

# RATE ADVISORY COMMITTEE: BILL ANALYSIS & RATE DISCUSSION

PRESENTED BY:

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Interim Vice President, Strategic Pricing & Enterprise Risk Management

October 21, 2021

Informational Update

### **OBJECTIVES & TAKEAWAYS**



- REVIEW THE COMPOSITION OF OUR BILLS
- BENCHMARK CPS ENERGY'S PRICES IN TEXAS
- SUMMARIZE DESIGN OF RATE INCREASE FOR CUSTOMER GROUPS

### **AGENDA**



- BILL ANALYSIS
- RESIDENTIAL TEXAS BILL COMPARISONS
- COMMERCIAL TEXAS BILL COMPARISONS
- RATE DESIGN

### **CUSTOMER GROUPS**



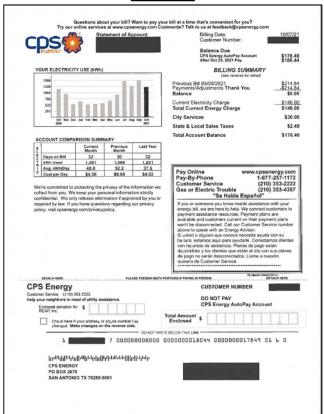
Customer Group	Abbreviation	Service Availability	Demand Charge
Residential Electric	RE	X	
Power & Light (Small Commercial)	PL	X	
Large Light and Power	LLP	X	X
Extra Large Power	ELP	Χ	X
Super Large Power	SLP	X	X

Examples of all bills are included in the attachment. We will concentrate on the Residential & the Large Electric customers.

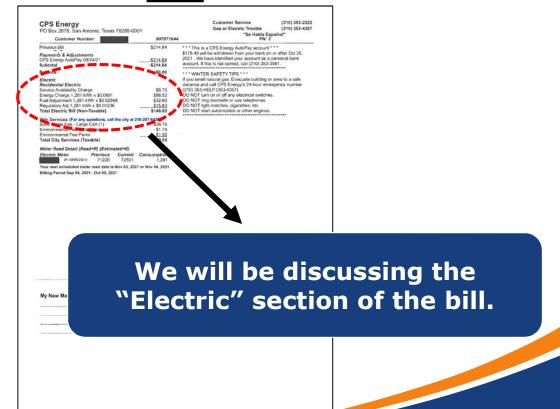
### **BILL SECTION FOR DISCUSSION**



#### **Front**



#### **Back**



# BILL EXPLAINED RESIDENTIAL ELECTRIC (RE)



#### Electric

#### Residential Electric

Service Availability Charge 1 \$8.75 Energy Charge 1,212 kWh x \$0.0691 2 \$83.75 Fuel Adjustment 1,212 kWh x \$0.02568 3 \$31.12 Regulatory Adj 1,212 kWh x \$0.01236 4 \$14.98 Affordability Discount 5 -\$8.55 Total Electric Bill (Non-Taxable) \$130.05

Each line on a residential bill can include several cost components.

#### **Costs Recovered by Charge**

- 1. Service Availability Charge: service drop, metering, billing, & customer svc.
- 2. Energy Charge: some fuel, <u>generation</u><sup>1</sup>, <u>distribution lines</u><sup>1</sup>, <u>transformers</u><sup>1</sup>, variable O&M, & Affordability Discount Program (ADP).
- 3. Fuel Adjustment: remaining fuel, PPAs (incl. renewables), market power purchases, & STEP. See Slide 6
- 4. Regulatory Adjustment: transmission, ERCOT admin. fees, & Electric Reliability Organization (ERO) fees.
- 5. Affordability Discount: credit to qualifying customer.

<sup>1</sup>Note these include fixed costs recovered in the variable component of the rate.

# BILL EXPLAINED LARGE COMMERCIAL (ELP)



#### Electric Extra Large Power

Service Availability Charge 1 \$1,000.00

Demand Charge 1,589 KW x \$8.75 2 \$13,903.75

Energy Charge 397,250 kWh x \$0.038 3 \$15,095.50

Energy Charge 589,750 kWh x \$0.0339 \$19,992.53

Fuel Adjustment 987,000 kWh x \$0.02568 4 \$25,346.16

Regulatory Adj 987,000 kWh x \$0.00706 5 \$6,968.22

Total Electric Bill (Taxable) \$82,306.16

Commercial bills have additional components such as demand charges.

