROP D

15 DEF T_SF_Energy Star Dishwasher \$17 \$41 \$2 \$0 \$0 \$41 Per Unit 0.0 0.386225 8.47135 0 -\$27 \$15 DROP DROP DROP DROP D

16 DEF T_MF_Energy Star Dishwasher \$17 \$41 \$2 \$0 \$0 \$41 Per Unit 0.0 0.386225 8.47135 0 -\$27 \$15 DROP DROP DROP DROP D

17 DEF T_MH_Energy Star Dishwasher \$17 \$41 \$2 \$0 \$0 \$41 Per Unit 0.0 0.386225 8.47135 0 -\$27 \$15 DROP DROP DROP DROP D

18 DEF N_SF_Energy Star Dishwasher \$17 \$41 \$2 \$0 \$0 \$41 Per Unit 0.0 0.386225 8.47135 0 -\$27 \$15 DROP DROP DROP DROP D

19 DEF N_MF_Energy Star Dishwasher \$17 \$41 \$2 \$0 \$0 \$41 Per Unit 0.0 0.386225 8.47135 0 -\$27 \$15 DROP DROP DROP DROP D

20 DEF N_MH_Energy Star Dishwasher \$17 \$41 \$2 \$0 \$0 \$41 Per Unit 0.0 0.386225 8.47135 0 -\$27 \$15 DROP DROP DROP DROP D

21 DEF T_SF_Energy Star Freezer \$31 \$73 \$3 \$0 \$90 \$90 \$73 Per Unit 11.4 0.40475 0.331561 0.81271453 -\$45 -\$62 DROP DROP DROP DROP D

22 DEF T_MF_Energy Star Freezer \$31 \$73 \$3 \$0 \$90 \$90 \$73 Per Unit 11.4 0.40475 0.331561 0.81271453 -\$45 -\$62 DROP DROP DROP DROP D

23 DEF T_MH_Energy Star Freezer \$31 \$73 \$3 \$0 \$90 \$90 \$73 Per Unit 11.4 0.40475 0.331561 0.81271453 -\$45 -\$62 DROP DROP DROP DROP D

24 DEF N_SF_Energy Star Freezer \$31 \$73 \$3 \$0 \$90 \$90 \$73 Per Unit 11.4 0.40475 0.331561 0.81271453 -\$45 -\$62 DROP DROP DROP DROP D

25 DEF N_MF_Energy Star Freezer \$31 \$73 \$3 \$0 \$90 \$90 \$73 Per Unit 11.4 0.40475 0.331561 0.81271453 -\$45 -\$62 DROP DROP DROP DROP D

26 DEF N_MH_Energy Star Freezer \$31 \$73 \$3 \$0 \$90 \$90 \$73 Per Unit 11.4 0.40475 0.331561 0.81271453 -\$45 -\$62 DROP DROP DROP DROP D

27 DEF T_SF_Energy Star Refrigerator \$81 \$183 \$7 \$0 \$122 \$122 \$183 Per Unit 7.6 0.42733 0.628496 1.49599175 -\$108 -\$48 DROP DROP DROP DROP D

28 DEF T_MF_Energy Star Refrigerator \$81 \$183 \$7 \$0 \$122 \$122 \$183 Per Unit 7.6 0.42733 0.628496 1.49599175 -\$108 -\$48 DROP DROP DROP DROP D

29 DEF T_MH_Energy Star Refrigerator \$81 \$183 \$7 \$0 \$122 \$122 \$183 Per Unit 7.6 0.42733 0.628496 1.49599175 -\$108 -\$48 DROP DROP DROP DROP D

30 DEF N_SF_Energy Star Refrigerator \$81 \$183 \$7 \$0 \$122 \$122 \$183 Per Unit 7.6 0.42733 0.628496 1.49599175 -\$108 -\$48 DROP DROP DROP DROP D

31 DEF N_MF_Energy Star Refrigerator \$81 \$183 \$7 \$0 \$122 \$122 \$183 Per Unit 7.6 0.42733 0.628496 1.49599175 -\$108 -\$48 DROP DROP DROP DROP D

32 DEF N_MH_Energy Star Refrigerator \$81 \$183 \$7 \$0 \$122 \$122 \$183 Per Unit 7.6 0.42733 0.628496 1.49599175 -\$108 -\$48 DROP DROP DROP DROP D

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U3 fx =IF((N3+O3)<0.9999,IFERROR(K3/(N3+O3),0))

