

# **Bath Electric Gas and Water Systems**

## **Electric Department Rate Filing**

Filed on July 19, 2017



**Bath Electric Gas and Water Systems  
Gas Department – Rate Filing  
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**Proposed Tariffs**  
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# Bath Electric Gas and Water Systems

## Electric Department

### Historic and Forecast Income Statements with Rate of Return

Line No.		Test Year FY 2016 A	PSC Normalizing Adjustments B		Normalized Test Year C	Known Changes D		Updated Normalized Rate Year E	Increase F	Rate Year After Increase G	% Increase
1	Operating revenues	\$4,218,015	\$74,962	a)	\$4,292,977			\$4,292,977	\$625,974	\$4,918,950	14.6%
2	Operating Expenses:										
3	Purchased Power	\$2,161,685	\$22,395	b)	\$2,184,080			\$2,184,080		\$2,184,080	
4	Transmission	\$16,893			\$16,893	\$1,113	f)	\$18,005		\$18,005	
5	Distribution	\$615,063			\$615,063	\$40,513	f)	\$655,576		\$655,576	
6	Street Lighting	\$7,201			\$7,201	\$474	f)	\$82,434		\$82,434	
7	Customer Service	\$139,014			\$139,014	\$9,157	f)	\$148,171		\$148,171	
8	A&G	\$716,154			\$716,154	\$85,609	f) , g) , h)	\$801,762		\$801,762	
9	Depreciation	\$623,679	-\$190,029	c)	\$433,650	\$0		\$433,650		\$433,650	
10	Total Operating Expenses	\$4,279,689			\$4,112,055	\$136,865		\$4,323,679		\$4,323,679	
11	Taxes - Electric	\$65,942			\$65,942	\$3,461	i)	\$69,403		\$69,403	
11a	PILOT		\$90,972	d)	\$90,972	\$11,970	j)	\$102,942		\$102,942	
12	Uncollectible Revenues - Electric	\$9,429			\$9,429	\$621	f)	\$10,050		\$10,050	
13	Interests and Amortizations	\$0			\$0	\$51,303	k)	\$51,303		\$51,303	
14	Total Operating Expenses	\$4,355,060			\$4,278,398			\$4,557,377		\$4,557,377	
15	Operating Income	-\$137,046	\$151,624		\$14,578	-\$341,086		-\$264,401		\$361,573	
16	Rate Base	\$10,062,243	\$850,051	e)	\$10,912,294	\$57,032	l)	\$10,969,326		\$10,969,326	
17	Rate of Return	-1.36%			0.13%			-2.41%		3.30%	i)

## Exhibit 3

**Bath Electric Gas and Water Systems**  
**Electric Department**  
**Explanation of Adjustments**

**Test Year Normalization**

a) Revenues			
PPAC -- Impact of Test Year PPAC reconciliation	\$	21,509	
Weather Normalization - test year warmer than normal		96,461	
Growth Analysis	\$	(43,008)	
Total			\$ 74,962
b) Purchased Power			
PPAC - increased cost to reverse warmer than normal weather	\$	38,926	
PPAC - increased cost for new sales	\$	(16,531)	
			\$ 22,395
c) Depreciation - to correct for errors being made by accounting system in calculating depreciation expense			\$ (190,029)
The correct depreciation expense for FY 2016 was \$62,979 less \$19,907 charged to building (a capital account) and another \$109,422 charged to transportation clearing for a net expense level of \$433,650.			
d) To reflect PILOT payment made to Village as operating expense			\$ 90,972
e) Rate Base - to restate depreciation reserve to correct for calculation of depreciation in accounting system software			\$ 850,051
f) Labor and Inflation. Mid-test year to mid rate year. Labor is 2.5% per year increase. Assuming the same for inflation			
Transmission	\$	16,893	1.06587
Distribution	\$	615,063	1.06587
Street Lighting	\$	7,201	1.06587
Customer Service	\$	139,014	1.06587
A&G	\$	347,973	1.06587
Uncollectible Revenues - Electric		9429.13	1.06587
			\$ 621
g) Increase in Health Insurance at 8.1% per year.	\$	286,577	1.18823
			\$ 53,942
h) Pension - To reflect latest invoice from Comptrollers Office			
FY 2016	\$	81,604	
FY 2017	\$	90,351	
			\$ 8,747
i) Property taxes - 2% per year	\$	65,942	1.05249
			\$ 3,461
j) Adjustment to reflect commercial tax rate on in-Village plant which PSC allows as PILOT payment level			\$ 10,970
k) Amortization - Reflect Amortization from Case 14-E-0140 of \$46, 803 and Rate Case Expense - to reflect 3 year amortization of contract amount			\$ 51,303
l) Updated rate base calculation based on rate year working capital allowance - See Exhibit 9			

