

CITY OF
ASHLAND

City of Ashland Electric Rate Design

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UFS
Utility Financial Solutions, LLC

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Utility Financial Solutions, LLC

- International consulting firm providing cost of service and financial plans and services to utilities across the country, Canada, Guam and the Caribbean
- Instructors for cost of service and financial planning for APPA, speakers for organizations across the country.
- APPA's Hometown Connection preferred vendor for cost of service and financial planning



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Why is Cost of Service Important?



- ▶ Cost of service is:
 - A method to equitably allocate the revenue requirements of the utility among the various customer classes of service
- ▶ As rate making gets more complicated in the industry, important to have a document based on fair and defensible methodologies.

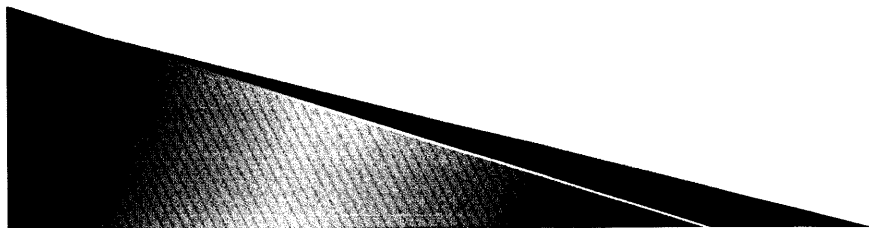
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COS Process

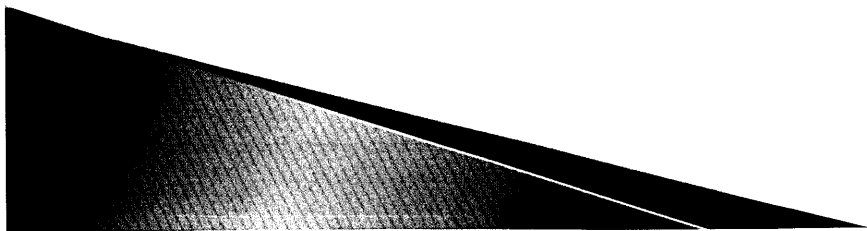
Three Studies

- Done • *Financial projection: Where are today compared to key financial targets and what to do to remain or get financially.*
- Done • *COS – Revenue requirements based on one point in time. Equitable and fair rate structure, and identify any cross-subsidizations.*
- ➔ • Rate design – COS is a base. Then add the Board/Council/Community social and political objectives to development the rate design. Move slowly toward goals.



Today's Objectives

- ▶ *Brief review* of Cost of Service results
- ▶ Review Electric Department Proposed Rate Design



Power Supply Changes

▶ Power Supply Change

Bonneville Power

- 2018 - 6%
- 2019 - 1%
- 2020 - 3%
- 2021 - 3%

▶ Transmission Change

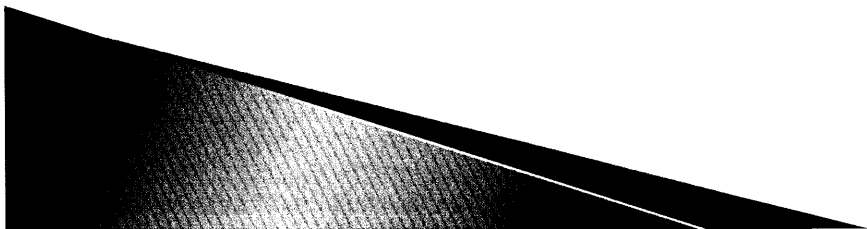
- 2018 - 4%
- 2019 - 1%
- 2020 - 3%
- 2021 - 3%

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Summary without Rate Changes

Fiscal Year	Projected Rate Adjustments	Projected Expenses	Projected Revenues	Adjusted Operating Income	Target Operating Income	Projected Cash Balances	Recommended Minimum Cash
2018	0.00%	\$15,884,175	\$ 15,022,996	\$ (861,179)	\$ 514,397	\$ 162,810	\$ 3,037,822
2019	0.00%	16,058,053	15,066,327	(991,725)	534,255	(1,125,360)	3,080,294
2020	0.00%	16,404,398	15,108,884	(1,295,515)	554,100	(2,693,862)	3,137,714
2021	0.00%	16,915,239	15,145,297	(1,769,941)	573,946	(4,712,519)	3,215,368
2022	0.00%	17,108,497	15,181,862	(1,926,635)	593,807	(6,863,598)	3,232,382



