

MESA CITY COUNCIL

ELECTRIC & GAS UTILITY RATES

ENERGY RESOURCES DEPARTMENT

10.31.19

# RATE ADJUSTMENT PRINCIPLES

- Recover costs incurred to provide service
  - Infrastructure investments to enhance safety, reliability & efficiency
- Promote energy efficiency & conservation
- Minimize rate/bill spikes
  - Long-term rate stability
  - Minimize bill impacts of extreme weather
- Benchmark with neighboring utilities (SRP & SWG)
- Proposed rate increases offset by reductions in energy supply costs

# CUSTOMER SUPPORT PROGRAMS

## *Small Business Attraction (E3.6D)*

- Attract new business customers to Central Business District and Town Center Redevelopment Area (CBD/TRA)
- Minimum & maximum consumption levels
- 3-year term & customer obligations including minimum number of employees
- 25% bill discount

# CUSTOMER SUPPORT PROGRAMS cont.

## *Customer Retention / Economic Development (E3.6)*

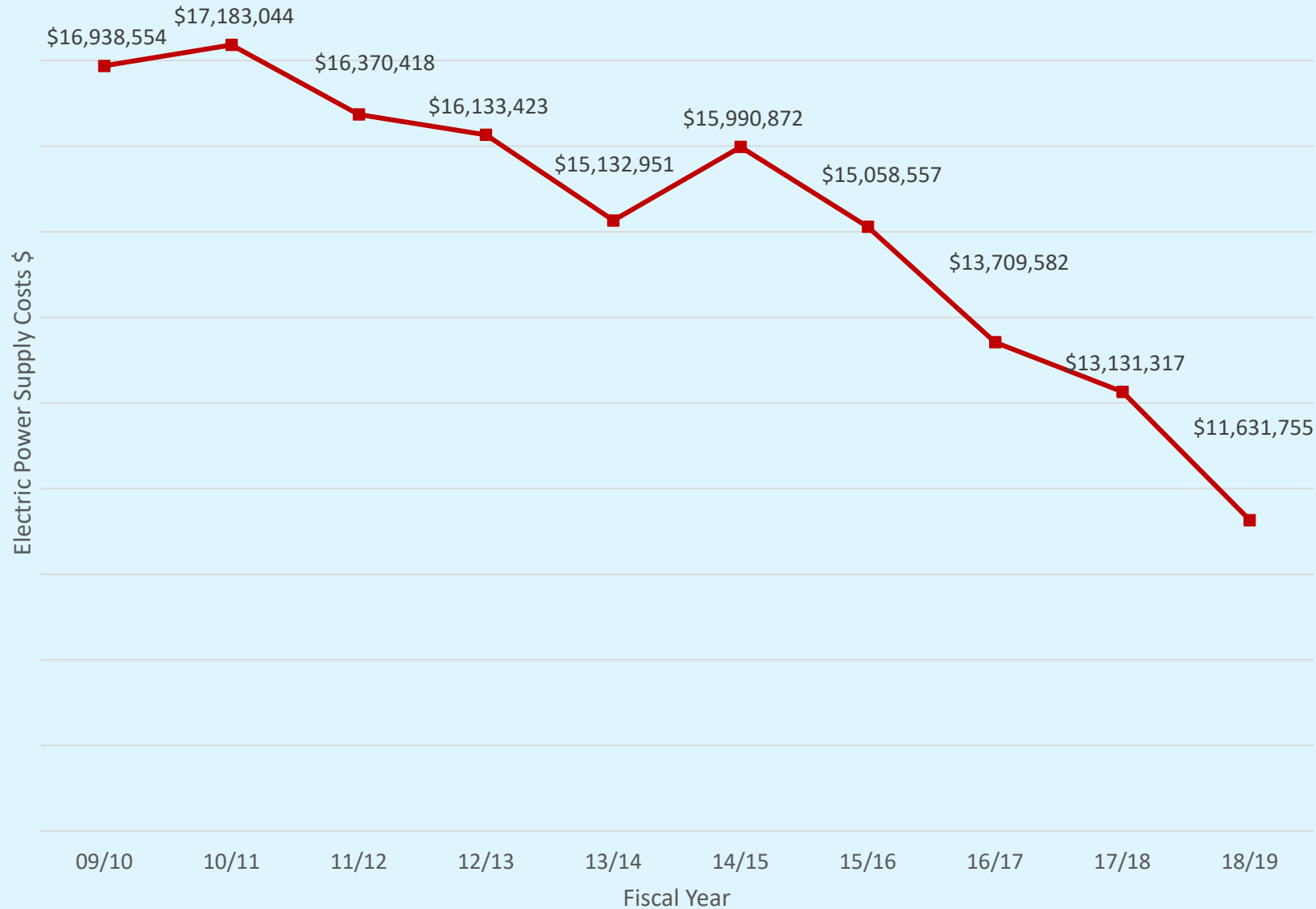
- New, Expansion and Retention of existing Customers
- Larger commercial customers, minimum annual consumption required
- Discounted rates for up to 5 years
- Full-time employees or capital investment minimums required
- Financial mechanism ensures customer does not leave prematurely after receiving discounts

# ELECTRIC RATE STRUCTURE

*There are three components*

- System Service Charge (fixed \$ per month per account)
- Usage (Consumption)
- Electric Energy Cost Adjustment Factor (EECAF)
  - Consumption
  - Pass-through of cost of commodity

## Electric Power Supply Costs



The benefits of competitive wholesale energy markets have been aggressively pursued, effectively captured and our customers have benefitted directly.

# PROPOSED ELECTRIC RATE ADJUSTMENTS

- *Proposed rate increases offset by reductions in energy supply costs*
- *Minimal Rate & Bill Adjustments*
  - Residential: System Service Charge rate adjustment (no change in Usage rate)
  - Non-Residential: System Service Charge rate adjustment (no change in Usage rate)
- *New Electric Services & Rates*
  - “Green” Tariff

# PROPOSED RESIDENTIAL ELECTRIC RATES

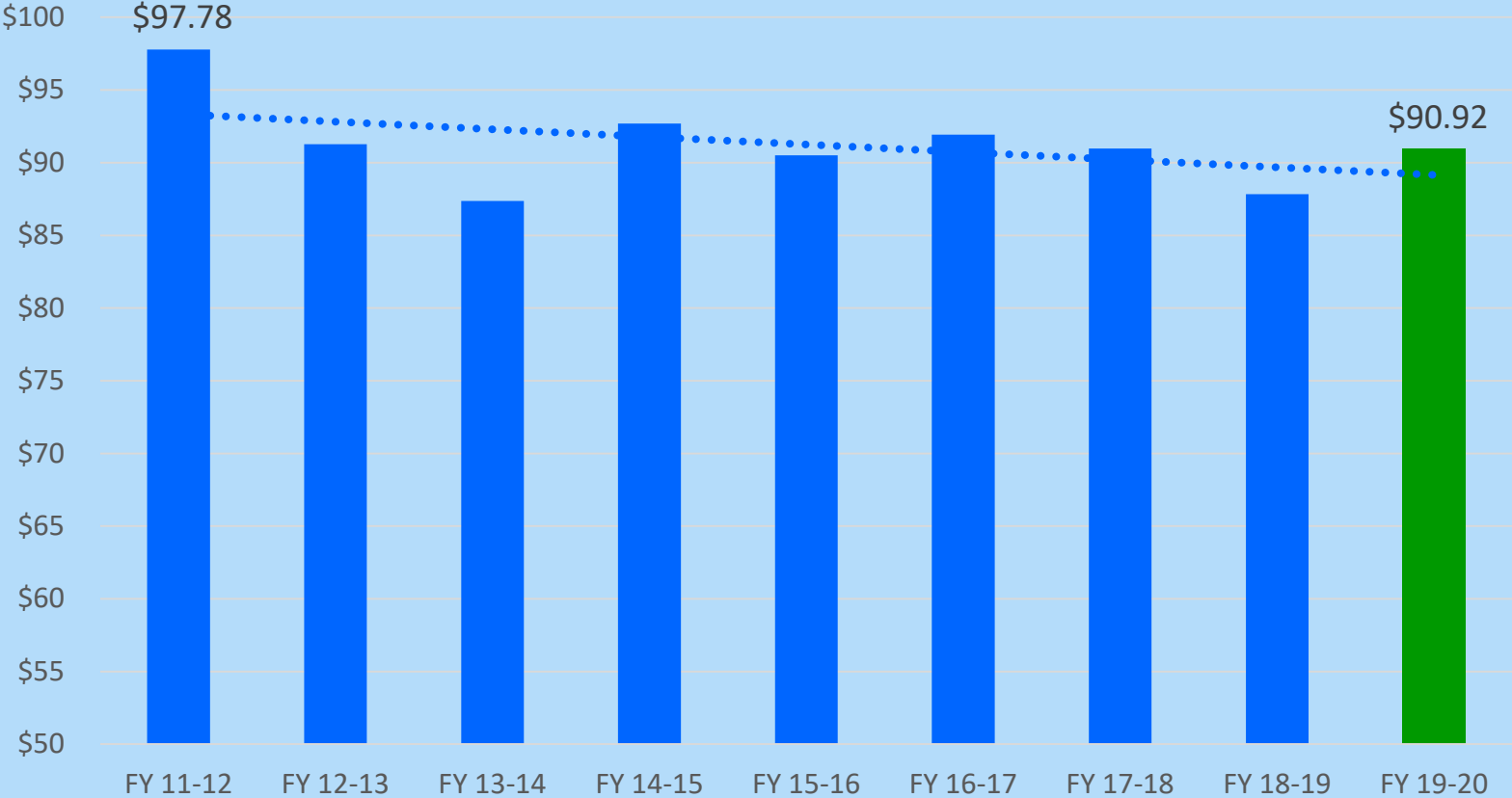
COMPONENT	CURRENT	PROPOSED
SYSTEM SERVICE CHARGE	\$ 11.75/MON	\$ 12.00/MON
USAGE CHARGE	\$ 0.05128/kWh	No Change
ELECTRIC ENERGY SUPPLY COST	\$ 0.04407/kWh	\$ 0.04844/kWh