**Bath Electric Gas and Water Systems**  
**Electric Department**  
**Historic Balance Sheets - Assets**  
**As of May 31,**

	2014	2015	2016
<b>ASSETS</b>			
<b>FIXED ASSETS</b>			
Operating Property - Electric (101)	14,309,430	15,077,217	15,481,964
Construction Work in Progress (110)	<u>1,450,244</u>	<u>696,659</u>	<u>672,967</u>
Total Fixed Assets	15,759,674	15,773,876	16,154,931
<b>INVESTMENTS</b>			
Loans to Operating Municipality (113)			
Depreciation Funds (116)	173,256	173,476	173,828
Miscellaneous Special Funds (117)	<u>71,068</u>	<u>71,211</u>	<u>71,355</u>
Total Investments	244,324	244,687	245,183
<b>CURRENT ASSETS</b>			
Cash (121)	1,601,309	1,213,530	960,388
Working Funds (122)	300	300	300
Materials and Supplies (123)	319,585	320,865	247,368
Receivables from Operating Municipality (124)	67,366	65,952	69,033
Accounts Receivable (125)	366,680	381,455	240,383
Notes Receivable (126)			
Interest and Dividends Receivable (127)	130	174	145
Prepayments (128)	68,932	53,601	48,924
Special Deposits	<u>479</u>	<u>479</u>	<u>479</u>
Total Current Assets	2,424,781	2,036,356	1,567,020
<b>DEFERRED DEBITS</b>			
Suspense to be Amortized (143)	0	206,712	159,910
Clearing Accounts (144)			
Total Deferred Debits	0	206,712	159,910
Total Assets and Other Debits	<u>18,428,779</u>	<u>18,261,631</u>	<u>18,127,043</u>

**Bath Electric Gas and Water Systems**  
**Electric Department**  
**Historic Balance Sheets - Liabilities**  
**As of May 31,**

	2014	2015	2016
<b>LIABILITIES AND RETAINED EARNINGS</b>			
<b>LONG-TERM DEBT</b>			
Bonds (231)	0	0	5,805,000
Miscellaneous Long Term Debt (233)	6,559,967	6,151,426	140,939
Total Long-Term Debt	6,559,967	6,151,426	5,945,939
<b>CURRENT AND ACCRUED LIABILITIES</b>			
Accounts Payable (242)	283,426	256,487	216,031
Notes Payable (243)	440,000	0	0
Customer Deposits (244)	205,211	243,090	236,676
Taxes Accrued (248)	15,534	15,010	12,477
Interest Accrued (249)	12,725	5,695	9,103
Miscellaneous Current Liabilities (252)	154,705	118,847	109,567
Total Current Liabilities	1,111,601	639,129	583,854
<b>RESERVES</b>			
Depreciation Reserves (261)	6,040,487	6,152,457	6,764,154
Amortization Reserves (262)			
Contributions for Extensions (263)			
Insurance Reserve (264)	27,451	27,451	27,451
Injuries and Damages Reserve (265)			
Reserve for Uncollectible Accounts (266)	15,296	14,515	10,147
Miscellaneous Reserves (267)	11,700	11,700	11,700
Total Operating Reserves	6,094,934	6,206,123	6,813,453
<b>DEFERRED CREDITS</b>			
Unamortized Premium on Debt (271)			
Miscellaneous Unadjusted Credits (272)	0	22,541	0
Total Deferred Credits	0	22,541	0
<b>SURPLUS</b>			
Contributions - Operating Municipality (280)	(2,646,039)	(2,691,812)	(2,788,286)
Surplus (281)	7,308,316	7,934,224	7,572,084
Total Surplus	4,662,277	5,242,412	4,783,798
Total Liabilities and Other Credits	18,428,779	18,261,631	18,127,043

Source Data: PSC Annual Report Pages 104 and 105

**Bath Electric Gas and Water Systems**  
**Electric Department**  
**Historic Income Statements**  
**For the Years Ended May 31,**