A B L M N O P Q R S T U V W X Y Z AA AB AC

0.049 0.12036 = Electric Rate in 2020

Compa	Measure Name	NPV Lost			NPV Program			NPV Net			ACH RIM +			ACH TRC +							
		Revenue	Costs	Incentives	Cost	Cost	Bill Savings	Unit of Measure	Payback	RIM	TRC	Participa	Benefits	Benefits	PB	>2-yr PB	RIM + Part + >2-yr PB	TRC Net	Part +>2-yr PB	RIM + Part + >1-yr PB	Part +>2-yr PB
DEF	T_SF_Energy Star Clothes Dryer	\$77	\$163	\$7	\$0	\$249	\$249	\$163 Per Unit	14.2	10.71328	0.299111	0.65356361	-\$93	-\$180	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	T_MF_Energy Star Clothes Dryer	\$77	\$163	\$7	\$0	\$249	\$249	\$163 Per Unit	14.2	0.450987	0.299111	0.65356361	-\$93	-\$180	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	T_MH_Energy Star Clothes Dryer	\$77	\$163	\$7	\$0	\$249	\$249	\$163 Per Unit	14.2	0.450987	0.299111	0.65356361	-\$93	-\$180	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_SF_Energy Star Clothes Dryer	\$77	\$163	\$7	\$0	\$249	\$249	\$163 Per Unit	14.2	0.450987	0.299111	0.65356361	-\$93	-\$180	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_MF_Energy Star Clothes Dryer	\$77	\$163	\$7	\$0	\$249	\$249	\$163 Per Unit	14.2	0.450987	0.299111	0.65356361	-\$93	-\$180	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_MH_Energy Star Clothes Dryer	\$77	\$163	\$7	\$0	\$249	\$249	\$163 Per Unit	14.2	0.450987	0.299111	0.65356361	-\$93	-\$180	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	T_SF_Energy Star Clothes Washer	420	\$607	\$27	\$0	\$58	\$58	\$607 Per Unit	0.9	0.662447	4.938573	10.4073288	-\$214	\$335	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	T_MF_Energy Star Clothes Washer	420	\$607	\$27	\$0	\$58	\$58	\$607 Per Unit	0.9	0.662447	4.938573	10.4073288	-\$214	\$335	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	T_MH_Energy Star Clothes Washer	420	\$607	\$27	\$0	\$58	\$58	\$607 Per Unit	0.9	0.662447	4.938573	10.4073288	-\$214	\$335	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_SF_Energy Star Clothes Washer	420	\$607	\$27	\$0	\$58	\$58	\$607 Per Unit	0.9	0.662447	4.938573	10.4073288	-\$214	\$335	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_MF_Energy Star Clothes Washer	420	\$607	\$27	\$0	\$58	\$58	\$607 Per Unit	0.9	0.662447	4.938573	10.4073288	-\$214	\$335	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_MH_Energy Star Clothes Washer	420	\$607	\$27	\$0	\$58	\$58	\$607 Per Unit	0.9	0.662447	4.938573	10.4073288	-\$214	\$335	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	T_SF_Energy Star Dishwasher	17	\$41	\$2	\$0	\$0	\$0	\$41 Per Unit	0.0	0.386225	8.47135	0	-\$27	\$15	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	T_MF_Energy Star Dishwasher	17	\$41	\$2	\$0	\$0	\$0	\$41 Per Unit	0.0	0.386225	8.47135	0	-\$27	\$15	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	T_MH_Energy Star Dishwasher	17	\$41	\$2	\$0	\$0	\$0	\$41 Per Unit	0.0	0.386225	8.47135	0	-\$27	\$15	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_SF_Energy Star Dishwasher	17	\$41	\$2	\$0	\$0	\$0	\$41 Per Unit	0.0	0.386225	8.47135	0	-\$27	\$15	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_MF_Energy Star Dishwasher	17	\$41	\$2	\$0	\$0	\$0	\$41 Per Unit	0.0	0.386225	8.47135	0	-\$27	\$15	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_MH_Energy Star Dishwasher	17	\$41	\$2	\$0	\$0	\$0	\$41 Per Unit	0.0	0.386225	8.47135	0	-\$27	\$15	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	T_SF_Energy Star Freezer	31	\$73	\$3	\$0	\$90	\$90	\$73 Per Unit	11.4	0.40475	0.331561	0.81271453	-\$45	\$62	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	T_MF_Energy Star Freezer	31	\$73	\$3	\$0	\$90	\$90	\$73 Per Unit	11.4	0.40475	0.331561	0.81271453	-\$45	\$62	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	T_MH_Energy Star Freezer	31	\$73	\$3	\$0	\$90	\$90	\$73 Per Unit	11.4	0.40475	0.331561	0.81271453	-\$45	\$62	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_SF_Energy Star Freezer	31	\$73	\$3	\$0	\$90	\$90	\$73 Per Unit	11.4	0.40475	0.331561	0.81271453	-\$45	\$62	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_MF_Energy Star Freezer	31	\$73	\$3	\$0	\$90	\$90	\$73 Per Unit	11.4	0.40475	0.331561	0.81271453	-\$45	\$62	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_MH_Energy Star Freezer	31	\$73	\$3	\$0	\$90	\$90	\$73 Per Unit	11.4	0.40475	0.331561	0.81271453	-\$45	\$62	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	T_SF_Energy Star Refrigerator	81	\$183	\$7	\$0	\$122	\$122	\$183 Per Unit	7.6	0.42733	0.628496	1.49599175	-\$108	\$48	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	T_MF_Energy Star Refrigerator	81	\$183	\$7	\$0	\$122	\$122	\$183 Per Unit	7.6	0.42733	0.628496	1.49599175	-\$108	\$48	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	T_MH_Energy Star Refrigerator	81	\$183	\$7	\$0	\$122	\$122	\$183 Per Unit	7.6	0.42733	0.628496	1.49599175	-\$108	\$48	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_SF_Energy Star Refrigerator	81	\$183	\$7	\$0	\$122	\$122	\$183 Per Unit	7.6	0.42733	0.628496	1.49599175	-\$108	\$48	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_MF_Energy Star Refrigerator	81	\$183	\$7	\$0	\$122	\$122	\$183 Per Unit	7.6	0.42733	0.628496	1.49599175	-\$108	\$48	DROP	DROP	DROP	DROP	DROP	DROP	DROP
DEF	N_MH_Energy Star Refrigerator	81	\$183	\$7	\$0	\$122	\$122	\$183 Per Unit	7.6	0.42733	0.628496	1.49599175	-\$108	\$48	DROP	DROP	DROP	DROP	DROP	DROP	DROP



DEF Nexant EE Summary - Yr-12020 - with CCs - No CO2 - Base Fuel ACH Prog Cost 03-28-19_nexant - Gr...

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U3 fx =IF((N3+O3)<0.9999,IFERROR(K3/(N3+O3),0))

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1 0.049 0.12036 = Electric Rate in 2020

2 Compa Measure Name NPV Lost NPV Program NPV NPV Gross Participant NPV Net Participant RIM Net TRC Net ACH RIM + Part +>2-yr RIM + Part + RIM + Part + Part +>2-yr ACH TRC + TRC Net PB >3-yr PB >1-yr PB PB >2-yr

3 DEF T_SF_Energy Star Clothes Dryer \$77 \$163 \$7 \$0 \$249 \$249 \$163 Per Unit 14.2 10.71328 0.299111 0.65356361 -\$93 -\$180 DROP DROP DROP DROP D

4 DEF T_MF_Energy Star Clothes Dryer \$77 \$163 \$7 \$0 \$249 \$249 \$163 Per Unit 14.2 10.71328 0.299111 0.65356361 -\$93 -\$180 DROP DROP DROP DROP D

5 DEF T_MH_Energy Star Clothes Dryer \$77 \$163 \$7 \$0 \$249 \$249 \$163 Per Unit 14.2 10.71328 0.299111 0.65356361 -\$93 -\$180 DROP DROP DROP DROP D

6 DEF N_SF_Energy Star Clothes Dryer \$77 \$163 \$7 \$0 \$249 \$249 \$163 Per Unit 14.2 10.71328 0.299111 0.65356361 -\$93 -\$180 DROP DROP DROP DROP D

7 DEF N_MF_Energy Star Clothes Dryer \$77 \$163 \$7 \$0 \$249 \$249 \$163 Per Unit 14.2 10.71328 0.299111 0.65356361 -\$93 -\$180 DROP DROP DROP DROP D

8 DEF N_MH_Energy Star Clothes Dryer \$77 \$163 \$7 \$0 \$249 \$249 \$163 Per Unit 14.2 10.71328 0.299111 0.65356361 -\$93 -\$180 DROP DROP DROP DROP D

9 DEF T_SF_Energy Star Clothes Washer 420 \$607 \$27 \$0 \$58 \$58 \$607 Per Unit 0.9 15.73656 4.938573 10.4073288 -\$214 \$335 DROP DROP DROP DROP D

10 DEF T_MF_Energy Star Clothes Washer 420 \$607 \$27 \$0 \$58 \$58 \$607 Per Unit 0.9 15.73656 4.938573 10.4073288 -\$214 \$335 DROP DROP DROP DROP D

11 DEF T_MH_Energy Star Clothes Washer 420 \$607 \$27 \$0 \$58 \$58 \$607 Per Unit 0.9 15.73656 4.938573 10.4073288 -\$214 \$335 DROP DROP DROP DROP D

12 DEF N_SF_Energy Star Clothes Washer 420 \$607 \$27 \$0 \$58 \$58 \$607 Per Unit 0.9 15.73656 4.938573 10.4073288 -\$214 \$335 DROP DROP DROP DROP D

13 DEF N_MF_Energy Star Clothes Washer 420 \$607 \$27 \$0 \$58 \$58 \$607 Per Unit 0.9 15.73656 4.938573 10.4073288 -\$214 \$335 DROP DROP DROP DROP D