- EECAF in PROPOSED column is average of EECAF forecast for FY 19/20
  - Forecast range of \$ 0.04590 to \$ 0.05533
- 4.6 % cumulative increase for average residential customer (829 kWh/month)
  - 4.3% due to forecasted monthly EECAF rate adjustments
  - 0.3% due to increase in System Service Charge



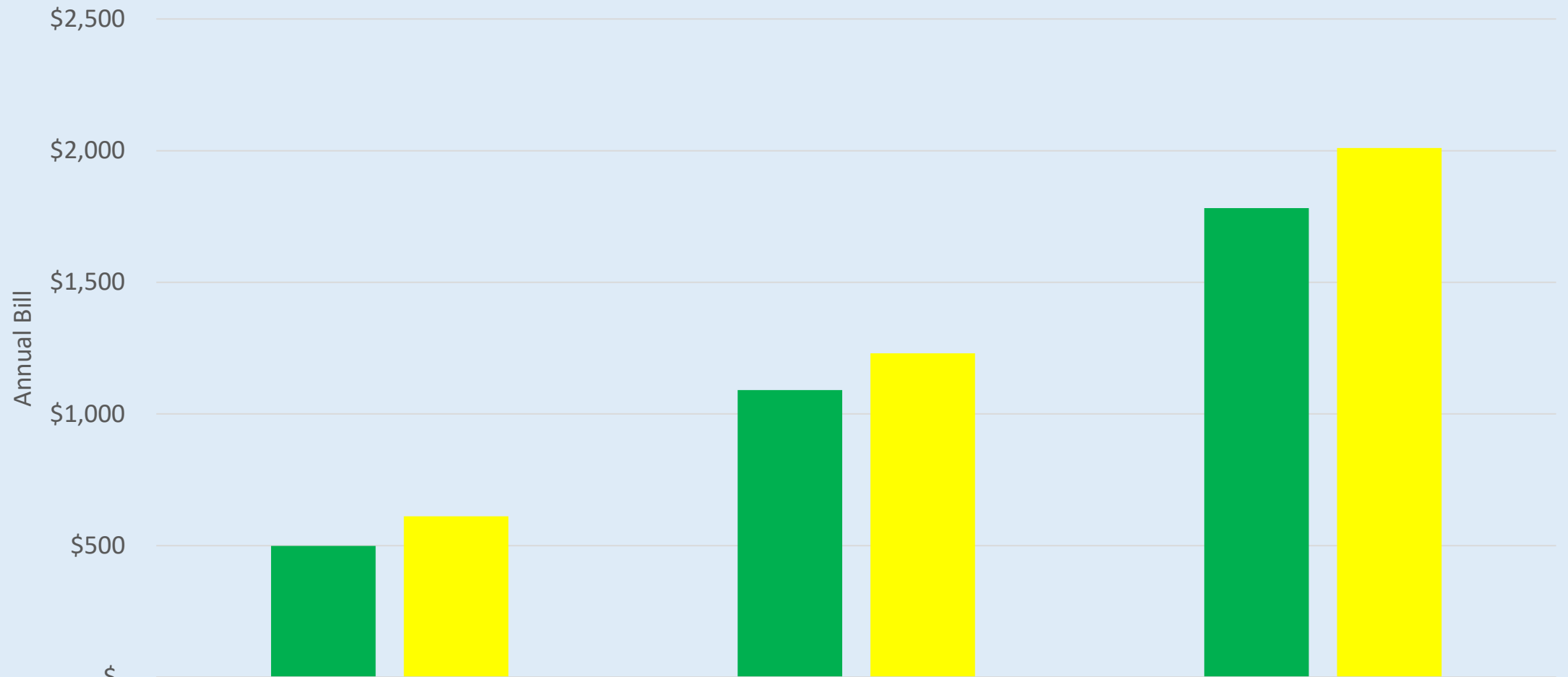
# PROPOSED RESIDENTIAL ELECTRIC RATES

Average Residential Electric Monthly Bills by Fiscal Year



- Average residential bills have decreased 10.2% over 8 years
- \$0.25 increase to System Service Charge for all residential customers
- 4.6% increase for average residential (829 kWh/month)

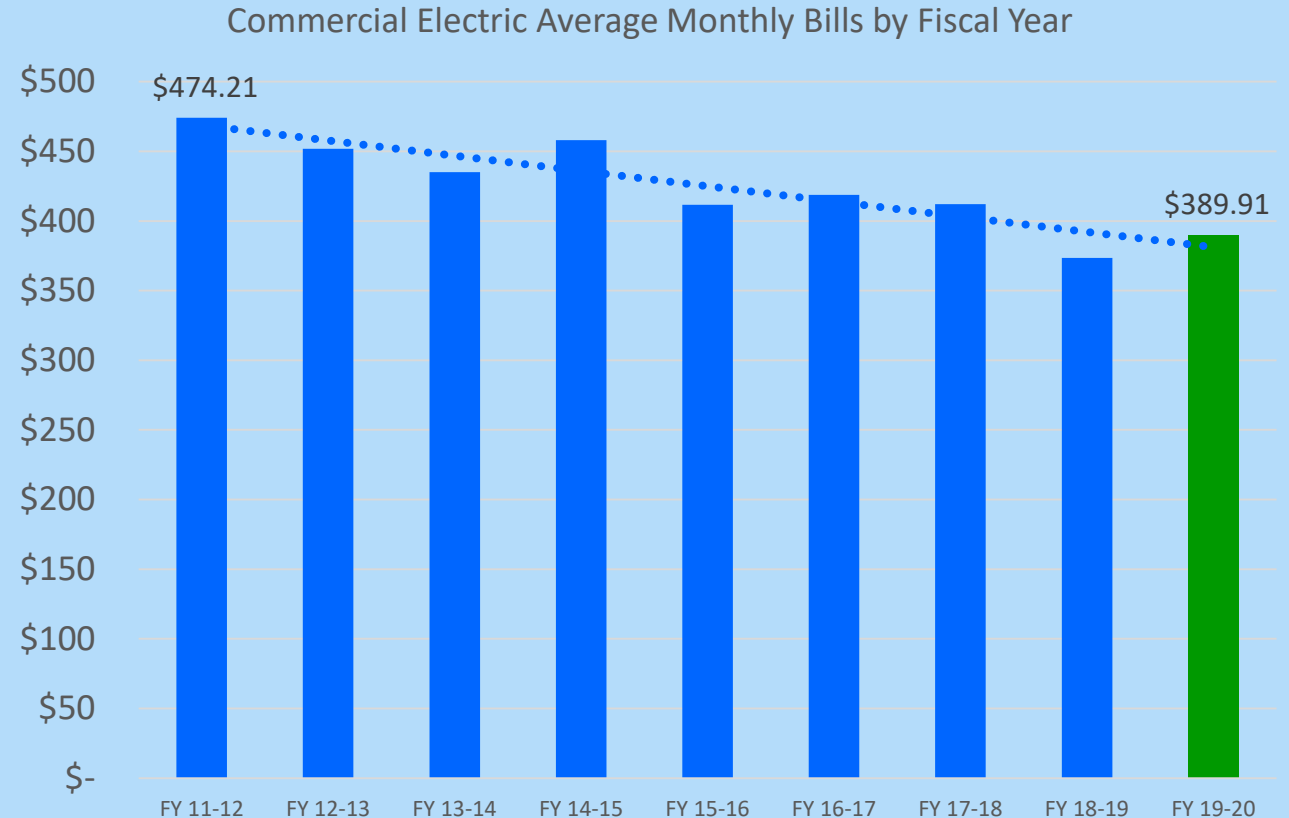
## Proposed Residential Electric Bill Comparison by Consumption (\$0.25 System Service Charge Increase)



