WORK SESSION MINUTES – WEDNESDAY, JUNE 16, 2021

STATE OF KANSAS)
) SS
CITY OF KANSAS CITY)

The Board of Public Utilities of Kansas City, Kansas (aka BPU, We, Us, Our) met remotely in Work Session on Wednesday, June 16, 2021 at 5:00 P.M. The following Board Members were on the teleconference: Robert L. Milan, President; Mary Gonzales, Vice President; Rose Mulvany Henry, Secretary; Jeff Bryant, Thomas Groneman, and Ryan Eidson.

Also on teleconference: William Johnson, General Manager; Angela Lawson, Deputy Chief Counsel; Lori Austin, Chief Financial Officer/Chief Administrative Officer; Steve Green, Executive Director Water Operations; Johnetta Hinson, Executive Director Customer Service; Dong Quach, Executive Director Electric Production; Jerry Sullivan, Chief Information Officer; Jerry Ohmes, Executive Director Electric Supply; David Mehlhaff, Chief Communications Officer, Robert Kamp, IT Project Manager; Dennis Dumovich, Director Human Resources, and Patrice Townsend, Director Utility Services.

A tape of this meeting is on file at the Board of Public Utilities.

Mr. Milan called the meeting to order at 5:00 P.M.

Roll call was taken, and all Board Members were present.

Item #3 - Approval of Agenda

A motion was made to approve the Agenda by Ms. Gonzales, seconded by Mr. Groneman and unanimously carried.

Item #4 – Board Updates / GM Updates

Mr. Groneman informed the Board that the UG Standing Committee Public Works and Safety would meet June 21, 2021.

Mr. Eidson began the dialog about coming up with possible topics for future meetings. After discussing, it was decided that Mr. Johnson would bring 10 possible topics for future Work Session meetings to discuss at the next meeting.

WORK SESSION MINUTES - WEDNESDAY, JUNE 16, 2021

STATE OF KANSAS)
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Item #5 - Utility Financial Benchmarking

Mr. Jerry McKenzie, MGT Consulting Group, furnished a PowerPoint presentation which gave the Board information regarding where the utility stood with regards to rates as well as where the utility stood with regards to costs compared to other utilities. (see attached)

Mr. McKenzie responded to Questions from the Board.

Item #6 - Adjourn

A motion was made to adjourn the Work Session at 5:58 P.M. by Mr. Groneman, seconded by Ms. Gonzales and carried unanimously.

ATTEST:

Secretary

APPROVED:

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Benchmarking Analysis (Detailed Schedules)

Completed for the

KANSAS CITY BOARD OF PUBLIC UTILITIES



Prepared
April 2021
by
Jerry McKenzie



BENCHMARK COMPARISON SUMMARY - ELECTRIC COMPARISON TO APPA NATIONAL SURVEY REVENUE PER KWH - FY 2019 (last APPA survey)

(compiled by MGT Consulting Group)

	Kansas City	Α	PPA Nationa	ıl	APPA Natio	nal 50-100k	Customers		APPA Re	gion Median	
Benchmark Category	BPU	1st Quartile	Median	3rd Quartile	1st Quartile	Median	3rd Quartile	Southeast	N.Ctl/Plains	Southwest	West
REVENUE PER KWH:											
1 All Customers	\$0.0965	\$0.0840	\$0.0960	\$0.1080	\$0.0890	\$0.1040	\$0.1200	\$0.0980	\$0.0920	\$0.0950	\$0.0910
2 Residential Customers	\$0.1297	\$0.0980	\$0.1090	\$0.1200	\$0.1040	\$0.1160	\$0.1280	\$0.1120	\$0.1080	\$0.1040	\$0.1070
3 Commercial Customers	\$0.1055	\$0.0890	\$0.1010	\$0.1120	\$0.0900	\$0.1050	\$0.1250	\$0.1060	\$0.0990	\$0.0900	\$0.0920
4 Industrial Customers	\$0.0871	\$0.0630	\$0.0720	\$0.0860	\$0.0550	\$0.0730	\$0.0930	\$0.0710	\$0.0770	\$0.0720	\$0.0640

APPA DEFINITIONS:

1 All Customers The ratio of total electric operating revenues from sales to ultimate customers to total kilowatt-hour sales. This ratio measures the revenue received for each kilowatt-hour of electricity sold to all classes of customers.

