

Bryan Texas Utilities COS Results and Rate Recommendations





Agenda

- Overview of Ratemaking Process
- Rate Strategy and Principals Document
- Financial Planning Model
- Cost of Service Study
- Tariff Updates
- Rate Design
 - Class Consolidations
 - Rate Phase-in
 - Revenue from Proposed Rates

Overview of Rate Making Process

Rate Strategy and Principles Document

Framework and guide for cost of service, financial, and rate related decisions for BTU (vision, goals, metrics, etc.)

Financial Planning Model

Identify and run scenarios for future mix of capital, debt, and rate changes to calculate total BTU costs.

Cost of Service

Results of Financial Model lead to the total costs to be recovered and calculation of cost of service.

Rate Design

Use the cost of service results, rate strategy document, and policy to guide rate design. Rates must fully recover all costs.

Rate Strategy and Principles Document

- Document developed at beginning of rate making process that serves to align the economic principals that are used throughout the rate study with BTU's values and strategic goals
 - Sets goals for key economic performance indicators
 - Debt Service Coverage Goal: 2.0 ratio
 - City Reserve Goal: 90 Days Operating Cash
 - Rural Reserve Goal: 45 Days Operating Cash
 - Defines rate policies
 - Minimize inter-class and intra-class subsidizations
 - Stabilize rates/phase-in of large rate changes
 - Others
 - Conveys BTU's values and strategic goals
 - See Figure



City System Financial Plan – 5 Years

- Five percent increase to base rates required
 - Base rate increase primarily due to increasing TMPA costs
- Base rate increase will be offset by a reduction in Power Supply Adjustment
 - Initial total system revenue impact is zero percent
 - Duration of Power Supply Adjustment offset dependent on future fuel prices
 - Total rate increase without Power Supply Adjustment offset: 2.4 percent
- Maintains 90 day operating cash reserve requirement
- Reaches goal full debt service coverage ratio of 2.0 within five years
 - Maintains required 1.5 debt service coverage throughout test period

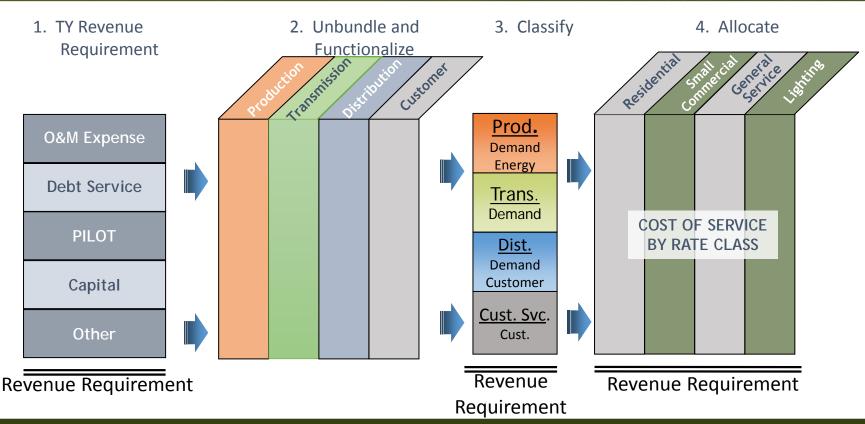
Rural System Financial Plan – 5 Years

- Base rate increase primarily due to
 - increase in Wholesale Power Costs (from COS results) driven by:
 - Assignment of all TCOS revenues to city customers
- Actual AMI load data showing rural system usage to be more on-peak than previously estimated

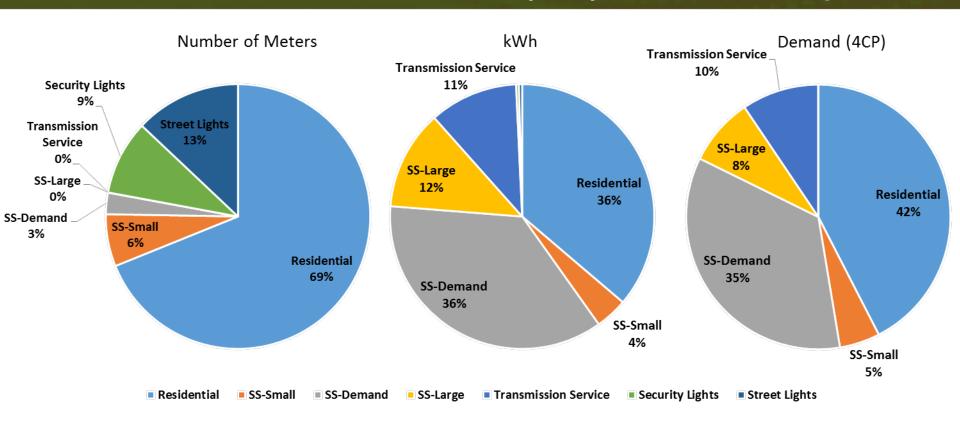
Rural System Financial Plan – 5 Years

- Base rate increase offset by return of Power Supply Adjustment over-recovery balance such that total average rural rate increase is seven percent
 - Power Supply Adjustment offset duration dependent on fuel prices
 - Total rate increase without Power Supply Adjustment offset: 10 percent
- Increased use of debt to fund CIP to reduce required rate increases
 - Increased percentage of projected CIP funding by debt to 50 percent
- Maintains 45 day operating cash reserve requirement
- Maintains goal full debt service coverage ratio of 2.0

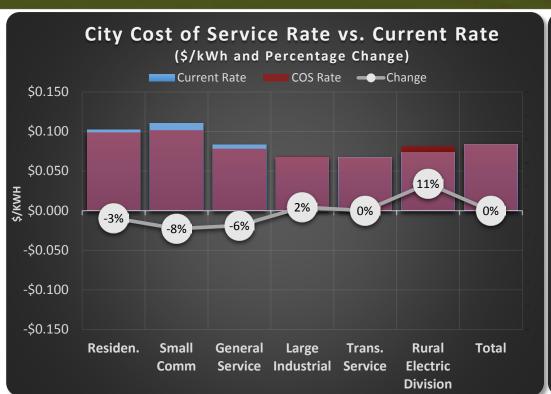
Cost of Service Process



Common Allocators – City System Example



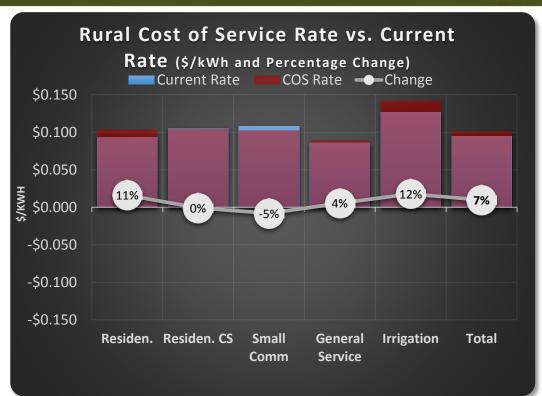
Cost of Service Results - City





Note: COS rates include return of Power Supply Adjustment over-recovery

Cost of Service Results - Rural





Note: COS rates include return of Power Supply Adjustment over-recovery

Rate Design

- Retail rates designed to reach cost of service for all classes in three phases
- Rate increases initially offset by decrease to Power Supply Adjustment
 - Power Supply Adjustment offset duration dependent on future fuel costs
- Maintain Regulatory Charge pass through in Rate Structure

Tariff Changes

- New Rate Definitions\Titles
 - Rates renamed to COS based titles
 - Small Commercial Secondary Service Small
 - General Service Secondary Service Demand
 - Large Industrial Secondary Service Large
 - Secondary Service Small defined to allow customers below 25kW
 - Secondary Service Demand defined to allow customers from 25kW-999kW

Tariff Changes

- New Rate Categories
 - Primary Service Large (City and Rural)
 - Transmission Service (City Only)
 - New Time-of-Use options
 - Secondary Service TOU (City and Rural)
 - Secondary Service Large TOU (City and Rural)
 - Transmission Service TOU (City Only)
- Consolidation of rates
 - Interdepartmental and School classes consolidated into Secondary Service Small and Secondary Service Demand as appropriate

Basic Rate Structure

Rate Structure and Corresponding Recovery of Costs

Rate Component	Production – Non-Fuel ¹	Production – Fuel	Transmission - Non-TCOS	Transmission - TCOS	Distribution ²	Customer Service/Accounting
Customer Charge					✓	✓
Energy Charge	✓					
Delivery Charge					✓	
Demand Charge ³	✓		✓			
Regulatory Charge				✓		
Power Supply Adjustment		✓				

- 1. Demand related production costs are collected through demand charges; variable production costs are collected through energy charges.
- 2. Costs of distribution system related to number of customers (e.g., meters, service drops, etc.) are collected through customer charges. All other distribution costs are collected through delivery charge.
- If retail rate does not have demand component (i.e. Residential and Small Commercial) then demand related charges are included in energy charge.

Pass Through Rates

Pass Through Rates – City Residential Only

Rate	Current Rates	October 1, 2014 Rate Implementation	Test Period (2015-2019) Projected Average³
Power Supply Adjustment Adjustment	\$0.0330/kWh ¹	\$0.0301/kWh ¹	\$0.0405/kWh
Regulatory Charge	\$0.0129/kWh	\$0.0120/kWh ²	\$0.0134/kWh

- In proceeding rate comparison slides, all current rates are shown with current Power Supply Adjustment. Unless otherwise indicated, proposed rates are shown with projected fuel rate for October 1, 2015 which is the current Power Supply Adjustment with discount for return of Power Supply Adjustment Adjustment over-recovery balances.
- 2. For purposes of rate comparisons, the regulatory charge used to calculate rates is the same in all periods and is equal to the projected regulatory charge as of October 1, 2015.
- 3. Test period pass through rates are forecasted rates only and are subject to change based on actual market conditions. These rates are not used in rate comparison slides.



