



Shrewsbury Electric & Cable Operations

Electric Cost of Service and Rate Design

August 6, 2024





Report

SELCO

1. Project overview

2. Overall process

- a) Data collection
- b) Developing the revenue requirement, cost of service, and rate design studies
- c) SELCO objectives



Report (cont.)

3. Electric operations

- a) Revenue requirement
- b) Cost of service analysis
- c) Preliminary rate design
- d) Proposed Rates

4. Cash Flow and Debt Service Coverage

5. Questions & Discussion





**Shrewsbury Electric & Cable
Operations**

General project overview

Project objectives

- > Conduct and develop a comprehensive allocated cost of service and rate design study for electric operations
- > Review existing rate structures
- > Recommend rates that reflect costs of providing service
- > Develop tailored rate models that can be used internally by SELCO

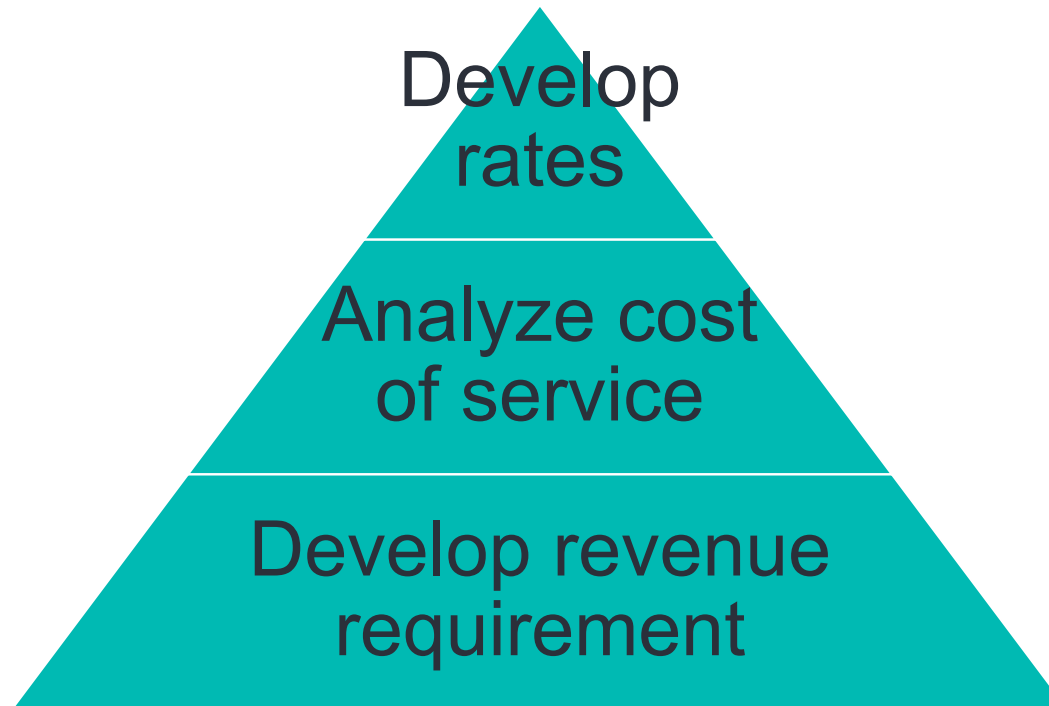


Data collection

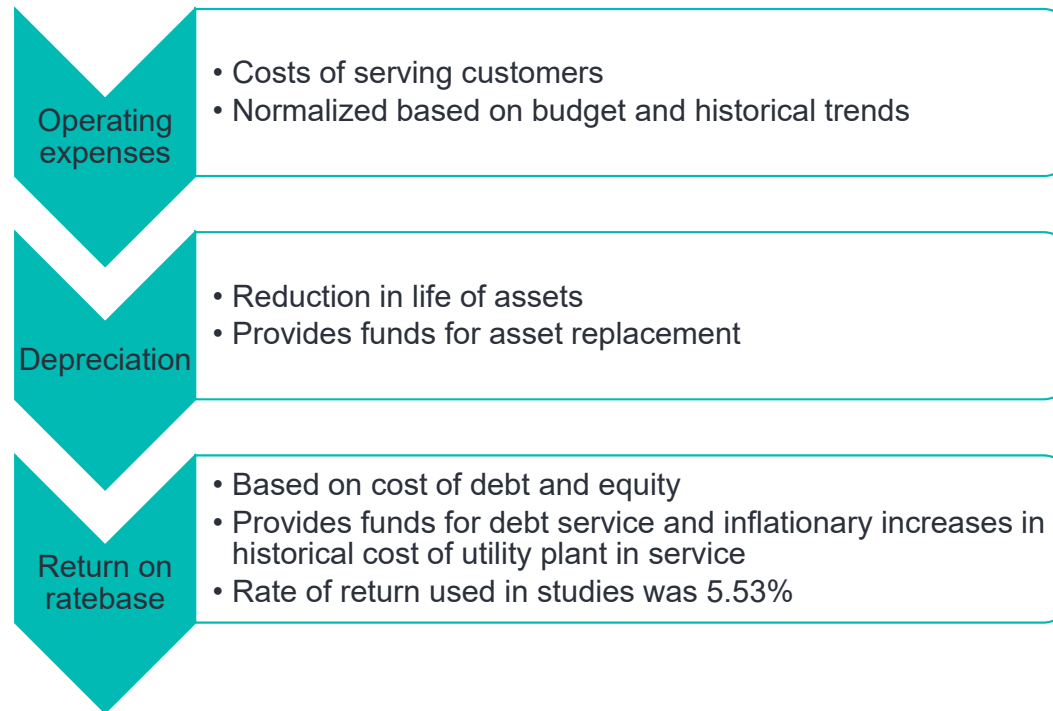
- > Study is based on management's assumptions
- > Quality and quantity of data received was excellent and useful in preparing studies
- > We greatly appreciate the assistance of the SELCO team in this project