	FY 2014	FY 2015	FY 2016
<u>Revenues</u>			
Non-Fuel Revenues	\$ 1,882,093	\$ 2,084,687	\$ 1,965,636
Purchased Power Revenues	\$ 3,155,611	\$ 3,005,115	\$ 2,252,378
Total Operating Revenues	\$ 5,037,704	\$ 5,089,802	\$ 4,218,015
<u>Operating Expenses</u>			
Purchased Power	\$ 3,240,717	\$ 2,618,976	\$ 2,161,685
Transmission	\$ 6,947	\$ 13,604	\$ 16,893
<b>Distribution</b>	\$ 517,881	\$ 480,522	\$ 615,063
Street Lighting	\$ 5,757	\$ 7,709	\$ 7,201
Sales Expense		\$ (2,341)	
Customer Service	\$ 146,348	\$ 155,429	\$ 139,014
A&G	\$ 780,987	\$ 659,673	\$ 716,154
Depreciation	\$ 403,472	\$ 578,426	\$ 623,679
Total Operating Expenses	\$ 5,102,109	\$ 4,511,998	\$ 4,279,689
Taxes - Electric	\$ 64,045	\$ 65,353	\$ 65,942
Uncollectible Revenues - Electric	\$ 14,309	\$ 16,161	\$ 9,429
Interests and Amortizations	\$ -	\$ -	\$ -
Total Operating and Maintenance Expenses	\$ 5,180,463	\$ 4,593,512	\$ 4,355,060
Net Income	<u>\$ (142,759)</u>	<u>\$ 496,290</u>	<u>\$ (137,046)</u>

Source : PSC Annual Report Pages 106, 301 and 307



## Exhibit 6

**Bath Electric Gas and Water Systems**  
**Electric Department**  
**Revenues by Rate Class and kWh Sales**  
**Fiscal Years Ending May 31,**

Operating Revenues		2014	2015	2016
<u>Acct. No.</u>	<u>Account Title</u>			
601	Residential Sales	\$2,853,308	\$2,896,482	\$2,270,591
602	Commercial Sales	476,170	436,997	392,851
603	Industrial Sales	914,674	952,151	832,413
604	Public Street Lighting - Operating Mun.	58,128	57,012	63,390
605	Public Street Lighting - Other	2,537	2,584	2,815
606	Other Sales to Operating Municipality	103,659	111,215	88,313
607	Other Sales to Other Public Authorities	936	970	941
608	Sales to Other Distributors	524,961	550,288	478,758
609	Sales to Railroads and Street Railroads	0	0	0
610	Security Lighting	53,613	55,846	54,071
	Total	<u>\$4,987,986</u>	<u>\$5,063,545</u>	<u>\$4,184,144</u>
 <u>kWh Sales</u>				
601	Residential Sales	47,648,111	46,503,398	41,633,113
602	Commercial Sales	6,635,566	5,896,474	5,795,090
603	Industrial Sales	18,604,739	18,421,280	17,731,860
604	Public Street Lighting - Operating Mun.	777,754	777,171	824,430
605	Public Street Lighting - Other	10,516	10,415	11,281
606	Other Sales to Operating Municipality	2,065,728	2,152,300	1,888,843
607	Other Sales to Other Public Authorities	10,940	10,940	10,920
608	Sales to Other Distributors	9,519,111	9,571,266	8,922,730
609	Sales to Railroads and Street Railroads	-	-	-
610	Security Lighting	413,595	410,993	401,263
	Total	<u>85,686,060</u>	<u>83,754,237</u>	<u>77,219,530</u>

## Exhibit 7

**Bath Electric Gas and Water Systems**  
**Electric Department**  
**Number of Customers**

	2014	2015	2016
Month	Number of Customers	Number of Customers	Number of Customers
June	4,886	4,893	4,842
July	4,881	4,816	4,814
August	4,886	4,877	4,823
Sept	4,876	4,838	4,846
Oct	4,882	4,872	4,813
Nov	4,845	4,815	4,819
Dec	4,862	4,829	4,851
Jan	4,812	4,850	4,837
Feb	4,831	4,793	4,835
March	4,877	4,842	4,822
April	4,833	4,879	4,877
May	4,871	4,811	4,832
<b>TOTALS</b>	<b>58,342</b>	<b>58,115</b>	<b>58,011</b>
Account 601	45,731	45,660	45,577
Account 602	5,759	5,564	5,637
Account 603	279	301	300
Account 604	12	12	12
Account 605	12	12	13
Account 606	312	312	312
Account 607	4	4	4
Account 608	1,056	1,139	1,128
Account 609			
Account 610	5,177	5,111	5,028
<b>TOTALS</b>	<b>58,342</b>	<b>58,115</b>	<b>58,011</b>