Proposed Rates

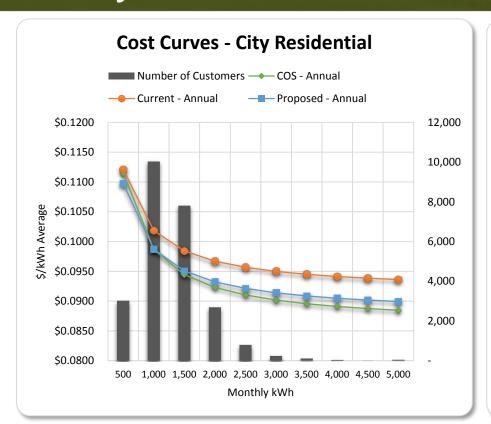
City Residential

Item/Rate	Current Rate	Proposed Rate All Phases
Customer (\$/Month)	\$10.28	\$11.00
Summer Energy (\$/kWh)	\$0.0316	\$0.0383
Non-Summer Energy (\$/kWh)	\$0.0190	\$0.0256
Delivery (\$/kWh)	\$0.0198	\$0.0122
Regulatory (\$/kWh)	\$0.0120	\$0.0120
Power Supply Adjustment (\$/kWh)	\$0.0330	\$0.0301
Average Monthly Bill	\$101.11	\$98.03
Average Rate (\$/kWh)	\$0.1019	\$0.0988
Difference (%)		-3.0%

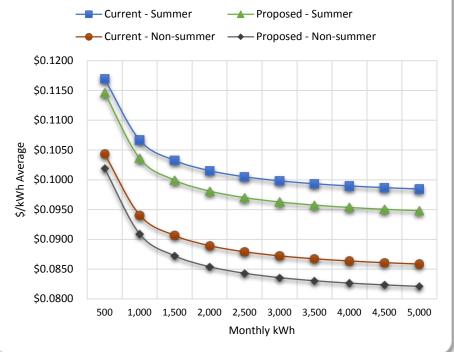
City Residential Class Size (FY2015 Projections)

Class Meters	31,904
Average Monthly Sales (kWh)	992
Class Annual Sales (kWh)	379,764,208

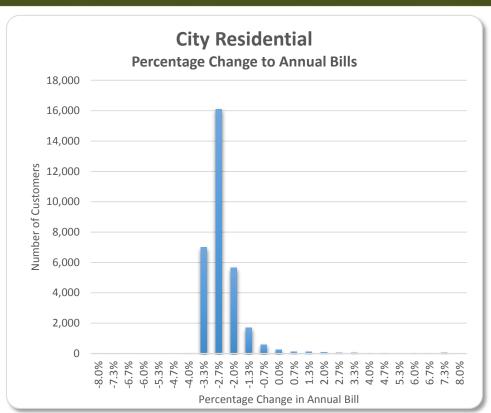
City Residential – Cost Curve

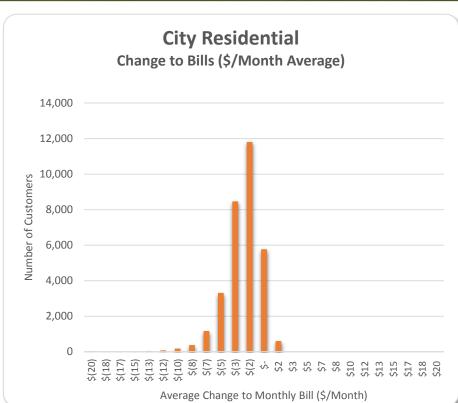


Cost Curves - City Residential



City Residential – Billing Impacts





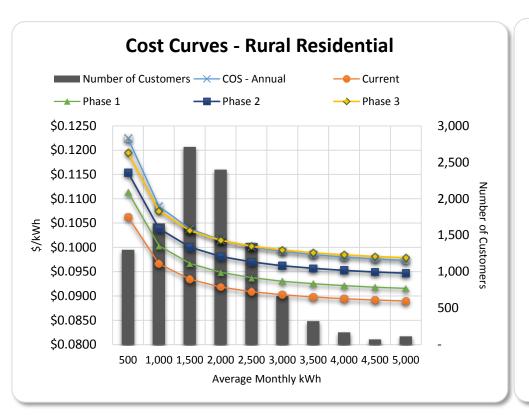
Rural Residential

		Proposed Rate	Proposed Rate	Proposed Rate
Item/Rate	Current Rate	Phase 1	Phase 2	Phase 3
Customer(\$/Month)	\$9.61	\$11.00	\$11.50	\$12.00
Summer Energy (\$/kWh)	\$0.0300	\$0.0394	\$0.0429	\$0.0465
Non-Summer Energy (\$/kWh)	\$0.0177	\$0.0263	\$0.0287	\$0.0311
Delivery (\$/kWh)	\$0.0185	\$0.0150	\$0.0150	\$0.0150
Regulatory (\$/kWh)	\$0.0104	\$0.0104	\$0.0104	\$0.0104
Power Supply Adjustment (\$/kWh)	\$0.0335	\$0.0303	\$0.0303	\$0.0303
Average Monthly Bill	\$141.48	\$146.39	\$151.46	\$156.62
Average Rate (\$/kWh)	\$0.0934	\$0.0966	\$0.1000	\$0.1034
Average Difference (%)		3.4%	3.3%	3.3%

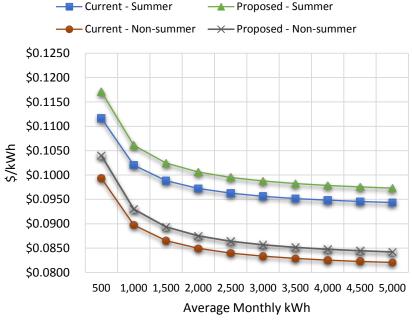
Rural Residential Class Size (FY2015 Projections)

Class Meters 12,988
Average Monthly Sales (kWh) 1,515
Class Annual Sales (kWh) 236,087,550

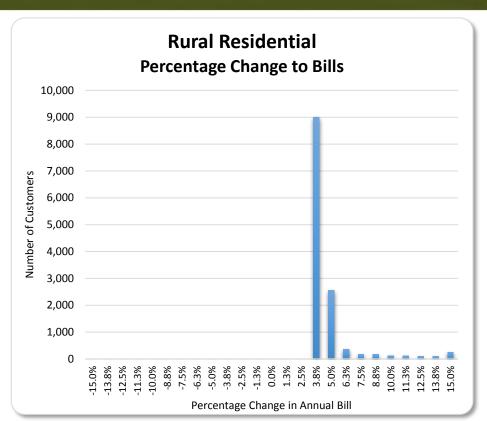
Rural Residential – Cost Curves

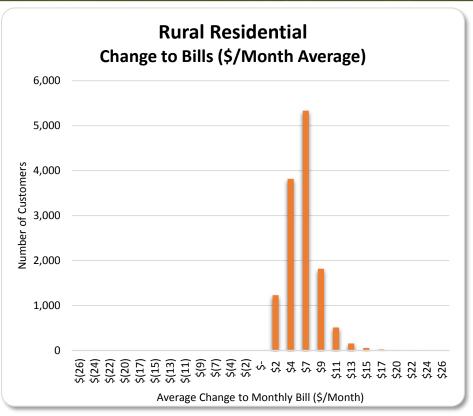


Cost Curves - Rural Residential Phase 1



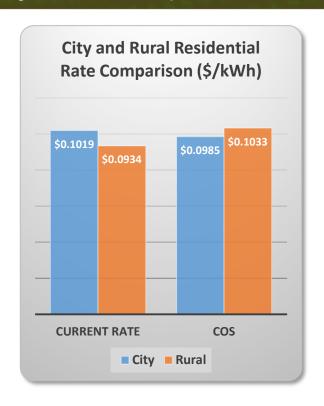
Rural Residential – Phase 1 Billing Impacts



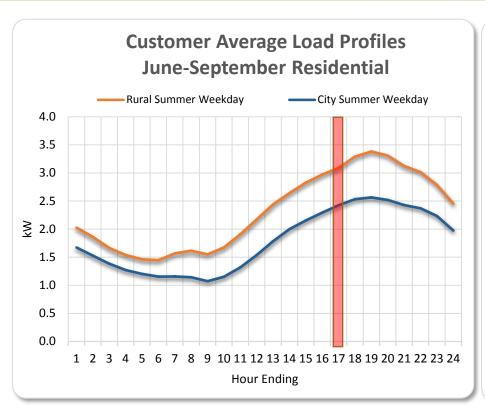


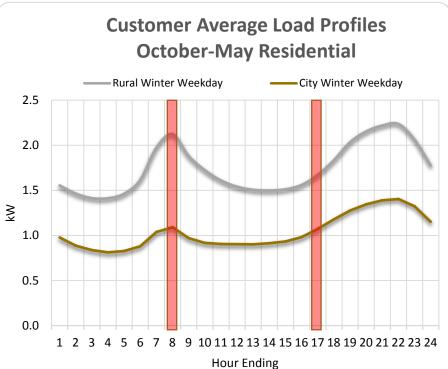
Residential Differences (City/Rural)

- City System electric rates offset by TCOS revenues generated from City System transmission investments
- Distribution system for both systems are accounted for separately and each service a unique demographic:
 - Rural System customers use on average 55 percent more energy per year per customer
 - Average monthly load factor:
 - City 23.3%
 - Rural 20.0%
 - Rural System customers have higher geographic diversity and range
 - Loss factor for Rural System is approximately two percent higher than City System