14 DEF N_MH_Energy Star Clothes Washer 420 \$607 \$27 \$0 \$58 \$58 \$607 Per Unit 0.9 15.73656 4.938573 10.4073288 -\$214 \$335 DROP DROP DROP DROP D

15 DEF T_SF_Energy Star Dishwasher \$17 \$41 \$2 \$0 \$0 \$41 Per Unit 0.0 8.47135 8.47135 0 -\$27 \$15 DROP DROP DROP DROP D

16 DEF T_MF_Energy Star Dishwasher \$17 \$41 \$2 \$0 \$0 \$41 Per Unit 0.0 8.47135 8.47135 0 -\$27 \$15 DROP DROP DROP DROP D

17 DEF T_MH_Energy Star Dishwasher \$17 \$41 \$2 \$0 \$0 \$41 Per Unit 0.0 8.47135 8.47135 0 -\$27 \$15 DROP DROP DROP DROP D

18 DEF N_SF_Energy Star Dishwasher \$17 \$41 \$2 \$0 \$0 \$41 Per Unit 0.0 8.47135 8.47135 0 -\$27 \$15 DROP DROP DROP DROP D

19 DEF N_MF_Energy Star Dishwasher \$17 \$41 \$2 \$0 \$0 \$41 Per Unit 0.0 8.47135 8.47135 0 -\$27 \$15 DROP DROP DROP DROP D

20 DEF N_MH_Energy Star Dishwasher \$17 \$41 \$2 \$0 \$0 \$41 Per Unit 0.0 8.47135 8.47135 0 -\$27 \$15 DROP DROP DROP DROP D

21 DEF T_SF_Energy Star Freezer \$31 \$73 \$3 \$0 \$90 \$90 \$73 Per Unit 11.4 9.614927 0.331561 0.81271453 -\$45 -\$62 DROP DROP DROP DROP D

22 DEF T_MF_Energy Star Freezer \$31 \$73 \$3 \$0 \$90 \$90 \$73 Per Unit 11.4 9.614927 0.331561 0.81271453 -\$45 -\$62 DROP DROP DROP DROP D

23 DEF T_MH_Energy Star Freezer \$31 \$73 \$3 \$0 \$90 \$90 \$73 Per Unit 11.4 9.614927 0.331561 0.81271453 -\$45 -\$62 DROP DROP DROP DROP D

24 DEF N_SF_Energy Star Freezer \$31 \$73 \$3 \$0 \$90 \$90 \$73 Per Unit 11.4 9.614927 0.331561 0.81271453 -\$45 -\$62 DROP DROP DROP DROP D

25 DEF N_MF_Energy Star Freezer \$31 \$73 \$3 \$0 \$90 \$90 \$73 Per Unit 11.4 9.614927 0.331561 0.81271453 -\$45 -\$62 DROP DROP DROP DROP D

26 DEF N_MH_Energy Star Freezer \$31 \$73 \$3 \$0 \$90 \$90 \$73 Per Unit 11.4 9.614927 0.331561 0.81271453 -\$45 -\$62 DROP DROP DROP DROP D

27 DEF T_SF_Energy Star Refrigerator \$81 \$183 \$7 \$0 \$122 \$122 \$183 Per Unit 7.6 12.35005 0.628496 1.49599175 -\$108 -\$48 KEEP KEEP KEEP DROP D

28 DEF T_MF_Energy Star Refrigerator \$81 \$183 \$7 \$0 \$122 \$122 \$183 Per Unit 7.6 12.35005 0.628496 1.49599175 -\$108 -\$48 KEEP KEEP KEEP DROP D

29 DEF T_MH_Energy Star Refrigerator \$81 \$183 \$7 \$0 \$122 \$122 \$183 Per Unit 7.6 12.35005 0.628496 1.49599175 -\$108 -\$48 KEEP KEEP KEEP DROP D

30 DEF N_SF_Energy Star Refrigerator \$81 \$183 \$7 \$0 \$122 \$122 \$183 Per Unit 7.6 12.35005 0.628496 1.49599175 -\$108 -\$48 KEEP KEEP KEEP DROP D

31 DEF N_MF_Energy Star Refrigerator \$81 \$183 \$7 \$0 \$122 \$122 \$183 Per Unit 7.6 12.35005 0.628496 1.49599175 -\$108 -\$48 KEEP KEEP KEEP DROP D

32 DEF N_MH_Energy Star Refrigerator \$81 \$183 \$7 \$0 \$122 \$122 \$183 Per Unit 7.6 12.35005 0.628496 1.49599175 -\$108 -\$48 KEEP KEEP KEEP DROP D

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Cost / Benefit Tests For Normal Weather

	Cost Based	Market-Based				
	Minimum	Today	Alternate	Option	Maximum	
Utility (PAC/UCT) Test	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
TRC Test	7.20	4.39	5.84	5.84	8.05	
RM Test	0.69	0.45	0.56	0.56	0.75	
RM (Net Fuel)	0.69	0.45	0.56	0.56	0.75	
Societal Test	7.20	4.39	5.84	5.84	8.05	
Participant Test	10.41	9.85	10.41	10.41	10.72	

Cost / Benefit Test Matrix By Weather / Price Scenarios

Usage/Weather Scenarios	Test	Cost Based	Market-Based			kWh Savings
			Low	Median	High	
Mild Year	Utility (PAC/UCT)	\$0.00	\$0.00	\$0.00	\$45.7	
Normal Year	Utility (PAC/UCT)	\$0.00	\$0.00	\$0.00	\$76.4	
Extreme Year	Utility (PAC/UCT)	\$0.00	\$0.00	\$0.00	\$93.6	
Mild Year	TRC	6.61	4.39	5.84	6.92	\$45.7
Normal Year	TRC	7.20	4.54	5.81	7.47	\$76.4
Extreme Year	TRC	7.88	4.75	6.24	8.05	\$93.6
Mild Year	RM	0.65	0.42	0.53	0.67	\$45.7
Normal Year	RM	0.69	0.44	0.56	0.72	\$76.4
Extreme Year	RM	0.74	0.46	0.60	0.80	\$93.6
Mild Year	Societal	6.61	4.39	5.84	6.92	\$45.7
Normal Year	Societal	7.20	4.54	5.81	7.47	\$76.4
Extreme Year	Societal	7.88	4.75	6.24	8.05	\$93.6
Mild Year	Participant	9.85	9.85	9.85	9.85	\$45.7
Normal Year	Participant	10.41	10.41	10.41	10.41	\$76.4
Extreme Year	Participant	10.72	10.72	10.72	10.72	\$93.6

Present Values (PVs) of Costs and Benefits Per Test

	Cost Based	Market-Based					Discount Rate Used		Cost Based	Market-Based					
		Minimum	Today	Alternate	Option	Maximum				Minimum	Today	Alternate	Option	Maximum	
Utility (PAC/UCT) Test															
Avoided Electric Production	\$155.06	\$70.76	\$155.06	\$155.06	\$125.87	\$284.27	7.10%		Net Benefits	\$419.89	\$256.17	\$340.47	\$340.47	\$311.27	\$469.68
Avoided Electric Production Adders	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	7.10%		Levelized Cost (kW)	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Avoided Electric Capacity	\$79.42	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	7.10%		Levelized Cost (kWh)	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Avoided Electric TSO	\$185.41	\$185.41	\$185.41	\$185.41	\$185.41	\$185.41	7.10%		Levelized Cost (CCF)	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Avoided Electric Ancillary	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	7.10%								
Avoided Gas Production	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	7.10%								
Avoided Gas Capacity	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	7.10%								
Total	\$419.89	\$256.17	\$340.47	\$340.47	\$311.27	\$469.68									
Administration Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	7.10%								
Implementation / Participation Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	7.10%								
Other / Miscellaneous Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	7.10%								
Incentives	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	7.10%								