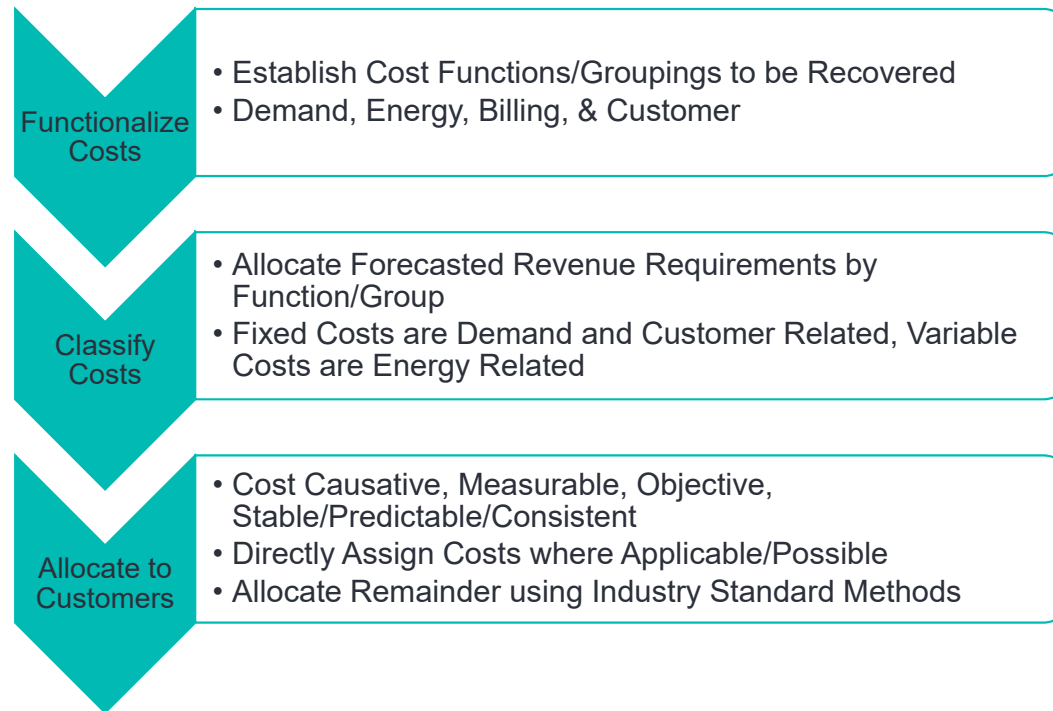
Rate study process



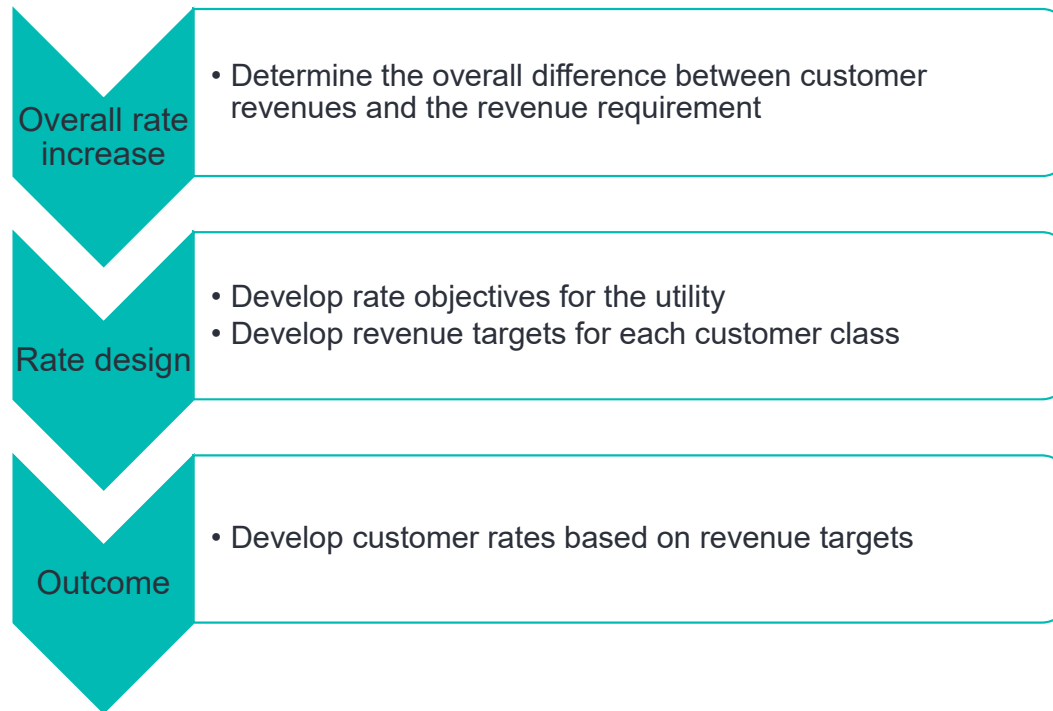
Revenue requirement components



Cost of service approach



Rate design



Overall rate design objectives

- > Meet the financial needs of the electric utility for reliable service
- > Smooth and steady increases
- > Recover the costs of service
- > Move customer classes to their cost of service over a period of time and after extended analysis



Successful implementation of new rate structures

1. Board and management support is key
2. Public presentations at Board meetings
3. Information campaigns
 - a) Website
 - b) Included with customer bills on rate changes
 - c) Social media
 - d) Signage in pay stations
 - e) Local media
4. Once rate structures are implemented, ongoing information should be part of the process





**Shrewsbury Electric & Cable
Operations**

Revenue requirement, cost of
service and rate design study



Executive summary and recommendations

1. Our review of the electric revenue requirement indicates a 9% increase in rates overall is needed to cover the cost of service
2. We recommend moving customer classes closer to their cost of service and reduce subsidization of some rate classes by the other rate classes