Residential Load Profiles





College Station - Residential

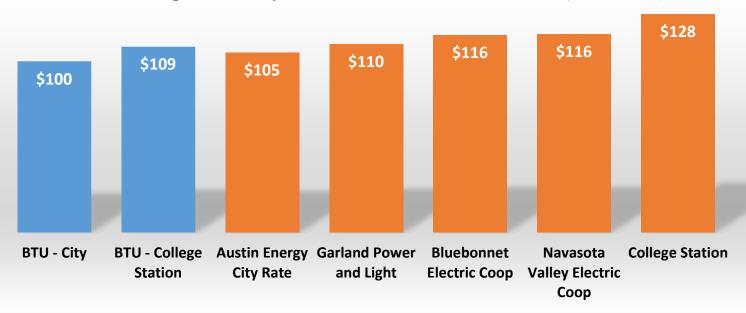
Item/Rate	Current Rate	Proposed Rate All Phases
Customer(\$/Month)	\$10.28	\$11.00
Summer Energy (\$/kWh)	\$0.0316	\$0.0401
Non-Summer Energy (\$/kWh)	\$0.0190	\$0.0268
Delivery (\$/kWh)	\$0.2110	\$0.0150
Regulatory (\$/kWh)	\$0.01061	\$0.01061
Power Supply Adjustment (\$/kWh)	\$0.0335	\$0.0303
College Station Franchise Fee	5%	5%
Average Monthly Bill	\$125.52	\$124.87
Average Rate (\$/kWh)	\$0.1050	\$0.1045
Difference (%)		-0.5%

CS - Residential Class Size (FY2015 Projections)

Class Meters	2,163
Average Monthly Sales (kWh)	1,195
Class Annual Sales (kWh)	31,026,842

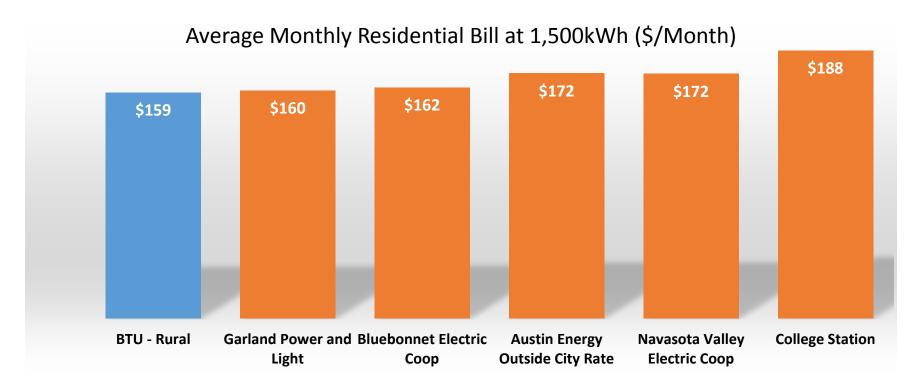
Residential Rate Comparisons - City





^{*}Comparison of rates at Phase 3 with current Fuel Adjustment without offset (\$0.0330 City, \$0.0335 Rural).

Residential Rate Comparisons - Rural



^{*}Comparison of rates at Phase 3 with current Fuel Adjustment without offset (\$0.0330 City, \$0.0335 Rural).

Secondary Service Small - City

Item/Rate	Current Rate*	Proposed Rate Phase 1	Proposed Rate Phase 2	Proposed Rate Phase 3
Customer(\$/Month)	\$13.82	\$15.50	\$15.50	\$15.50
Energy (\$/kWh)	\$0.0183	\$0.0400	\$0.0373	\$0.0345
Delivery (\$/kWh)	\$0.0333	\$0.0110	\$0.0110	\$0.0110
Regulatory (\$/kWh)	\$0.0129	\$0.0129	\$0.0129	\$0.0129
Power Supply Adjustment (\$/kWh)	\$0.0330	\$0.0301	\$0.0301	\$0.0301
Average Monthly Bill	\$128.51	\$124.88	\$121.74	\$118.48
Average Rate (\$/kWh)	\$0.1105	\$0.1074	\$0.1047	\$0.1019
Average Difference (%)		-2.9%	-2.6%	-2.7%

Secondary Service Small – City Class Size (FY2015 Projections)

Class Meters 2,955
Average Monthly Sales (kWh) 1,163
Class Annual Sales (kWh) 41,252,247

^{*}Current rate shown is current Small Commercial Rate. Average bill and average rate shown is combined average rate of all meters in new Secondary Service Small class at current respective rates.

Secondary Service Small - Rural

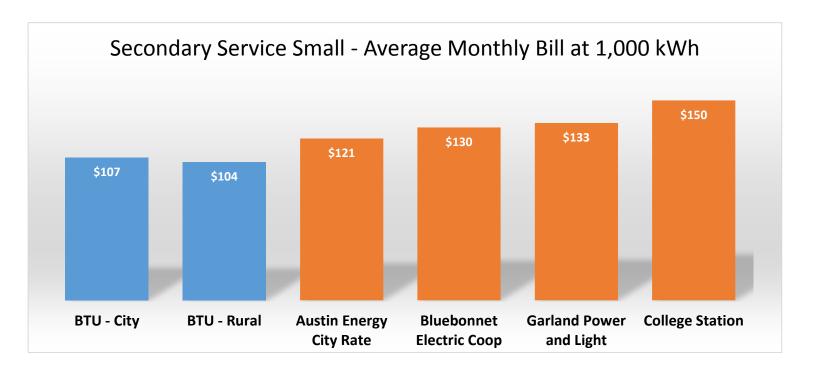
Item/Rate	Current Rate*	Proposed Rate Phase 1	Proposed Rate Phase 2	Proposed Rate Phase 3
Customer(\$/Month)	\$13.16	\$14.00	\$15.00	\$16.00
Energy (\$/kWh)	\$0.0162	\$0.0399	\$0.0385	\$0.0330
Delivery (\$/kWh)	\$0.0347	\$0.0112	\$0.0112	\$0.0112
Regulatory (\$/kWh)	\$0.0098	\$0.0098	\$0.0098	\$0.0098
Power Supply Adjustment (\$/kWh)	\$0.0335	\$0.0303	\$0.0303	\$0.0303
Average Monthly Bill	\$98.94	\$97.65	\$97.40	\$93.39
Average Rate (\$/kWh)	\$0.1083	\$0.1069	\$0.1066	\$0.1022
Average Difference (%)		-1.3%	-0.3%	-4.3%

Secondary Service Small – Rural Class Size (FY2015 Projections)

Class Meters 2,891
Average Monthly Sales (kWh) 914
Class Annual Sales (kWh) 31,705,596

^{*}Current rate shown is current Small Commercial Rate. Average bill and average rate shown is combined average rate of all meters in new Secondary Service Small class at current respective rates.

Secondary Service Small Rate Comparisons*



^{*}Comparison of rates at Phase 3 with current Fuel Adjustment without offset (\$0.0330 City, \$0.0335 Rural).

Secondary Service Demand - City

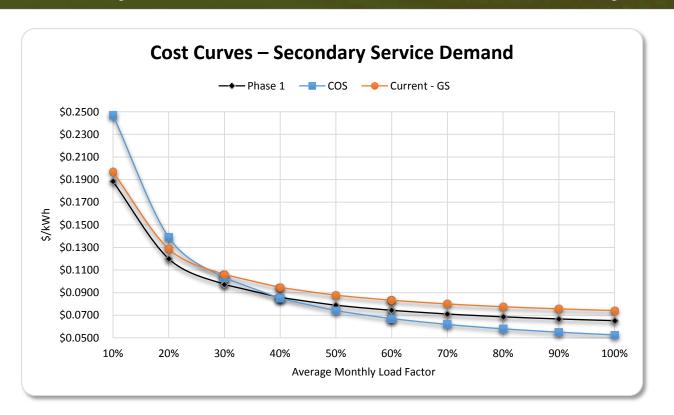
lhour /Dohn	Comment Data*	•	Proposed Rate	•
Item/Rate	Current Rate*	Phase 1	Phase 2	Phase 3
Customer(\$/Month)	\$26.34	\$29.75	\$33.25	\$37.00
Energy (\$/kWh)	\$0.0276	\$0.0215	\$0.0150	\$0.0086
Demand (\$/kW)	\$0.59	\$3.52	\$5.02	\$6.60
Delivery (\$/kW)	\$5.72	\$2.79	\$2.79	\$2.79
Regulatory (\$/kW)	\$3.30	\$3.30	\$3.30	\$3.30
Power Supply Adjustment (\$/kWh)	\$0.0330	\$0.0301	\$0.0301	\$0.0301
Average Monthly Bill	\$2,177.23	\$2,131.68	\$2,082.23	\$2,042.91
Average Rate (\$/kWh)	\$0.0834	\$0.0816	\$0.0798	\$0.0785
Average Difference (%)		-2.2%	-2.3%	-1.9%

Secondary Service Demand – City Class Size (FY2015 Projections)

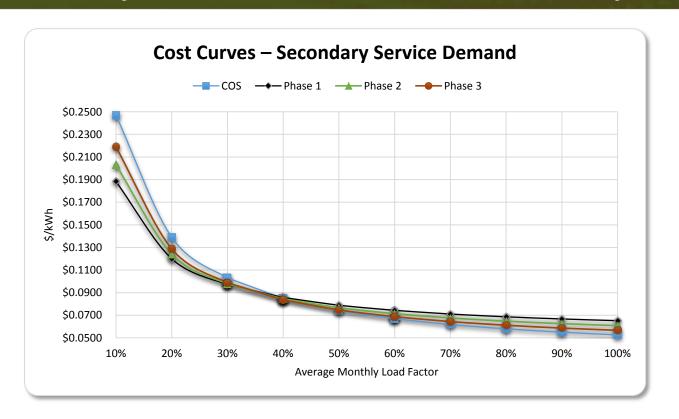
Class Meters 1,208
Average Monthly Sales (kWh) 26,096
Class Annual Sales (kWh) 378,402,515

^{*}Current rate shown is current General Service Rate. Average bill and average rate shown is combined average rate of all meters in new Secondary Service Demand class at current respective rates.