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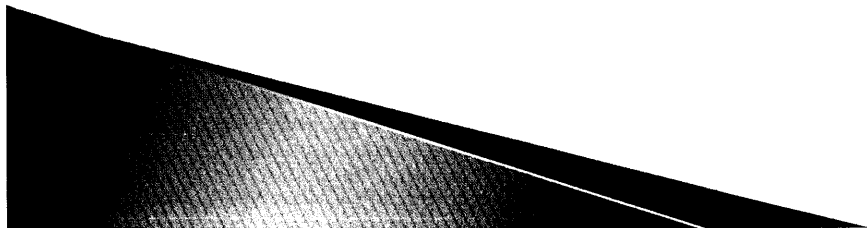
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Summary with Recommended Rate Track

Fiscal Year	Projected Rate Adjustments	Projected Expenses	Projected Revenues	Adjusted Operating Income	Target Operating Income	Projected Cash Balances	Recommended Minimum Cash
2018	6.90%	\$ 15,983,993	\$ 16,021,174	\$ 37,181	\$ 514,397	\$ 1,061,170	\$ 3,050,128
2019	2.75%	16,200,713	16,496,007	295,294	534,255	1,064,512	3,097,882
2020	2.75%	16,591,249	16,983,654	392,404	554,100	1,189,252	3,160,751
2021	2.75%	17,147,575	17,478,199	330,623	573,946	1,277,106	3,244,012
2022	2.75%	17,387,713	17,986,935	599,222	593,807	1,658,269	3,266,806

Rate track mirroring power supply increases

City Increased Technology and other charges \$220k since last presentation; so 4.3% and 2.9%



Electric Cost of Service Results

Customer Class	Cost of Service	Projected Revenues	% Change
Residential Single-Phase	\$ 8,343,058	\$ 7,410,275	12.6%
Seasonal Residential Single	75,378	60,785	24.0%
Telecommunications	73,981	68,342	8.3%
Commercial Service Single Phase	1,907,280	1,720,561	10.9%
Commercial Service Three Phase	3,333,918	3,168,263	5.2%
Governmental Service Single Phase	132,089	100,297	31.7%
Governmental Service Three Phase	475,225	438,354	8.4%
Municipal Service Single Phase	151,481	122,475	23.7%
Municipal Service Three Phase	440,310	479,332	-8.1%
Governmental Large Service	890,057	877,970	1.4%
Total	\$ 15,841,934	\$ 14,466,358	9.5%

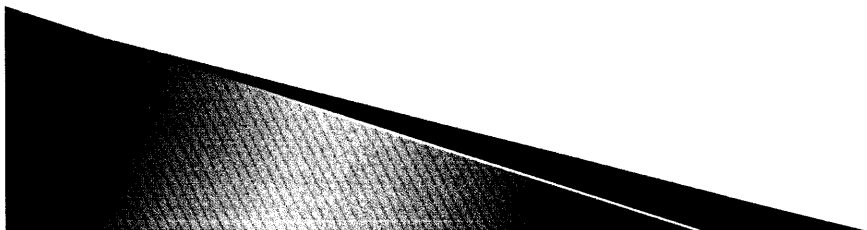
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COS Rates

(Used as a Guide to Design Rates)

Customer Class	Current Average		COS Customer		
	Customer Charge	Charge	Demand	Energy	
Residential Single-Phase	\$ 9.62	\$ 14.09	\$ -	\$ 0.0765	
Seasonal Residential Single	9.62	16.50	-	0.0909	
Telecommunications	17.23	19.45	-	0.0834	
Commercial Service Single Phase	20.29	43.46	14.25	0.0393	
Commercial Service Three Phase	49.95	103.90	12.86	0.0394	
Governmental Service Single Phase	17.23	51.68	13.30	0.0394	
Governmental Service Three Phase	101.01	155.98	14.58	0.0394	
Municipal Service Single Phase	18.79	58.97	16.04	0.0392	
Municipal Service Three Phase	54.72	127.75	14.02	0.0394	
Governmental Large Service	2,639.36	1,635.79	13.96	0.0385	



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Review Proposed Rate Design

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City of Ashland
Rate Design

3/14/2017

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Submitted Respectfully by:
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City of Ashland
Rate Design
Table of Contents

