

Electric Purchased Power Costs

BACKGROUND AND CURRENT STATUS OF THE CITY'S ELECTRIC FUND

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2008 Purchased Power Goals

Current policy direction on power portfolio goals

- Competitively priced
- Long-term stable rates on energy
- Mitigate regulatory, legislative, and financial risk
- 30% renewable by 2030

2008 Integrated Resource Plan (IRP)

- 30% Renewable
- 30% Coal
- 30% Gas
- 10% Market
- Substitute Nuclear power for Coal or Gas if available

Contract History

LCRA Primary Provider of energy from 1940-2012

- Did not renew as they couldn't meet purchased power goals
 - Aging fleet
 - New investments were expensive
 - No rate guarantees to the City

2008 – Signed small wind contract with AEP as a pass through deal for Southwestern University

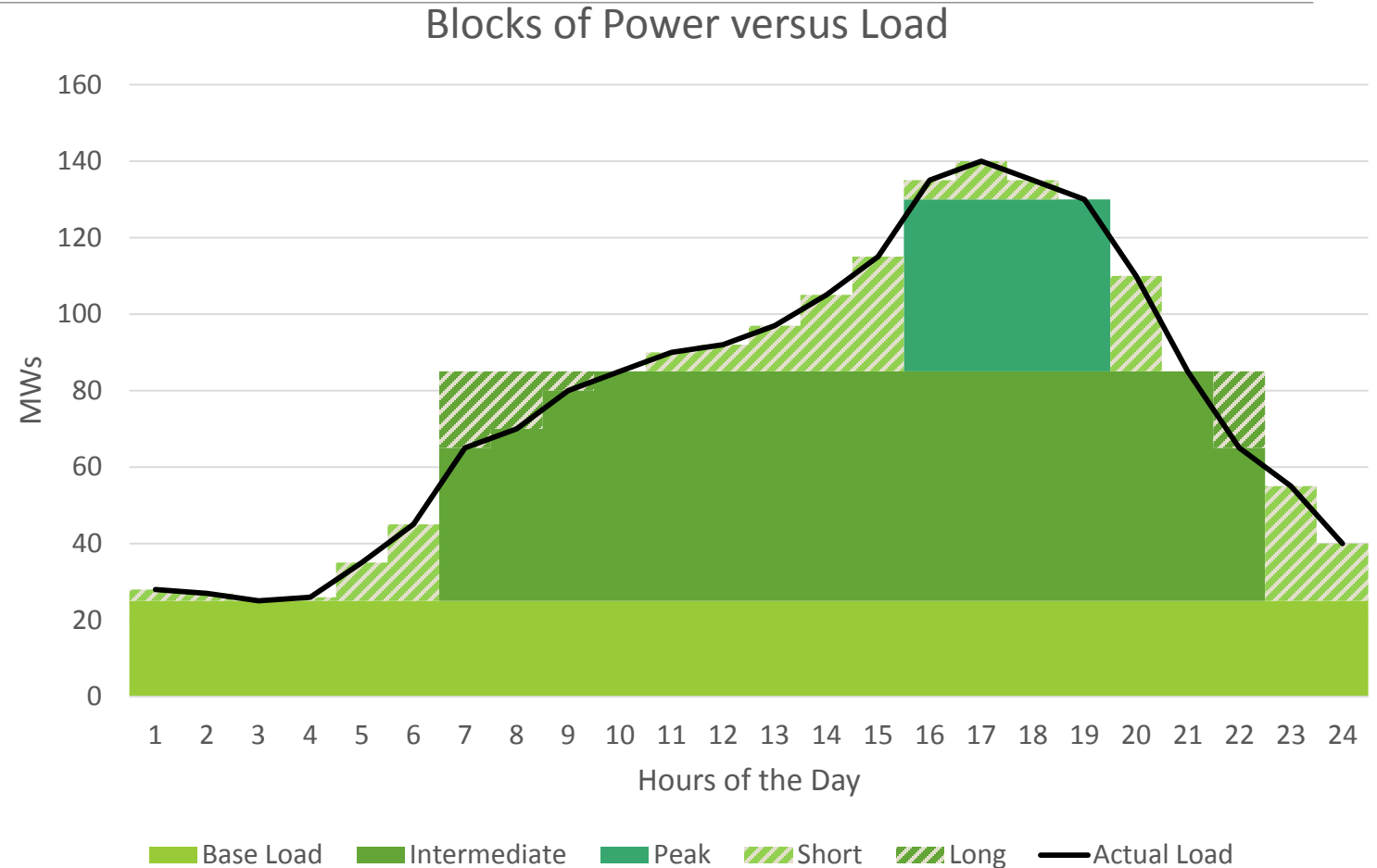
Utility had no other sources of power at this time