Program Input Utility Input Test Results Loads & Bills Financial Reports Peak Clipping Loadshapes SwitchSettings

Average: \$122.12 Count: 25 Sum: \$3,053.02

Test	RIM + Part + 2-Yr PB	UCT + Part + 2-Yr PB	UCT + Part
Number of Passing Measure Permutations	45	145	247

Test	RIM + Part	TRC + Part + 2-Yr PB	TRC + Part
Number of Passing Measure Permutations	45	81	177

EXHIBIT NO. 4

DOCKET NO: 20200181-EU

PARTY: League of United Latin American Citizens of Florida ("LULAC") & Environmental Confederation of Southwest Florida ("ECOSWF")

DESCRIPTION: Florida Utility Rate, Usage, and Bill Data 1990-2021 (2022 for IOUs & JEA)

	CF	CI	CJ	CK	CL	CO	CP	CQ	CR	CU	CV	CW	CX	DA	DB	DC	DD			
1	2009 Megawatt Hours	2009 Bills	2009 Usage	2009 Rates	2010 Megawatt Hours	2010 Bills	2010 Usage	2010 Rates	2011 Megawatt Hours	2011 Bills	2011 Usage	2011 Rates	2012 Megawatt Hours	2012 Bills	2012 Usage	2012 Rates	2013 Megawatt Hours			
2	40,938	\$ 121.38	985.13	0.12321	43,735	\$ 130.85	1,048.50	0.12480	42,344	\$ 126.44	992.03	0.12746	39,213	\$ 114.33	929.13	0.12305	39,865			
3	134,486	\$ 155.87	1,121.61	0.13897	144,190	\$ 164.80	1,208.23	0.13640	135,920	\$ 153.40	1,142.72	0.13424	123,337	\$ 137.49	1,036.62	0.13264	123,705			
4	366,057	\$ 128.07	1,011.87	0.12657	385,342	\$ 139.71	1,071.50	0.13038	350,727	\$ 122.39	979.56	0.12494	333,583	\$ 125.99	931.37	0.13527	327,636			
5	534,969	\$ 156.77	1,201.67	0.13046	569,757	\$ 149.06	1,271.48	0.11723	563,456	\$ 145.99	1,238.75	0.11786	531,362	\$ 139.23	1,140.51	0.12207	550,722			
6	2,236,217	\$ 142.56	1,267.71	0.11246	2,415,332	\$ 156.99	1,367.10	0.11483	2,191,983	\$ 146.71	1,240.50	0.11827	2,079,615	\$ 135.18	1,170.57	0.11548	2,055,318			
7	50,550	\$ 161.46	1,266.16	0.12752	52,364	\$ 154.39	1,320.72	0.11690	49,359	\$ 139.81	1,235.21	0.11319	47,644	\$ 132.80	1,189.79	0.11162	47,158			
8	127,945	\$ 168.20	1,214.91	0.13844	138,644	\$ 167.59	1,320.12	0.12695	129,924	\$ 159.45	1,242.91	0.12829	123,158	\$ 157.92	1,176.56	0.13422	124,725			
9	362,525	\$ 147.68	1,176.51	0.12553	366,258	\$ 143.57	1,186.36	0.12102	365,547	\$ 138.14	1,180.07	0.11706	358,489	\$ 128.56	1,146.58	0.11213	372,403			
10	53,953,573	\$ 134.78	1,127.92	0.11950	56,583,308	\$ 118.63	1,179.13	0.10061	54,764,235	\$ 120.61	1,133.34	0.10642	53,383,164	\$ 114.20	1,097.83	0.10402	54,074,164			
11	19,399,196	\$ 153.95	1,121.61	0.13726	20,524,060	\$ 159.90	1,178.35	0.13570	19,237,836	\$ 141.33	1,103.75	0.12804	18,251,334	\$ 137.37	1,042.68	0.13175	18,507,962			
12	316,307	\$ 154.16	1,113.18	0.13849	347,040	\$ 181.90	1,226.00	0.14837	318,064	\$ 162.19	1,122.82	0.14445	292,981	\$ 143.69	1,031.52	0.13930	289,745			
13	213,653	\$ 117.45	766.77	0.15317	223,143	\$ 117.85	817.23	0.14420	214,913	\$ 104.53	787.89	0.13267	204,531	\$ 97.50	750.55	0.12990	208,467			
14	808,252	\$ 109.30	815.38	0.13404	851,454	\$ 115.34	885.58	0.13325	804,800	\$ 107.12	819.07	0.13079	757,179	\$ 99.37	768.29	0.12934	753,459			
15	157,520	\$ 145.56	1,047.12	0.13901	161,772	\$ 161.23	1,097.27	0.14694	145,261	\$ 136.73	994.50	0.13748	141,110	\$ 135.87	962.37	0.14118	141,077			
16	44,147	\$ 171.64	1,187.13	0.14459	48,165	\$ 160.55	1,259.41	0.12748	45,157	\$ 145.04	1,216.25	0.11925	41,262	\$ 134.67	1,109.91	0.12133	43,594			
17	279,014	\$ 163.81	1,228.21	0.13338	300,038	\$ 160.90	1,296.71	0.12408	273,291	\$ 151.65	1,184.55	0.12802	241,353	\$ 142.70	1,078.61	0.13230	245,524			
18	5,254,491	\$ 131.03	1,170.76	0.11192	5,651,274	\$ 156.80	1,253.01	0.12514	5,304,769	\$ 140.42	1,168.71	0.12015	5,053,724	\$ 133.68	1,108.50	0.12060	5,088,829			
19	13,247	\$ 145.80	998.12	0.14607	14,753	\$ 151.21	1,112.59	0.13590	13,603	\$ 133.36	1,029.59	0.12953	12,288	\$ 113.00	930.06	0.12150	12,523			
20	239,326	\$ 122.18	989.38	0.12349	244,260	\$ 138.86	1,092.71	0.12708	244,832	\$ 126.20	1,040.42	0.12130	250,404	\$ 128.57	1,086.14	0.11837	259,063			