Executive summary and recommendations

3. Street light rates are a new introduction and are subsidized by other rate classes
4. We recommend developing a rate plan that increases rates by 1% per in order to keep up with inflation in expenses that is not covered by load growth



Forecasted Revenue Requirement

	<u>Budget</u> <u>2024</u>	<u>Proposed Rates</u> <u>2024</u>	<u>2025</u>	<u>Forecasted</u> <u>2026</u>	<u>2027</u>
Revenue from rates	\$ <u>36,593,972</u>	\$ <u>39,778,561</u>	\$ <u>40,381,570</u>	\$ <u>41,981,849</u>	\$ <u>46,018,318</u>
Revenue Requirement					
Operation and maintenance expenses	\$ 34,932,162	\$ 34,932,162	\$ 35,213,108	\$ 36,712,595	\$ 39,290,833
Depreciation expense	2,737,749	2,737,749	3,108,363	3,478,977	3,549,591
Return on ratebase	2,355,043	2,355,043	2,878,312	3,382,261	3,332,591
Other revenues	<u>(118,530)</u>	<u>(118,530)</u>	<u>(118,530)</u>	<u>(118,530)</u>	<u>(118,530)</u>
Total Revenue Requirement	\$ <u>39,906,425</u>	\$ <u>39,906,425</u>	\$ <u>41,081,253</u>	\$ <u>43,455,303</u>	\$ <u>46,054,485</u>
Revenue Increase Required	\$ <u>3,312,453</u>	\$ <u>127,864</u>	\$ <u>699,683</u>	\$ <u>1,473,454</u>	\$ <u>36,167</u>
Revenue Percentage Increase Required	<u>9.05%</u>	<u>0.32%</u>	<u>1.73%</u>	<u>3.51%</u>	<u>0.08%</u>



Shrewsbury Electric & Cable Operations

Cost of Service

Cost of Service by Class

Customer Class	FY 2024 Cost of Service	Forecasted Revenues at Current Rates	Difference Over/(Under) Cost of Service	Indicated Rate Increase/(Decrease)
Residential	19,572,056	19,360,169	(211,887)	1.1%
Commercial	5,663,384	4,395,596	(1,267,788)	28.8%
General Service - GS1	3,785,329	3,071,935	(713,394)	23.2%
General Service - GS2	8,348,646	8,382,671	34,025	-0.4%
Municipal	1,246,711	1,091,646	(155,065)	14.2%
Residential Net Metered Rate	410,397	118,697	(291,700)	245.8%
Commercial Net Metered Rate	10,174	8,150	(2,024)	24.8%
Protective Lighting	285,079	16,092	(268,987)	1671.6%
Street Lighting	429,342	140,048	(289,294)	206.6%
Electric Vehicle	15,862	8,968	(6,894)	76.9%
Interdepartmental	139,444	-	(139,444)	0.0%
Total	\$ 39,906,424	\$ 36,593,972	\$ (3,312,452)	9.1%

Recommended Rate Changes

Recommended Rate Changes by Class

<u>Customer Class</u>	<u>Rate Design</u> <u>Rate Change</u>	<u>Revenue Target</u>	<u>Difference from</u> <u>Cost of Service</u>
Residential	5.00%	\$ 20,328,000	\$ 755,944
Commercial	25.00%	5,494,000	(169,384)
General Service - GS1	25.00%	3,840,000	54,671
General Service - GS2	2.00%	8,550,000	201,354
Municipal	10.00%	1,201,000	(45,711)
Residential Net Metered Rate	11.00%	132,000	(278,397)
Commercial Net Metered Rate	10.00%	9,000	(1,174)
Protective Lighting	30.00%	21,000	(264,079)
Street Lighting	30.00%	182,000	(247,342)
Electric Vehicle	30.00%	12,000	(3,862)
Interdepartmental	0.00%	-	(139,444)
Total		<u>\$ 39,769,000</u>	<u>\$ (137,424)</u>