State of markets in 2008-2012

All forms of power were expensive to acquire

City evaluated multiple options in wind, coal, and gas

Every option was above electric rate targets



Competitive Procurement of Purchased Power

2012

- LCRA contract terminated
- Began competitive procurement for energy (gas, coal, wind, solar, and nuclear)

Philosophical design for the utility

- Targeted peak vs. base load protection
- Targeted future vs. current needs

2008-2012 had shown a high frequency of price spikes during peak demand

Competitive Procurement of Purchased Power

2012

- Mercuria (MEA) contract approved through 2021 (Gas Contract)
- No long-term contracts available due to ERCOT forecasting shortage and resulting high energy prices

2013

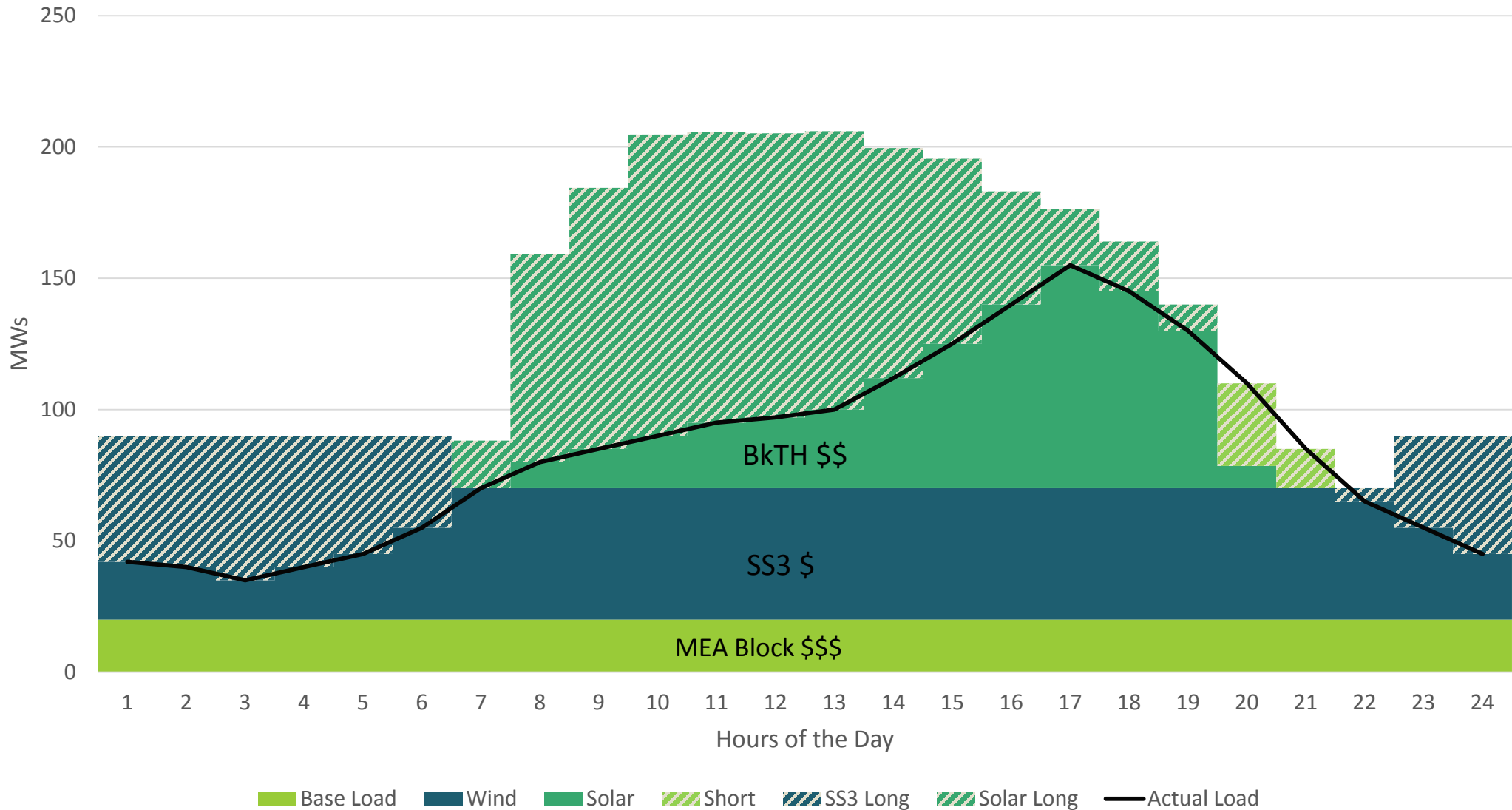
- Spinning Spur 3 (SS3) contract approved through 2035 (Wind Contract)