21	442,995	\$ 178.64	1,305.29	0.13686	474,857	\$ 189.04	1,393.65	0.13564	450,067	\$ 169.29	1,322.11	0.12805	423,779	\$ 154.21	1,231.47	0.12523	418,786			
22	5,318,602	\$ 144.09	1,204.03	0.11968	5,746,964	\$ 152.54	1,297.69	0.11755	5,236,798	\$ 148.69	1,180.22	0.12598	4,879,578	\$ 135.34	1,091.83	0.12396	4,852,228			
23	321,484	\$ 173.97	1,106.58	0.15721	324,455	\$ 158.99	1,107.98	0.14350	331,480	\$ 155.01	1,120.58	0.13833	327,841	\$ 151.93	1,103.84	0.13764	336,742			
24	695,330	\$ 148.66	1,109.66	0.13397	743,330	\$ 155.29	1,179.51	0.13165	733,223	\$ 135.62	1,140.77	0.11889	702,353	\$ 124.84	1,070.50	0.11662	709,471			
25	224,621	\$ 122.21	875.88	0.13953	230,409	\$ 128.91	908.61	0.14188	223,417	\$ 117.81	875.69	0.13453	217,475	\$ 109.53	830.87	0.13183	219,148			
26	1,417,495	\$ 142.35	1,173.86	0.12126	1,529,905	\$ 149.70	1,266.21	0.11822	1,437,360	\$ 137.92	1,196.39	0.11528	1,356,649	\$ 118.80	1,122.33	0.10585	1,367,751			
27	2,362,554	\$ 130.76	1,120.19	0.11673	2,448,450	\$ 135.90	1,142.90	0.11891	2,365,496	\$ 125.44	1,091.67	0.11491	2,313,278	\$ 124.21	1,056.98	0.11752	2,331,317			
28	211,129	\$ 139.45	953.20	0.14630	227,631	\$ 134.70	1,022.60	0.13172	213,937	\$ 121.56	960.10	0.12661	200,174	\$ 111.55	899.59	0.12400	203,685			
29	246,187	\$ 116.28	935.97	0.12423	265,763	\$ 121.25	1,005.86	0.12055	248,414	\$ 105.16	930.39	0.11303	235,645	\$ 97.03	876.38	0.11072	233,394			
30	505,879	\$ 154.75	1,056.03	0.14654	537,830	\$ 145.84	1,134.06	0.12860	523,604	\$ 134.94	1,100.11	0.12266	471,445	\$ 127.63	980.14	0.13022	478,339			
31	397,580	\$ 160.71	1,236.12	0.13001	418,136	\$ 175.77	1,289.64	0.13630	396,523	\$ 152.33	1,214.08	0.12547	386,255	\$ 157.57	1,160.34	0.13580	391,709			
32	2,231,300	\$ 125.95	1,048.68	0.12010	2,437,496	\$ 122.73	1,140.33	0.10763	2,333,058	\$ 127.14	1,077.13	0.11804	2,247,393	\$ 113.42	1,020.58	0.11114	2,266,696			
33	47,902	\$ 132.81	1,011.10	0.13135	53,083	\$ 141.48	1,091.70	0.12959	51,065	\$ 111.59	1,023.18	0.10906	45,369	\$ 97.98	945.42	0.10364	45,976			
34	24,050	\$ 147.05	997.59	0.14740	25,729	\$ 147.78	1,092.25	0.13529	24,758	\$ 126.36	1,047.82	0.12060	21,811	\$ 118.04	933.05	0.12651	21,790			
35	1,953,675	\$ 129.70	1,057.96	0.12259	2,145,525	\$ 143.98	1,140.38	0.12626	1,947,725	\$ 125.37	1,018.83	0.12305	1,922,512	\$ 121.37	984.18	0.12332	1,959,966			
36	292,367	\$ 137.32	1,128.90	0.12164	316,848	\$ 153.62	1,218.07	0.12612	308,420	\$ 140.75	1,177.89	0.11949	275,803	\$ 130.43	1,051.30	0.12406	281,282			
37	1,049,831	\$ 133.42	922.58	0.14461	1,136,334	\$ 129.92	993.98	0.13071	1,117,459	\$ 121.81	972.10	0.12531	1,031,756	\$ 105.07	891.17	0.11790	1,014,343			
38	708,358	\$ 150.63	1,210.00	0.12448	767,655	\$ 170.48	1,315.20	0.12962	728,498	\$ 153.84	1,253.14	0.12276	650,887	\$ 145.56	1,119.01	0.13008	654,446			
39	8,666,471	\$ 153.57	1,229.50	0.12490	9,184,729	\$ 154.96	1,293.87	0.11976	8,717,992	\$ 139.11	1,219.13	0.11410	8,395,166	\$ 132.40	1,159.05	0.11423	8,469,567			
40	171,098	\$ 120.17	899.74	0.13356	186,445	\$ 134.12	982.18	0.13856	177,567	\$ 126.95	941.66	0.13481	161,148	\$ 121.30	851.55	0.14244	162,260			
41	351,306	\$ 162.28	1,050.24	0.15451	376,512	\$ 146.80	1,124.06	0.13059	354,742	\$ 128.35	1,056.42	0.12149	339,124	\$ 130.86	1,005.49	0.13014	343,477			
42	325,525	\$ 153.21	1,092.95	0.14018	355,068	\$ 152.46	1,191.28	0.12798	340,693	\$ 149.42	1,147.67	0.13020	304,213	\$ 138.16	1,028.48	0.13433	307,132			
43	2,648,017	\$ 144.89	1,221.51	0.11862	2,894,031	\$ 155.63	1,331.34	0.11690	2,560,745	\$ 140.31	1,174.52	0.11946	2,471,821	\$ 136.72	1,131.38	0.12084	2,479,834			
44	153,441	\$ 155.36	1,345.83	0.11544	168,104	\$ 170.80	1,474.60	0.11583	149,815	\$ 161.43	1,328.15	0.12154	140,865	\$ 151.25	1,249.73	0.12102	138,632			
45																178,735	\$ 149.79	1,310.80	0.11427	177,522