-0.34%



Proposed Rates

	<u>Current Rates</u>	<u>Proposed Rates</u>
Residential		
Distribution charge	\$ 0.0412	\$ 0.0433
Transmission charge	\$ 0.0263	\$ 0.0276
Generation charge	\$ 0.0660	\$ 0.0693
Customer Charge	\$ 11.55	\$ 12.13
G&T Adjustment	\$ -	\$ -
NYPA Credit	\$ (0.0066)	\$ (0.0069)
Commercial		
Distribution charge	\$ 0.0437	\$ 0.0546
Transmission charge	\$ 0.0207	\$ 0.0259
Generation charge	\$ 0.0660	\$ 0.0825
Customer Charge	\$ 12.00	\$ 15.00
G&T Adjustment	\$ -	\$ -
General Service - GS1		
Distribution charge	\$ 0.0223	\$ 0.0279
Transmission charge	\$ 0.0195	\$ 0.0244
Generation charge	\$ 0.0660	\$ 0.0825
Demand charge	\$ 4.4500	\$ 5.5625
Customer Charge	\$ 50.00	\$ 62.50
G&T Adjustment		



Proposed Rates, cont.

General Service - GS2			
Distribution charge	\$	0.0185	\$ 0.0189
Transmission charge	\$	0.0191	\$ 0.0195
Generation charge	\$	0.0660	\$ 0.0673
Demand charge	\$	4.45	\$ 4.54
Customer Charge	\$	120.00	\$ 122.40
G&T Adjustment	\$	-	\$ -
Municipal			
Distribution charge	\$	0.0347	\$ 0.0382
Transmission charge	\$	0.0207	\$ 0.0228
Generation charge	\$	0.0660	\$ 0.0726
Customer Charge	\$	12.00	\$ 13.20
G&T Adjustment	\$	-	\$ -
Residential Net Metered			
Distribution charge	\$	0.0412	\$ 0.0433
Transmission charge	\$	0.0263	\$ 0.0276
Generation charge	\$	0.0660	\$ 0.0693
Customer Charge	\$	11.55	\$ 12.13
Distribution Standby Charge	\$	2.50	\$ 3.50
G&T Adjustment	\$	-	\$ -
NYP&A Credit	\$	(0.0066)	\$ (0.0079)



Proposed Rates, cont.

Commercial Net Metered

Distribution charge	\$ 0.0437	\$ 0.0279
Transmission charge	\$ 0.0207	\$ 0.0244
Generation charge	\$ 0.0660	\$ 0.0825
Customer Charge	\$ 12.00	\$ 13.20
Distribution Standby Charge	\$ 2.50	\$ 3.50
G&T Adjustment	-	-

Protective Lighting

SL 30W LED	\$ 10.50	\$ 13.65
SL 90W LED	\$ 14.00	\$ 18.20
FL 100W LED	\$ 18.50	\$ 24.05
FL 180W LED	\$ 22.00	\$ 28.60
Wood Pole	\$ 10.00	\$ 13.00

Street Lighting

Streetlight charge	N/A	\$ 2.00
Distribution charge		\$ 0.0382
Transmission charge		\$ 0.0228
Generation charge		\$ 0.0726
G&T Adjustment		