2 Residential Customers The ratio of residential revenue to residential sales. This ratio measures the revenue received for each kilowatt-hour of electricity sold to residential customers.

3 Commercial Customers The ratio of commercial revenue to commercial sales. The ratio measures the revenue received for each kilowatt-hour of electricity sold to commercial customers.

4 Industrial Customers The ratio of industrial revenue to industrial sales. This ratio measures the revenue received for each kilowatt-hour of electricity sold to industrial customers.

BENCHMARK COMPARISON SUMMARY - ELECTRIC COMPARISON TO SPECIFIC COMPARABLE UTILITIES REVENUE PER KWH

(compiled by MGT Consulting Group)

	Kansas City	Independence	City Utilities	Rochester	Lansing Board	•	APPA National		
Benchmark Category	BPU	Power & Light	Springfield	Public Utilities	Water & Light	Utilities System	1st Quartile	Median	3rd Quartile
REVENUE PER KWH:									
1 All Retail Customers	\$0.0965	\$0.1253	\$0.0856	\$0.1262	\$0.1365	\$0.0868	\$0.0840	\$0.0960	\$0.1080
2 Residential Customers	\$0.1297	\$0.1366	\$0.0992	\$0.1519	\$0.1582	\$0.0932	\$0.0980	\$0.1090	\$0.1200
3 Commercial Customers	\$0.1055	\$0.1179	\$0.0808	\$0.1176	\$0.1334	\$0.0822	\$0.0890	\$0.1010	\$0.1120
4 Industrial Customers	\$0.0871	\$0.0707	\$0.0697	\$0.1053	\$0.1111	shown as comm	\$0.0630	\$0.0720	\$0.0860

APPA DEFINITIONS:

1 All Retail Customers The ratio of total electric operating revenues from sales to ultimate customers to total kilowatt-hour sales. This ratio measures the revenue received for each kilowatt-hour of electricity sold to all classes of customers.

2 Residential Customers The ratio of residential revenue to residential sales. Measures the revenue received for each kilowatt-hour of electricity sold to residential customers.

3 Commercial Customers The ratio of commercial revenue to commercial sales. Measures the revenue received for each kilowatt-hour of electricity sold to commercial customers.

4 Industrial Customers The ratio of industrial revenue to industrial sales. Measures the revenue received for each kilowatt-hour of electricity sold to industrial customers.

BENCHMARK COMPARISON SUMMARY - ELECTRIC COMPARISON TO APPA NATIONAL SURVEY EXPENSE BENCHMARKS - FY 2019 (last APPA survey)

(compiled by MGT Consulting Group)

	Kansas City	Α	PPA Nationa	ıl	APPA Natio	nal 50-100k	Customers		APPA Re	gion Median	
Benchmark Category	BPU	1st Quartile	Median	3rd Quartile	1st Quartile	Median	3rd Quartile	Southeast	N.Crl/Plains	Southwest	West
EXPENSE BENCHMARKS:											
1 Total O&M less depr per KWH Sold	\$0.0737	\$0.0620	\$0.0780	\$0.0920	\$0.0550	\$0.0730	\$0.0940	\$0.0880	\$0.0760	\$0.0680	\$0.0630
Total O&M (exclude Power Supply) per Customer	\$952	\$410	\$544	\$704	\$467	\$586	\$767	\$473	\$539	\$544	\$638
3 Total Power Supply per KWH Sold	\$0.0497	\$0.0460	\$0.0610	\$0.0750	\$0.0430	\$0.0460	\$0.0730	\$0.0710	\$0.0610	\$0.0550	\$0.0460
4 Trans/Distr O&M per Circuit Mile	\$11,568	\$4,937	\$8,755	\$13,983	\$6,083	\$11,173	\$15,926	\$10,844	\$5,779	\$7,510	\$9,793
5 Customer Acctg/Service/Sales per Customer	\$59	\$49	\$66	\$103	\$61	\$82	\$112	\$64	\$58	\$62	\$109
Administrative and General per Customer	\$253	\$120	\$179	\$281	\$160	\$212	\$238	\$169	\$158	\$161	\$181