2015

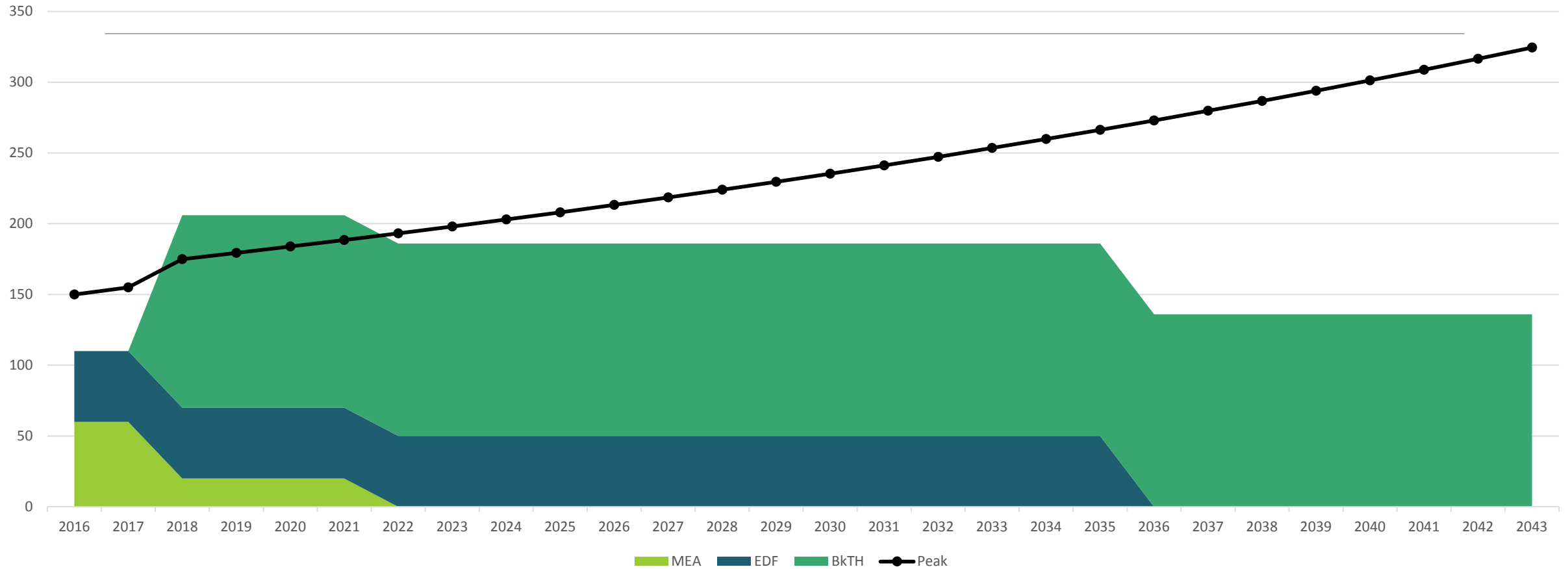
- Buckthorn Contract approved through 2043 (Solar Contract)

Competitive Procurement of Purchased Power

Blocks of Power versus Load



Annual Peak Supply



*MEA block (\$\$\$) expires at the end of Dec. 2021

Why the long position?