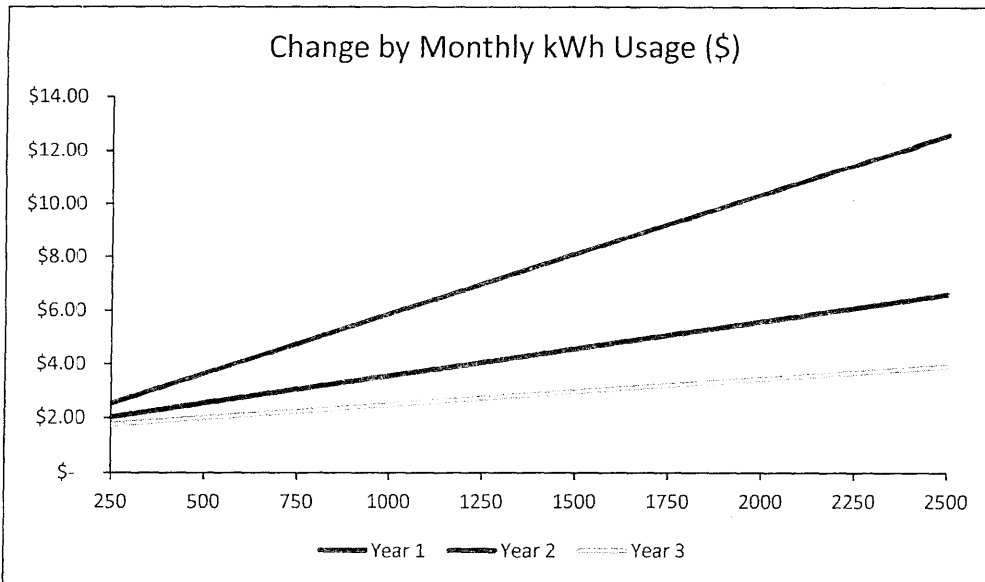
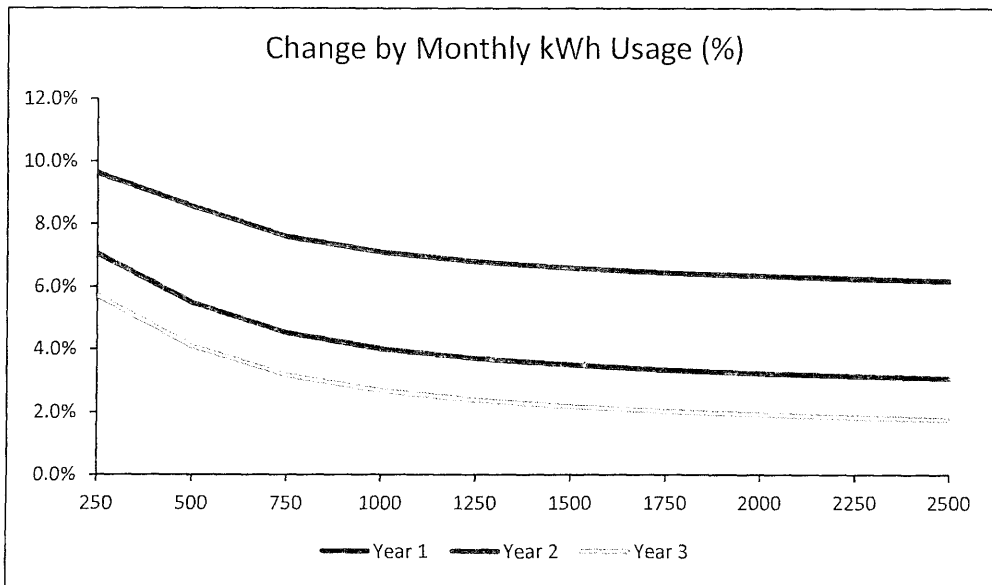
	Page
Rate Design Summary	3
Proposed Residential Single-Phase Rates	4
Proposed Seasonal Residential Single Rates	6
Proposed Commercial Single/Telecomm Rates	7
Proposed Outdoor Lighting Rates	8
Proposed Commercial Service Three Phase Rates	9
Proposed Govt/Muni Single Phase Rates	10
Proposed Govt/Muni Three Phase Rates	11
Proposed Governmental Large Service Rates	12

City of Ashland
Rate Design
Rate Design Summary

Customer Class	Projected	Projected	Projected	Projected	Change Year 1 %	Change Year 2 %	Change Year 3 %
	Revenues Under Current Rates	Revenues Under Proposed Rates Year 1	Revenues Under Proposed Rates Year 2	Revenues Under Proposed Rates Year 3			
Residential Single-Phase	\$ 7,410,275	\$ 7,967,778	\$ 8,329,088	\$ 8,597,320	7.52%	4.53%	3.22%
Seasonal Residential Single	60,785	66,195	69,196	71,425	8.90%	4.53%	3.22%
Commercial Single/Telecomm	1,788,904	1,914,127	1,996,434	2,051,336	7.00%	4.30%	2.75%
Outdoor Lighting	19,703	21,061	21,848	22,489	6.90%	3.75%	2.90%
Commercial Service Three Phase	3,168,263	3,358,358	3,492,693	3,580,010	6.00%	4.00%	2.50%
Govt/Muni Single Phase	222,773	242,597	257,883	267,940	8.90%	6.30%	3.90%
Govt/Muni Three Phase	917,686	968,159	1,004,465	1,027,065	5.50%	3.75%	2.25%
Governmental Large Service	878,093	926,259	960,993	982,616	5.50%	3.75%	2.25%
Totals	\$ 14,466,481	\$ 15,464,534	\$ 16,132,599	\$ 16,600,201	6.90%	4.32%	2.90%