Source Data: PSC Annual Reports, poage 301

## Exhibit 8

**Bath Electric Gas and Water Systems**  
**Electric Department**  
**Capital Structure and Rate of Return**

	<u>ProForma Amount</u>	<u>%</u>	<u>Cost Rate</u>	<u>Rate of Return</u>
Long-term debt	5,805,000	42.6%	3.08%	1.32%
Customer deposits	236,676	1.7%	0.05%	0.00%
Net surplus	<u>7,572,084</u>	<u>55.6%</u>	3.56%	<u>1.98%</u>
Total	<u><u>13,613,760</u></u>	100.0%		<u><u>3.30%</u></u>

Notes: Bath's long term debt is rated A+ by S&P. For surplus, a proxy rate was used which was the last A rated municipal utility to receive a rate increase from the PSC, Boonville, Case 16-E-0565 - Order issued and effective 2/11/2017

## Exhibit 9

## Bath Electric Gas and Water Systems

## Electric Department

## Rate Base

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Rate Year</u>
Gross Plant				
Operating Property	\$14,309,430	\$15,077,217	\$15,481,964	\$16,154,931
Construction Work in Progress	<u>1,450,244</u>	<u>696,659</u>	<u>672,967</u>	<u>0</u>
Total Gross Plant	15,759,674	15,773,876	16,154,931	16,154,931
Depreciation Reserve	6,040,487	6,152,457	6,764,154	5,914,103
Amortization Reserves	0	0	0	0
Contributions for Extensions	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Net Plant	9,719,187	9,621,419	9,390,777	10,240,828
Materials & Supplies	319,585	320,865	247,368	247,368
Prepayments	68,932	53,601	48,924	48,924
Rate Case Expense	0	0	0	9,000
Working Capital				
Total Operating Expenses	5,180,463	4,593,512	4,355,060	4,557,377
Purchased Power	3,240,717	2,618,976	2,161,685	2,184,080
Depreciation	403,472	578,426	623,679	433,650
PILOT/Other Taxes	64,045	65,353	65,942	69,403
Uncollectibles	<u>14,309</u>	<u>16,161</u>	<u>9,429</u>	<u>10,050</u>
Net Expenses	1,457,920	1,314,596	1,560,267	1,929,596
Working Capital Required @ 1/8	182,240	164,325	195,033	241,200
Working Capital Required @ 1/12	<u>270,060</u>	<u>218,248</u>	<u>180,140</u>	<u>182,007</u>
Year End Total Rate Base	<u>\$10,560,004</u>	<u>\$10,378,458</u>	<u>\$10,062,243</u>	<u>\$10,969,326</u>

Source Data: PSC Annual Reports, Pages 104 and 105

**Exhibit 10**

**Bath Electric Gas and Water Systems**  
**Electric Department**  
**Factor of Adjustment**

	<u><b>2011</b></u>	<u><b>2012</b></u>	<u><b>2013</b></u>	<u><b>2014</b></u>	<u><b>2015</b></u>	<u><b>2016</b></u>
KWH Sold	86,857,261	79,901,049	82,543,390	85,686,060	83,754,237	77,219,530
KWH Purchased	91,936,189	84,536,377	87,499,885	92,283,310	88,266,673	80,915,433
Factor of Adjustment	1.0585	1.0580	1.0600	1.0770	1.0539	1.0479
Six Year Average						1.0594