Secondary Service Demand - City



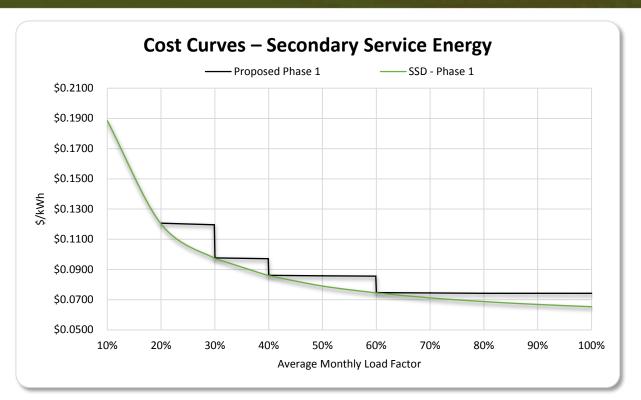
Secondary Service Demand - City



Secondary Service Energy - City

Item/Rate	Current Rate*	Proposed Rate Phase 1	Proposed Rate Phase 2	Proposed Rate Phase 3
Customer(\$/Month)	\$23.99	\$29.75	\$33.25	\$37.00
Energy (\$/kWh)				
Load Factor 20-29	\$0.0489	\$0.0647	\$0.0685	\$0.0729
Load Factor 30-39	\$0.0414	\$0.0503	\$0.0507	\$0.0515
Load Factor 40-59	\$0.0383	\$0.0431	\$0.0417	\$0.0408
Load Factor 60+	\$0.0329	\$0.0359	\$0.0328	\$0.0300
Regulatory (\$/kWh)				
Load Factor 20-29	\$0.0116	\$0.0226	\$0.0226	\$0.0226
Load Factor 30-39	\$0.0116	\$0.0151	\$0.0151	\$0.0151
Load Factor 40-59	\$0.0116	\$0.0113	\$0.0113	\$0.0113
Load Factor 60+	\$0.0116	\$0.0075	\$0.0075	\$0.0075
Power Supply Adjustment (\$/kWh)	\$0.0330	\$0.0301	\$0.0301	\$0.0301

Secondary Service Energy - City



Secondary Service Demand - Rural

		Proposed Rate	Proposed Rate	Proposed Rate
Item/Rate	Current Rate*	Phase 1	Phase 2	Phase 3
Customer (\$/Month)	\$19.25	\$21.00	\$21.00	\$21.00
Energy (\$/kWh)	\$0.0192	\$0.0228	\$0.0167	\$0.0104
Demand (\$/kW)	\$0.42	\$2.94	\$4.44	\$5.96
Delivery (\$/kW)	\$5.58	\$3.06	\$3.06	\$3.06
Regulatory (\$/kW)	\$2.92	\$2.92	\$2.92	\$2.92
Power Supply Adjustment (\$/kWh)	\$0.0335	\$0.0303	\$0.0303	\$0.0303
Average Monthly Bill	\$1,405.57	\$1,443.67	\$1442.83	\$1,440.06
Average Rate (\$/kWh)	\$0.0868	\$0.0891	\$0.0891	\$0.0890
Average Difference (%)	_	2.6%	-0.1%	-0.2%

Secondary Service Demand – Rural Class Size (FY2015 Projections)

Class Meters 441

Average Monthly Sales (kWh) 16,195

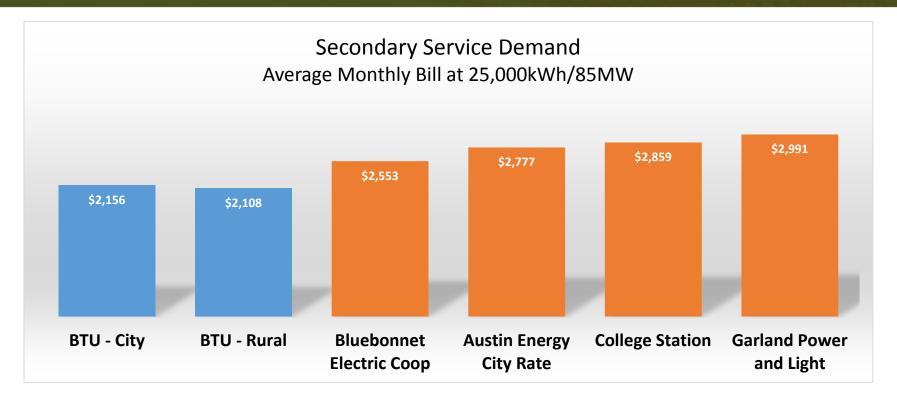
Class Annual Sales (kWh) 85,661,515

^{*}Current rate shown is current General Service Rate. Average bill and average rate shown is combined average rate of all meters in new Secondary Service Demand class at current respective rates.

Secondary Service Energy - Rural

		Proposed Rate	Proposed Rate	Proposed Rate
Item/Rate	Current Rate*	Phase 1	Phase 2	Phase 3
Customer(\$/Month)	\$22.94	\$29.75	\$33.25	\$37.00
Energy (\$/kWh)				
Load Factor 20-29	\$0.0487	\$0.0647	\$0.0685	\$0.0729
Load Factor 30-39	\$0.0415	\$0.0503	\$0.0507	\$0.0515
Load Factor 40-59	\$0.0376	\$0.0431	\$0.0417	\$0.0408
Load Factor 60+	\$0.0315	\$0.0359	\$0.0328	\$0.0300
Regulatory (\$/kWh)				
Load Factor 20-29	\$0.0097	\$0.0180	\$0.0180	\$0.0180
Load Factor 30-39	\$0.0097	\$0.0120	\$0.0120	\$0.0120
Load Factor 40-59	\$0.0097	\$0.0090	\$0.0090	\$0.0090
Load Factor 60+	\$0.0097	\$0.0060	\$0.0060	\$0.0060
Power Supply Adjustment (\$/kWh)	\$0.0335	\$0.0303	\$0.0303	\$0.0303

Secondary Service Demand Rate Comparisons*



^{*}Comparison of rates at Phase 3 with current Fuel Adjustment without offset (\$0.0330 City, \$0.0335 Rural).

Secondary Service Large - City

Item/Rate	Current Rate	Proposed Rate All Phases
Customer (\$/Month)	\$400.00	\$400.00
Energy (\$/kWh)	\$0.0077	\$0.0075
Demand (\$/kW)	\$6.31	\$8.85
Delivery (\$/kW)	\$3.97	\$3.65
Regulatory (\$/kW)	\$3.75	\$3.75
Power Supply Adjustment (\$/kWh)	\$0.0330	\$0.0301
Average Monthly Bill	\$63,558.11	\$64,545.26
Average Rate (\$/kWh)	\$0.0673	\$0.0683
Average Difference (%)		1.6%

Secondary Service Large – City Class Size (FY2015 Projections)

Class Meters 11
Average Monthly Sales (kWh) 944,752
Class Annual Sales (kWh) 127,543,944

Transmission Service - City

Item/Rate	Proposed Rate
Customer(\$/Month)	\$1,725.00
Energy (\$/kWh)	\$0.0010
Demand (\$/kW)	\$12.68
Regulatory (\$/kW)	\$3.71
Power Supply Adjustment (\$/kWh)	\$0.0290
Average Monthly Bill	\$665,830
Average Rate (\$/kWh)	\$0.0676

Transmission Service – City Class Size (FY2015 Projections)

Class Meters 1
Average Monthly Sales (kWh) 9,855,000
Class Annual Sales (kWh) 118,260,000

Secondary Service Irrigation - Rural

/			Proposed Rate	
Item/Rate	Current Rate	Phase 1	Phase 2	Phase 3
Customer (\$/Month)	\$0.00	\$0.00	\$0.00	\$0.00
Energy (\$/kWh)	\$0.0683	\$0.0550	\$0.0600	\$0.0656
Delivery (\$/kWh)	\$0.000	\$0.0210	\$0.0210	\$0.0210
Regulatory (\$/kWh)	\$0.0252	\$0.0252	\$0.0252	\$0.0252
Power Supply Adjustment (\$/kWh)	\$0.0335	\$0.0303	\$0.0303	\$0.0303
Average Monthly Bill	\$86.94	\$90.00	\$93.43	\$97.26
Average Rate (\$/kWh)	\$0.1297	\$0.1314	\$0.1364	\$0.1420
Average Difference (%)		3.5%	3.8%	4.1%

Secondary Service Irrigation Class Size (FY2015 Projections)			
Class Meters	122		
Average Monthly Sales (kWh)	685		
Class Annual Sales (kWh)	1,005,299		

Security Lighting – City

		Proposed Rate	Proposed Rate	Proposed Rate
Item/Rate	Current Rate	Phase 1	Phase 2	Phase 3
Lamp (\$/Month)	\$8.55	\$8.55	\$9.10	\$9.78
Regulatory (\$/kWh)	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Power Supply Adjustment (\$/kWh)	\$0.0000	\$0.0301	\$0.0301	\$0.0301
Average Rate (\$/kWh)	\$0.1222	\$0.1523	\$0.1602	\$0.1699
Average Difference (%)		24.6%	5.2%	6.1%