City of Ashland
Rate Design
Residential Single-Phase

Rates	Current	Year 1	Year 2	Year 3
Monthly Facilities Charge:				
All Customers	\$ 9.62	\$ 11.00	\$ 12.50	\$ 14.00
Energy Charge:				
Block 1 (0 - 500 kWh)	\$ 0.06563	\$ 0.07011	\$ 0.07216	\$ 0.07313
Block 2 (501 - 5,000 kWh)	\$ 0.08073	\$ 0.08521	\$ 0.08726	\$ 0.08823
Block 3 (Excess)	\$ 0.08073	\$ 0.12000	\$ 0.12500	\$ 0.12750
Revenue from Rate	\$ 7,410,275	\$ 7,967,778	\$ 8,329,088	\$ 8,597,320
Change from Previous		7.5%	4.5%	3.2%



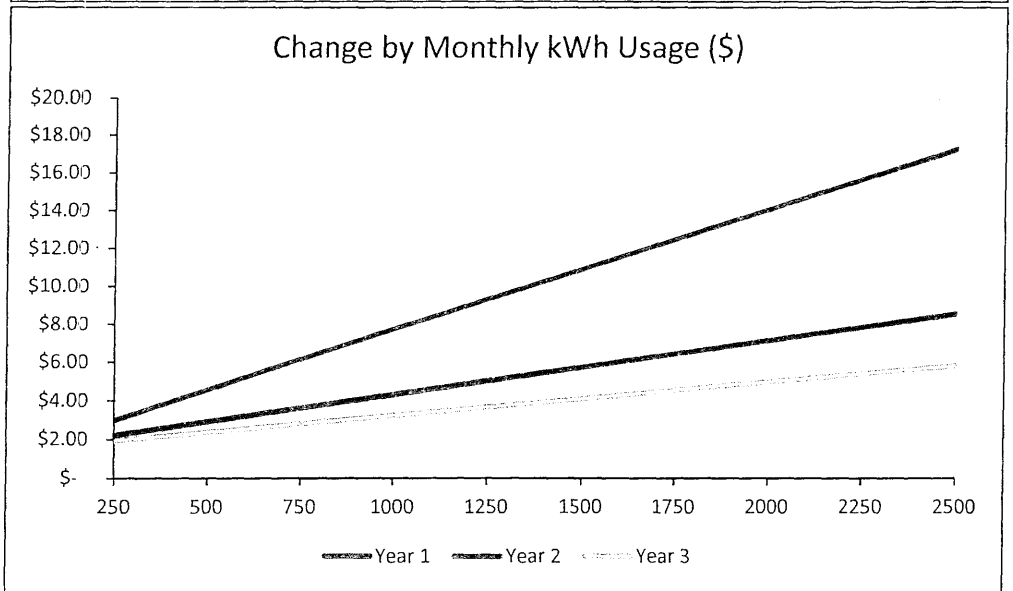
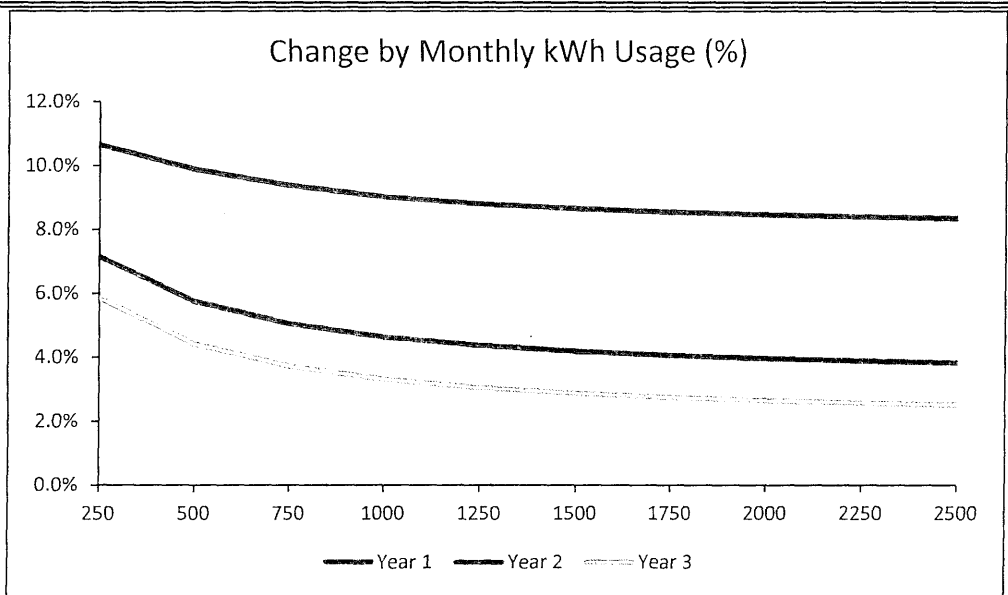
City of Ashland
Rate Design
Residential Single-Phase