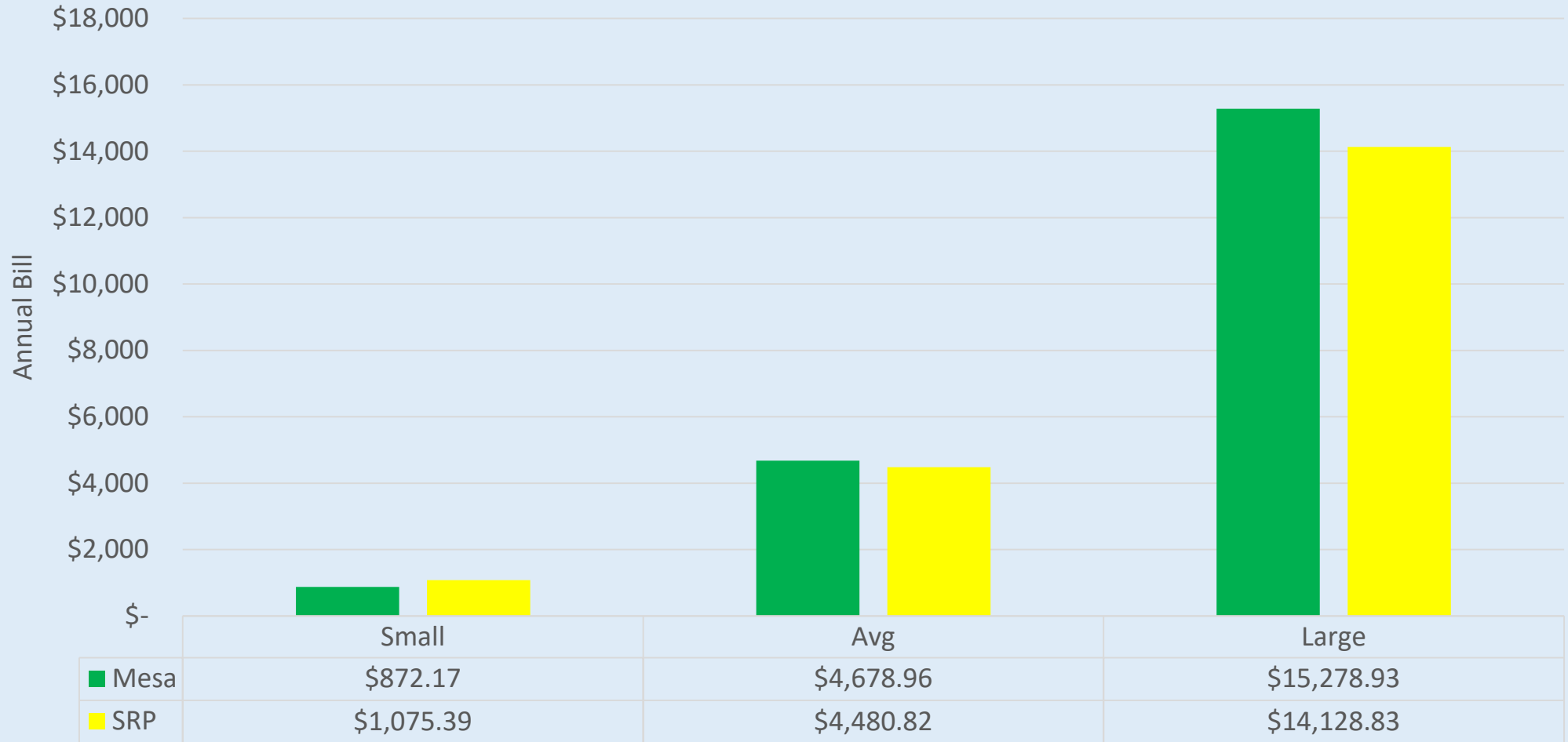
	Small	Avg	Large
Mesa	\$498.78	\$1,091.08	\$1,782.14
SRP	\$611.22	\$1,230.53	\$2,009.82

# PROPOSED COMMERCIAL ELECTRIC RATES

- Only EECAF adjustments since 2004
- Average commercial bills have decreased 21.2% over 8 years
- \$1.00 increase to System Service Charge for all commercial customers
- 5.3% increase for average commercial customer (3,919 kWh/month)



### Proposed Commercial Electric Bill Comparison by Consumption



# VOLUNTARY GREEN TARIFF

- Customers able to meet some or all their electric energy needs with renewable resources
  - Mesa ERD acquires renewable energy supplies on customers' behalf
- Additional \$0.01/kWh in EECAF rate component
  - Options for customer to elect 25%, 50%, 75%, 100% of needs with renewable energy

# BENEFITS OF GREEN TARIFF PARTICIPATION

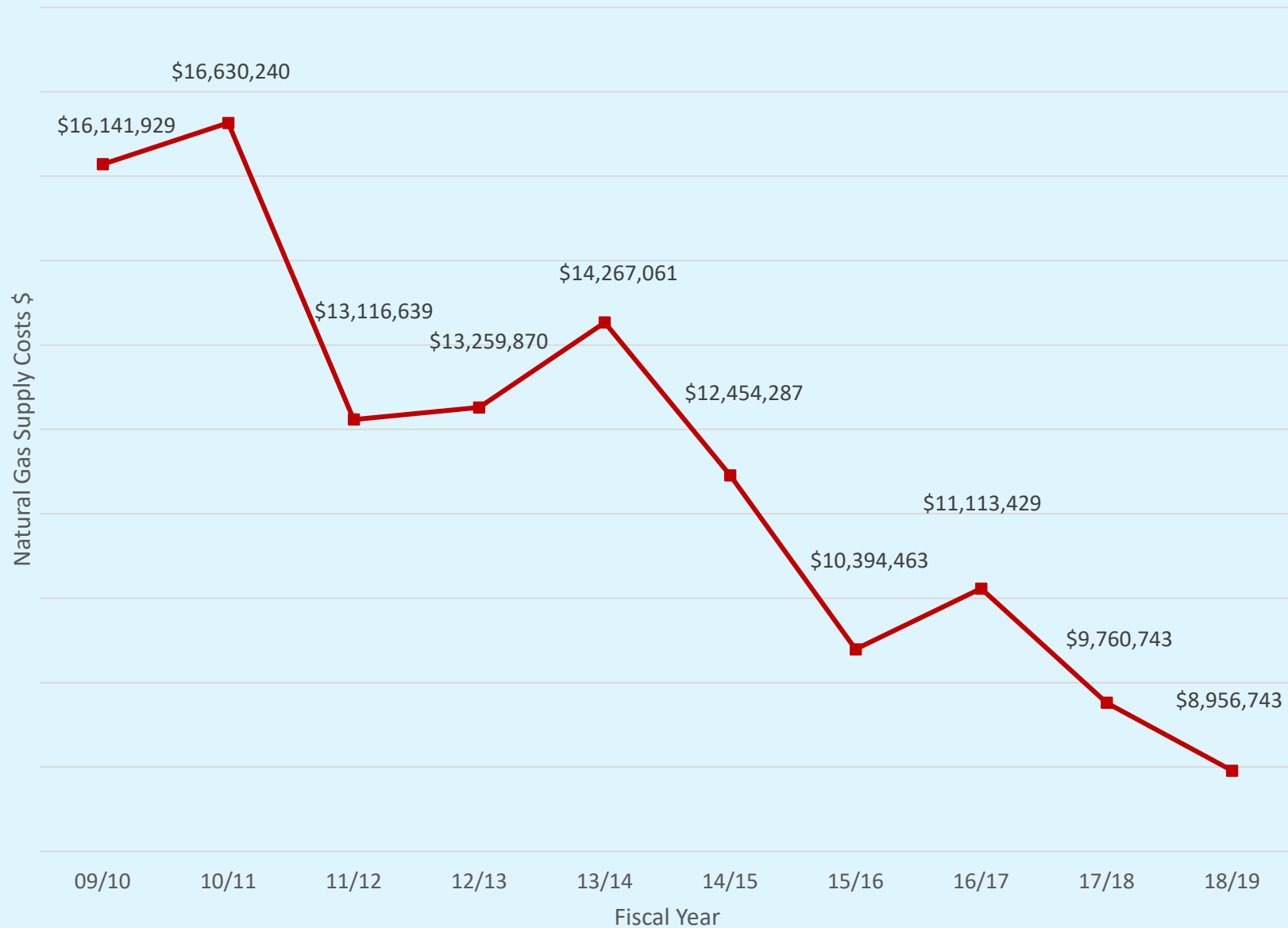
- ERD's renewable supplies competitively sourced
- Non-owner-occupied customers can meet energy needs with renewables
- Advantages relative to customer installations
  - Economies of scale relative to roof top Solar
  - Avoid initial investment & ongoing maintenance and repair costs
  - Eliminates risks of overestimated benefits & longer payback periods than what vendor presented
  - Can supplement customer owned to meet still more of their needs w renewables

# NATURAL GAS RATE STRUCTURE

*There are three components*

- System Service Charge (fixed \$ per month per account)
- Usage (Consumption)
- Purchased Natural Gas Cost Adjustment Factor  
(PNGCAF)
  - Consumption
  - Pass-through of cost of commodity

## Natural Gas Supply Costs



The benefits of competitive wholesale energy markets have been aggressively pursued, effectively captured and our customers have benefitted directly.