Security Lighting Class Size (FY2015 Projections)

Number of Lamps 4,225 Class Annual Sales (kWh) 3,547,446

Security Lighting – Rural

Item/Rate	Current Rate	Proposed Rate All Phases
Lamp (\$/Month)	\$12.61	\$9.85
Regulatory (\$/kWh)	\$0.0000	\$0.0000
Power Supply Adjustment (\$/kWh)	\$0.0000	\$0.0303
Average Rate (\$/kWh)	\$0.1803	\$0.1592
Average Difference (%)		-5.1%

Security Lighting Class Size (FY2015 Projections)

Number of Lamps 3,932 Class Annual Sales (kWh) 3,299,677

Street Lighting – City

Item/Rate	Current Rate A	Current Rate B	Proposed Rate A	Proposed Rate B
175W Mercury Vapor Lamp (\$/Month)	\$7.20	N/A	\$8.73	N/A
250W High Pressure Sodium Lamp (\$/Month)	\$10.61	\$4.94	\$10.85	\$5.69
150W High Pressure Sodium Lamp (\$/Month)	N/A	N/A	\$7.55	\$4.95
100W High Pressure Sodium Lamp (\$/Month)	\$6.73	\$2.12	\$6.73	\$4.75
Regulatory (\$/kWh)	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Power Supply Adjustment (\$/kWh)	\$0.0330	\$0.0330	\$0.0301	\$0.0301
Average Rate (\$/kWh)	\$0.1611		\$0.1659	
Average Difference (%)			2.9%	

Security Lighting Class Size (FY2015 Projections)

Number of Lamps 6,003 Class Annual Sales (kWh) 4,189,801

Street Lighting – Rural

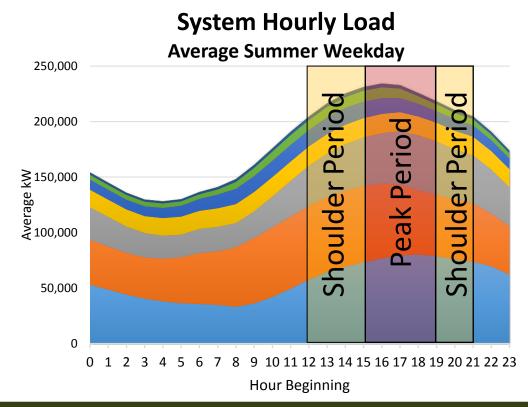
	Current	Current	Proposed	Proposed
Item/Rate	Rate A	Rate B	Rate A	Rate B
175W Mercury Vapor Lamp (\$/Month)	\$10.33	N/A	\$12.44	N/A
250W High Pressure Sodium Lamp (\$/Month)	\$15.18	\$7.09	\$15.36	\$8.09
150W High Pressure Sodium Lamp (\$/Month)	N/A	N/A	\$10.55	\$6.75
100W High Pressure Sodium Lamp (\$/Month)	\$9.52	\$3.03	\$9.52	\$6.61
Regulatory (\$/kWh)	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Power Supply Adjustment (\$/kWh)	\$0.0335	\$0.0301	\$0.0303	\$0.0303
Average Rate (\$/kWh)	\$0.2718		\$0.2685	
Average Difference (%)			-1.2%	

Security Lighting Class Size (FY2015 Projections)

Number of Lamps 958 Class Annual Sales (kWh) 459,438

Time of Use (TOU) Rates

- Time-of-Use Rates
 - Designed to encourage shifting of energy usage away from 4CP time periods
 - June-September
 - Weekdays
 - 3:00pm-7:00pm Peak
 - 12:00pm-9:00pm Shoulder
- Three New Rates
 - Secondary Service TOU
 - Secondary Service Large TOU
 - Transmission Service TOU



Time of Use Proposed Rates - City

Item/Rate	Secondary Service TOU Proposed Rate	Secondary Service Large TOU Proposed Rate	Transmission Service TOU Proposed Rate
Customer (\$/Month)	\$137.00	\$500.00	\$1,825.00
Base Energy (\$/kWh)	\$0.0314	\$0.0288	\$0.0250
Shoulder Energy (\$/kWh)	\$0.0737	\$0.0675	\$0.0622
Peak Energy (\$/kWh)	\$0.0918	\$0.0839	\$0.0765
Peak Regulatory (\$/kWh)	\$0.1813	\$0.1641	\$0.1433
Power Supply Adjustment (\$/kWh)	\$0.0301	\$0.0301	\$0.0290

Time of Use Proposed Rate - Rural

Item/Rate	Secondary Service TOU Proposed Rate
Customer (\$/Month)	\$137.00
Base Energy (\$/kWh)	\$0.0321
Shoulder Energy (\$/kWh)	\$0.0754
Peak Energy (\$/kWh)	\$0.0939
Peak Regulatory (\$/kWh)	\$0.1813
Power Supply Adjustment (\$/kWh)	\$0.0303

- Financial Forecast indicates City and Rural System average base rates are too low
 - City average required base rate increase: 5 percent
 - Rural average required base rate increase: 18 percent

- BTU can temporarily offset base rate increases by returning current fuel charge over-recovery balance
 - Total City rate increase with fuel offset: 0 percent
 - Total City rate increase without fuel offset: 2.4 percent
 - Total Rural rate increase with fuel offset: 7 percent
 - Total Rural rate increase without fuel offset: 9.9 percent
- At end of phase in period and end of fuel offset, BTU still maintains competitive rates.

- Cost of Service indicates following rates require average base rate increases:
 - City
 - Secondary Service Large
 - Security Lighting
 - Street Lighting
 - Rural Electric Division Wholesale Customer
 - Rural
 - Residential (College Station and Rural)
 - Secondary Service Demand
 - Irrigation

- Cost of Service indicates following rates average require base rate decreases:
 - City
 - Residential
 - Secondary Service Small
 - Secondary Service Demand
 - Rural
 - Secondary Service Small

Recommendations

- Move rates to cost of service
- Add new classes of service for City and Rural Systems
- Phase in rates over a three year period to minimize rate impacts on customers
- Maintain current rate pass-through structure (Power Supply Adjustment and Regulatory Charge)
- Adopt Time of Use rates as option for shifting load away from peak periods
- Adopt rates as proposed



Questions / Discussion

City Residential – Proposed Rates

		Cu	irrent	Proposed R	ate All Phases	Cost o	of Service
ltem	Determinants	Rate	Revenue	Rate	Revenue	Rate	Revenue
Customer Charges							
Customer Charge \$/Month	382,843	\$10.28	\$3,935,622	\$11.00	\$4,211,269	\$12.80	\$4,899,402
Energy Charge							
Summer Energy (\$/kWh)	234,332,344	\$0.0316	\$7,404,902	\$0.0383	\$8,974,929	\$0.0334	\$7,828,021
Non-Summer Energy (\$/kWh)	145,431,864	\$0.0190	\$2,763,205	\$0.0256	\$3,723,056	\$0.0334	\$4,858,244
Delivery Charge (\$/kWh)	379,764,208	\$0.0198	\$7,519,331	\$0.0122	\$4,633,123	\$0.0104	\$3,953,109
Total Energy Charges		\$0.0456	\$17,687,439	\$0.0453	\$17,331,108	\$0.0435	\$16,639,373
Subtotal Base Rate		\$0.0569	\$21,623,061	\$0.0567	\$21,542,377	\$0.0567	\$21,538,775
Pass-Through Charges							
Regulatory Charge (\$/kWh)	379,764,208	\$0.0120	\$4,554,093	\$0.0120	\$4,554,093	\$0.0120	\$4,554,093
Power Supply Adjustment (\$/kWh)	379,764,208	\$0.0330	\$12,532,219	\$0.0301	\$11,432,897	\$0.0301	\$11,432,897
Total Pass-Through Charges		\$0.0450	\$17,086,312	\$0.0421	\$15,986,990	\$0.0421	\$15,986,990
Grand Total		\$0.1019	\$38,709,373	\$0.0988	\$37,409,403	\$0.0988	\$37,525,765
Difference (From Current Rate)				-3.0%	-\$1,180,007	-3.1	-\$1,183,608
Difference (From COS)		3.2%	\$1,183,608	0.0%	\$3,602		

