

September 21, 2017

Mr. Tom O'Leary, Mayor  
City of Galion  
301 Harding Way East  
Galion, OH 44833

**RE: 2017 Cost of Service and Rate Design Update  
Work Order No. 0406.010**

Dear Tom:

This letter responds to your request for Sawvel and Associates, Inc. (Sawvel) to update the 2015 Report on Electric Cost of Service and Rate Study (2015 Report). The City indicated that electric utility operation and maintenance (O&M) expenses have increased since the 2015 Report and that the Electric Operating Fund cash balance had decreased to a lower level than originally planned.

## **APPROACH**

The approach to this assignment involved completing several tasks. The first task was to request and to review revenue, expenses, and electric billing for each rate class in 2016 and 2017. This information was used in the second task that involved preparing revenue requirements to be used in the cost of service analysis. The third task was to update the cost of service model to reflect the new revenue requirement and the fourth was to prepare new electric rates.

The main goal of this assignment was to design rates that generate sufficient revenue and maintain the electric fund balance at or above a minimum fund balance guideline. The minimum fund balance guideline is set at three months of power supply costs or approximately \$2.6 million in 2018.

## **2018 TEST YEAR REVENUE REQUIREMENT**

A 2018 test year was selected for use in the cost of service analysis. The 2018 test year expenses were derived from the City of Galion Financial Recovery Plan developed jointly between the City and the State Auditor's office. The City advised that approximately \$100,000 of salary and

benefits should be removed from 2018 test year expenses because of an open position included in the Financial Recovery Plan that is expected to be eliminated and thus would no longer be an electric system expense going forward. Power supply costs included in the Financial Recovery Plan for 2018 through 2021 were modified to reflect more recent power costs. This information was obtained from American Municipal Power, Inc. (AMP), the City's power supplier. The 2018 test year revenue requirement is \$13,380,482 and is shown on line 39 in Table 1, Electric System Rate Plan.

### **COST OF SERVICE ANALYSIS**

The 2018 revenue requirement was used in the cost of service analysis to estimate the cost to serve each customer rate class. The cost of service analysis indicated a revenue increase of approximately \$1.1 million (8.6%) compared to existing rate revenue as of October 1, 2017. The results of the cost of service analysis by rate class are shown in Table 2, Comparison of Revenue from Existing Rates to Cost of Service Revenue. The largest percent increase was Commercial at 15.7 percent (\$254,336).

### **PROJECTED OPERATING RESULTS**

A projection for the years 2017 through 2023 was prepared to test the revenue adequacy of the proposed rates and to demonstrate the estimated effect of the electric system debt service that ends in 2022 and 2023. Table 1 shows if the proposed rates are implemented January 1, 2018, the electric fund balance at the end of 2018 is projected to be approximately \$3.1 million increasing to approximately \$3.8 million by the end of 2023. The minimum fund balance guideline during this period is no more than approximately \$2.85 million.

### **RATE COMPETITIVENESS**

Table 3, Estimated Monthly Bills, shows estimate monthly customer bills using the City's existing and proposed rates compare to neighboring utilities, Ohio Edison (First Energy) and Ohio Power (AEP).

### **CONCLUSION AND RECOMMENDATION**

Although cost of service results are an important consideration when determining appropriate adjustments to customer revenue and rate components, one must also consider the customer bill impact and rate competitiveness when making such decisions. The cost of service results indicate increases to the Residential and Commercial rate classes that may cause unreasonable

increases to customer bills if applied as a one-time rate adjustment. Given the magnitude of the revenue adjustments indicated by the cost of service analysis, Sawvel recommends the City implement an across the board revenue increase of 8.6 percent to each rate class. Proposed rates that reflect this adjustment can be found in Table 4, Existing and Proposed Rates.

If you have any questions, please call me.

Sincerely,

Donald E. Gruenemeyer, P.E.  
President

DEG:dmd

**Table 1**  
**Electric System Rate Plan: January 1, 2018 Rate Change**  
(\$ except where noted)  
City of Galion, Ohio