Georgetown's energy demand was growing rapidly

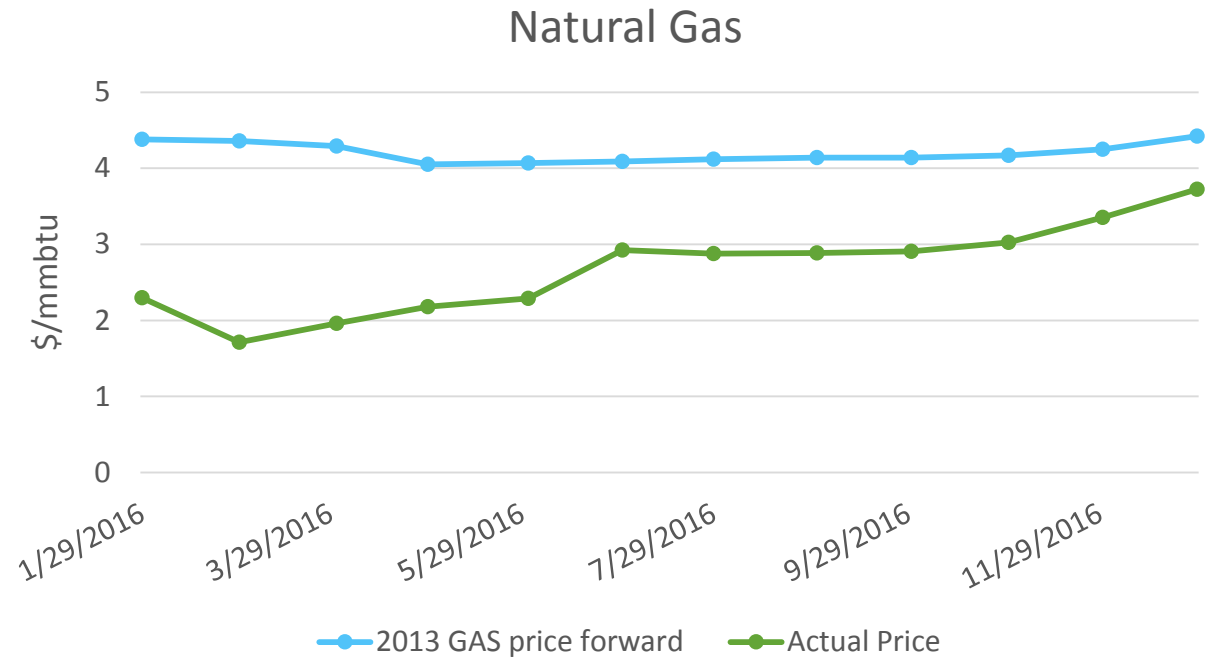
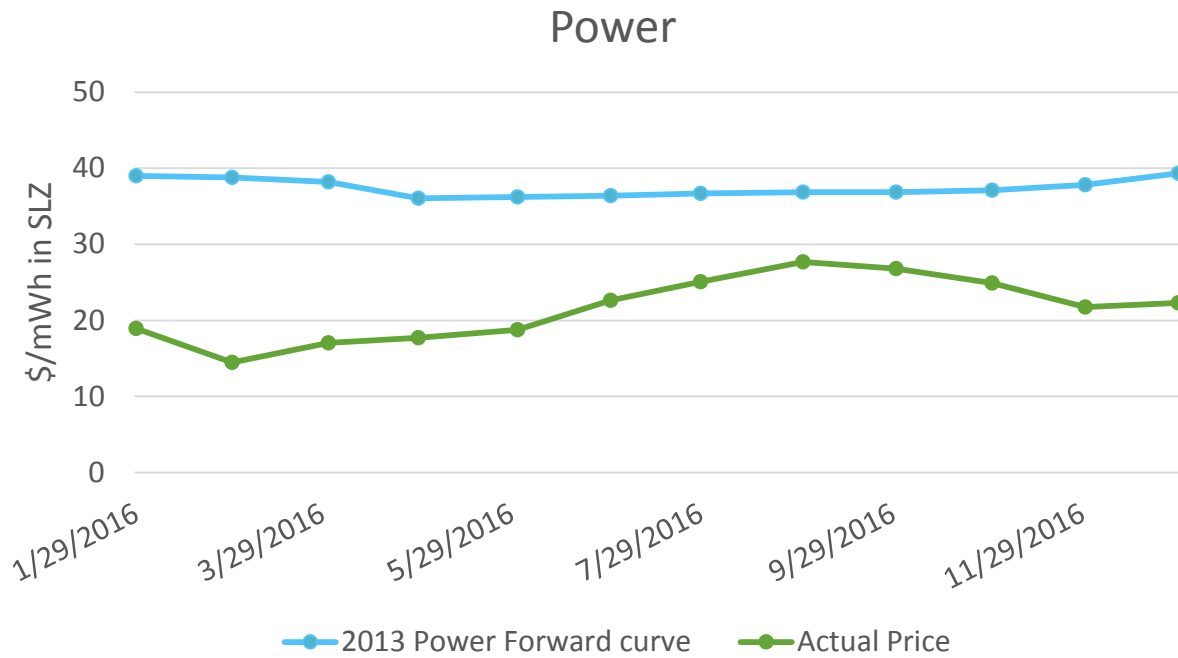
High frequency of price spikes for peaking energy in 2008-2014