#### **Costs Recovered by Charge**

- 1. Service Availability Charge: service drop, metering, billing, & customer svc.
- 2. Demand Charge: generation, distribution lines, & transformers.
- 3. Energy Charge: some fuel, <u>generation</u>, variable O&M, & Affordability Discount Program (ADP).
- 4. Fuel Adjustment: remaining fuel, PPAs (incl. renewables), market power purchases, ERCOT market charges, & STEP. See Slide 6
- 5. Regulatory Adjustment: transmission, ERCOT admin. fees, & Electric Reliability Organization (ERO) fees.

# BILL EXPLAINED FUEL ADJUSTMENT



Cost recovered by the Fuel Adjustment include:

- Generated Power Costs fuel cost associated with nuclear, coal & natural gas units
- Renewable Power Costs renewable energy purchases of wind, solar & landfill gas
- Market Power Purchases purchases from the ERCOT open market
- STEP recovery of energy efficiency programs

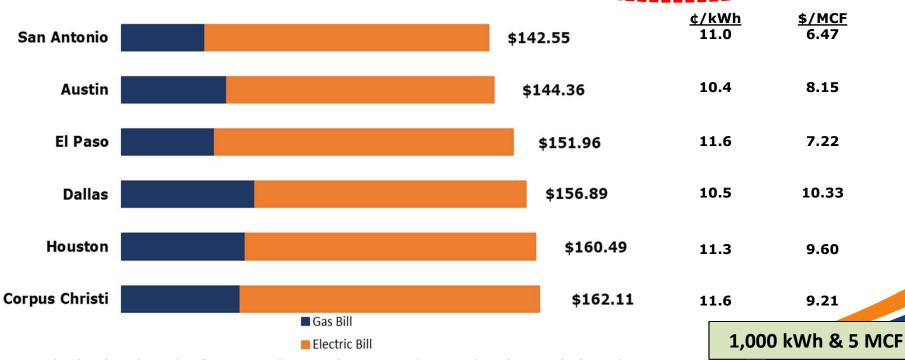


All types of energy costs are recovered through the fuel adjustment.

# TEXAS CITIES COMBINED RESIDENTIAL BILL COMPARISON-



#### TRAILING TWELVE MONTHS ENDING SEPTEMBER 2020

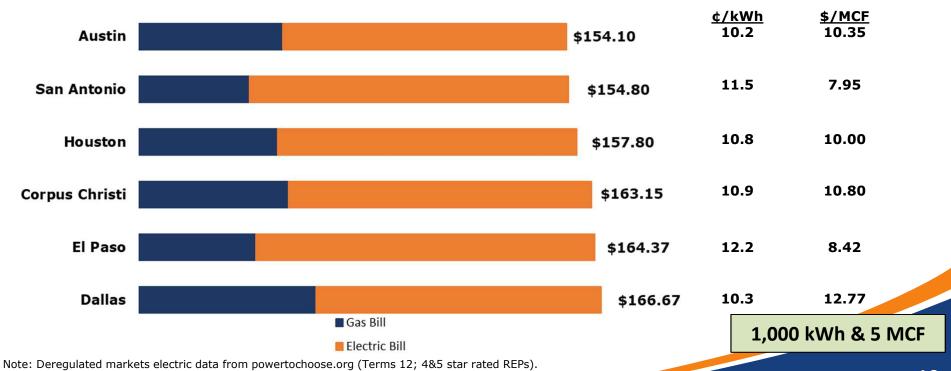


Note: Deregulated markets electric data from powertochoose.org (Terms 12; 4&5 star rated REPs), September's PTC data is based on October 5th offers

### **TEXAS CITIES COMBINED** RESIDENTIAL BILL COMPARISON



TRAILING TWELVE MONTHS ENDING AU



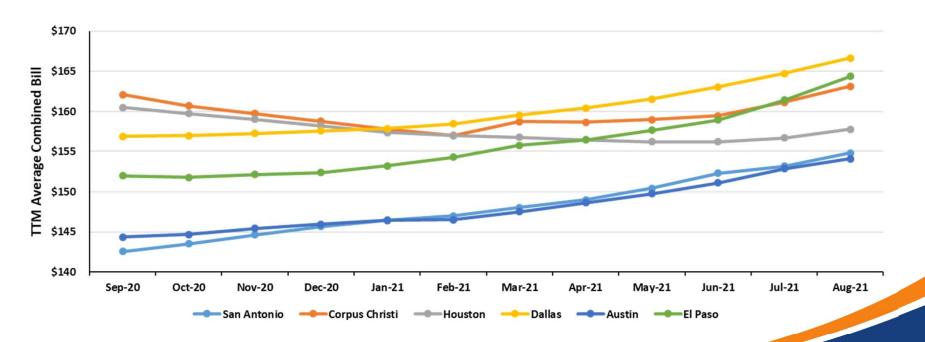
San Antonio is the only city that has a single electric & gas provider.