Rate Change Effect by Usage (%)				
Usage	Year 1	Year 2	Year 3	
250	9.6%	7.0%	5.7%	
500	8.5%	5.5%	4.1%	
750	7.6%	4.5%	3.2%	
1000	7.1%	4.0%	2.7%	
1250	6.8%	3.7%	2.4%	
1500	6.6%	3.5%	2.2%	
1750	6.4%	3.3%	2.0%	
2000	6.3%	3.2%	1.9%	
2250	6.2%	3.1%	1.8%	
2500	6.2%	3.1%	1.8%	

Rate Change Effect by Usage (\$)				
Usage	Year 1	Year 2	Year 3	
250 \$	2.50	2.01	1.74	
500 \$	3.62	2.52	1.98	
750 \$	4.74	3.03	2.23	
1000 \$	5.86	3.54	2.47	
1250 \$	6.99	4.05	2.71	
1500 \$	8.11	4.57	2.95	
1750 \$	9.23	5.08	3.19	
2000 \$	10.35	5.59	3.43	
2250 \$	11.47	6.10	3.68	
2500 \$	12.59	6.61	3.92	

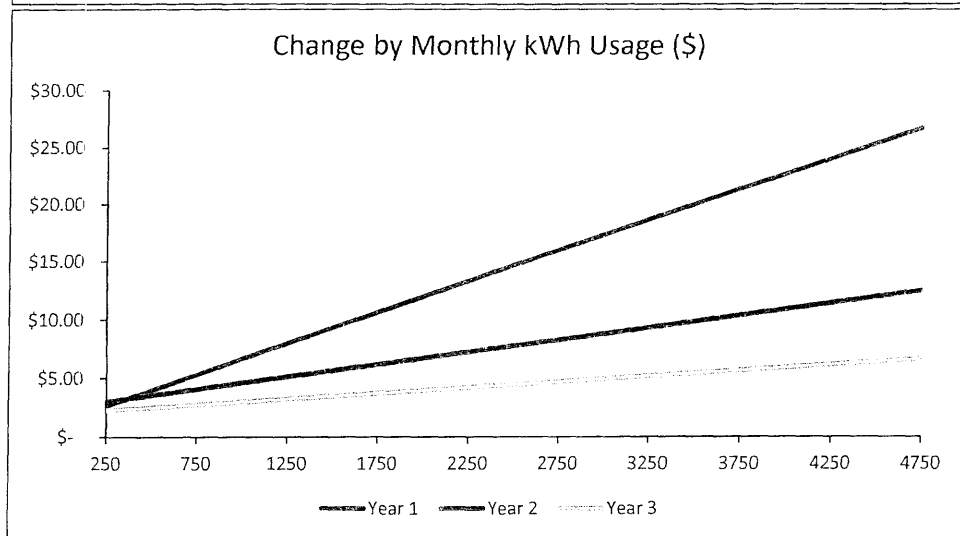
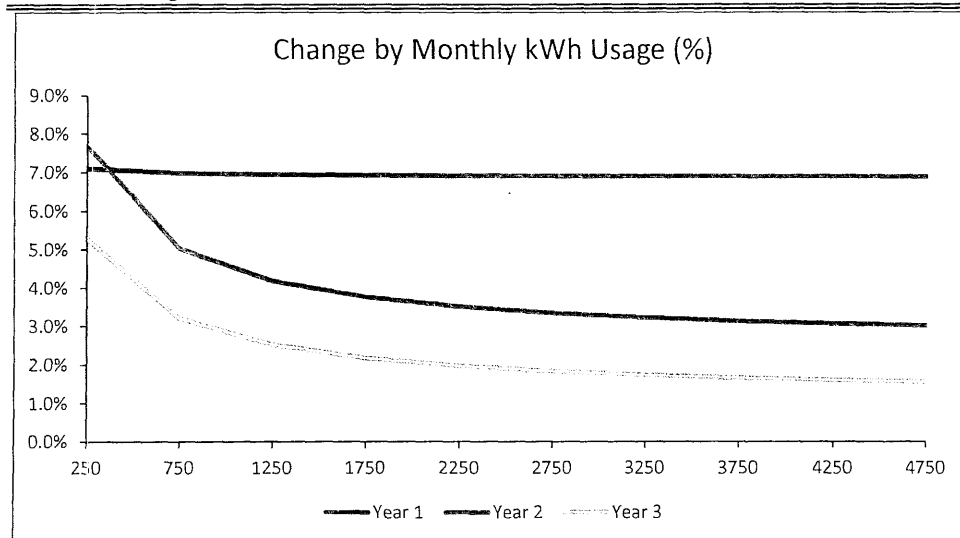
City of Ashland
Rate Design
Seasonal Residential Single