ERCOT was forecasting energy shortages past 2021

Forecast for energy market predicted increasing prices

State of the energy market in 2016

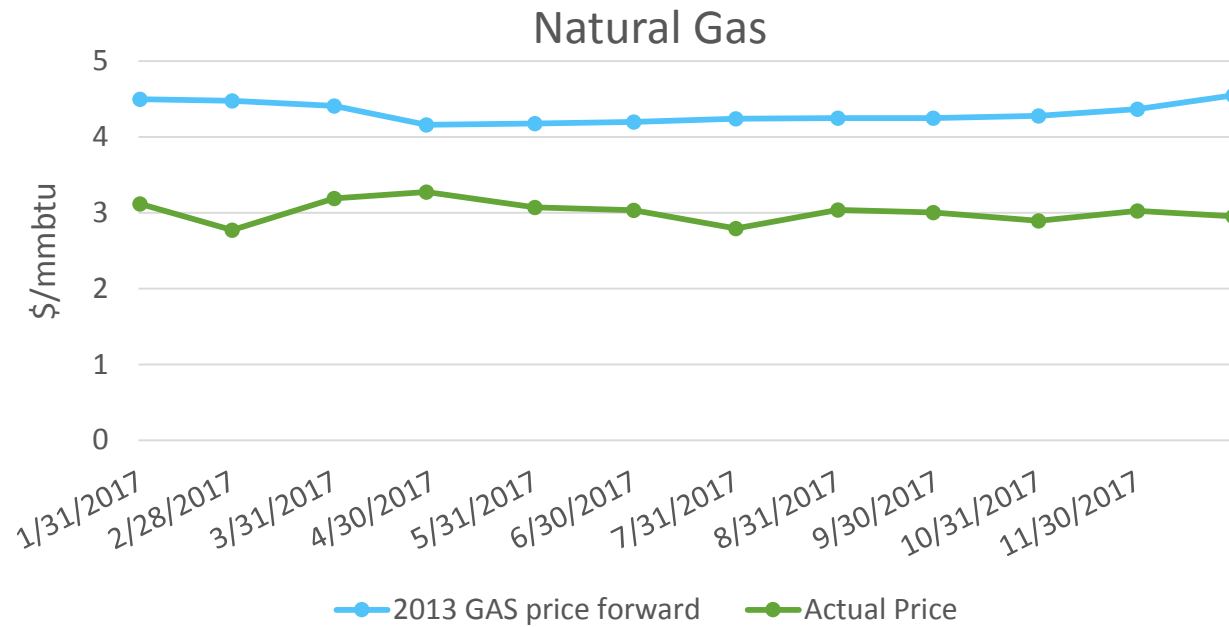
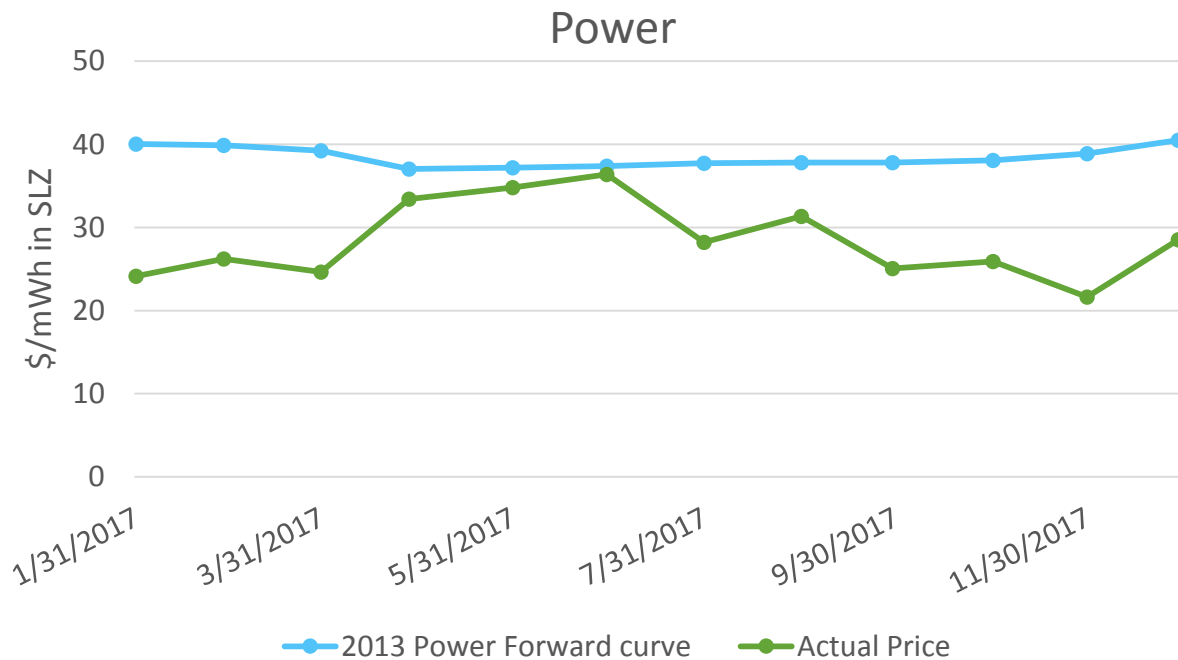
Mild weather depressed power prices throughout the year