Rural Residential – Proposed Rates

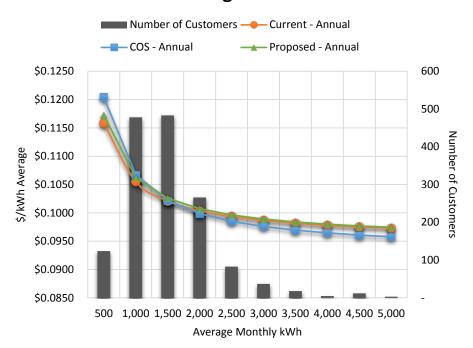
		Cı	Current Proposed Phase 1 Proposed Phase 2		ed Phase 2	Propos	ed Phase 3	Cost of Service			
Item	Determinants	Rate	Revenue	Rate	Revenue	Rate	Revenue	Rate	Revenue	Rate	Revenue
Customer Charges											
Customer Charge \$/Month	155,850	\$9.61	\$1,497,722	\$11.00	\$1,714,354	\$11.50	\$1,792,279	\$12.00	\$1,870,204	\$13.59	\$2,117,982
Energy Charge											
Summer Energy (\$/kWh)	132,554,637	\$0.0300	\$3,976,639	\$0.0394	\$5,222,653	\$0.0429	\$5,686,594	\$0.0465	\$6,163,791	\$0.0393	\$5,213,982
Non-Summer Energy (\$/kWh)	103,532,913	\$0.0177	\$1,832,533	\$0.0263	\$2,722,916	\$0.0287	\$2,971,395	\$0.0311	\$3,219,874	\$0.0393	\$4,072,425
Delivery Charge (\$/kWh)	236,087,550	\$0.0185	\$4,367,620	\$0.0150	\$3,541,313	\$0.0150	\$3,541,313	\$0.0150	\$3,541,313	\$0.0145	\$3,417,051
Total Energy Charges		\$0.0431	\$10,176,791	\$0.0487	\$11,486,882	\$0.0517	\$12,199,302	\$0.0547	\$12,924,977	\$0.0538	\$12,703,458
Subtotal Base Rate		\$0.0494	\$11,674,513	\$0.0559	\$13,201,235	\$0.0593	\$13,991,581	\$0.0627	\$14,795,182	\$0.0628	\$14,821,440
Pass-Through Charges											
	226 007 550	¢0.0104	¢2.466.204	¢0.0104	¢2.466.204	¢0.0104	¢2.4CC.204	¢0.0104	¢2.466.204	¢0.0104	¢2.466.204
Regulatory Charge (\$/kWh)	236,087,550	\$0.0104	\$2,466,284	\$0.0104	\$2,466,284	\$0.0104	\$2,466,284	\$0.0104	\$2,466,284	\$0.0104	\$2,466,284
Power Supply Adjustment	226 007 550	60.0005	ć= 000 000	40.0000	67 4 47 607	¢0.0000	ć	¢0.0000	ć	40.0000	¢7.447.607
(\$/kWh)	236,087,550	\$0.0335	\$7,908,933	\$0.0303	\$7,147,697	\$0.0303	\$7,147,697	\$0.0303	\$7,147,697	\$0.0303	\$7,147,697
Total Pass-Through Charges		\$0.0439	\$10,375,217	\$0.0407	\$9,613,981	\$0.0407	\$9,613,981	\$0.0407	\$9,613,981	\$0.0407	\$9,613,981
										4	
Grand Total		\$0.0934	\$22,049,730	\$0.0966	\$22,815,216	\$0.1000	\$23,605,561	\$0.1034	\$24,409,162	\$0.1035	\$24,435,420
Difference (From Current Rate)				3.4%	\$765,486	3.3%	\$790,345	3.3%	\$803,601	9.8%	\$2,385,691
Difference (From COS)		-9.8%	-\$2,385,691	-6.6%	-\$1,620,204	-3.4%	-\$829,859	-0.1%	-\$26,258		

College Station Residential – Proposed Rates

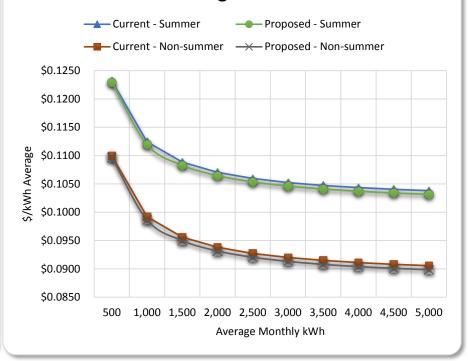
		Cu	rrent	Proposed R	ate All Phases	Cost o	f Service
Item	Determinants	Rate	Revenue	Rate	Revenue	Rate	Revenue
Customer Charges							
Customer Charge \$/Month	25,956	\$10.28	\$266,827	\$11.00	\$4,211,269	\$13.64	\$354,021
Energy Charge							
Summer Energy (\$/kWh)	17,723,930	\$0.0316	\$560,076	\$0.0390	\$8,041,110	\$0.0345	\$610,735
Non-Summer Energy (\$/kWh)	13,302,912	\$0.0190	\$252,755	\$0.0261	\$4,530,488	\$0.0345	\$458,394
Delivery Charge (\$/kWh)	31,026,842	\$0.0211	\$654,666	\$0.0122	\$4,633,123	\$0.0127	\$395,232
Total Energy Charges		\$0.0473	\$1,467,498	\$0.0453	\$17,204,721	\$0.0472	\$1,464,361
Subtotal Base Rate		\$0.0559	\$1,734,325	\$0.0564	\$21,415,990	\$0.0586	\$1,818,383
Pass-Through Charges							
Regulatory Charge (\$/kWh)	31,026,842	\$0.0106	\$329,138	\$0.0106	\$329,138	\$0.0106	\$329,138
Power Supply Adjustment (\$/kWh)	31,026,842	\$0.0335	\$1,039,399	\$0.0303	\$939,357	\$0.0303	\$939,357
College Station Franchise Fee		5.00%	\$155,143	5.00%	\$154,333	5.00%	\$154,333
Total Pass-Through Charges		\$.04911	\$1,523,680	\$0.0459	\$1,422,828	\$0.0459	\$1,422,828
Grand Total		\$0.1050	\$3,258,005	\$0.1045	\$3,240,993	\$0.1045	\$3,241,221
Difference (From Current Rate)				-0.5%	-\$17,012	-0.5%	-\$16,784
Difference (From COS)		0.5%	\$16,784	0.0%	-\$228		

College Station Residential – Cost Curves

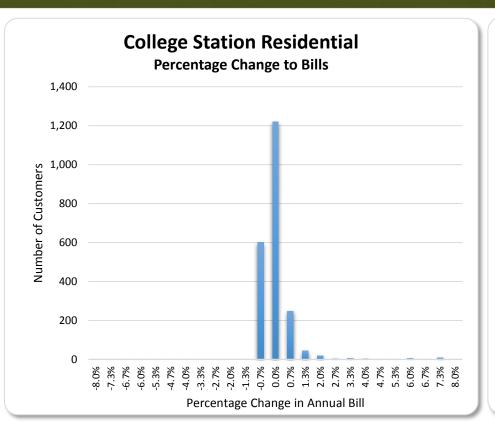
Cost Curves - College Station Residential