Shrewsbury Electric & Cable Operations

Net Cash Flow

	<u>Budgeted</u>		<u>Forecasted</u>		
	2024	2024	2025	2026	2027
	<u>Budget</u>	<u>Proposed rates</u>			
Revenues and other sources of cash:					
Operating revenues from sales	\$36,593,972	\$39,778,561	\$40,381,570	\$41,981,849	\$46,018,318
Interest income	6,745	6,745	6,745	6,745	6,745
Other electric revenue	111,785	111,785	111,785	111,785	111,785
Debt proceeds	-	-	10,000,000	10,000,000	-
Total Revenues and Other Sources of Cash	<u>\$36,712,502</u>	<u>\$39,897,091</u>	<u>\$50,500,100</u>	<u>\$52,100,379</u>	<u>\$46,136,848</u>
Uses of Cash:					
Operation and maintenance expense	34,932,162	34,932,162	35,213,108	36,712,595	39,290,833
Debt - Principal	1,225,910	1,225,910	1,999,584	2,052,205	2,106,456
Interest on LT Debt	268,431	268,431	830,071	767,850	703,399
PILOT	859,419	859,419	900,000	900,000	900,000
Capital expenditures	3,578,390	3,578,390	12,500,000	12,500,000	2,500,000
Total Other Uses of Cash	<u>\$40,864,312</u>	<u>\$40,864,312</u>	<u>\$51,442,763</u>	<u>\$52,932,650</u>	<u>\$45,500,688</u>
Net Cash Flow	<u>\$ (4,151,810)</u>	<u>\$ (967,221)</u>	<u>\$ (942,663)</u>	<u>\$ (832,271)</u>	<u>\$ 636,160</u>