Source Data: PSC Annual Reports, page 400

**Bath Electric, Gas & Water Systems  
Electric Department  
Comparison of Present and Proposed Rates**

		YR 1			YR 2			YR 3		
	<u>Present</u>	<u>Proposed</u>	<u>Increase</u>	<u>Increase</u>	<u>Proposed</u>	<u>Increase</u>	<u>Increase</u>	<u>Proposed</u>	<u>Increase</u>	<u>Increase</u>
	<u>Rate</u>	<u>Rate</u>	<u>Amount</u>	<u>Percent</u>	<u>Rate</u>	<u>Amount</u>	<u>Percent</u>	<u>Rate</u>	<u>Amount</u>	<u>Percent</u>
<u>Service Classification No. 1 - Residential</u>										
<u>May - October</u>										
Customer Service Charge	3.36	4.57	1.21	36%	5.78	1.21	26%	7.00	1.22	21%
Energy Charge - 1,000 kWh or less, per kW	0.0360	0.0419	0.0059	16.5%	0.0408	(0.0011)	-2.7%	0.0396	(0.0012)	-2.8%
Over 1,000 kWh - 2,400, per kWh	0.0360									
Over 2,400 kWh	0.0360	0.0419	0.0059	16.5%	0.0408	(0.0011)	-2.7%	0.0396	(0.0012)	-2.8%
Minimum Charge per month, per meter	3.36	4.57	1.21	36%	5.78	1.21	26%	7.00	1.21	21%
<u>November - April</u>										
Customer Service Charge	3.36	4.57	1.21	36%	5.78	1.21	26%	7.00	1.22	21%
Energy Charge - 1,000 kWh or less, per kW	0.0360	0.0419	0.0059	16.5%	0.0408	(0.0011)	-2.7%	0.0396	(0.0012)	-2.8%
Over 1,000 kWh - 2,400, per kWh	0.0557	0.0649	0.0092	16.5%	0.0631	(0.0018)	-2.7%	0.0613	(0.0018)	-2.8%
Over 2,400 kWh	0.0618	0.0720	0.0102	16.5%	0.0700	(0.0020)	-2.7%	0.0680	(0.0020)	-2.8%
Minimum Charge per month, per meter	3.36	4.57	1.21	36%	5.78	1.21	26%	7.00	1.21	21%
<u>Service Classification No. 2 - Small Commercial (Under 20 KW demand)</u>										
<u>May - October</u>										
Customer Service Charge	4.22	5.15	0.93	22%	6.08	0.93	18%	7.00	0.92	15%
Energy Charge, per kWh, first 2,400 kWh	0.0499	0.0588	0.0089	17.8%	0.0580	(0.0008)	-1.3%	0.0572	(0.0008)	-1.4%
Energy Charge, per kWh, over 2,400 kWh	0.0499	0.0588	0.0089	17.8%	0.0580	(0.0008)	-1.3%	0.0572	(0.0008)	-1.4%
Minimum Charge per month, per meter	4.22	5.15	0.93	122%	6.08	0.93	18%	7.00	0.92	15%
<u>November - April</u>										
Customer Service Charge	4.22	5.15	0.93	22%	6.08	0.93	18%	7.00	0.92	15%
Energy Charge, per kWh, first 2,400 kWh	0.0609	0.0717	0.0108	17.8%	0.0708	(0.0010)	-1.3%	0.0698	(0.0010)	-1.4%
Energy Charge, per kWh, over 2,400 kWh	0.0625	0.0736	0.0111	17.8%	0.0726	(0.0010)	-1.3%	0.0716	(0.0010)	-1.4%
Minimum Charge per month, per meter	4.22	5.15	0.93	22%	6.08	0.93	18%	7.00	0.92	15%
<u>Service Classification No. 3 - Commercial (20 KW to 75 KW demand)</u>										
Energy Charge, per kWh	0.0241	0.0285	0.0044	18.1%						
Demand Charge, first 20 KW or less	112.25	132.53	20.2831	18.1%						
Over 20 KW, per KW	5.61	6.62	1.0137	18.1%						
<u>Service Classification No. 4 - Industrial (Over 75 KW demand)</u>										
Energy Charge, per kWh	0.0241	0.0285	0.0044	18.1%						
Demand Charge, first 75 KW or less	374.20	441.82	67.6162	18.1%						
Over 75 KW, per KW	4.99	5.89	0.9017	18.1%						
<u>Service Classification No. 5 - Outdoor Lighting</u>										
175W MV - 150W HPS, per month, per light	9.16	10.82	1.6554	18.1%						
250W HPS	11.59	13.68	2.0940	18.1%						
400W MV/HPS	17.41	20.56	3.1460	18.1%						
Minimum charge per month, per light shall be calculated under the above rate										

**LATE PAYMENT CHARGE - Rate including 1.5% late payment charge due and payable 23 days after LAST DAY TO PAY NET date on bill.**

**ALL RATES SUBJECT TO PURCHASED POWER ADJUSTMENT.**

Purchased Power Adjustment also subject to late payment charge.