Rates	Current	Year 1	Year 2	Year 3
Monthly Facilities Charge:				
All Customers	\$ 9.62	\$ 11.00	\$ 12.50	\$ 14.00
Energy Charge:				
Block 1 (0 - 600 kWh)	\$ 0.07293	\$ 0.07927	\$ 0.08209	\$ 0.08381
Block 2 (601 - 5,000 kWh)	\$ 0.08062	\$ 0.08696	\$ 0.08978	\$ 0.09150
Block 3 (Excess)	\$ 0.08062	\$ 0.12000	\$ 0.12500	\$ 0.12750
Revenue from Rate	\$ 60,785	\$ 66,195	\$ 69,196	\$ 71,425
Change from Previous		8.9%	4.5%	3.2%



City of Ashland
Rate Design
Commercial Single/Telecomm

Rates	Current	Year 1	Year 2	Year 3
Monthly Facilities Charge:				
30kw or Less/Power Supply	\$ 17.23	\$ 18.50	\$ 21.00	\$ 23.00
Over 30kW	\$ 64.67	\$ 64.67	\$ 64.67	\$ 64.67
Energy Charge:				
Block 1 (0 - 3,000 kWh)	\$ 0.07804	\$ 0.08340	\$ 0.08550	\$ 0.08648
Block 2 (3001 - 20,000 kWh)	\$ 0.07829	\$ 0.08365	\$ 0.08575	\$ 0.08673
Block 3 (Excess)	\$ 0.07866	\$ 0.08402	\$ 0.08612	\$ 0.08710
Demand Charge				
Block 1 (0 - 15 kW)	\$ -	\$ -	\$ -	\$ -
Block 2 (Excess)	\$ 4.12	\$ 4.75	\$ 5.50	\$ 6.25
Power Cost Adjustment:				
All Energy	\$ -	\$ -	\$ -	\$ -
Revenue from Rate	\$ 1,788,904	\$ 1,914,127	\$ 1,996,434	\$ 2,051,336
Change from Previous		7.0%	4.3%	2.8%