Shrewsbury Electric & Cable Operations

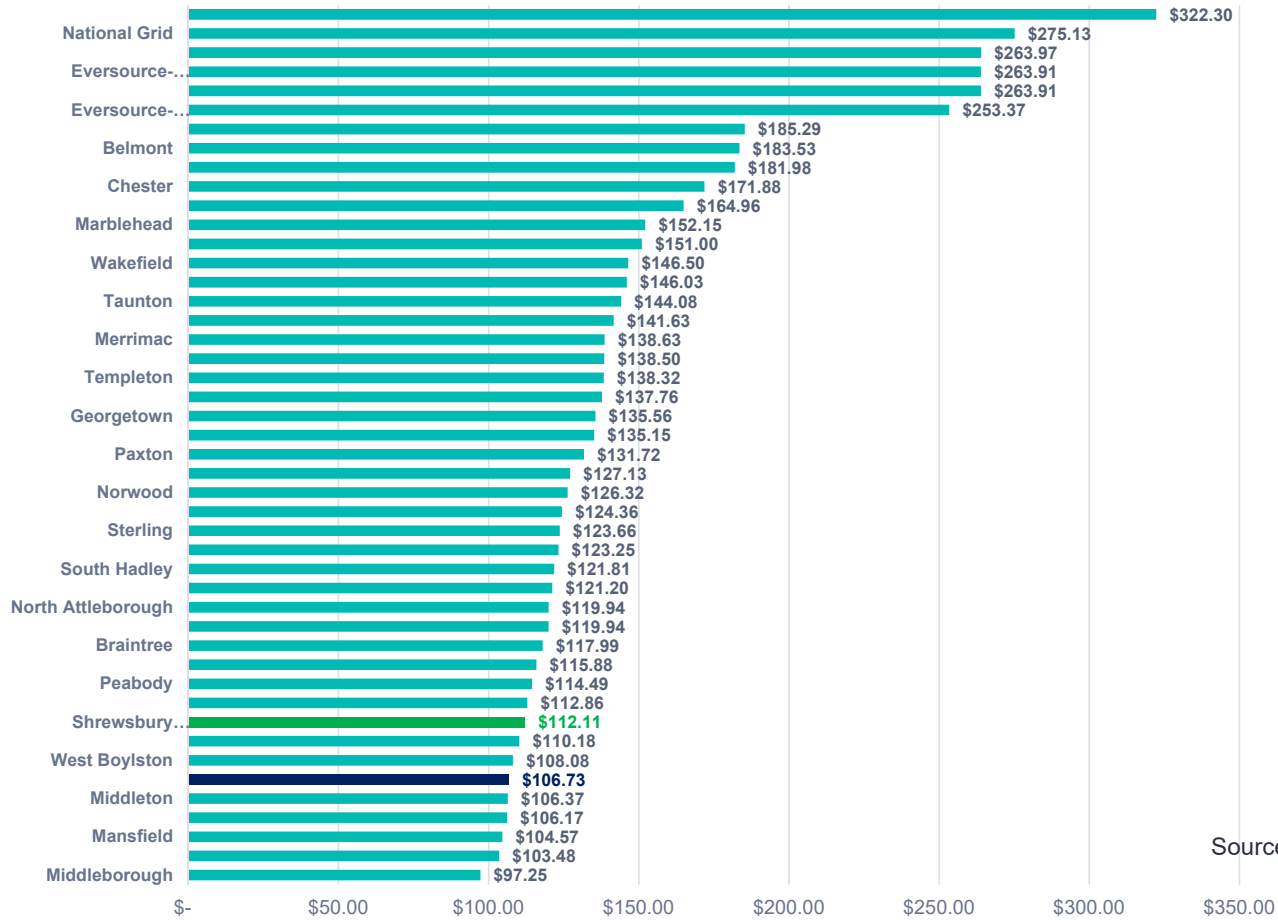
Debt Service Coverage

	<u>Budgeted</u>		<u>Forecasted</u>		
	2024 Budget	2024 Proposed rates	2025	2026	2027
<u>Debt service coverage</u>					
Debt service principal	\$ 1,225,910	\$ 1,225,910	\$ 1,999,584	\$ 2,052,205	\$ 2,106,456
Debt service interest	<u>268,431</u>	<u>268,431</u>	<u>830,071</u>	<u>767,850</u>	<u>703,399</u>
Total Debt Service	<u>\$ 1,494,341</u>	<u>\$ 1,494,341</u>	<u>\$ 2,829,655</u>	<u>\$ 2,820,055</u>	<u>\$ 2,809,855</u>
Cash flows for debt service	<u>\$ 1,309,386</u>	<u>\$ 4,493,975</u>	<u>\$ 4,386,992</u>	<u>\$ 4,487,784</u>	<u>\$ 5,946,015</u>
Debt coverage	<u>0.88</u>	<u>3.01</u>	<u>1.55</u>	<u>1.59</u>	<u>2.12</u>
Debt service target	<u>1.70</u>	<u>1.70</u>	<u>1.70</u>	<u>1.70</u>	<u>1.70</u>

Shrewsbury Electric & Cable Operations

Rate Comparison – 750 kWh per month

750 kWh Per Month Cost (Includes Customer Charges)