Bath Electric, Gas & Water Systems  
Electric Department  
Comparison of Monthly Bills

## Service Classification No. 1 - Residential

<u>kWh Used</u>	<u>Present Rate</u>		<u>Proposed Rate</u>		<u>\$ Increase</u>		<u>% Increase</u>	
	May to October	November to April	May to October	November to April	May to October	November to April	May to October	November to April
0	3.36	3.36	4.57	4.57	1.21	1.21	36.01%	36.01%
2	3.45	3.45	4.67	4.67	1.22	1.22	35.40%	35.40%
10	3.82	3.82	5.09	5.09	1.27	1.27	33.25%	33.25%
25	4.51	4.51	5.86	5.86	1.36	1.36	30.15%	30.15%
50	5.65	5.65	7.16	7.16	1.51	1.51	26.66%	26.66%
75	6.80	6.80	8.45	8.45	1.65	1.65	24.35%	24.35%
100	7.94	7.94	9.74	9.74	1.80	1.80	22.71%	22.71%
150	9.45	10.23	12.33	12.33	2.88	2.10	30.47%	20.52%
200	12.52	12.52	14.92	14.92	2.40	2.40	19.14%	19.14%
250	14.81	14.81	17.50	17.50	2.69	2.69	18.18%	18.18%
500	26.26	26.26	30.44	30.44	4.18	4.18	15.90%	15.90%
750	37.71	37.71	43.37	43.37	5.66	5.66	15.00%	15.00%
900	44.58	44.58	51.13	51.13	6.55	6.55	14.69%	14.69%
1,000	49.16	49.16	56.30	56.30	7.14	7.14	14.53%	14.53%
1,500	72.06	81.91	82.17	93.64	10.11	11.73	14.03%	14.32%
2,000	94.96	114.66	108.03	130.98	13.07	16.32	13.77%	14.23%
5,000	232.36	327.02	263.23	373.48	30.87	46.46	13.28%	14.21%
PPAC:	0.0098							

Bath Electric, Gas & Water Systems  
Electric Department  
Comparison of Monthly Bills

## Service Classification No. 2 - Non-demand Metered

<u>kWh Used</u>	<u>Present Rate</u>		<u>Proposed Rate</u>		<u>\$ Increase</u>		<u>% Increase</u>	
	May to October	November to April	May to October	November to April	May to October	November to April	May to October	November to April
0	4.22	4.22	5.15	5.15	0.93	0.93	22.04%	22.04%
2	4.34	3.78	5.29	5.31	0.95	1.53	21.85%	40.52%
10	4.81	4.34	5.83	5.96	1.02	1.62	21.17%	37.27%
25	5.70	5.40	6.85	7.18	1.15	1.78	20.21%	33.01%
50	7.18	7.15	8.55	9.20	1.37	2.05	19.13%	28.69%
75	8.66	8.91	10.26	11.23	1.60	2.32	18.42%	26.07%
100	10.14	10.66	11.96	13.25	1.82	2.59	17.92%	24.32%
150	13.10	14.17	15.36	17.30	2.26	3.13	17.26%	22.12%
200	16.06	17.68	18.76	21.36	2.70	3.68	16.84%	20.79%
250	19.02	21.19	22.17	25.41	3.15	4.22	16.55%	19.90%
500	33.82	38.74	39.19	45.66	5.37	6.92	15.86%	17.87%
750	48.62	56.29	56.20	65.92	7.58	9.63	15.60%	17.11%
1,000	63.42	65.44	73.22	86.18	9.80	20.74	15.45%	31.69%
1,500	93.02	108.94	107.26	126.69	14.24	17.75	15.30%	16.29%
2,000	122.62	144.04	141.29	167.20	18.67	23.16	15.23%	16.08%
5,000	300.22	358.80	345.50	415.18	45.28	56.38	15.08%	15.71%

PPAC: 0.0093



**Bath Electric, Gas & Water Systems  
Electric Department  
Comparison of Monthly Bills**

**Service Classification No. 3 - General Service - Demand Metered**

<u>KW</u>	<u>kWh</u>	<u>Present Rate</u>	<u>Proposed Rate</u>	<u>\$ Increase</u>	<u>% Increase</u>
20	1,000	145.75	170.39	24.64	16.90%
	1,500	162.50	189.32	26.82	16.50%
	2,000	179.25	208.24	28.99	16.17%
50	2,000	347.55	406.95	59.40	17.09%
	3,000	381.05	444.81	63.76	16.73%
	4,000	414.55	482.66	68.11	16.43%
75	5,000	588.30	686.11	97.81	16.63%
	7,500	672.05	780.75	108.70	16.17%
	10,000	755.80	875.38	119.58	15.82%