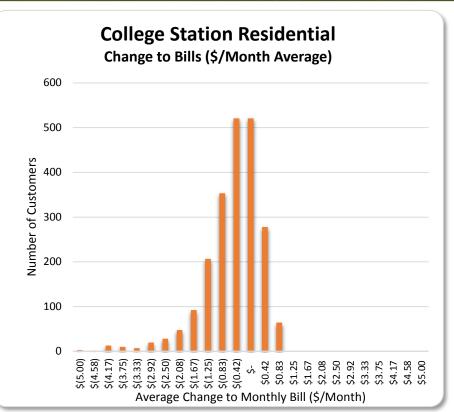


Cost Curves - College Station Residential



College Station Residential - Billing Impacts

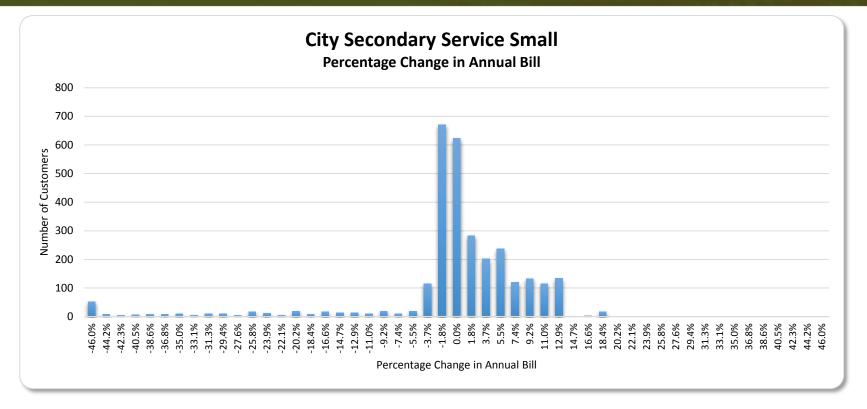




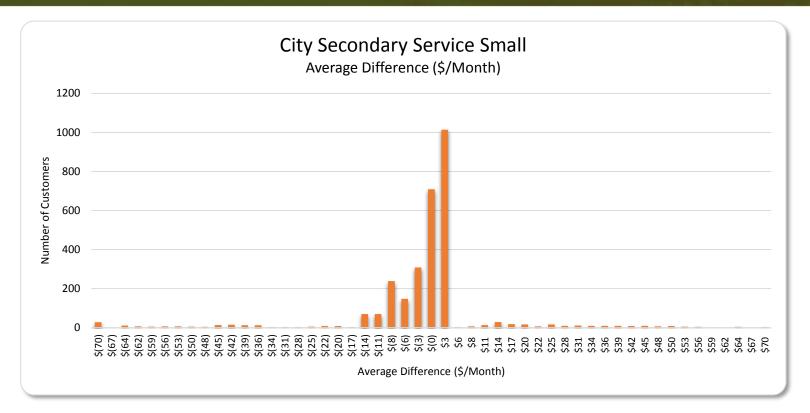
Secondary Service Small - City

	New	Current SC		Currer	Current GS <25 kW			Current Interdep. <25kW				
Item	Determinants	Determinants	Rate	Revenue	Determinants	Rate	Revenue	Determinants	Rate	Revenue	Rate	Revenue
Customer Charges												
Customer Charge \$/Month	35,463	27,489	\$13.82	\$379,893	2,201	\$26.34	\$57,982	1,705	\$30.00	\$51,150	\$15.42	\$546,873
LF Only Cust. Charge \$/Month					4,068	\$23.99	\$97,593					
Energy Charge												
Energy Charge (\$/kWh)	41,252,247	21,834,731	\$0.0183	\$399,576	3,665,743	\$0.0276	\$101,175	1,505,784	\$0.0200	\$30,116	\$0.0348	\$1,437,452
LF1 (\$/kWh)	41,232,247	21,034,731	Ç0.0103	7333,370	4,222,003	\$0.0270	\$206,456	1,505,704	Ş0.0200	750,110	Ş0.03 4 0	71,437,432
LF2 (\$/kWh)					3,855,663	\$0.0414	\$159,624					
LF3 (\$/kWh)					4,942,503	\$0.0383	\$189,298					
LF4 (\$/kWh)					1,225,819	\$0.0329	\$40,329					
Delivery Charge (\$/kWh)	41,252,247	21,834,731	\$0.0333	\$727,097				1,505,784	\$0.0244	\$36,741	\$0.0106	\$438,412
Total Energy Charges			\$0.0516	\$1,126,672		\$0.0389	\$696,882		\$0.0444	\$66,857	\$0.0455	\$1,875,865
Demand Charges						40 =0	4 000					
Demand Charge (\$/kW)					29,458	\$0.59	\$17,380					
Delivery Charge (\$/kW)					29,458	\$5.72	\$168,501				ć0.00	\$0
Total Demand Charges						\$6.31	\$185,881				\$0.00	ŞU
Subtotal Base Rate			\$0.0690	\$1,506,565		\$0.0580	\$1,038,339		\$0.0784	\$118,007	\$0.0587	\$2,422,737
la												
Pass-Through Charges	44 252 247	24 024 724	ć0 0430	¢202.456	47.044.722	ć0 04 3 0	¢224_462	4 505 704	ć0 0420	640.450	60.0430	¢522.076
Regulatory Charge (\$/kWh)	41,252,247	21,834,731	\$0.0129	\$282,156	17,911,732	\$0.0129	\$231,462	1,505,784	\$0.0129	\$19,458	\$0.0129	\$533,076
Power Supply Adjustment (\$/kWh)	41,252,247	21,834,731	\$0.0330	\$720,546	17,911,732	\$0.0330	\$591,087	1,505,784	\$0.0330	\$49,691	\$0.0301	\$1,241,909
Total Pass-Through Charges	41,232,247	21,034,731	\$0.0330	\$1,002,702	17,311,732	\$0.0330	\$822,549	1,303,764	\$0.0330	\$69,149	\$0.0301	\$1,774,986
Total 1 ass-1111 ough Charges			70.0 1 33	71,002,702		Ç0.0 4 33	7022,343		₹0.0 1 33	703,173	70.0430	71,777,300
Grand Total			\$0.1149	\$2,509,268		\$0.1039	\$1,860,888		\$0.1243	\$187,156	\$0.1018	\$4,197,723
Difference (from Current Rate)										•	-7.9%	-\$359,589

Secondary Service Small – City Billing Impacts – Phase 1



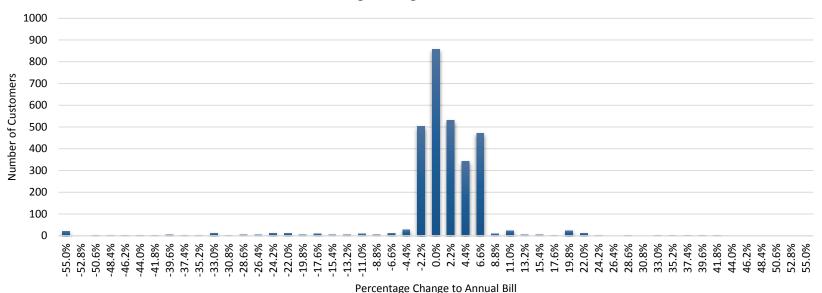
Secondary Service Small – City Billing Impacts – Phase 1



Secondary Service Small – Rural Billing Impacts – Phase 1

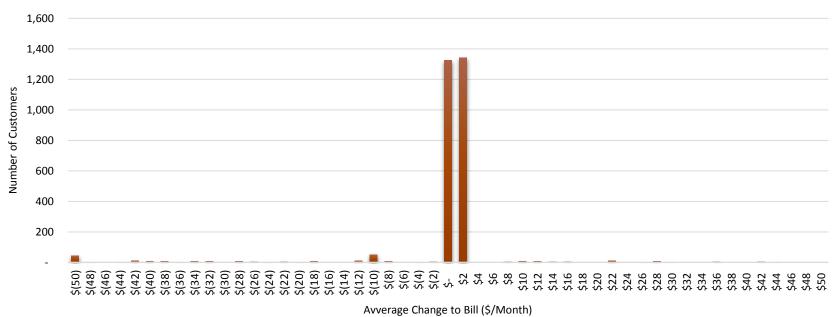
Secondary Service Small - Rural

Percentage Change in Annual Bill



Secondary Service Small – Rural Billing Impacts – Phase 1

Secondary Service Small - Rural Average Change to Bill (\$/Month)



Secondary Service Small - City

	New	Proposed Phase 1		Propose	d Phase 2	Propose	d Phase 3	Cost of Service		
Item	Determinants	Rate	Revenue	Rate	Revenue	Rate	Revenue	Rate	Revenue	
Customer Charges										
Customer Charge \$/Month	35,463	\$15.50	\$549,677	\$15.50	\$549,677	\$15.50	\$549,677	\$15.42	\$546,873	
Energy Charge										
Energy Charge (\$/kWh)	41,252,247	\$0.0400	\$1,650,090	\$0.0373	\$1,538,709	\$0.0345	\$1,423,203	\$0.0348	\$1,437,452	
Delivery Charge (\$/kWh)	41,252,247	\$0.0110	\$453,775	\$0.0110	\$453,775	\$0.0110	\$453,775	\$0.0106	\$438,412	
Total Energy Charges	, ,	\$0.0510	\$2,103,865	\$0.0483	\$1,992,484	\$0.0455	\$1,876,977	\$0.0455	\$1,875,865	
Subtotal Base Rate		\$0.0643	\$2,653,542	\$0.0616	\$2,542,161	\$0.0588	\$2,426,655	\$0.0587	\$2,422,737	
Pass-Through Charges										
Regulatory Charge (\$/kWh)	41,252,247	\$0.0129	\$533,076	\$0.0129	\$533,076	\$0.0129	\$533,076	\$0.0129	\$533,076	
Regulatory Charge (\$/kW)										
Power Supply Adjustment (\$/kWh)	41,252,247	\$0.0301	\$1,241,909	\$0.0301	\$1,241,909	\$0.0301	\$1,241,909	\$0.0301	\$1,241,909	
Total Pass-Through Charges		\$0.0430	\$1,774,986	\$0.0430	\$1,774,986	\$0.0430	\$1,774,986	\$0.0430	\$1,774,986	
Crond Total		ć0 1074	¢4 439 539	ć0 1047	64 217 147	ć0 1010	¢4 201 640	ĆO 1019	Ć4 107 722	
Grand Total		\$0.1074	\$4,428,528	\$0.1047	\$4,317,147	\$0.1019	\$4,201,640	\$0.1018	\$4,197,723	
Difference from Current Rate		-2.9% 5.3%	-\$128,784	-2.6%	-\$111,381	-2.7% 0.1%	-\$115,506	-7.9%	-\$359,589	
Difference from COS		5.2%	\$230,805	2.8%	\$119,424	0.1%	\$3,917			

Secondary Service Small - Rural

	New	Current SC			Curi	rent GS <25	kW	Cost of	Service
Item	Determinants	Determinants	Rate	Revenue	Determinants	Rate	Revenue	Rate	Revenue
Customer Charges									
Customer Charge \$/Month	34,698	30,913	\$13.16	\$406,817	2,007	\$19.25	\$38,638	\$16.17	\$561,204
LF Only Cust. Charge \$/Month					1,778	\$22.94	\$40,781		
Energy Charge									
Energy Charge (\$/kWh)	31,705,596	20,760,331	\$0.0162	\$336,317	3,733,007	\$0.0192	\$71,674	\$0.0337	\$1,067,664
LF1 (\$/kWh)					1,856,944	\$0.0487	\$90,433		
LF2 (\$/kWh)					1,138,656	\$0.0415	\$47,254		
LF3 (\$/kWh)					1,376,308	\$0.0376	\$51,749		
LF4 (\$/kWh)					2,840,350	\$0.0315	\$89,471		
Delivery Charge (\$/kWh)	31,705,596	20,760,331	\$0.0347	\$720,384				\$0.0110	\$349,164
Total Energy Charges			\$0.0509	\$1,056,701		\$0.0320	\$350,581	\$0.0447	\$1,416,828
Demand Charges									
Demand Charge (\$/kW)					27,604	\$0.42	\$11,594		
Delivery Charge (\$/kW)					27,604	\$5.58	\$154,030		
Total Demand Charges						\$6.00	\$165,624		
Subtotal Base Rate			\$0.0705	\$1,463,518		\$0.0544	\$595,624	\$ 0.0479	5 \$ 1,978,032
Bass Thurstonk Chauses									
Pass-Through Charges Regulatory Charge (\$/kWh)	31,705,596	20,760,331	\$0.0098	\$204,216	10,945,265	\$0.0098	\$107,667	\$0.0098	\$311,883
Power Supply Adjustment (\$/kWh)	31,705,596	20,760,331	\$0.0098	\$695,471	10,945,265	\$0.0098	\$366,666	\$0.0098	\$959,907
Total Pass-Through Charges	31,703,390	20,700,331	\$0.0333	\$899,687		\$0.0333	\$474,333	\$0.0303	\$1,271,789
			•	. ,		•	. ,		
Grand Total			\$0.1138	\$2,363,205		\$0.0978	\$1,069,957	\$0.1025	\$3,249,822
Difference (From Current Rate)				4			400 -00	-5.6%	-\$183,341
Difference (From COS)			-4.3%	-\$102,753		-7.5%	-\$80,588	L	