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### **BILL COMPARISON TREND**



### <u>Texas Cities Combined Residential Bill Comparison<sup>(1)</sup> – Trailing Twelve Months (TTM) Ending August 2021</u>



(1) Based on an average of 1,000 kWh/month & 5 MCF/month; Each data point reflects a 12-month average of bills.

(2) San Antonio is the only city that has a single electric & gas provider.

# BILL COMPARISONS BY USAGE LEVEL (AUGUST 2021)



		Austin	San Antonio	Houston	Corpus Christi	El Paso	Dallas	Average	
	Renewable Generation	\$3.51	\$4.13	\$0.00	\$0.00	\$0.00	\$0.00		
	<b>Conservation Programs</b>	\$1.34	\$1.96	\$0.32	\$0.34	\$0.50	\$0.40		
500 kWh	Electric	<u>\$44.38</u>	<u>\$53.75</u>	<u>\$60.18</u>	<u>\$60.66</u>	<u>\$63.88</u>	<u>\$57.08</u>		
20 CCF	Total Electric	\$49.23	\$59.83	\$60.50	\$61.00	\$64.38	\$57.48	\$58.74	
	Gas	\$29.87	\$21.69	\$31.22	\$27.81	\$28.78	\$39.69	\$29.84	
	Total Bill	\$79.10	\$81.52	\$91.72	\$88.81	\$93.16	\$97.17	\$88.58	
,		1	2		3				
	Renewable Generation	\$7.01	\$8.33	\$0.00	\$0.00	\$0.00	\$0.00		
	<b>Conservation Programs</b>	\$2.70	\$3.93	\$0.64	\$0.68	\$0.99	\$0.79		
1,000 kWh	Electric	<u>\$92.64</u>	<u>\$102.79</u>	\$107.14	<u>\$108.49</u>	<u>\$121.28</u>	<u>\$102.02</u>		
50 CCF	Total Electric	\$102.35	\$115.04	\$107.78	\$109.17	\$122.27	\$102.81	\$109.90	
	Gas	\$51.75	\$39.76	\$50.02	\$53.98	\$42.10	\$63.86	\$50.25	
	Total Bill	\$154.10	\$154.80	\$157.80	\$163.15	\$164.37	\$166.67	\$160.15	
		1	2	3				•	
	Renewable Generation	\$14.02	\$16.76	\$0.00	\$0.00	\$0.00	\$0.00		
	Conservation Programs	\$5.37	\$7.89	\$1.27	\$1.36	\$1.98	\$1.58		
2,000 kWh	Electric	<u>\$210.69</u>	<u>\$199.26</u>	<u>\$213.54</u>	<u>\$216.59</u>	<u>\$234.49</u>	<u>\$204.01</u>		
60 CCF	Total Electric	\$230.08	\$223.91	\$214.81	\$217.95	\$236.47	\$205.59	\$221.47	
	Gas	\$59.04	\$45.79	\$56.29	\$62.09	\$46.54	\$71.91	\$56.94	
	Total Bill	\$289.12	\$269.70	\$271.10	\$280.04	\$283.01	\$277.50	\$278.41	

Note: Bills reflect 12-month average pricing through August 2021; Deregulated markets electric data from powertochoose.org (Terms 12; 4&5 star rated REPs); Renewable Generation data not available for all other markets. San Antonio is the only city that has a single electric & gas provider.