State of the energy market in 2017

Hurricane Harvey disrupted all of ERCOT

Energy prices crashed

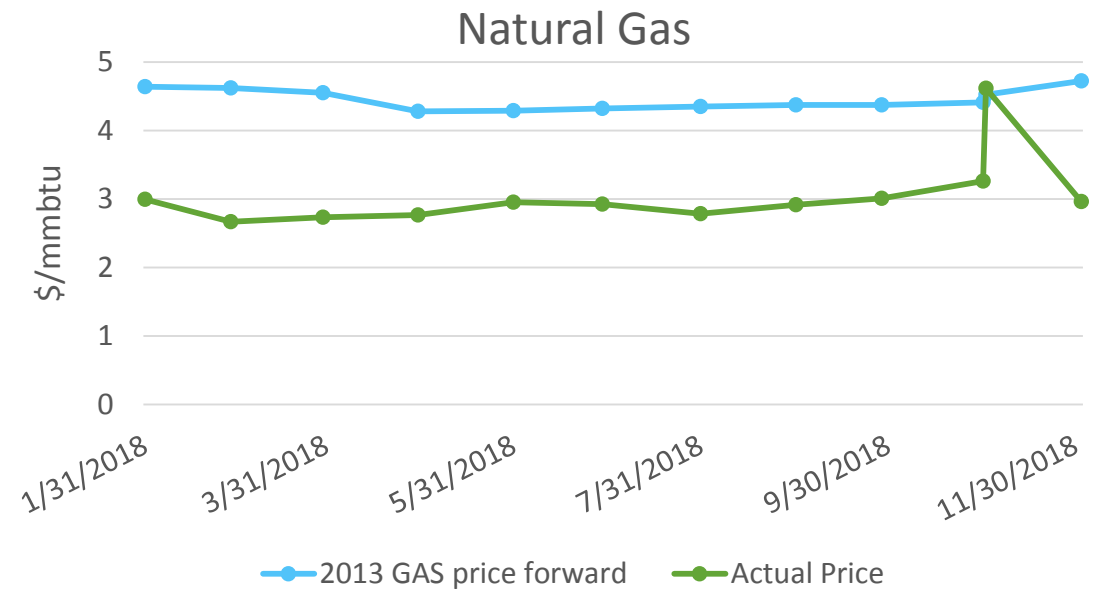
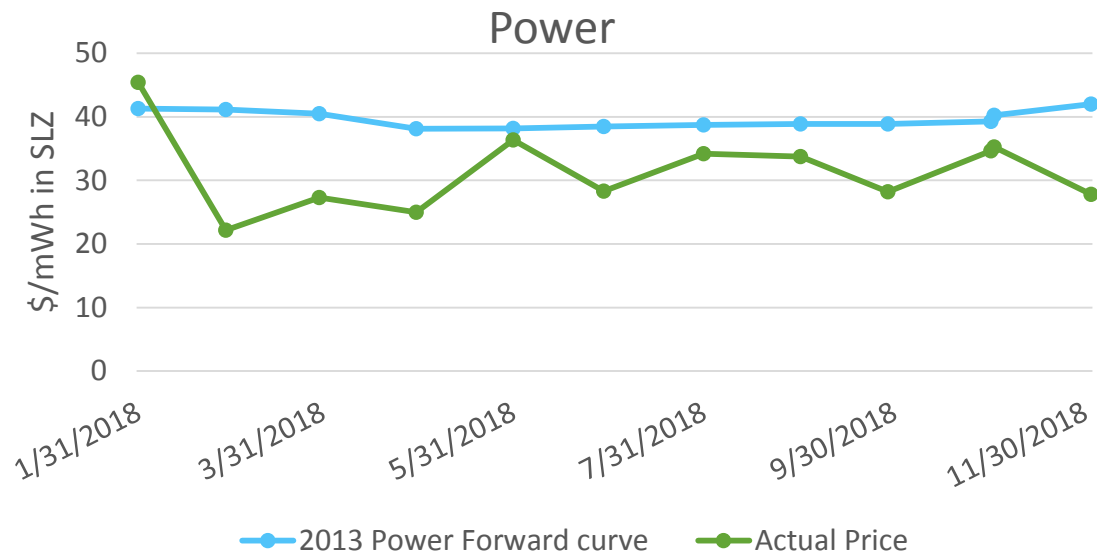