APPA DEFINITIONS:

- 1 Total O&M per KWH Sold The ratio of total electric utility O&M expenses, including the cost of generated/purchased power to total kilowatt-hour sales to ultimate customers.

 Measures average total O&M expenses associated with each kilowatt-hour of electricity sold, either for resale or to ultimate customers.
- 2 Total O&M (exclude Power Supply) The ratio of total electric utility O&M expenses, excluding all costs of power supply to the total number of ultimate customers. Includes costs of transmission, distribution, customer accounting, customer services, sales and administrative and general expenses.
- 3 Total Power Supply per KWH Sold The ratio of the total costs of power supply to total sales to both ultimate and customers. Measures all power supply costs, including generation and purchased power associated with the sale of each kilowatt-hour of electricity.
- 4 Trans/Distr O&M per Circuit Mile The ratio of T&D O&M expenses to the total circuit miles of line. Measures the total transmission/distribution costs associated with each circuit mile of line used to deliver power to customers.
- 5 Customer Acctg/Service/Sales per Customer Customer accounting, service, and sales expenses to the total number of customers. Measures the average expenses incurred by the utility in handling each customer's account. Uncollectible accounts and meter reading expenses are included in this ratio.
- 6 Administrative and General per Customer The ratio of total electric utility administrative and general expense to the total number of customers. Measures the average administrative and general expense to the total number of customers. Measures the average administrative and general expense incurred by the utility on behalf of each customer.

BENCHMARK COMPARISON SUMMARY - ELECTRIC COMPARISON TO SPECIFIC COMPARABLE UTILITIES EXPENSE BENCHMARKS

(compiled by MGT Consulting Group)

	Kansas City	Independence	City Utilities	Rochester	Lansing Board	Lafayette	Α	PPA Nationa	ıl
Benchmark Category	BPU	Power & Light	Springfield	Public Utilities	Water & Light	Utilities System	1st Quartile	Median	3rd Quartile
EXPENSE BENCHMARKS:									
1 Total O&M per KWH Sold	\$0.0737	\$0.0848	\$0.0495	\$0.0995	\$0.0986	\$0.0487	\$0.0620	\$0.0780	\$0.0920
Total O&M (exclude Power Supply) per Customer	\$952	\$769	\$724	\$598	\$991	\$842	\$410	\$544	\$704
3 Total Power Supply per KWH Sold	\$0.0497	\$0.0474	\$0.0287	\$0.0755	\$0.0549	\$0.0303	\$0.0460	\$0.0610	\$0.0750
4 Trans/Distr O&M per Circuit Mile	\$11,568	\$15,557	\$7,892	no FERC	\$11,493	not reported	\$4,937	\$8,755	\$13,983
5 Customer Acctg/Service/Sales per Customer	\$59	\$77	\$50	no FERC	included in A&G	\$76	\$49	\$66	\$103
6 Administrative and General per Customer	\$253	\$314	\$165	no FERC	\$444	\$323	\$120	\$179	\$281

APPA DEFINITIONS:

note a note b

- 1 Total O&M per KWH Sold

 The ratio of total electric utility O&M expenses, including the cost of generated/purchased power to total kilowatt-hour sales to ultimate customers