	DG	DH	DI	DJ	DM	DN	DO	DP	DS	DT	DU	DV	DY	DZ	EA	EB	EE
1	2013 Bills	2013 Usage	2013 Rates	2014 Megawatt Hours	2014 Bills	2014 Usage	2014 Rates	2015 Megawatt Hours	2015 Bills	2015 Usage	2015 Rates	2016 Megawatt Hours	2016 Bills	2016 Usage	2016 Rates	2017 Megawatt Hours	2017 Bills
2	\$ 114.63	931.86	0.12302	41,430	\$ 120.18	940.48	0.12778	43,175	\$ 123.68	963.04	0.12843	44,900	\$ 122.50	987.51	0.12405	42,300	\$ 108.33
3	\$ 137.00	1,030.88	0.13290	127,344	\$ 142.79	1,046.45	0.13645	132,963	\$ 144.91	1,078.79	0.13433	138,250	\$ 139.66	1,117.66	0.12496	135,411	\$ 138.99
4	\$ 122.92	915.99	0.13419	346,220	\$ 131.89	964.45	0.13676	344,602	\$ 132.40	982.42	0.13757	354,842	\$ 131.23	979.83	0.13393	342,777	\$ 124.93
5	\$ 143.33	1,156.62	0.12392	598,882	\$ 152.06	1,223.27	0.12431	603,481	\$ 143.37	1,212.95	0.11820	616,609	\$ 137.19	1,205.38	0.11381	611,225	\$ 134.38
6	\$ 134.97	1,151.23	0.11724	2,134,428	\$ 146.88	1,189.31	0.12350	2,158,661	\$ 143.01	1,191.73	0.12000	2,228,015	\$ 140.66	1,214.74	0.11579	2,194,296	\$ 137.09
7	\$ 128.72	1,170.99	0.10993	48,296	\$ 127.56	1,184.77	0.10767	51,865	\$ 130.07	1,257.15	0.10346	51,500	\$ 124.76	1,251.21	0.09971	50,941	\$ 129.40
8	\$ 161.62	1,169.68	0.13818	134,781	\$ 176.04	1,254.94	0.14028	133,289	\$ 166.88	1,221.80	0.13642	135,195	\$ 158.98	1,198.54	0.13265	135,089	\$ 157.99
9	\$ 133.64	1,183.58	0.11291	386,637	\$ 145.18	1,215.24	0.11946	415,779	\$ 145.99	1,293.23	0.11289	406,835	\$ 130.81	1,254.87	0.10424	402,976	\$ 136.74
10	\$ 114.48	1,099.83	0.10409	55,224,656	\$ 122.05	1,103.87	0.11056	59,117,632	\$ 125.89	1,181.68	0.10654	58,573,164	\$ 115.83	1,139.34	0.10167	57,997,255	\$ 124.80
11	\$ 129.44	1,036.40	0.12489	19,002,681	\$ 141.67	1,053.07	0.13453	19,931,985	\$ 143.50	1,089.46	0.13172	20,265,419	\$ 129.75	1,093.80	0.11863	19,790,794	\$ 129.87
12	\$ 145.13	1,016.99	0.14271	310,218	\$ 150.23	1,083.24	0.13869	303,644	\$ 161.83	1,052.61	0.15375	303,654	\$ 159.12	1,039.41	0.15309	291,500	\$ 149.52
13	\$ 98.66	764.39	0.12907	211,967	\$ 96.40	764.44	0.12610	235,024	\$ 98.53	845.11	0.11659	237,522	\$ 102.62	852.40	0.12038	237,125	\$ 102.91
14	\$ 96.57	759.80	0.12711	772,836	\$ 110.94	773.94	0.14334	799,153	\$ 114.78	793.25	0.14469	822,237	\$ 110.73	812.25	0.13632	806,074	\$ 106.18
15	\$ 144.61	959.00	0.15080	143,189	\$ 148.03	966.42	0.15317	153,985	\$ 156.64	1,027.64	0.15243	157,596	\$ 152.50	1,048.88	0.14540	153,590	\$ 150.13
16	\$ 147.93	1,154.01	0.12819	44,668	\$ 155.04	1,180.19	0.13137	52,121	\$ 150.99	1,354.78	0.11145	50,922	\$ 143.81	1,278.16	0.11251	48,653	\$ 143.14
17	\$ 137.74	1,106.02	0.12453	266,607	\$ 150.40	1,197.37	0.12561	264,323	\$ 146.37	1,172.77	0.12481	265,283	\$ 139.81	1,155.07	0.12104	255,942	\$ 137.42
18	\$ 137.76	1,108.39	0.12429	5,362,423	\$ 150.23	1,155.40	0.13002	5,364,991	\$ 155.66	1,137.18	0.13688	5,357,623	\$ 150.44	1,126.29	0.13357	5,229,276	\$ 149.32
19	\$ 120.50	940.17	0.12816	13,419	\$ 127.86	997.55	0.12818	13,287	\$ 114.75	993.94	0.11545	13,150	\$ 109.07	969.76	0.11247	12,929	\$ 109.14
20	\$ 130.61	1,098.49	0.11890	274,117	\$ 133.03	1,118.94	0.11889	294,059	\$ 138.12	1,187.66	0.11629	301,456	\$ 135.95	1,173.29	0.11587	311,290	\$ 136.20
21	\$ 150.10	1,209.16	0.12414	434,762	\$ 152.79	1,241.86	0.12303	440,883	\$ 151.87	1,236.67	0.12281	448,638	\$ 147.31	1,253.61	0.11751	428,613	\$ 138.97
22	\$ 130.54	1,071.63	0.12182	5,162,233	\$ 136.28	1,120.28	0.12165	5,197,183	\$ 129.81	1,107.05	0.11726	5,350,812	\$ 124.02	1,119.27	0.11081	5,195,715	\$ 121.26
23	\$ 147.99	1,118.49	0.13231	348,695	\$ 146.84	1,149.44	0.12775	371,698	\$ 144.63	1,213.89	0.11915	366,571	\$ 146.64	1,197.71	0.12243	353,756	\$ 146.32
24	\$ 130.97	1,061.16	0.12343	741,059	\$ 136.14	1,087.60	0.12518	785,853	\$ 134.00	1,123.33	0.11929	833,290	\$ 137.02	1,153.92	0.11874	827,838	\$ 130.57
25	\$ 102.66	838.88	0.12238	195,937	\$ 88.87	736.20	0.12072	225,813	\$ 90.71	824.26	0.11006	254,734	\$ 90.00	920.83	0.09774	255,928	\$ 88.07
26	\$ 118.32	1,117.76	0.10585	1,399,962	\$ 122.89	1,132.62	0.10850	1,468,152	\$ 132.67	1,169.77	0.11342	1,472,627	\$ 121.18	1,158.41	0.10461	1,460,335	\$ 119.68
27	\$ 123.80	1,054.14	0.11744	2,435,778	\$ 125.60	1,086.86	0.11557	2,619,269	\$ 126.37	1,151.22	0.10977	2,635,487	\$ 117.40	1,143.75	0.10264	2,635,807	\$ 122.60
28	\$ 116.38	904.83	0.12862	207,701	\$ 120.45	889.85	0.13536	217,868	\$ 126.76	928.96	0.13645	227,297	\$ 111.39	943.86	0.11802	227,627	\$ 112.09
29	\$ 94.41	858.09	0.11002	254,972	\$ 98.11	920.01	0.10664	267,353	\$ 101.35	951.87	0.10647	276,175	\$ 101.04	953.74	0.10594	268,265	\$ 96.39
30	\$ 92.42	990.30	0.09332	490,711	\$ 95.39	1,018.24	0.09368	511,045	\$ 97.16	1,042.27	0.09322	532,247	\$ 99.67	1,074.44	0.09277	509,389	\$ 95.16
31	\$ 158.16	1,148.33	0.13773	409,183	\$ 159.92	1,116.30	0.14326	449,436	\$ 164.63	1,173.45	0.14029	465,248	\$ 156.05	1,166.95	0.13373	475,941	\$ 151.23
32	\$ 104.54	1,012.54	0.10324	2,257,492	\$ 118.26	982.70	0.12034	2,429,876	\$ 116.47	1,035.20	0.11251	2,490,811	\$ 115.32	1,030.50	0.11191	2,473,322	\$ 112.70
33	\$ 116.35	965.56	0.12050	49,785	\$ 115.47	1,052.98	0.10966	48,337	\$ 103.04	1,031.78	0.09987	46,669	\$ 102.75	992.11	0.10356		
34	\$ 118.28	933.59	0.12870	22,714	\$ 121.85	967.71	0.12591	23,280	\$ 113.78	965.65	0.11783	24,208	\$ 124.31	1,074.76	0.11566	23,156	\$ 111.46
35	\$ 120.83	974.89	0.12394	2,049,075	\$ 125.83	992.19	0.12682	2,167,742	\$ 126.72	1,024.91	0.12364	2,238,935	\$ 121.59	1,041.21	0.11677	2,210,499	\$ 120.09
36	\$ 134.55	1,067.31	0.12606	293,414	\$ 140.24	1,104.44	0.12698	288,008	\$ 141.46	1,082.72	0.13065	295,924	\$ 139.30	1,101.40	0.12648	285,767	\$ 133.71
37	\$ 102.54	870.13	0.11785	1,089,483	\$ 109.56	926.57	0.11824	1,087,978	\$ 107.47	915.74	0.11736	1,080,178	\$ 99.63	900.12	0.11068	1,059,408	\$ 97.68
38	\$ 145.71	1,119.74	0.13013	688,932	\$ 159.04	1,172.92	0.13559	673,963	\$ 146.40	1,140.49	0.12837	669,116	\$ 144.80	1,123.12	0.12893	646,531	\$ 142.60
39	\$ 127.31	1,151.00	0.11061	8,655,850	\$ 134.59	1,156.25	0.11640	9,045,021	\$ 136.43	1,186.26	0.11501	9,187,440	\$ 133.54	1,184.76	0.11271	9,029,286	\$ 127.09
40	\$ 122.32	852.62	0.14346	170,355	\$ 132.10	892.57	0.14800	166,900	\$ 129.94	870.63	0.14924	168,227	\$ 123.80	869.07	0.14245	162,988	\$ 119.50
41	\$ 139.21	1,013.53	0.13735	336,035	\$ 133.05	984.15	0.13520	373,553	\$ 142.18	1,080.77	0.13155	376,112	\$ 137.02	1,081.98	0.12663	368,129	\$ 130.78
42	\$ 136.69	1,027.22	0.13307	325,821	\$ 154.86	1,095.71	0.14133	318,525	\$ 147.24	1,065.67	0.13816	314,893	\$ 138.10	1,047.88	0.13179	303,880	\$ 135.42
43	\$ 136.73	1,130.77	0.12092	2,575,081	\$ 144.08	1,164.55	0.12372	2,659,201	\$ 146.70	1,186.21	0.12367	2,730,212	\$ 139.43	1,199.34	0.11625	2,663,325	\$ 131.60
44	\$ 151.72	1,220.57	0.12430	144,762	\$ 159.62	1,274.94	0.12520	144,199	\$ 150.55	1,289.33	0.11677	148,251	\$ 149.02	1,287.84	0.11571	145,662	\$ 152.01
45	\$ 156.04	1,284.38	0.12149	182,684	\$ 168.23	1,305.86	0.12883	192,075	\$ 165.01	1,346.99	0.12250	191,572	\$ 143.92	1,301.62	0.11057	185,434	\$ 139.78