PPAC: 0.0094

**Bath Electric, Gas & Water Systems  
Electric Department  
Comparison of Monthly Bills**

**Service Classification No. 4 - Large General Service**

<u>KW</u>	<u>kWh</u>	<u>Present Rate</u>	<u>Proposed Rate</u>	<u>\$ Increase</u>	<u>% Increase</u>
75	1,000	407.70	479.67	71.97	17.65%
	1,500	424.45	498.60	74.15	17.47%
	2,000	441.20	517.53	76.33	17.30%
100	2,000	565.95	664.82	98.87	17.47%
	3,000	599.45	702.67	103.22	17.22%
	4,000	632.95	740.53	107.58	17.00%
150	5,000	915.95	1,078.86	162.91	17.79%
	7,500	999.70	1,173.49	173.79	17.38%
	10,000	1,083.45	1,268.13	184.68	17.05%
PPAC:	0.0093				

Bath Electric, Gas & Water Systems  
Electric Department  
Calculation of Base Rate Increase Per Service Class

Sales and Revenues by Service Classification								Other Revenues		Weather Normalization Adjustment			Customer Growth											
			# of Bills	Sales (kWh)	Base Revenues	PPAC Revenues	Total Revenues	Late Charges and Other Revenues	PPAC Reconciliation	Base	PPAC	Total	Base	PPAC	Total	Grand RY Total	RY Base Revenues	PPAC Revenues	Other Revenues	Total	Revenue Increase	% Base Rate Increase		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)		
SC 1	Residential	Account 601	45,660	41,633,113	\$1,849,372	409,761	\$ 2,259,133	\$ 11,458	\$ 11,878	\$ 46,220	\$ 37,354	\$ 83,574	\$ (15,379)	\$ (14,486)	\$ (29,865)	\$ 2,336,178	\$ 1,880,213	\$ 444,507	\$ 11,458	\$ 2,336,178	\$ 339,746	18.1%		
SC 2	Commercial	Account 602	5,564	5,795,090	339,130	53,721	\$ 392,851	\$	\$ 1,557	\$ 11,315	\$ 1,572	\$ 12,887	\$ (8,575)	\$ (4,568)	\$ (13,143)	\$ 394,153	\$ 341,870	\$ 52,282	\$ -	\$ 394,153	\$ 61,774	18.1%		
SC 4	Industrial	Account 603	301	17,731,860	667,243	165,169	\$ 832,412	\$	\$ 4,788	\$	\$	\$	\$	\$	\$	\$ 837,200	\$ 667,243	\$ 169,957	\$ -	\$ 837,200	\$ 120,568	18.1%		
Contract	Street Lighting	Account 604	12	824,430	55,447	7,943	\$ 63,390	\$	\$ 230	\$	\$	\$	\$	\$	\$	\$ 63,621	\$ 55,447	\$ 8,173	\$ -	\$ 63,621	\$ 10,019	18.1%		
		Account 605	12	11,281	2,705	110	\$ 2,815	\$	\$ 3	\$	\$	\$	\$	\$	\$	\$ 2,819	\$ 2,705	\$ 114	\$ -	\$ 2,819	\$ 489	18.1%		
		Account 606	312	1,888,843	70,541	17,772	\$ 88,313	\$	\$ 515	\$	\$	\$	\$	\$	\$	\$ 88,829	\$ 70,541	\$ 18,287	\$ -	\$ 88,829	\$ 12,746	18.1%		
		Account 607	4	10,920	803	138	\$ 941	\$	\$ 4	\$	\$	\$	\$	\$	\$	\$ 945	\$ 803	\$ 142	\$ -	\$ 945	\$ 145	18.1%		
		Account 608	1,139	8,922,730	395,140	83,618	\$ 478,758	\$	\$ 2,424	\$	\$	\$	\$	\$	\$	\$ 481,181	\$ 395,140	\$ 86,042	\$ -	\$ 481,181	\$ 71,400	18.1%		
		Account 609					\$ -	\$ 33,870	\$	\$	\$	\$	\$	\$	\$	\$ 33,870	\$	\$ -	\$ 33,870	\$ 33,870				
SC 5	Area Lighting	Account 610	5,111	401,263	50,285.20	3,786	\$ 54,071	\$	\$ 110	\$	\$	\$	\$	\$	\$	\$ 54,181	\$ 50,285	\$ 3,896	\$ -	\$ 54,181	\$ 9,086	18.1%		
			58,115	77,219,530	3,430,667	742,019	\$ 4,172,686	\$ 45,328	\$ 21,509	\$ 57,535	\$ 38,926	\$ 96,461	\$ (23,954)	\$ (19,054)	\$ (43,008)	\$ 4,292,976	\$ 3,464,248	\$ 783,400	\$ 45,328	\$ 4,292,976	\$ 625,974	18.1%		