# PROPOSED GAS RATE ADJUSTMENTS

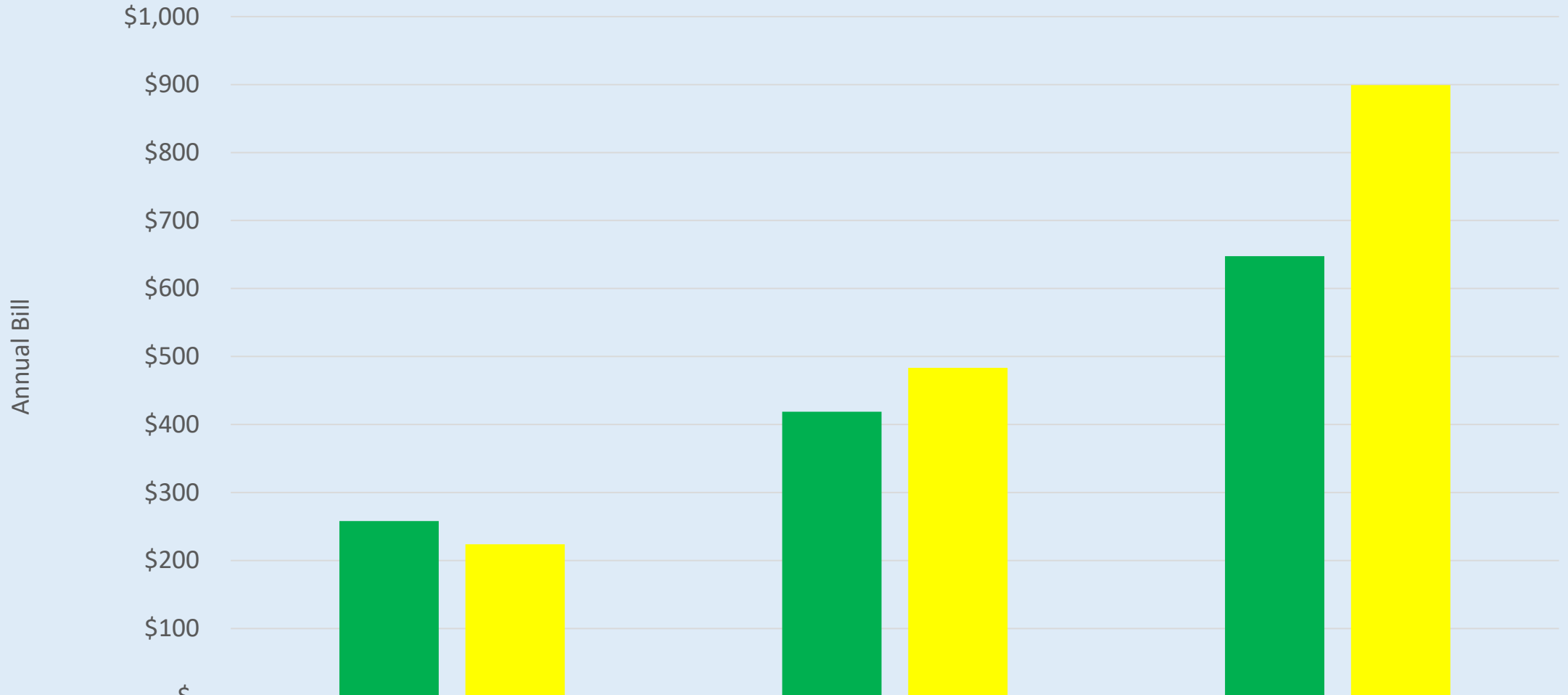
- *Proposed rate increases offset by reductions in energy supply costs*
- *Minimal Rate & Bill Adjustments for natural gas*
  - Residential: System Service Charge rate adjustment (no change in usage rate)
  - Non-Residential: System Service Charge rate adjustment (no change in usage rate)
- *Compressed Natural Gas (CNG) service charge and consumption rate adjustments*

# PROPOSED RESIDENTIAL GAS RATES

COMPONENT	CURRENT	PROPOSED
SYSTEM SERVICE CHARGE (Avg.)	\$ 15.78/MON	\$ 16.53/MON
USAGE CHARGE	\$ 0.6685/therm	No Change
NATURAL GAS SUPPLY COST	\$ 0.24731/therm	\$ 0.19138/therm

- PNGCAF in PROPOSED column is average of PNGCAF forecast for FY 19/20
- 3.2% decrease for average residential customer (22.47 therms/month) PNGCAF reductions offset System Service Charge increase

### Proposed Residential Gas Bill Comparison by Consumption



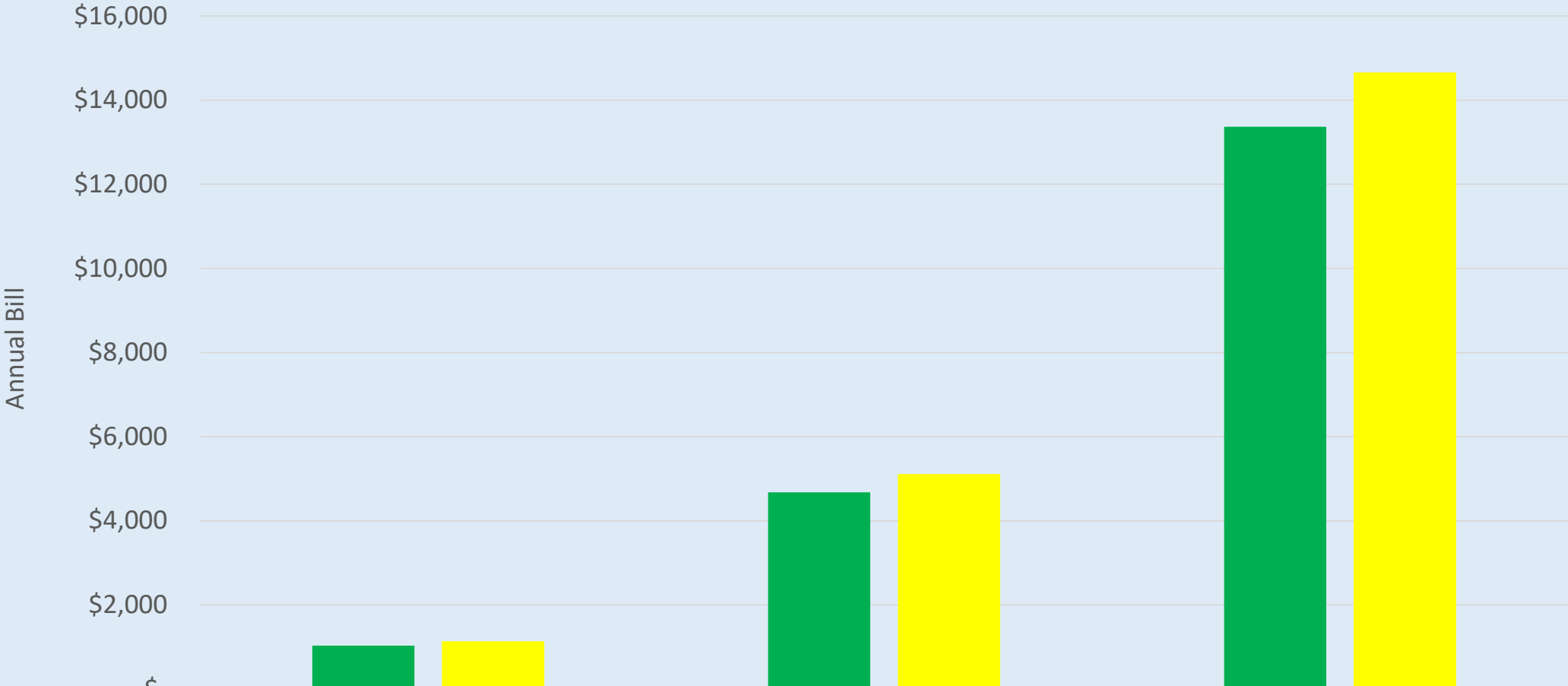
	Small	Avg	Large
■ Mesa Annual Bill	\$258.08	\$418.85	\$647.43
■ SWG Annual Bill	\$223.98	\$483.48	\$899.09

# PROPOSED COMMERCIAL GAS RATES

COMPONENT	CURRENT	PROPOSED
SYSTEM SERVICE CHARGE (Avg.)	\$ 38.50/MON	\$ 40.50/MON
USAGE CHARGE	\$ 0.5718/therm	No Change
NATURAL GAS SUPPLY COST	\$ 0.24731/therm	\$ 0.19138/therm

- PNGCAF in PROPOSED column is average of PNGCAF forecast for FY 19/20
- 7.4% decrease for average commercial customer (467.89 therm/month) PNGCAF reductions offset System Service Charge increase

### Proposed Commercial Gas Bill Comparison by Consumption



	Small	Avg	Large
■ Mesa Annual Bill	\$1,028.49	\$4,673.68	\$13,368.93
■ SWG Annual Bill	\$1,133.07	\$5,109.70	\$14,658.65