Description	Act/Proj.	Test Year	Projected				
	2017	2018	2019	2020	2021	2022	2023
<b>Revenue</b>							
Customer Sales Revenue							
Base Rate	11,710,810	13,380,482	13,433,927	13,487,724	13,541,639	13,595,769	13,650,116
PCA	296,010	(464)	133,308	155,609	528,519	715,001	771,645
RSA	-	-	-	-	-	-	-
<b>Total Customer Sales Revenue</b>	<b>12,006,820</b>	<b>13,380,018</b>	<b>13,567,235</b>	<b>13,643,334</b>	<b>14,070,158</b>	<b>14,310,770</b>	<b>14,421,760</b>
Other Income	-	-	-	-	-	-	-
Transfer from 525	375,000	-	-	-	-	-	-
<b>Total Revenue</b>	<b>12,381,820</b>	<b>13,380,018</b>	<b>13,567,235</b>	<b>13,643,334</b>	<b>14,070,158</b>	<b>14,310,770</b>	<b>14,421,760</b>
<b>Expenses</b>							
Electric Line	1,252,287	1,256,067	1,309,057	1,362,297	1,415,791	1,491,397	1,572,585
Electric Billing & Collection	270,288	232,095	242,564	253,084	263,656	278,920	295,379
Purchase Power	10,048,189	10,443,683	10,619,172	10,683,465	11,098,458	11,327,191	11,426,255
General Government Cost	137,000	138,000	142,000	147,000	155,000	155,001	155,002
Capital Outlay	100,500	175,000	100,000	100,000	100,000	100,000	100,000
Debt Service	1,142,179	1,135,637	1,131,224	1,125,053	1,120,738	867,000	216,809
<b>Total Expenses</b>	<b>12,950,444</b>	<b>13,380,482</b>	<b>13,544,017</b>	<b>13,670,899</b>	<b>14,153,642</b>	<b>14,219,510</b>	<b>13,766,030</b>
<b>Net Income (Line 9 - Line 17)</b>	<b>(568,623)</b>	<b>(464)</b>	<b>23,218</b>	<b>(27,565)</b>	<b>(83,484)</b>	<b>91,261</b>	<b>655,731</b>
<b>BOY Operating Fund Balance</b>	<b>3,684,593</b>	<b>3,115,969</b>	<b>3,115,505</b>	<b>3,138,724</b>	<b>3,111,158</b>	<b>3,027,674</b>	<b>3,118,935</b>
Net Income/(Deficit)	(568,623)	(464)	23,218	(27,565)	(83,484)	91,261	655,731
<b>EOY Operating Fund Balance</b>	<b>3,115,969</b>	<b>3,115,505</b>	<b>3,138,724</b>	<b>3,111,158</b>	<b>3,027,674</b>	<b>3,118,935</b>	<b>3,774,666</b>
<b>Min. Fund Balance Guideline<sup>(1)</sup></b>	<b>2,512,047</b>	<b>2,610,921</b>	<b>2,654,793</b>	<b>2,670,866</b>	<b>2,774,614</b>	<b>2,831,798</b>	<b>2,856,564</b>

<sup>(1)</sup> Three months of power supply costs.

**Table 2**  
**Comparison of Revenue from**  
**Existing Rates to Cost of Service Revenue**  
**2018 Test Year (\$)**  
**Galion, Ohio**

<b>Customer Class</b>	<b>Revenue at Existing Rates<sup>(1)</sup></b>	<b>Cost of Service</b>	<b>COS minus Existing</b>	
Residential	5,709,844	6,302,447	592,603	
Commercial	1,619,319	1,873,655	254,336	
Power	930,645	930,645	-	
Large Power	3,999,225	4,216,100	216,875	
Subtotal	12,259,034	13,322,847	1,063,813	
Security Lighting	57,635	57,635	-	
<b>Total</b>	<b>12,316,669</b>	<b>13,380,482</b>	<b>1,063,813</b>	<b>8.6%</b>

<sup>(1)</sup> Includes PCA of \$0.00570/kWh.

**Table 3**  
**Estimated Monthly Bills (\$)**  
**City of Galion, Ohio**

<b>Description</b>	<b>Usage</b>	<b>Galion</b>		<b>Ohio Edison<sup>(2)</sup></b>	<b>Ohio Power<sup>(2)</sup></b>
		<b>Existing<sup>(1)</sup></b>	<b>Proposed</b>		
Residential	700 kWh	92	100	98	94
Commercial	2,000 kWh	239	259	298	201
Power	50 kW 13,750 kWh	1,708	1,858	1,591	1,622
Large Power	415 kW 135,000 kWh	14,700	15,960	13,961	14,647

<sup>(1)</sup> Power Cost Adjustment (PCA) is \$0.0057/kWh-sold.

<sup>(2)</sup> Rates effective September 1, 2017.

**Table 4**  
**Existing and Proposed Rates**  
**Galion, Ohio**

Description	Existing Rates <sup>(1)</sup>	Proposed Rates
<b>Residential</b>		
Service Charge (\$/month)	10.00	12.00
Energy Charge (\$/kWh)	0.10705	0.12085
<b>Commercial</b>		
Service Charge (\$/month)	15.00	20.00
Energy Charge (\$/kWh)	0.10157	0.11493
<b>Power</b>		
Service Charge (\$/month)	96.00	100.00
Demand Charge (\$/kW)	6.75	8.25
Energy Charge (\$/kWh)	0.08265	0.09355
<b>Large Power</b>		
Service Charge (\$/month)	500.00	500.00
Demand Charge (\$/kW)	8.75	10.25
Energy Charge (\$/kWh)	0.06889	0.07931
Substation Discount (\$/kW)	(0.15)	(0.15)
Power Supply Cost in Base Rates (\$/kWh-sold)	0.09320	0.09826

<sup>(1)</sup> Does not include PCA. PCA as of October 1, 2017 is \$0.0057/kWh.