Source: Page 300 of PSC Annual Report

Sources: Pages 300-303 of PSC Annual Report and Customer Weather Normalization and Customer Growth Work paper and PPAC Reconciliation Work paper

**Bath Electric Gas and Water Systems**  
**Electric Department**  
**Comparison of Customer Cost Per Bill and Minimum Charge**

<u>Line No.</u>	Cost Item	Cost (\$)	Customer Related Cost (\$)	Source
1	Customer Accounting		\$ 138,858	Account 761
2	Benefits & Pension	\$ 377,348		Account 785
3	Total Labor	\$ 663,635		Company Workpapers see "Labor Worksheet.xlsx"
4	Benefit %	57%		Line 2/ line 3
5	Cust. Acct. Labor	\$ 86,538		Company Workpapers see "Labor Worksheet.xlsx"
6	Cust Acct Benefits		\$ 49,206	Line 4 x line 5
7	A&G Labor	\$ 86,538		Company Workpapers see "Labor Worksheet.xlsx"
8	Total Labor	\$ 530,070		Company Workpapers see "Labor Worksheet.xlsx"
9	Non A&G Labor	\$ 443,532		Line 8 - line 7
10	Cust Acct as % of Non A&G Lat	20%		Line 5 / line 9
11	Allocated A&G Labor to Cust Acct		\$ 16,885	Line 10 x line 7
12	All Other A&G			
13	Total A&G	\$ 716,154		Accounts 920-933
14	Less Benefits	\$ 377,348		Line 2
15	Less A&G Laobr	\$ 86,538		Line 7
16	Less Depr on general plant	\$ -		Not applicable
17	Net A&G	\$ 252,268		Line 13 - lines 14-16
18	Allocated to Cust Acct		\$ 49,220	Line 10 x line 17
19	Total Expenses		\$ 254,169	Sum of Lines 1, 6, 11, 18
	Rate Base			
20	Poles	\$ 565,948	\$ 141,487	Account 358 @ 25%
21	Conductor	\$ 226,040	\$ 56,510	Account 363 @ 25%
22	Services	\$ 75,666	\$ 75,666	Account 366
23	Transformers	\$ 2,416,721	\$ 2,416,721	Account 365
24	Meters	\$ 92,204	\$ 92,204	Accounts 368
25	Total Net Plant		\$ 2,584,591	Line 20 thru line 24
26	Working Capital		\$ 31,771	1/8 x line 19
27	Total Rate Base		\$ 2,616,362	Line 25 + line 26
28	Weight Cost of Capital	3.30%	\$ 86,241	Exhibit 8
29	Depreciation expense related to Customer portion of rate b		\$ 142,603	Gross Plant at above weightngs at book depreciation rates
30	Total Customer Cost		\$ 483,013	Line 19 + line 28 + line 29
31	# of Bills per year		58,115	Exhibit 6
32	Customer Cost Per Bill		\$ 8.31	Line 30 / line 31

**Bath Electric Gas and Water Systems  
Electric Department  
Calculation of Escalation Factors**

Year	Month	# of Months		Estimated Escalation Rate	Escalation Factor
2015	5				
	6				
	7				
	8				
	9		Property Tax	2.00%	1.00165158
	10	1			1.052487897
	11	2	Labor and Inflation	2.50%	1.00205984
	12	3			1.065867743
2016	1	4	Health Insurance	8.1%	1.00557883
	2	5			1.188227915
	3	6			
	4	7			
	5	8			
	6	9			
	7	10			
	8	11			
	9	12			
	10	13			
	11	14			
	12	15			
2017	1	16			
	2	17			
	3	18			
	4	19			
	5	20			
	6	21			
	7	22			
	8	23			
	9	24			
	10	25			
	11	26			
	12	27			
2018	1	28			
	2	29			
	3	30			
	4	31			