	EF	EG	EH	EK	EL	EM	EN	EQ	ER	ES	ET	EW	EX	EY	EZ	FC	FD
1	2017 Usage	2017 Rates	2018 Megawatt Hours	2018 Bills	2018 Usage	2018 Rates	2019 Megawatt Hours	2019 Bills	2019 Usage	2019 Rates	2020 Megawatt Hours	2020 Bills	2020 Usage	2020 Rates	2021 Megawatt Hours	2021 Bills	2021 Usage
2	930.82	0.11638	45,011	\$ 112.57	971.24	0.11591	44,764	\$ 111.04	957.72	0.11594							
3	1,071.32	0.12974	138,228	\$ 121.11	1,085.06	0.11161	146,477	\$ 119.41	1,144.85	0.10430	150,108	\$ 113.74	1,165.47	0.09759	151,804	\$ 125.65	1,169.49
4	949.53	0.13157	367,098	\$ 132.25	1,012.70	0.13059	363,220	\$ 127.58	998.03	0.12783	382,845	\$ 129.64	1,040.43	0.12460	373,386	\$ 126.09	989.52
5	1,159.07	0.11594	668,113	\$ 144.16	1,226.05	0.11758	672,068	\$ 143.22	1,194.94	0.11985	707,089	\$ 137.60	1,210.79	0.11365	719,763	\$ 132.21	1,133.29
6	1,184.94	0.11569	2,270,492	\$ 144.20	1,213.94	0.11878	2,262,772	\$ 138.24	1,196.46	0.11554	2,367,495	\$ 141.65	1,234.13	0.11477	2,286,541	\$ 135.54	1,174.83
7	1,229.75	0.10522	51,339	\$ 130.07	1,246.58	0.10434	51,833	\$ 128.83	1,236.59	0.10418							
8	1,161.88	0.13598	146,459	\$ 168.98	1,229.84	0.13740	151,325	\$ 167.26	1,225.98	0.13643							
9	1,242.19	0.11008	402,886	\$ 144.98	1,252.94	0.11572	422,213	\$ 150.50	1,298.80	0.11587	448,251	\$ 152.90	1,362.95	0.11219	443,309	\$ 160.39	1,330.20
10	1,114.07	0.11202	59,106,811	\$ 121.49	1,121.53	0.10832	60,338,973	\$ 123.82	1,122.54	0.11030	63,817,760	\$ 122.12	1,169.26	0.10444	61,845,981	\$ 125.35	1,116.01
11	1,048.29	0.12388	20,635,801	\$ 141.43	1,076.70	0.13135	20,775,080	\$ 145.06	1,064.66	0.13625	21,458,693	\$ 145.78	1,080.30	0.13494	21,194,790	\$ 143.13	1,045.41
12	988.51	0.15126	317,473	\$ 159.32	1,105.98	0.14406	306,446	\$ 153.98	1,039.24	0.14817	303,916	\$ 153.46	1,011.52	0.15171	304,210	\$ 141.21	1,000.15
13	852.48	0.12072	240,456	\$ 103.19	862.26	0.11967	242,356	\$ 98.50	861.43	0.11434	257,993	\$ 103.97	910.14	0.11423	250,486	\$ 105.66	879.79
14	780.17	0.13610	833,940	\$ 102.58	803.34	0.12769	837,470	\$ 105.65	801.71	0.13178	850,316	\$ 104.36	801.66	0.13018	838,564	\$ 103.25	778.49
15	1,021.73	0.14694	158,887	\$ 155.23	1,058.06	0.14671	162,254	\$ 155.39	1,066.93	0.14564	175,100	\$ 157.63	1,115.66	0.14128	171,017	\$ 159.18	1,068.48
16	1,181.01	0.12121	51,936	\$ 148.79	1,261.44	0.11795	53,464	\$ 133.03	1,266.44	0.10504							
17	1,106.59	0.12418	263,200	\$ 143.28	1,125.36	0.12732	274,962	\$ 155.37	1,212.35	0.12816	274,074	\$ 153.46	1,178.39	0.13023	277,174	\$ 152.84	1,164.62
18	1,084.57	0.13768	5,519,379	\$ 142.91	1,130.24	0.12644	5,519,757	\$ 149.64	1,128.96	0.13254	5,500,768	\$ 148.64	1,111.20	0.13376	5,399,907	\$ 149.37	1,074.35
19	945.10	0.11548	13,855	\$ 108.17	1,009.25	0.10718	14,134	\$ 112.01	1,025.99	0.10917							
20	1,192.08	0.11425	319,942	\$ 166.69	1,190.85	0.13998	331,661	\$ 168.78	1,214.34	0.13899	359,694	\$ 148.84	1,188.71	0.12521	370,494	\$ 114.39	1,081.04
21	1,191.70	0.11661	446,930	\$ 140.33	1,239.53	0.11321	448,208	\$ 131.69	1,237.97	0.10637	448,350	\$ 130.64	1,233.09	0.10594	439,751	\$ 131.72	1,207.01
22	1,061.33	0.11425	5,460,245	\$ 126.50	1,108.27	0.11414	5,478,867	\$ 122.88	1,076.15	0.11418	5,679,034	\$ 123.46	1,101.68	0.11207	5,550,534	\$ 121.32	1,054.91
23	1,163.27	0.12578	353,116	\$ 148.39	1,163.60	0.12752	378,163	\$ 155.38	1,209.36	0.12848	389,295	\$ 164.67	1,226.05	0.13431	381,492	\$ 163.80	1,192.86
24	1,112.90	0.11732	864,038	\$ 130.77	1,124.31	0.11631	915,636	\$ 134.64	1,143.12	0.11778	956,188	\$ 127.56	1,148.99	0.11102	977,954	\$ 136.11	1,130.53
25	913.10	0.09646	253,196	\$ 82.52	901.73	0.09151	257,339	\$ 83.29	908.76	0.09166	269,963	\$ 86.38	944.38	0.09146	262,810	\$ 83.34	910.64