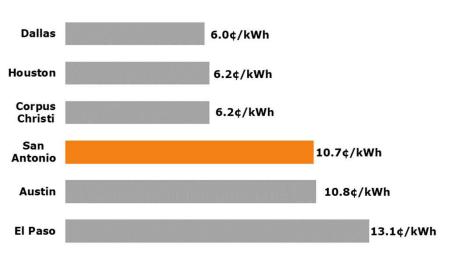
## TEXAS CITIES SMALL COMMERCIAL ELECTRIC PRICE COMPARISON



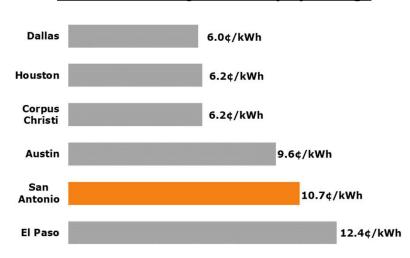
BROKER DATA, TRAILING MONTHS ENDING AUGUST 20211

#### **SMALL POWER EQUIVALENT (PL) Median Use**

#### **SMALL POWER EQUIVALENT (PL) Average**







PL based on an average of 19 kW & 5,475 kWh per month.

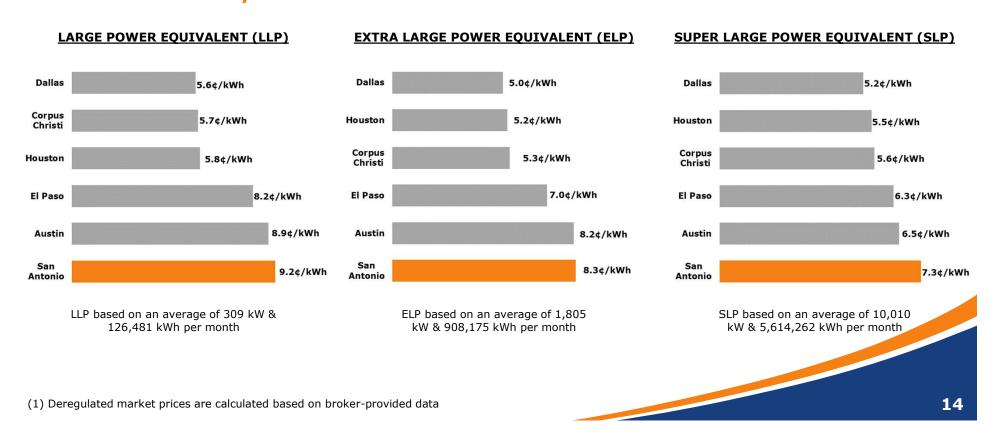
(1) Deregulated market prices are calculated based on broker-provided data

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## TEXAS CITIES LARGE COMMERCIAL ELECTRIC PRICE COMPARISON



BROKER DATA, TRAILING MONTHS ENDING AUGUST 2021<sup>1</sup>

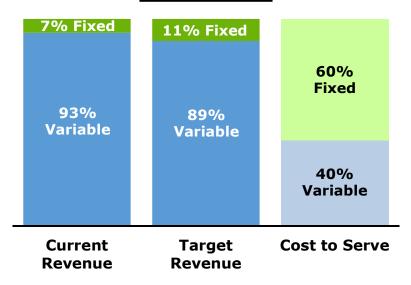


## CHANGING RATES TO IMPROVE REVENUE ALIGNMENT



**WORKING ESTIMATE** 

#### Residential



#### **Commercial & Industrial**



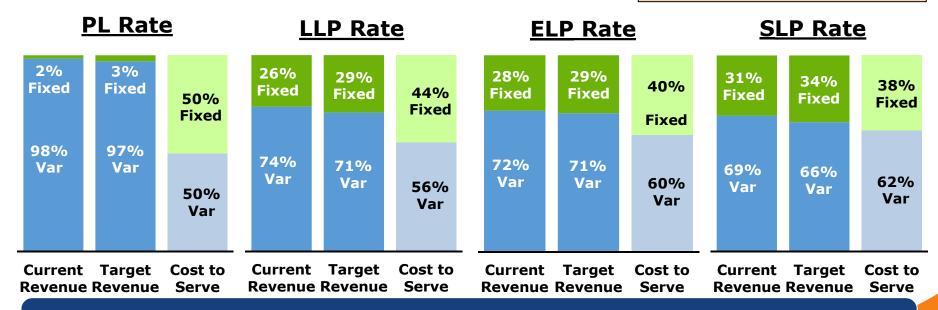
Increasing fixed charges more than variable charges is a small step in the right direction.