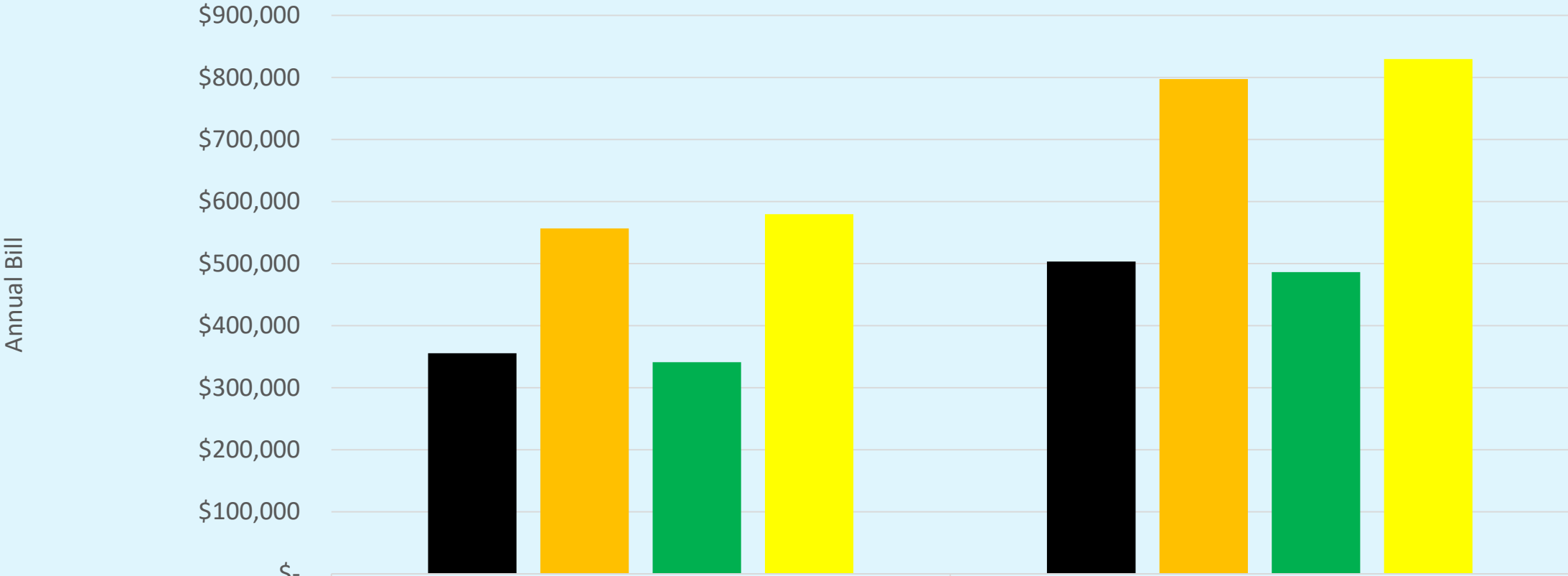
# PROPOSED LARGE CNG GAS RATES

COMPONENT	CURRENT	PROPOSED
SYSTEM SERVICE CHARGE (Large)	\$ 38.50/MON	\$ 100.00/MON
USAGE CHARGE	\$ 0.0879/therm	\$ 0.1379/therm
NATURAL GAS SUPPLY COST	\$ 0.24731/therm	\$ 0.19138/therm

- PNGCAF in PROPOSED column is average of PNGCAF forecast for FY 19/20
- PNGCAF reductions offset proposed increases

Percent <u>Decrease</u> by Customer	
Customer 1	Customer 2
4.0%	3.4%

### Large CNG Bill Comparison



	Customer 1	Customer 2
■ Mesa Current Annual Bill	\$355,535.56	\$503,326.75
■ SWG Current Annual Bill	\$556,771.65	\$797,192.72
■ Mesa Proposed Annual Bill	\$341,197.98	\$486,454.30
■ SWG Proposed Annual Bill	\$579,516.45	\$829,659.46

# PROPOSED SMALL CNG GAS RATES

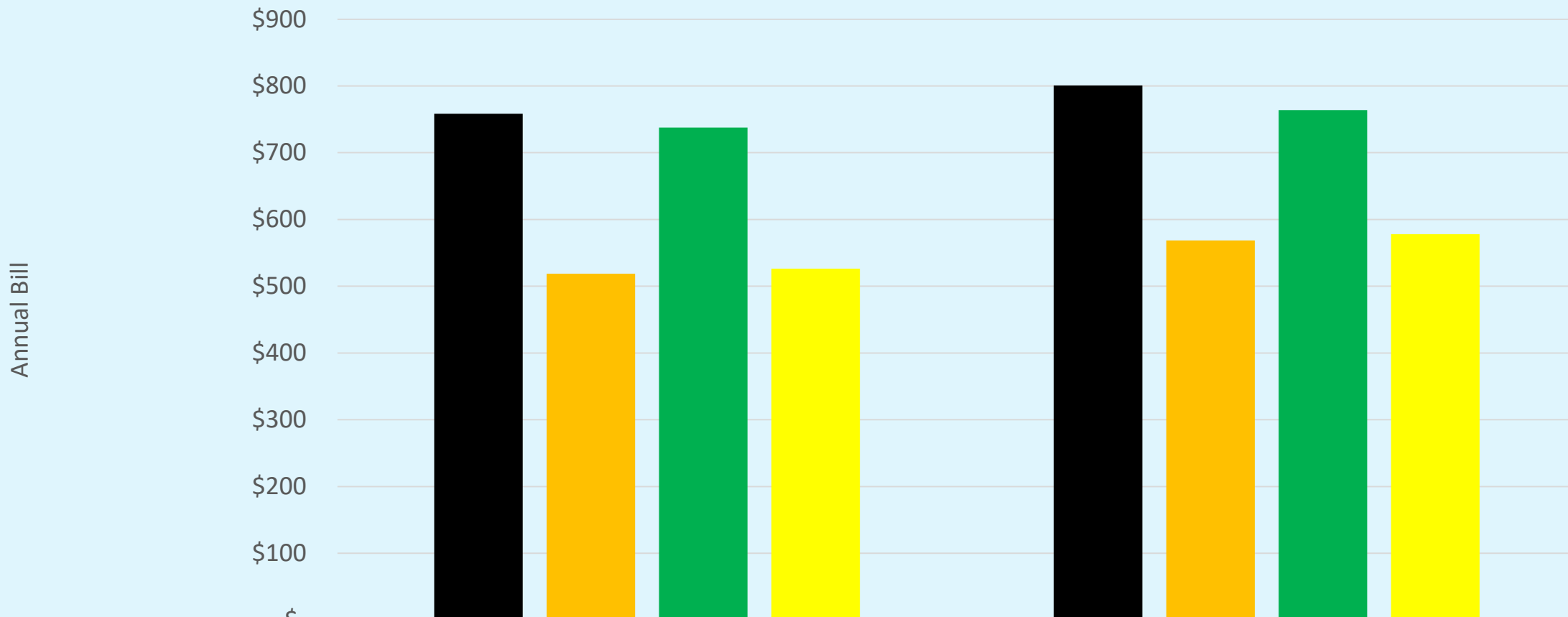
COMPONENT	CURRENT	PROPOSED
SYSTEM SERVICE CHARGE (Small)	\$ 38.50/MON	No Change
USAGE CHARGE	\$ 0.0879/therm	\$ 0.1379/therm
NATURAL GAS SUPPLY COST	\$ 0.24731/therm	\$ 0.19138/therm

- PNGCAF in PROPOSED column is average of PNGCAF forecast for FY 19/20
- PNGCAF reductions offset proposed increases

Percent <u>Decrease</u> by Customer	
Customer 1	Customer 2
2.7%	4.6%



### Small CNG Bill Comparison



	Customer 1	Customer 2
■ Mesa Current Annual Bill	\$758.32	\$800.52
■ SWG Current Annual Bill	\$518.83	\$568.69
■ Mesa Proposed Annual Bill	\$737.70	\$763.89
■ SWG Proposed Annual Bill	\$526.13	\$577.74

QUESTIONS?

# PROPOSED RESIDENTIAL ELECTRIC RATES

Proposed increase to Residential System Service Charge is appropriate method to increase revenues

- Revenue Stability
  - Revenue needs are insulated from extreme weather & associated consumption
    - Customer benefit – bill spikes are mitigated when inordinate weather spikes consumption
    - Utility Benefit – precipitous drops in revenue are mitigated when mild weather results in reduced consumption
- AMI will increase the costs of metering, billing, etc. – these costs are typically recovered in this component
- Recent rate increases (since 2014) offset by EECAF decreases since 2012
- Residential Rates/Bills remain comparable with SRP residential customers
- Benefits to SEA participants increase by 1.5%

# ELECTRIC RESIDENTIAL BILL COMPONENTS

COMPONENT	RATES	AVG CUST BILL
SYSTEM SERVICE CHARGE	\$ 11.75/MON	\$ 11.75
USAGE CHARGE *	\$ 0.05128/kWh	\$ 38.34
ELECTRIC ENERGY SUPPLY COST **	\$ 0.04407/kWh	\$ 36.84
TOTAL BILL		\$ 86.93 \$ 0.1037/kWh