State of the energy market in 2018

Return to normal weather patterns

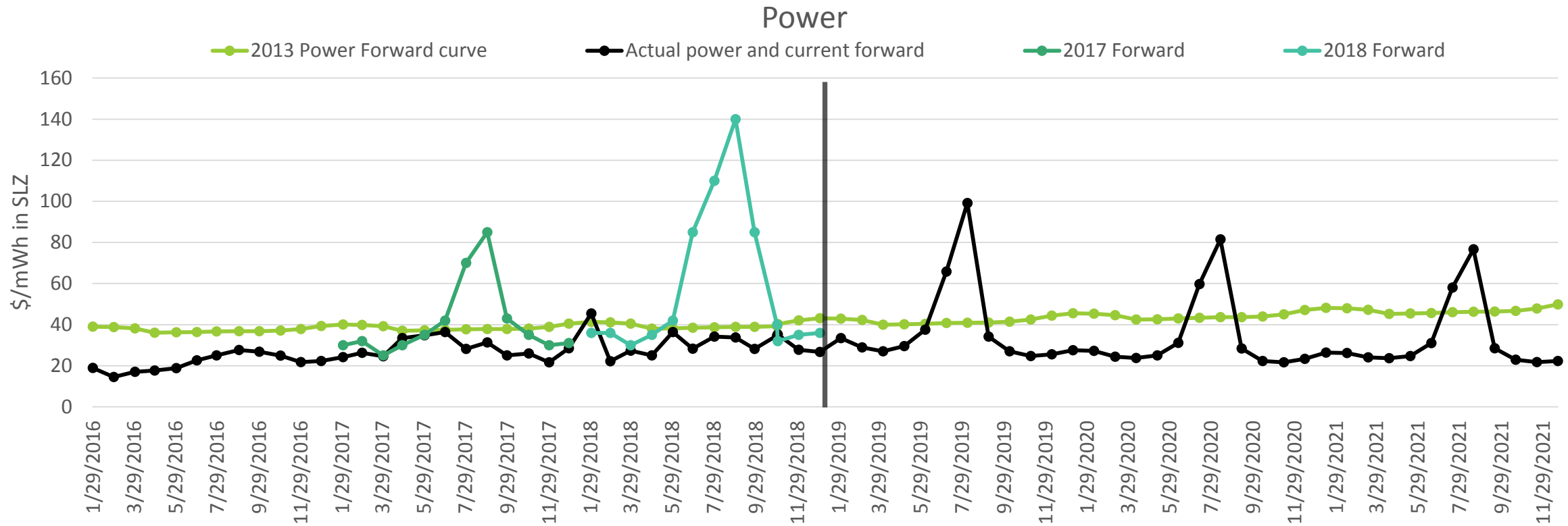
Normal market performance in late-May and all of June