Note: Fixed versus Variable Cost to Serve based on FY2017 Cost of Service study; Target Revenue is based on budget projections & excludes winter storm recoveries

# CHANGING RATES TO IMPROVE REVENUE ALIGNMENT (CONT'D)



**WORKING ESTIMATE** 



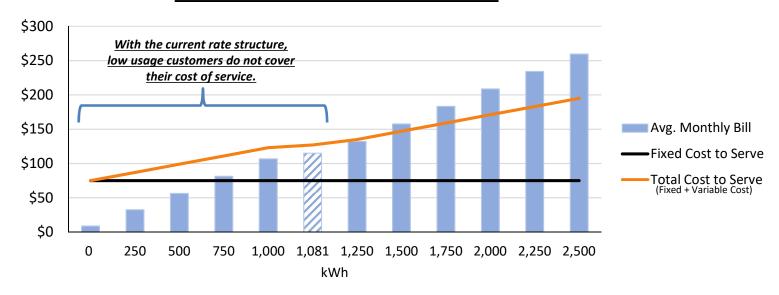
Increasing fixed charges more than variable charges is a small step in the right direction.

Note: Fixed versus Variable Cost to Serve based on FY2017 Cost of Service study; Target Revenue is based on budget projections & excludes winter storm recoveries

### RESIDENTIAL ELECTRIC COST TO SERVE VS BILLS



#### **Estimated Cost to Serve & Bills**



Note: 1,081 is the average monthly kWh for the Residential Electric (RE) class for FY2021

Low usage customers are not covering their cost of service.

### **CUSTOMER CHARGE**



#### **WORKING ESTIMATE**

	Customer	Current	New
	Charge Per	Service C	Cost Grid Cost
Rate Group	Cost-of-Service	<u>Availability</u> <u>Rec</u>	<u>covery Share Recovery</u>
Residential	\$ 21.64	\$ 8.75	40%   \$ 15.00 69%
PL	\$ 39.85	\$ 8.75	22%   \$ 15.00 38%
LLP	\$ 284.98	\$ 175.00	61%   \$ 300.00 105%
ELP	\$ 849.62	\$ 1,000.00	.18%   \$ 1,000.00 118%
SLP	\$ 6,088.74	\$ 1,000.00	16% \$ 1,750.00 29%

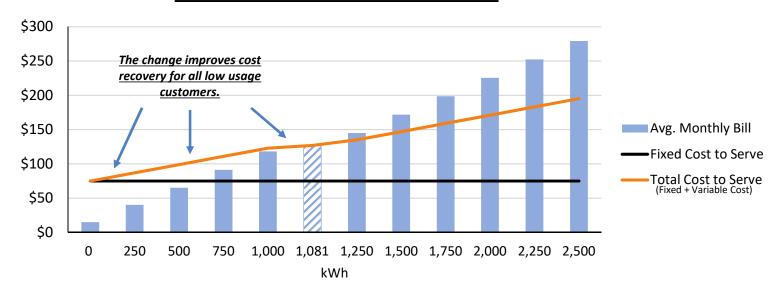
- $\$8.75 \rightarrow \$15$ : This is a small step toward rebalancing our rates so that revenue model aligns with cost model.
- Customer and demand costs are both fixed costs. For Residential & PL, even if all Customer costs are recovered in the customer charge, some fixed cost recovery will remain in the energy charge.

# RESIDENTIAL ELECTRIC COST TO SERVE VS BILLS



WORKING ESTIMATE

#### **Estimated Cost to Serve & Bills**



Note: 1,081 is the average monthly kWh for the Residential Electric (RE) class for FY2021

The higher the use, the more likely a residential customer will cover the total cost to serve.

### RESIDENTIAL BILL IMPACT AT VARIOUS USAGE LEVELS



**WORKING ESTIMATE** 

Residential Electric (RE) Non-ADP Avg. Mo. Bills											
kWh	FY '22	FY '23	\$Δ	<b>_</b> _%∆							
250	\$34.74	\$41.48	\$6.74	19.4%							
500	\$61.36	\$68.52	\$7.16	11.7%							
750	\$89.63	\$97.34	\$7.71	8.6%							
1,000	\$118.55	\$126.78	\$8.23	6.9%							
1,250	\$146.38	\$155.23	\$8.85	6.0%							
1,500	\$174.79	\$184.21	\$9.42	5.4%							
1,750	\$203.19	\$213.19	\$10.00	4.9%							
2,000	\$230.81	\$241.47	\$10.66	4.6%							
2,250	\$258.47	\$269.74	\$11.27	4.4%							
2,500	\$285.00	\$297.11	\$12.11	4.2%							