\* Summer rate for 1-1200kWh/month

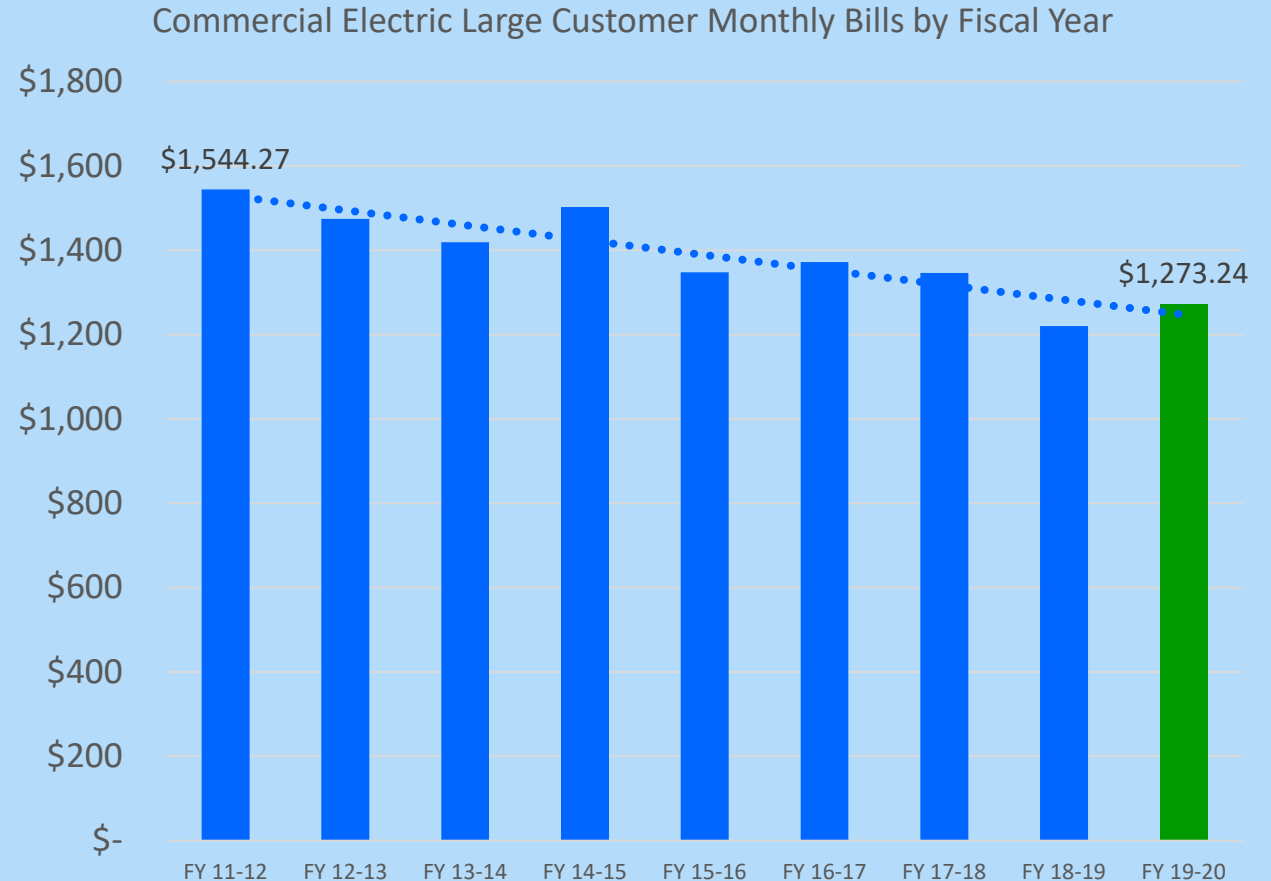
- \$ 0.04822 for >1200 kWh
- Lower rates in Winter months

\*\* Electric Energy Supply Cost Adjustment Factor (EECAF)

- Adjusted Monthly
- \$0.03951 - \$0.05533 in the most recent 12 months

# PROPOSED LARGE COMMERCIAL ELECTRIC RATES

- Only EECAF adjustments since 2004
- Large commercial bills have decreased 21.2% over 8 years
- \$1.00 increase to System Service Charge for all commercial customers
- 5.2% increase for Large commercial customer (3,919 kWh/month)



# GAS RESIDENTIAL BILL COMPONENTS

COMPONENT	RATES	AVG CUST BILL
SYSTEM SERVICE CHARGE *	\$ 17.24/MON	\$ 15.78
USAGE CHARGE *	\$ 0.6685/therm	\$ 14.08
PURCHASED GAS SUPPLY COST **	\$ 0.24731/therm	\$ 6.22
TOTAL BILL		\$ 36.08 \$ 1.88 /therm

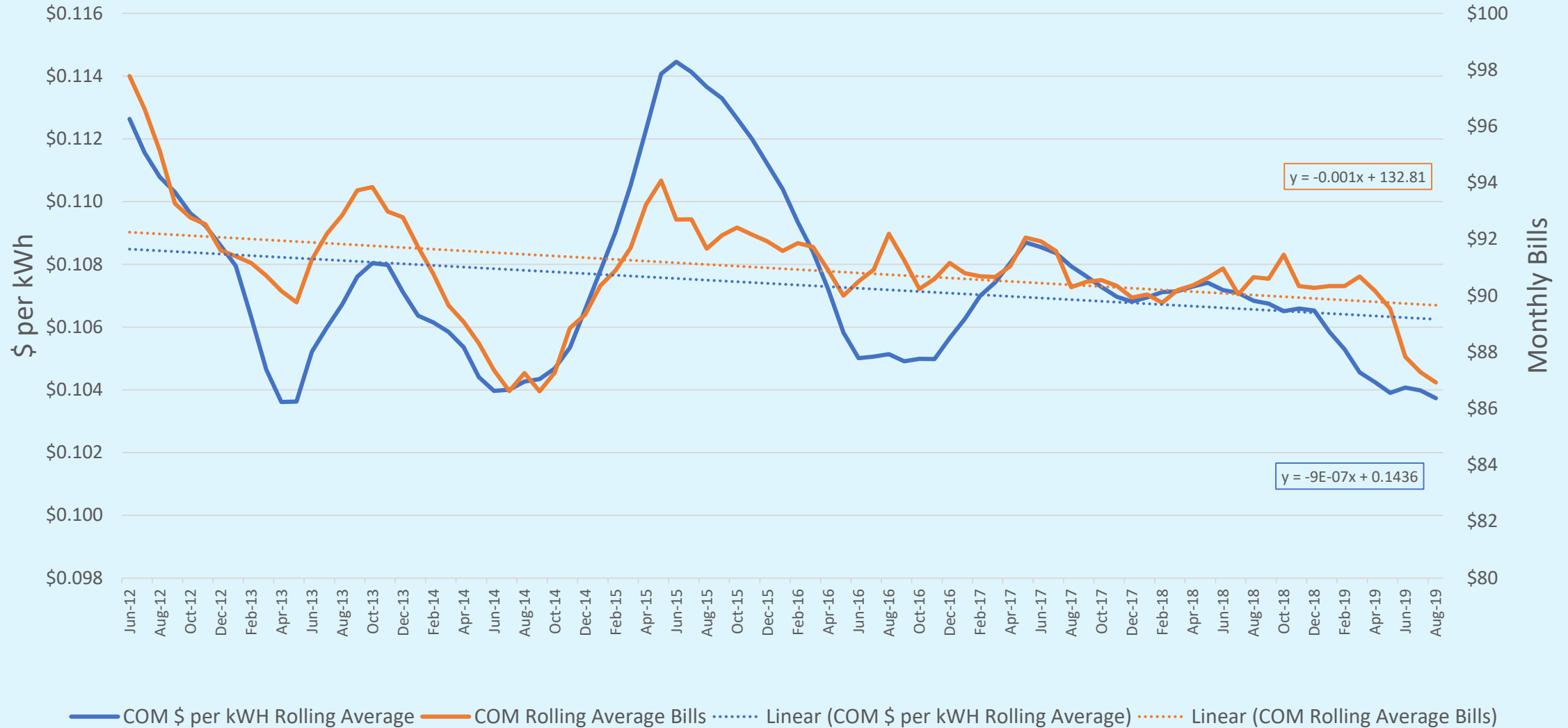
\* Winter rate for 1-25 therms/month

- \$ 0.4926 for >25 therms
- Lower rates in Summer months (\$ 14.31 system service charge)