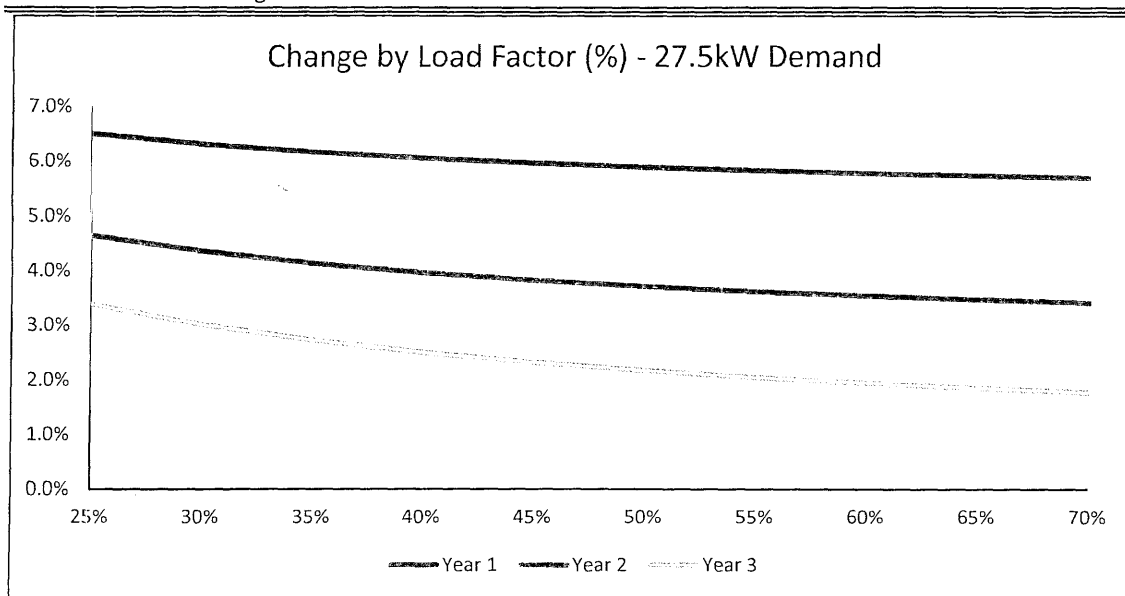


City of Ashland
Rate Design
Outdoor Lighting

Current Rates	Current	Year 1	Year 2	Year 3
Monthly Light Charge:				
Lamp				
HPS 5800 Non Res	\$ 21.69	\$ 23.15	\$ 23.80	\$ 24.50
HPS 22000 Non Res	\$ 31.31	\$ 33.40	\$ 34.65	\$ 35.65
HPS 50000 Non Res	\$ 50.08	\$ 53.55	\$ 55.55	\$ 57.15
HPS 5800 Res	\$ 16.68	\$ 17.85	\$ 18.60	\$ 19.15
HPS 22000 Res	\$ 24.09	\$ 25.70	\$ 26.50	\$ 27.25
HPS 50000 Res	\$ 38.53	\$ 41.20	\$ 42.75	\$ 44.00
Wood Pole	\$ 1.89	\$ 2.00	\$ 2.10	\$ 2.15
Revenues from Current Rates	\$ 19,703	\$ 21,061	\$ 21,848	\$ 22,489
Change from Previous		6.89%	3.74%	2.93%

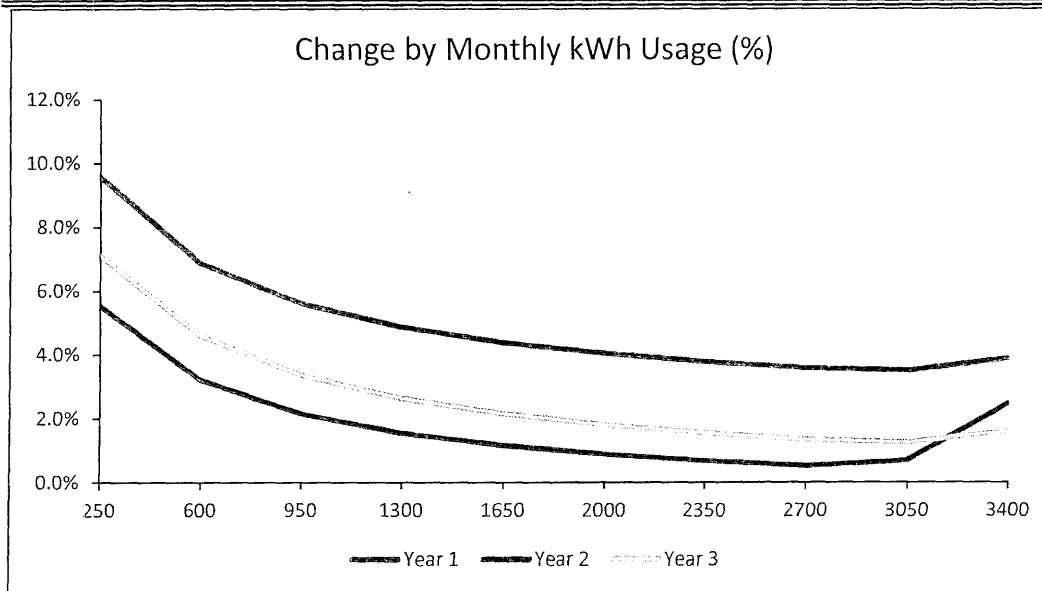
City of Ashland
Rate Design
Commercial Service Three Phase

Rates	Current	Year 1	Year 2	Year 3
Monthly Facilities Charge:				
30kw or Less	\$ 34.47	\$ 37.00	\$ 40.00	\$ 45.00
Over 30kW	\$ 112.10	\$ 112.10	\$ 112.10	\$ 112.10
Energy Charge:				
Block 1 (0 - 3,000 kWh)	\$ 0.07145	\$ 0.07514	\$ 0.07706	\$ 0.07754
Block 2 (3001 - 17,000 kWh)	\$ 0.07193	\$ 0.07562	\$ 0.07754	\$ 0.07802
Block 3 (Excess)	\$ 0.07212	\$ 0.07581	\$ 0.07773	\$ 0.07821
Demand Charge				
Block 1 (0 - 15 kW)	\$ -	\$ -	\$ -	\$ -
Block 2 (Excess)	\$ 4.12	\$ 4.75	\$ 5.50	\$ 6.25
Power Cost Adjustment:				
All Energy	\$ -	\$ -	\$ -	\$ -
Revenue from Rate	\$ 3,168,263	\$ 3,358,358	\$ 3,492,693	\$ 3,580,010
Change from Previous		6.0%	4.0%	2.5%