26	1,129.91	0.10592	1,524,443	\$ 125.91	1,165.01	0.10808	1,539,686	\$ 123.41	1,162.14	0.10619	1,612,266	\$ 117.62	1,197.72	0.09820	1,597,345	\$ 126.99	1,160.69
27	1,125.24	0.10896	2,750,609	\$ 122.36	1,158.28	0.10564	2,875,266	\$ 125.00	1,195.05	0.10460	3,071,749	\$ 130.72	1,250.97	0.10450	3,077,225	\$ 126.26	1,206.31
28	888.97	0.12609	249,521	\$ 117.60	945.20	0.12441	255,157	\$ 115.01	958.79	0.11995	266,606	\$ 111.08	992.10	0.11196	266,714	\$ 112.36	981.59
29	922.67	0.10447	281,667	\$ 99.50	953.42	0.10436	285,657	\$ 98.41	941.98	0.10447	305,199	\$ 94.62	978.13	0.09674	301,038	\$ 92.74	949.10
30	1,018.50	0.09343	532,411	\$ 99.28	1,053.76	0.09422	537,008	\$ 101.49	1,047.63	0.09687	557,510	\$ 108.02	1,076.52	0.10034	547,723	\$ 111.89	1,046.87
31	1,170.14	0.12925	507,173	\$ 153.62	1,190.78	0.12901	545,985	\$ 151.79	1,192.97	0.12723	608,779	\$ 149.79	1,217.64	0.12302	622,693	\$ 137.89	1,163.63
32	995.75	0.11318	2,587,797	\$ 114.77	1,022.51	0.11225	2,600,463	\$ 120.91	1,002.74	0.12058	2,755,558	\$ 117.13	1,035.51	0.11311	2,707,351	\$ 124.31	986.47
33							49,000	\$ 124.28	1,065.03	0.11669							
34	942.68	0.11824	24,302	\$ 116.23	994.19	0.11691	23,621	\$ 108.74	953.23	0.11408							
35	1,009.60	0.11894	2,344,414	\$ 125.32	1,045.96	0.11981	2,389,141	\$ 123.72	1,037.56	0.11924	2,529,176	\$ 130.61	1,067.77	0.12232	2,449,976	\$ 126.55	1,006.78
36	1,050.23	0.12731	304,201	\$ 142.57	1,104.72	0.12906	304,532	\$ 139.23	1,086.93	0.12809	316,237	\$ 135.73	1,097.36	0.12369	313,338	\$ 131.61	1,062.00
37	874.78	0.11166	1,122,468	\$ 104.61	913.51	0.11451	1,151,709	\$ 103.25	921.92	0.11199	1,148,933	\$ 100.64	904.71	0.11124	1,139,089	\$ 103.67	892.81
38	1,080.34	0.13200	688,411	\$ 152.66	1,141.55	0.13373	698,386	\$ 155.35	1,153.55	0.13467	694,632	\$ 149.51	1,120.04	0.13348	696,695	\$ 141.21	1,110.20
39	1,141.11	0.11138	9,418,149	\$ 131.25	1,158.21	0.11332	9,584,236	\$ 127.44	1,165.76	0.10932	10,121,922	\$ 121.69	1,207.59	0.10077	9,940,945	\$ 135.13	1,161.65
40	828.65	0.14421	175,921	\$ 125.96	885.27	0.14228	175,855	\$ 124.93	871.47	0.14335	179,221	\$ 120.87	868.12	0.13923	180,750	\$ 119.49	856.26
41	1,048.23	0.12476	373,275	\$ 138.55	1,055.52	0.13126											
42	1,006.13	0.13460	317,096	\$ 141.34	1,045.24	0.13522	323,694	\$ 145.24	1,087.29	0.13358	317,862	\$ 143.19	1,057.85	0.13536	321,677	\$ 137.41	1,057.54
43	1,149.99	0.11443	2,829,803	\$ 142.03	1,202.40	0.11813	2,850,741	\$ 139.68	1,184.04	0.11797	3,038,999	\$ 141.50	1,239.77	0.11413	2,989,873	\$ 136.18	1,194.26
44	1,216.53	0.12496	153,062	\$ 155.16	1,272.08	0.12197	154,581	\$ 157.33	1,266.39	0.12424	159,051	\$ 158.35	1,284.08	0.12332	155,878	\$ 153.15	1,236.54
45	1,250.43	0.11179	182,829	\$ 146.28	1,185.85	0.12336	188,276	\$ 142.31	1,220.32	0.11662	193,996	\$ 142.04	1,324.46	0.10724	189,401	\$ 150.45	1,226.85

	FE	FF	FI	FJ	FK
1	2021 Rates	2022 Megawatt Hours	2022 Bills	2022 Usage	2022 Rates
2					
3	0.10744				
4	0.12742				
5	0.11666				
6	0.11537				
7					
8					
9	0.12058				
10	0.11232	69,473,785	\$ 153.33	1139.46	0.13467
11	0.13692	21,508,147	\$ 161.58	1041.86	0.15545
12	0.14119	305,593	\$ 146.03	997.81	0.14672
13	0.12009				
14	0.13263				
15	0.14898				
16					
17	0.13124				
18	0.13903				
19					
20	0.10582				
21	0.10913				
22	0.11501	5,723,164	\$ 151.03	1066.23	0.14043
23	0.13732				
24	0.12039				
25	0.09152				
26	0.10941				
27	0.10467				
28	0.11447				
29	0.09772				
30	0.10688				
31	0.11850				
32	0.12601				
33					
34					
35	0.12570				
36	0.12393				
37	0.11611				
38	0.12719				
39	0.11632	10,109,074	\$ 157.68	1154.67	0.13646
40	0.13955				
41					
42	0.12993				
43	0.11403				
44	0.12386				
45	0.12263				