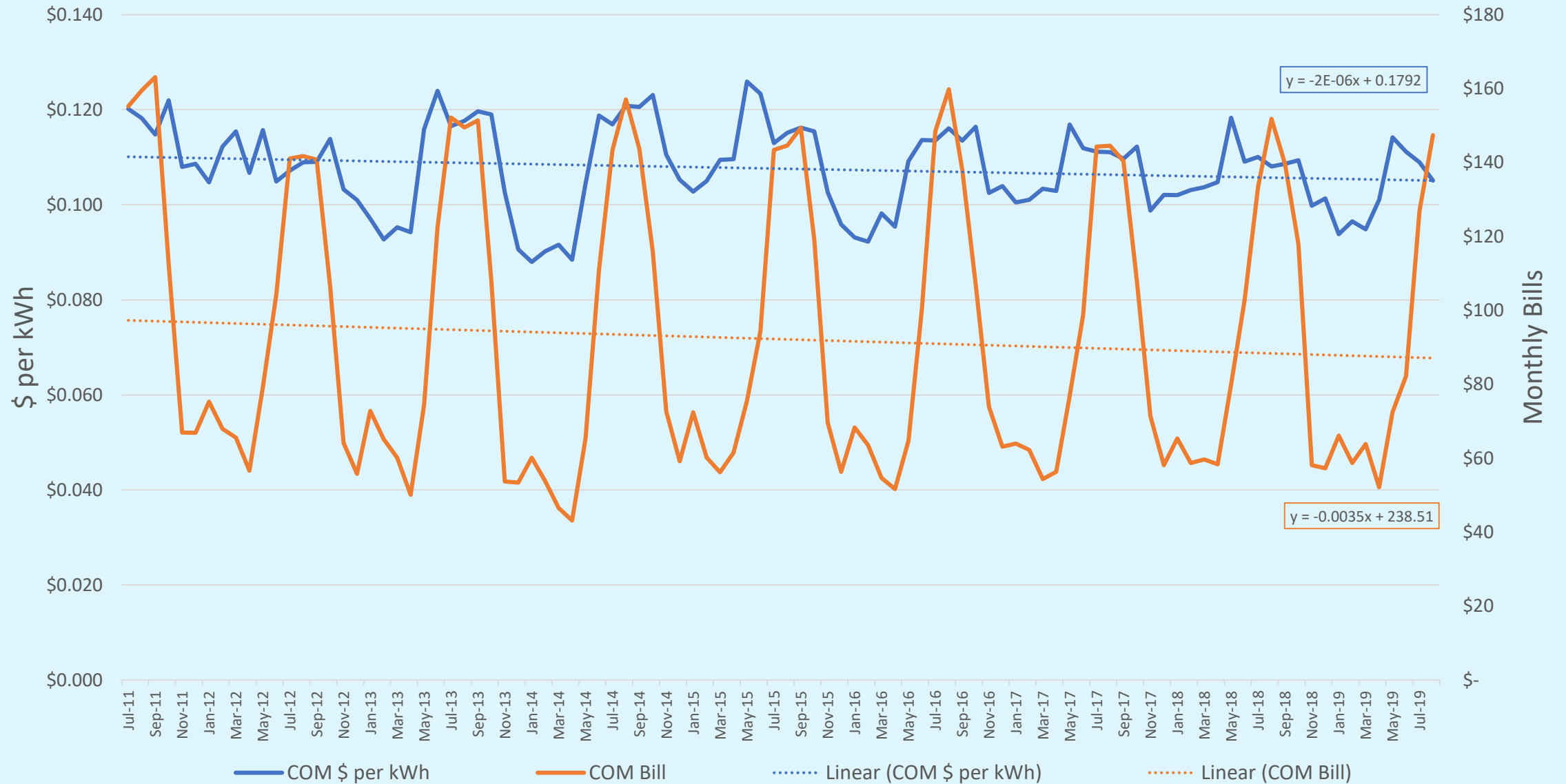
\*\* Purchased Natural Gas Cost Adjustment Factor (PNGCAF)

- Adjusted Monthly
- \$0.10000 - \$0.34954 per therm in the most recent 12 months