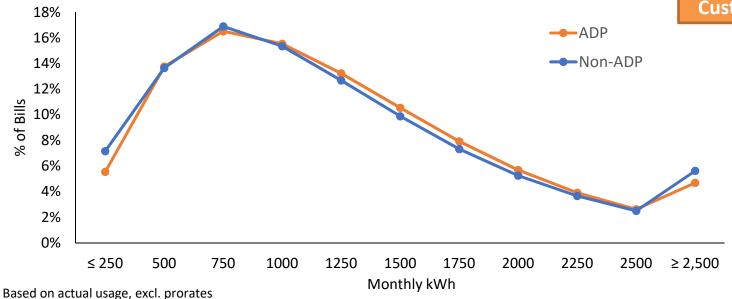
- As we saw, low usage customers are not covering their cost of service with the current rate structure
- With a higher customer charge, low usage customers have a higher % bill impact (but still a low \$ bill impact)
- CAUTION: Low usage ≠ low income

### ADP VS NON-ADP ELECTRIC USAGE ALL RE & RA CUSTOMERS









Usage patterns between ADP and Non-ADP customers are virtually identical.



### Thank You



### **Appendix**

# BILL COMPARISONS BY USAGE LEVEL (SEPTEMBER 2020)



		San Antonio	Austin	El Paso	Dallas	Houston	Corpus Christi	Average	
	Renewable Generation	\$4.98	\$3.51	\$0.00	\$0.00	\$0.00	\$0.00		
	<b>Conservation Programs</b>	\$2.06	\$1.74	\$0.51	\$0.37	\$0.30	\$0.26		
500 kWh	Electric	<u>\$50.37</u>	\$44.72	\$60.45	<u>\$59.62</u>	<u>\$64.25</u>	<u>\$67.00</u>		
20 CCF	Total Electric	\$57.41	\$49.97	\$60.96	\$59.99	\$64.55	\$67.26	\$60.02	
	Gas	\$18.72	\$26.90	\$25.65	\$33.57	\$29.86	\$23.89	\$26.43	
	Total Bill	\$76.13	\$76.87	\$86.61	\$93.56	\$94.41	\$91.15	\$86.46	
		1	2	3					
	Renewable Generation	\$9.93	\$7.01	\$0.00	\$0.00	\$0.00	\$0.00		
	Conservation Programs	\$4.13	\$3.48	\$1.02	\$0.75	\$0.60	\$0.52		
1,000 kWh	Electric	<u>\$96.13</u>	<u>\$93.14</u>	<u>\$114.84</u>	\$104.49	<u>\$111.90</u>	<u>\$115.52</u>		
50 CCF	Total Electric	\$110.19	\$103.63	\$115.86	\$105.24	\$112.50	\$116.04	\$110.58	
	Gas	\$32.36	\$40.73	\$36.10	\$51.65	\$47.99	\$46.07	\$42.48	
	Total Bill	\$142.55	\$144.36	\$151.96	\$156.89	\$160.49	\$162.11	\$153.06	
		1	2	3			•		
	Renewable Generation	\$19.97	\$14.02	\$0.00	\$0.00	\$0.00	\$0.00		
	<b>Conservation Programs</b>	\$8.24	\$6.97	\$2.04	\$1.49	\$1.20	\$1.05		
2,000 kWh	Electric	<u>\$185.76</u>	\$206.92	<u>\$221.63</u>	<u>\$208.38</u>	<u>\$221.89</u>	<u>\$226.80</u>		
60 CCF	Total Electric	\$213.97	\$227.91	\$223.67	\$209.87	\$223.09	\$227.85	\$221.06	
	Gas	\$36.90	\$45.33	\$39.58	\$57.68	\$54.03	\$52.64	\$47.69	
	Total Bill	\$250.87	\$273.24	\$263.25	\$267.55	\$277.12	\$280.49	\$268.75	
				9	(3)		-		

#### Our combined bills are the lowest at every usage level.

Note: Bills reflect 12-month average pricing through September 2020; Deregulated markets electric data from powertochoose.org (Terms 12; 4&5 star rated REPs), September's PTC data is based on October 5<sup>th</sup> offers; Renewable Generation data not available for all other markets