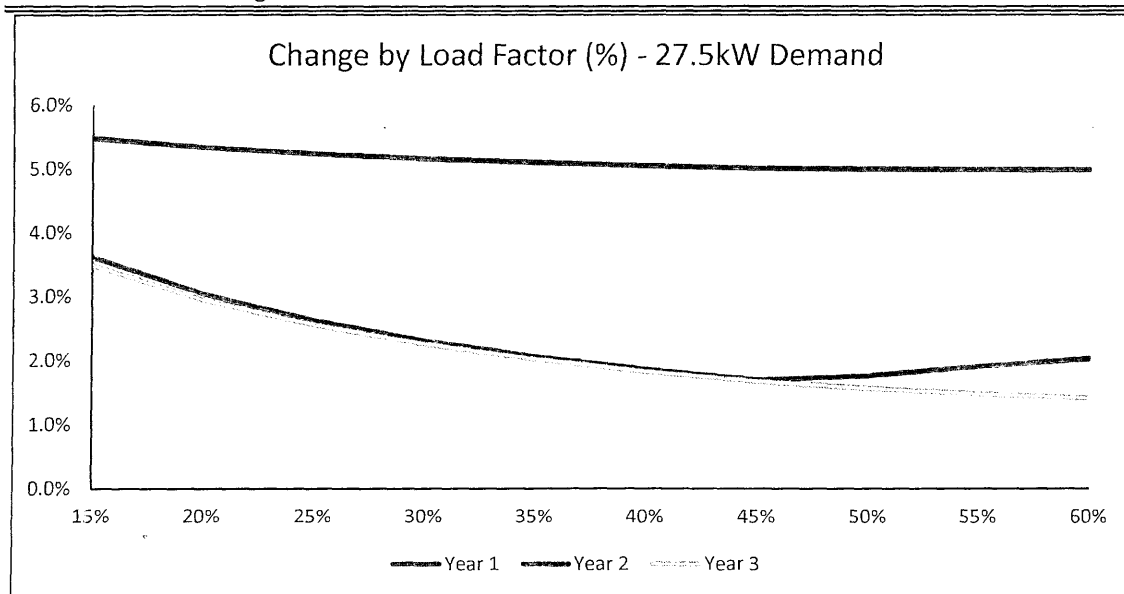
City of Ashland
Rate Design
Govt/Muni Single Phase

Rates	Current	Year 1	Year 2	Year 3
Monthly Facilities Charge:				
30kw or Less/Power Supply	\$ 17.23	\$ 18.50	\$ 21.00	\$ 23.00
Over 30kW	\$ 64.67	\$ 64.67	\$ 64.67	\$ 64.67
Energy Charge:				
Block 1 (0 - 3,000 kWh)	\$ 0.09437	\$ 0.09371	\$ 0.09562	\$ 0.09538
Block 2 (3001 - 20,000 kWh)	\$ 0.07077	\$ 0.08871	\$ 0.09562	\$ 0.10038
Block 3 (Excess)	\$ 0.06632	\$ 0.08871	\$ 0.09562	\$ 0.10038
Demand Charge				
Block 1 (0 - 15 kW)	\$ -	\$ -	\$ -	\$ -
Block 2 (Excess)	\$ 4.19	\$ 4.75	\$ 5.50	\$ 6.25
Revenue from Rate	\$ 222,773	\$ 242,597	\$ 257,883	\$ 267,940
Change from Previous		8.9%	6.3%	3.9%



City of Ashland
Rate Design
Govt/Muni Three Phase

Rates	Current	Year 1	Year 2	Year 3
Monthly Facilities Charge:				
30kw or Less	\$ 34.47	\$ 37.00	\$ 40.00	\$ 45.00
Over 30kW	\$ 112.10	\$ 112.10	\$ 112.10	\$ 112.10
Energy Charge:				
Block 1 (0 - 3,000 kWh)	\$ 0.10082	\$ 0.10433	\$ 0.10433	\$ 0.10433
Block 2 (3001 - 20,000 kWh)	\$ 0.07645	\$ 0.07996	\$ 0.07996	\$ 0.07996
Block 3 (Excess)	\$ 0.07166	\$ 0.07517	\$ 0.07803	\$ 0.07837
Demand Charge				
Block 1 (0 - 15 kW)	\$ -	\$ -	\$ -	\$ -
Block 2 (Excess)	\$ 4.19	\$ 4.75	\$ 5.50	\$ 6.25
Power Cost Adjustment:				
All Energy	\$ -	\$ -	\$ -	\$ -
Revenue from Rate	\$ 917,686	\$ 968,159	\$ 1,004,465	\$ 1,027,065
Change from Previous		5.50%	3.75%	2.25%



City of Ashland
Rate Design
Governmental Large Service

Rates	Current	Year 1	Year 2	Year 3
Monthly Facilities Charge:				
Monthly Charge	\$ 2,639.36	\$ 2,639.36	\$ 2,639.36	\$ 2,639.36
Energy Charge:				
All Energy	\$ 0.05766	\$ 0.05912	\$ 0.05963	\$ 0.05902
Demand Charge				
All Demand	\$ 4.92	\$ 6.00	\$ 7.00	\$ 8.00
Power Cost Adjustment:				
All Energy	\$ -	\$ -	\$ -	\$ -
Revenue from Rate	\$ 878,093	\$ 926,259	\$ 960,993	\$ 982,616
Change from Previous		5.49%	3.75%	2.25%