# Average Residential Customer \$ per kWh & Monthly Bills

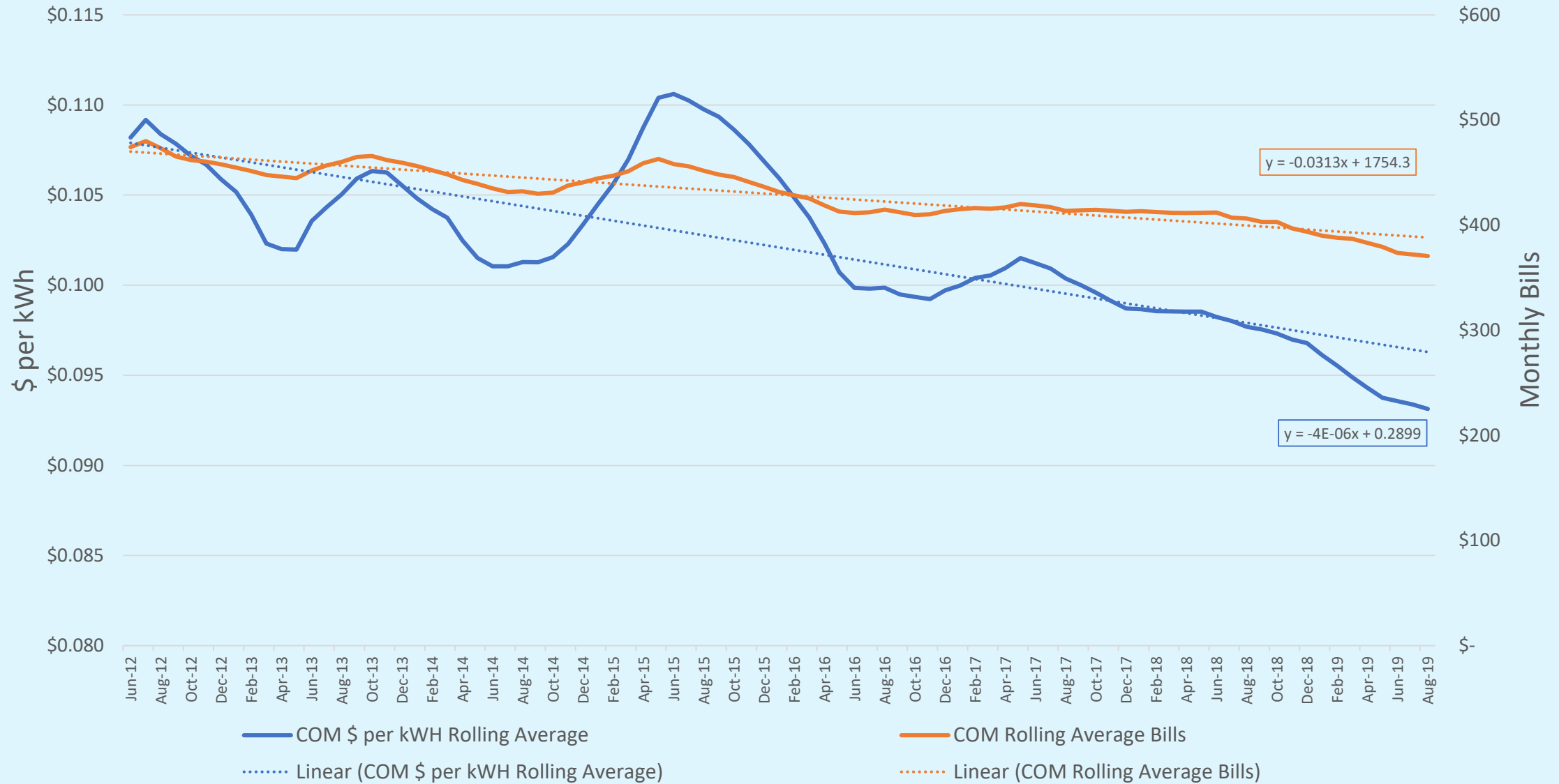


# Average Residential Customer \$ per kWh & Monthly Bills

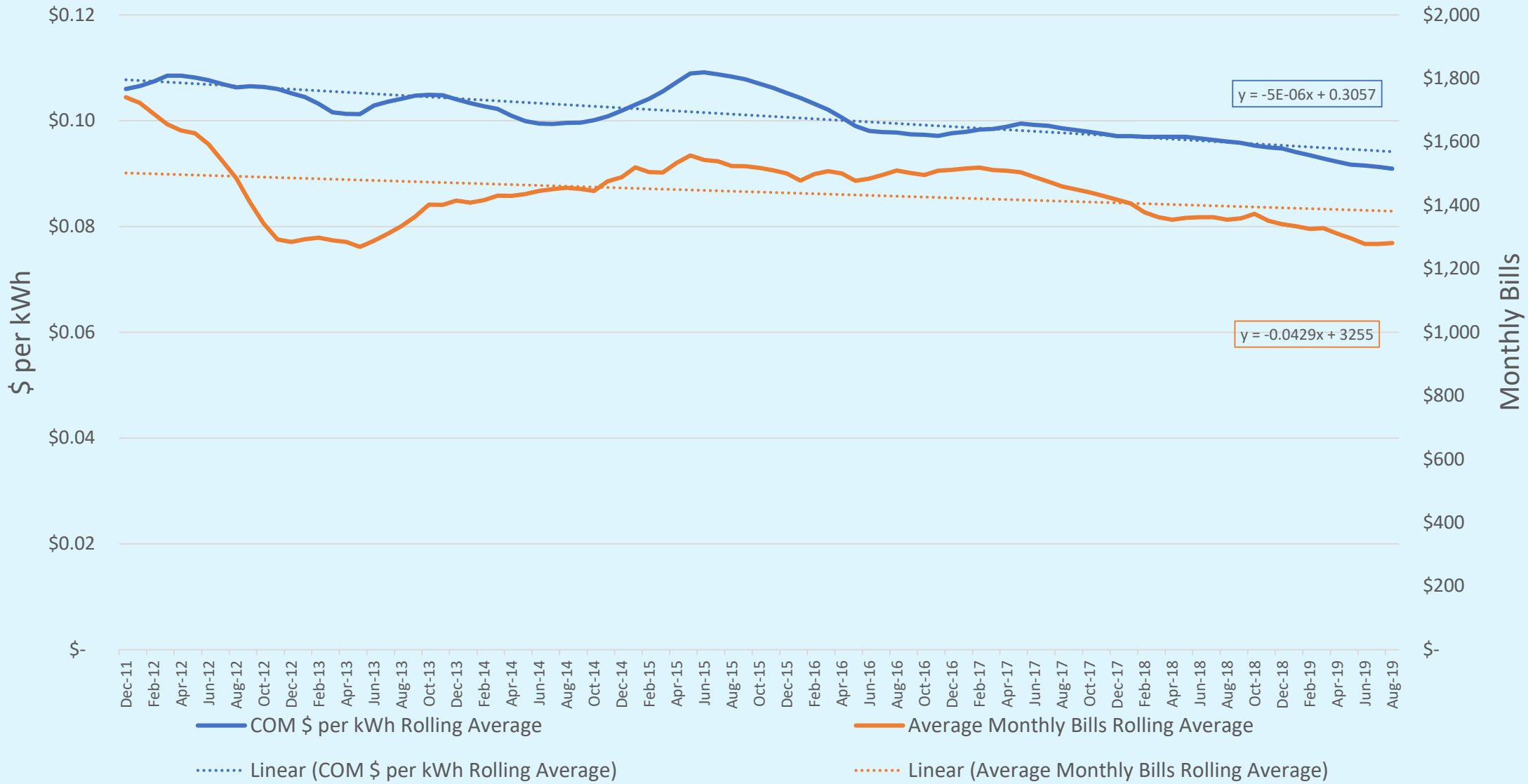




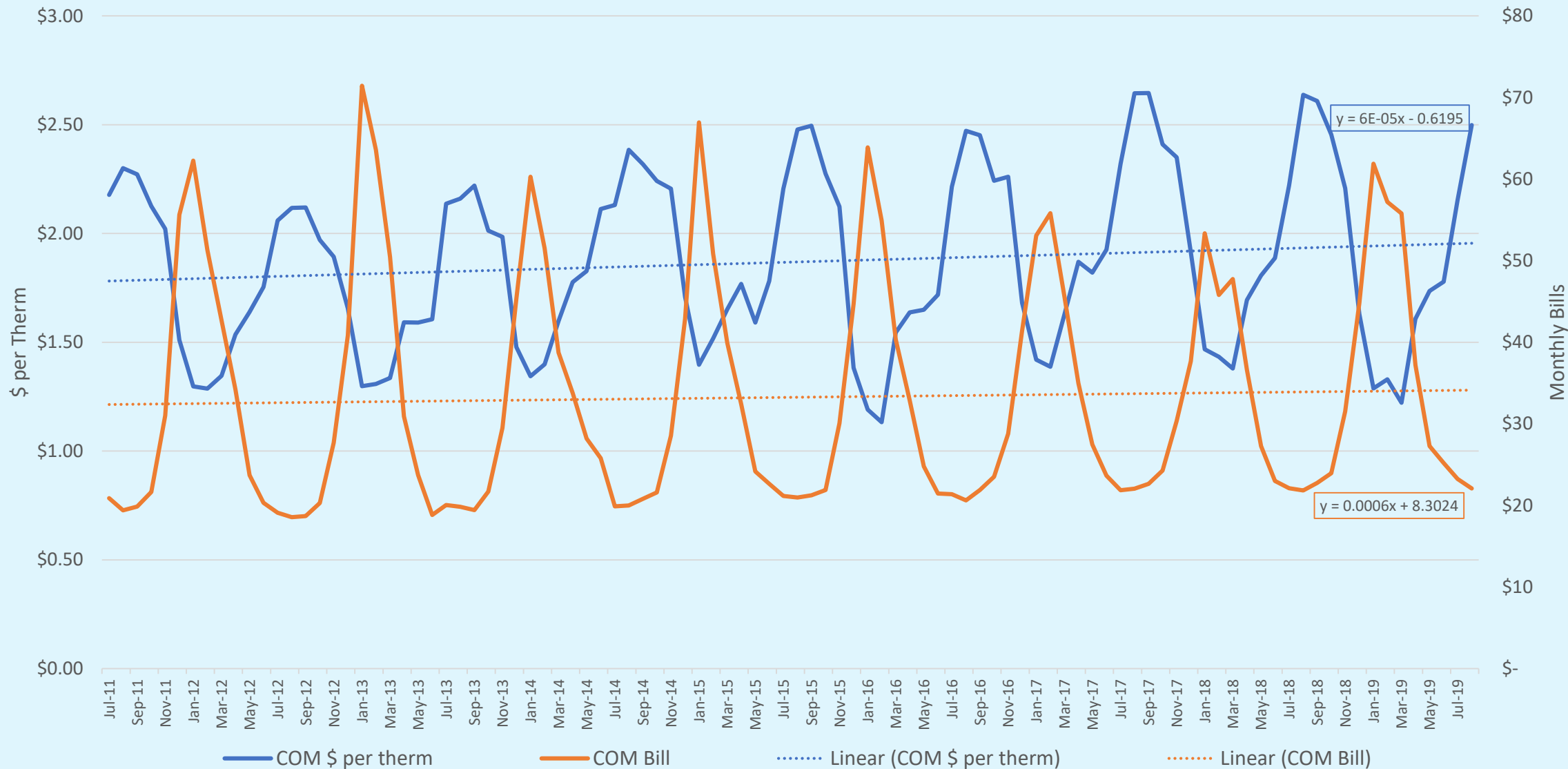
# Average Commercial \$ per kWh & Monthly Bills Rolling Averages



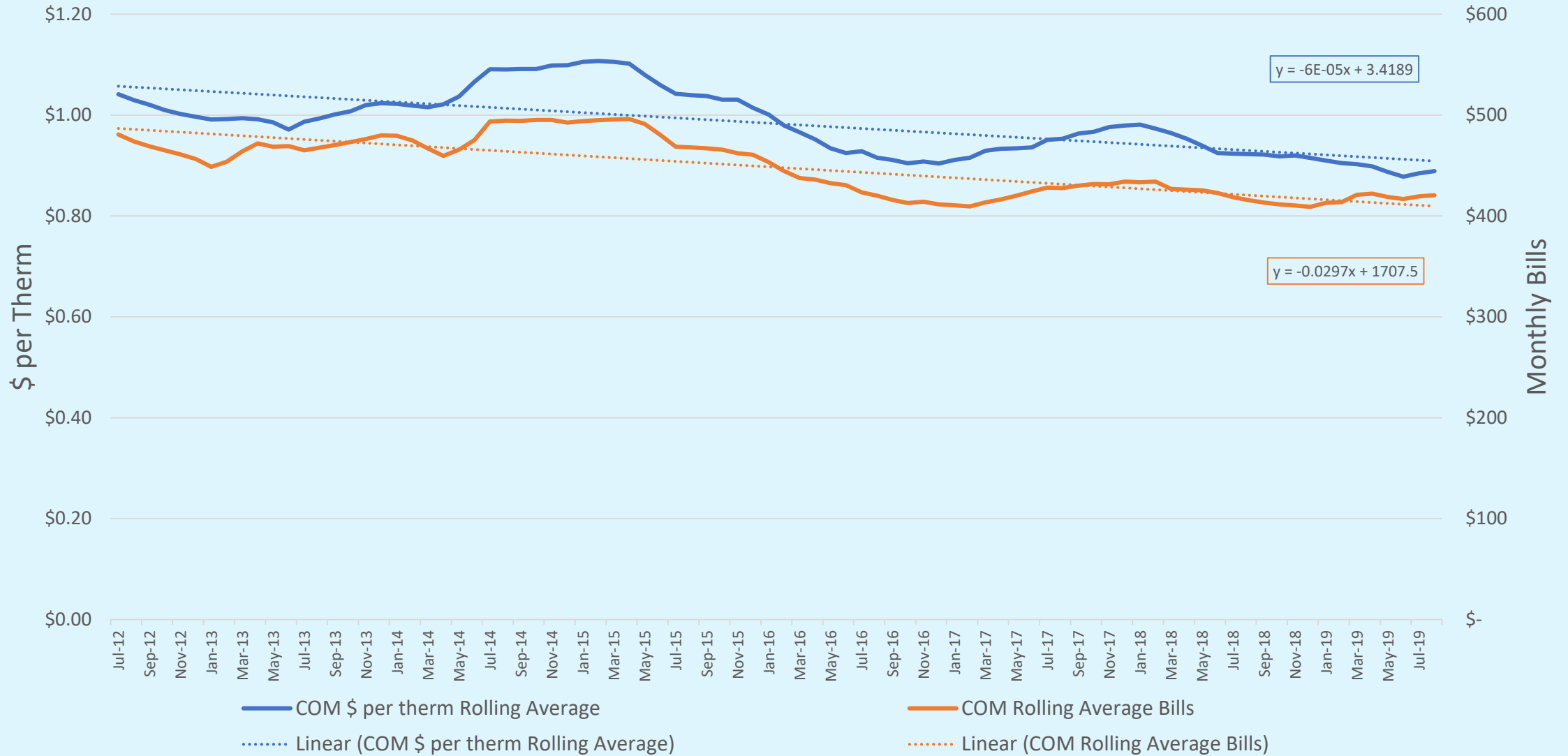
# Large Restaurant \$ per kWh & Monthly Bills Rolling Averages



# Average Residential Customer \$ per Therm & Monthly Bills



# Average Commercial \$ per Therm & Monthly Bills Rolling Averages



# Large CNG Customer \$ per Therm & Monthly Bills