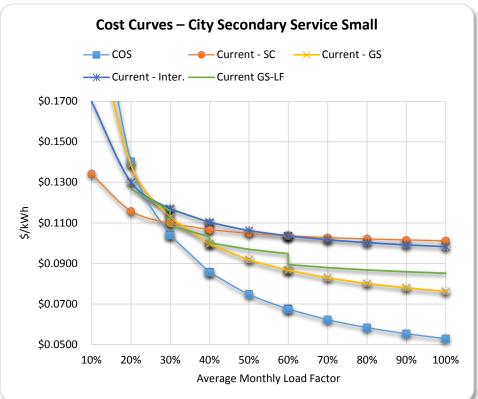
Secondary Service Small - Rural

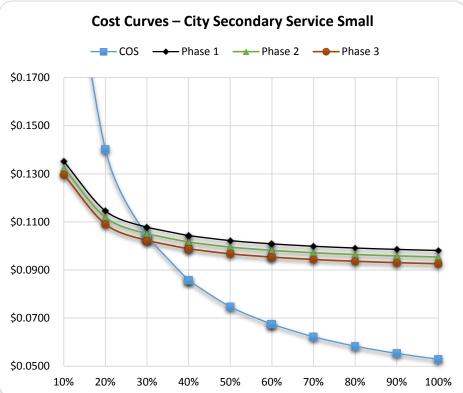
	New	Proposed Phase 1		Propose	ed Phase 2	Propose	d Phase 3	Cost of Service		
Item	Determinants	Rate	Revenue	Rate	Revenue	Rate	Revenue	Rate	Revenue	
Customer Charges										
Customer Charge \$/Month	34,698	\$14.00	\$496,483	\$15.00	\$531,946	\$16.00	\$567,409	\$16.17	\$561,204	
Energy Charge Energy Charge (\$/kWh)	31,705,596	\$0.0399	\$1,265,053	\$0.0385	\$1,220,665	\$0.0330	\$1,046,285	\$0.0337	\$1,067,664	
Delivery Charge (\$/kWh)	31,705,596	\$0.0112	\$355,103	\$0.0112	\$355,103	\$0.0112	\$355,103	\$0.0110	\$349,164	
Total Energy Charges		\$0.0511	\$1,620,156	\$0.0497	\$1,575,768	\$0.0442	\$1,401,387	\$0.0447	\$1,416,828	
Subtotal Base Rate		\$0.0513	\$2,116,639	\$0.0511	\$2,107,714	\$0.0477	\$1,968,796	\$0.0480	\$ 1,978,032	
Pass-Through Charges Regulatory Charge (\$/kWh) Power Supply Adjustment (\$/kWh)	31,705,596 31,705,596	\$0.0098 \$0.0303	\$311,883 \$959,907	\$0.0098 \$0.0303	\$311,883 \$959,907	\$0.0098 \$0.0303	\$311,883 \$959,907	\$0.0098 \$0.0303	\$311,883 \$959,907	
Total Pass-Through Charges	, ,	\$0.0401	\$1,271,789	\$0.0401	\$1,271,789	\$0.0401	\$1,271,789	\$0.0401	\$1,271,789	
Grand Total Difference (From Current Rate) Difference (From COS)		\$0.1069 -1.3% 4.3%	\$3,388,428 -\$44,734 \$138,607	\$0.1066 -0.3% 4.0%	\$3,379,503 -\$8,925 \$129,682	\$0.1022 -4.3% -0.3%	\$3,240,586 -\$138,918 -\$9,236	\$0.1025 -5.6%	\$3,249,822 -\$183,341	

Secondary Service Demand - City

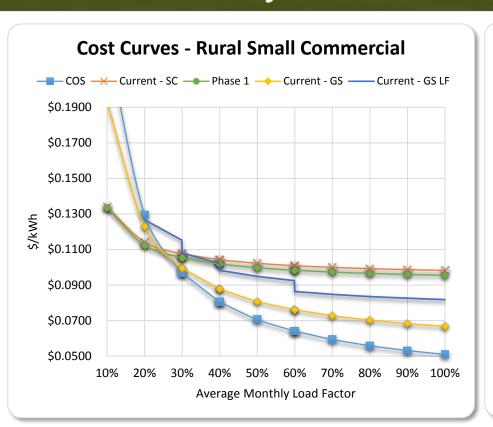
	New	Current GS			Curren	t Interdep.	>25kW	Curre	nt School >2	25kW	Current GS - TOU		
Item	Determinants	Determinants	Rate	Revenue	Determinants	Rate	Revenue	Determinants	Rate	Revenue	Determinants	Rate	Revenue
Customer Charges													
Customer Charge \$/Month	14,500	2,226	\$26.34	\$58,639	926	\$30.00	\$27,780	259	\$39.52	\$10,225	170	\$26.91	\$4,586
LF Only Cust. Charge \$/Month		10,919	\$23.99	\$261,941									
Energy Charge													
Energy Charge (\$/kWh)	378,402,515	16,670,432	\$0.0276	\$460,104	27,559,954	\$0.0200	\$551,199	8,525,793	\$0.0263	\$224,228	8,630,273	\$0.0142	\$122,550
LF1 (\$/kWh)	172,370	31,524,823	\$0.0489	\$1,541,564							' '		
LF2 (\$/kWh)	168,127	43,022,045	\$0.0414	\$1,781,113									
LF3 (\$/kWh)	340,930	124,705,789	\$0.0383	\$4,776,232									
LF4 (\$/kWh)	230,105	117,763,404	\$0.0329	\$3,874,416									
Delivery Charge (\$/kWh)	378,402,515				27,559,954	\$0.0244	\$672,463	8,525,793	\$0.0273	\$232,754			
Total Energy Charges			\$0.7458	\$12,433,428		\$0.0444	\$1,223,662		\$0.0536	\$456,983		\$0.0144	\$122,550
Demand Charges													
Demand Charge (\$/kW)	1,137,518	92,228	\$0.59	\$54,415							17,963	\$4.14	\$74,365
Delivery Charge (\$/kW)	1,137,518	92,228	\$5.72	\$527,545							25,281	\$2.70	\$68,259
Total Demand Charges				\$581,959									\$142,624
Subtotal Base Rate			\$0.0400	\$13,335,968		\$0.0454	\$1,251,442		\$0.0548	\$467,208		\$0.0316	\$269,760
Pass-Through Charges													
Regulatory Charge (\$/kW)	1,137,518	1,003,759	\$3.30	\$3,316,552	82,848	\$3.30	\$273,741	25,629	\$3.30	\$84,683	25,281	\$3.30	\$83,533
Power Supply Adjustment	1,137,010	1,000,700	ψ5.50	ψο,σ10,σσ2	02,010	ψ5.50	Ψ2/3)/.1		φ3.33	φο .,σσσ	20,201	φ5.50	ψου,σου
(\$/kWh)	378,402,515	333,686,494	\$0.0330	\$11,011,654	27.559.954	\$0.0330	\$909,478	8,525,793	\$0.0330	\$281,351	8,630,273	\$0.0330	\$284,799
Total Pass-Through Charges	-, - ,		\$0.0429	\$14,328,206	,,	\$0.0429	\$1,183,220	,,	\$0.0429	\$366,034	,,	\$0.0427	\$368,332
Grand Total			\$0.0829	\$27,664,174		\$0.0883	\$2,434,661		\$0.0977	\$833,242		\$0.0739	\$638,092
Difference (From Current Rate)				-			-			•			
Difference (From COS)			-5.6%	-\$1,538,326		-11.6%	\$2,151,053					3.3%	\$21,003

Secondary Service Small - City

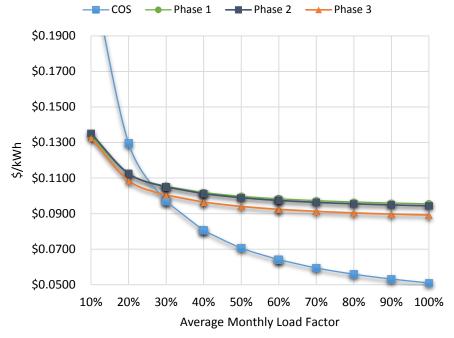




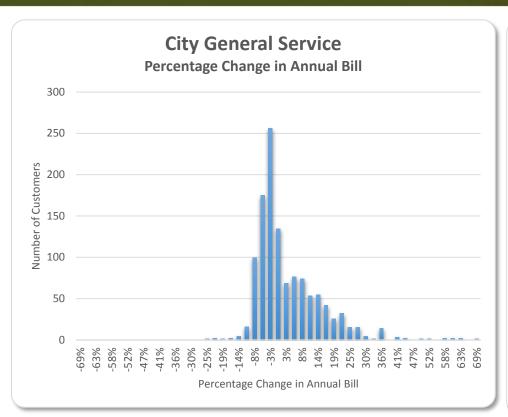
Secondary Service Small – Rural

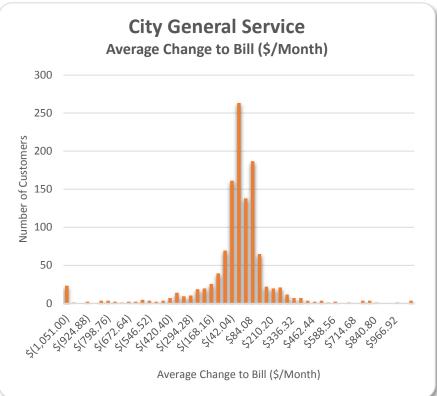


Cost Curves - Rural Small Commercial



Secondary Service Demand Billing Impacts - City





Secondary Service Demand Billing Impacts - City