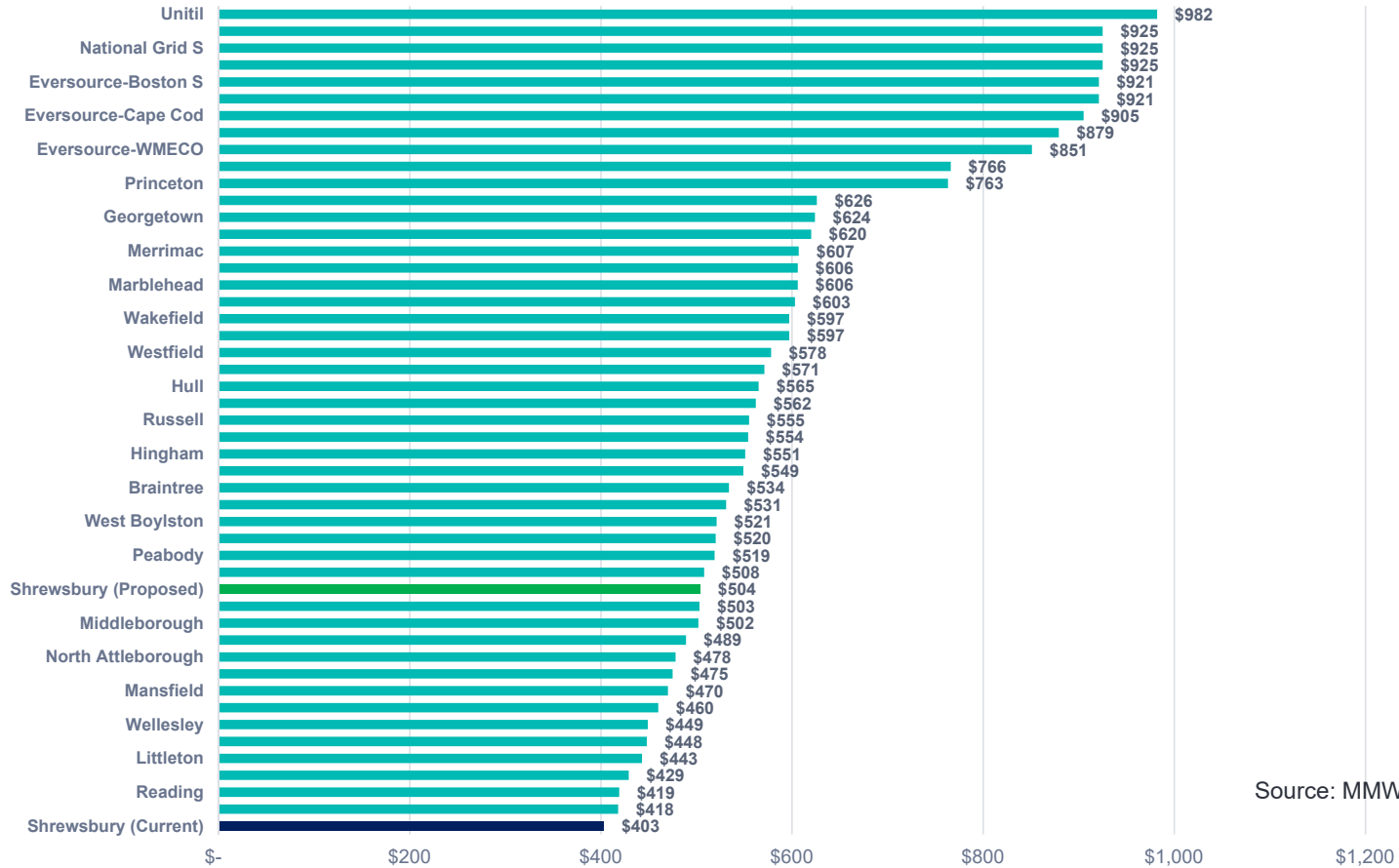


Source: MMWEC Q2 2024 Rate Comparison

Shrewsbury Electric & Cable Operations

Rate Comparison – Commercial 3,000 kWh per month

Commercial 3000 kWh Per Month Cost (Includes Customer Charges)



Source: MMWEC Q2 2024 Rate Comparison

Shrewsbury Electric & Cable Operations

Rate Comparison – Current and Proposed Rates Average Bill

Rate Class	2023 Avg Monthly kWh Use/Customer	2023 Avg Monthly Demand kW/Customer	Current Average Monthly Bill Cost	Proposed Rate % Increase	Average Monthly Bill After Increase	Average Monthly Bill Increase
Residential	743		\$105.84	5%	\$111.13	\$5.29
Commercial	2,414		\$326.78	25%	\$408.48	\$81.70
GS1	19,765		\$2,487.72	25%	\$3,109.65	\$621.93
GS2	233,400	517	\$26,600.89	2%	\$27,132.91	\$532.02
Municipal	7,396		\$909.88	10%	\$1,000.87	\$90.99
Residential Net Metered	428		\$90.87	20%	\$104.04	\$13.17



**Shrewsbury Electric & Cable
Operations**

Discussions on the findings
& recommendations

Thank you. We have enjoyed working with you!



Russ Hissom

P: +1 (608) 628 4020
E: russ.hissom@utilityeducation.com



Amanda Lasinski

P: +1 (920) 210 7796
M: +1 (XXX) XXX-XXXX
E: amanda.lasinski@bakertilly.com