# PRE-RATE INCREASE CONSIDERATION DATA



#### Pre-Rate Increase Consideration

Values in \$	Summer & Non-Summer		Summer Non-Summer			mer ck 1)		ummer ck 1)		nmer ck 2)	Non-Si (Blo	ummer ck 2)	Sum	mer	Non-S	ummer	Sumn Non-Si	ner & ummer		
	Current	New	Current	New	Current	New	Current	New	Current	New	Current	New	Current	New	Current	New	Current	New	Current	New
Electric	Grid Sha	are Fee	Demand Charge (per kW)			Fee Demand Charge (per kW) Energy Charge (per kWh)						Peak Capacity Charge (per kWh)				ADP (per month)				
RE	8.75	15.00					0.06910	0.07400	0.06910	0.07400	0.06910	0.07400			0.0198	0.0213			-8.55	-12.75
RA	8.75	15.00				0.06910	0.07400	0.06910	0.07400	0.06910	0.07400	0.05920	0.06975	0.0198	0.0213			-6.33	-12.75	
PL	8.75	15.00					0.07190	0.08177	0.07190	0.08177	0.03320	0.03536	0.03320	0.03536	0.0198	0.0205	0.0100	0.0103		
LLP	175.00	300.00	10.00	12.75	7.50	9.40	0.04250	0.04541	0.04250	0.04541	0.03970	0.04080	0.03970	0.04080						
ELP	1000.00	1000.00	11.40	15.20	8.75	11.15	0.03800	0.04117	0.03800	0.04117	0.03390	0.03400	0.03390	0.03400						
SLP	1000.00	1750.00	14.70	19.00	9.90	13.25	0.02650	0.02605	0.02650	0.02605										
Gas	Grid Sha	are Fee	D	emand Cha	rge (CCF/da	y)		Energy Charge (per CCF)									ADP (per month)			
Res G	9.55	10.90					0.49000	0.55710	0.49000	0.55710									-3.75	-5.81
Com G	9.55	10.90					0.49000	0.55710	0.49000	0.55710										
Ind B	40.00	47.00					0.47300	0.54300	0.47300	0.54300	0.39600	0.41700	0.39600	0.41700						
LVG	375.00	440.00	0.95	1.12	1.25	1.45	0.31600	0.36080	0.31600	0.36080										

Grid Share fees and Demand Charge increases provide for greater fixed cost recovery.

# UNDERSTANDING YOUR CPS ENERGY BILL



#### **Understanding Your CPS Energy Bill**



#### Bill Help

- CPS Energy Fighting for its SA Customers
- How To Read Your Residential Bill (English)
- How To Read Your Residential Bill (Spanish)
- How To Read Your Commercial Bill (English)
- How To Read Your Commercial Bill (Spanish)
- Energy Cost Calculator

#### Fuel Adjustment & Rates

- Fuel Adjustment Current Month
- Fuel Adjustment 13 Month
- Rates

#### Average Cost Per kWh

The October 2021 average cost per kWh for residential customers is 11.6 cents.

The current 12 month average is 11.3 cents.

#### Base Rate Cost

The electric and gas charges found on your CPS Energy residential bill are made up of base rate components, the fuel adjustment, and the regulatory adjustment.

The formula for the residential electric base rate combines.

- . The Service Availability Charge covers the cost of metering and billing for your address, regardless of consumption.
- The Energy Charge recovers costs for power plants and other infrastructure based on the amount of electricity you use.
- The Peak Capacity Charge applies during the months of June through September when an additional charge of \$0.0198 is added to bills for every kilowatt hour (kWh) used in excess of 600 kWh. The Peak Capacity Charge covers the higher costs for electricity CPS Energy incurs during summer months when the demand for electricity is at its highest.

For the natural gas rate, the residential base rate includes just the Service Availability Charge and the Energy Charge. Each of these items is listed on the back of your bill.

Retail rates contain an electric fuel adjustment, or gas cost adjustment clause, which provides for recovery of fuel costs.

Electric and gas fuel adjustment factors (listed below) are set each month and may be positive or negative, depending on whether fuel costs for the period are above or below the amount that is built into the base rate. As a result, customers may see a charce or a credit on their monthly built.

For retail customers, the Fuel Adjustment Charge may appear as a charge or a credit on your monthly bill. Here's what goes into it:

- . Generated Power Costs-fuel costs associated with CPS Energy's nuclear, coal, and natural gas units
- Renewable Power Costs—renewable energy purchases of wind, solar, and landfill gas
- · Market Power Purchases--purchases from the open market
- Save for Tomorrow Energy Plan (STEP)—recovers portion of costs associated with energy efficiency programs

Costs recovered through the Regulatory Adjustment factor include:

We provide a comprehensive analysis of both residential and commercial customer bills on our website