Prices crashed as more generation came online



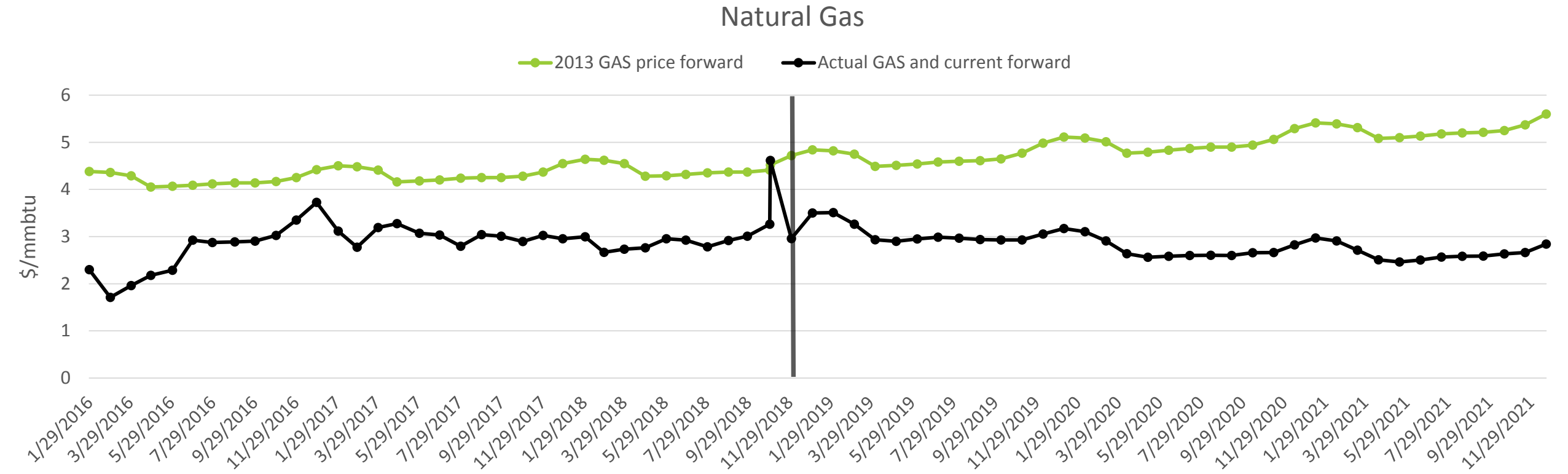
State of the current energy market

Market fundamentals have changed significantly since our contracts were originally proposed



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2019 electric fund actions

- Budget based on rate target
- Took advantage of November natural gas price spike to sell 2019 MEA gas and energy into the forward market
- Initiated discussions with SS3 and Buckthorn on contract structure
- Actively soliciting proposals from other utilities and brokers on selling remaining long position
- Updating management strategies
- Seeking alternatives for portfolio management going forward

Electric Rate Structure

Base Monthly Charge (100% of fixed costs)

- Currently \$24.80 per month (up from \$20.00 to offset increased investment)

Variable per kWh Charge

- Target for all Power and Transmission Costs including ERCOT Fees and Charges
 - \$0.0629 per kWh
- Power Cost Adjustment Factor (PCA)
 - \$0.004 per kWh
- Delivery costs, fees, and charges incurred by the City
 - \$0.0329 per kWh
- Transmission Cost Adjustment Factor (TCA)
 - 0.000 per kWh
 - Used when unexpected increases to transmission rates occur during a budget year

PCA Adjustment

Effective Feb. 1 the City will adjust the PCA by \$0.0135 per kwh through the end of September

The average customer uses 949 kilowatt hours per month and will experience a \$12.82 increase on their monthly bill.

The PCA adjustment will generate \$6 million in FY2019, and is needed to ensure the financial stability of the electric fund should steps to reduce the long position take longer to implement than expected