 Measures average total O&M expenses associated with each kilowatt-hour of electricity sold, either for resale or to ultimate customers
- 2 Total O&M (exclude Power Supply) The ratio of total electric utility O&M expenses, excluding all costs of power supply to the total number of ultimate customers. Includes costs of per Customer transmission, distribution, customer accounting, customer services, sales and administrative and general expenses
- 3 Total Power Supply per KWH Sold The ratio of the total costs of power supply to total sales to both ultimate and customers. Measures all power supply costs, including generation and purchased power associated with the sale of each kilowatt-hour of electricity.
- 4 Trans/Distr O&M per Circuit Mile The ratio of T&D O&M expenses to the total circuit miles of line. Measures the total transmission/distribution costs associated with each circuit mile or line used to deliver power to customers.
- 5 Customer Acctg/Service/Sales per Customer

 The ratio of total customer accounting, service, and sales expenses to the total number of customers. Measures the average expenses incurred by the utility in handling each customer's account. Uncollectible accounts and meter reading expenses are included in this ratio
- 6 Administrative and General per Customer

 The ratio of total electric utility administrative and general expense to the total number of customers. Measures the average administrative and general expense incurred by the utility on behalf of each customer.

Notes

- a City Utilities of Springfield has an "economies of scale advantage" over all of the other utilities in the study with 126% more KWH and nearly 65% more customers than the others on average
- b Lafayette Utilities System has an "economies of scale advantage" over all of the other utilities in the study (except Springfield) with 74% more KWH than the others (except Springfield) or Lafayette's customer count however, is in line with the other utilities included (again except Springfield).

BENCHMARK COMPARISON SUMMARY - ELECTRIC COMPARISON TO APPA NATIONAL SURVEY DEBT AND FINANCIAL BENCHMARKS - FY 2019 (last APPA survey

(compiled by MGT Consulting Group)

	Kansas City	Α	PPA Nationa	ıl	APPA Natio	nal 50-100k	Customers		APPA Re	gion Median	
Benchmark Category	BPU	1st Quartile	Median	3rd Quartile	1st Quartile	Median	3rd Quartile	Southeast	N.Crl/Plains	Southwest	West
DEBT & FINANCIAL BENCHMARKS:											
1 Debt to Total Assets	0.636	0.156	0.286	0.468	0.330	0.409	0.535	0.277	0.212	0.355	0.343
2 Operating Ratio	0.673	0.772	0.845	0.902	0.698	0.790	0.874	0.872	0.837	0.784	0.836
3 Current Ratio	2.80	1.86	2.79	4.53	1.93	3.00	4.74	2.79	2.96	3.23	2.47
4 Times Interest Earned	1.43	2.72	4.93	11.35	2.19	3.31	6.89	6.53	5.10	4.79	3.54
5 Debt Service Coverage	2.07	2.06	3.63	6.88	1.90	2.60	3.01	4.71	3.62	3.87	2.73
Uncollectible Accounts per Revenue Dollar	0.0025	0.0005	0.0015	0.0027	0.0005	0.0013	0.0021	0.0017	0.0008	0.0031	0.0015
7 Capital Expenditures to Depreciation Expense	1.78	0.85	1.18	1.64	1.03	1.30	1.66	1.07	1.18	0.89	1.32

APPA DEFINITIONS:

- 1 Debt to Total Assets The ratio of long-term debt, plus current and accrued liabilities, to total assets and other debits. Measures a utility's ability to meet its current and long-term liabilities based on the availability of assets.
- 2 Operating Ratio

 The ratio of total electric O&M expenses to total electric operating revenues. This ratio measures the proportion of revenues received from electricity sales, rate adjustments and other electric activities required to cover the O&M costs associated with producing and selling electricity.
- 3 Current Ratio The ratio of total current and accrued assets to total current and accrued liabilities. A measure of the utility's short-term liquidity (i.e., the ability to pay bills).

 The current ratio takes a snapshot of the utility's liquidity at a point in time and thus may vary considerably at other times of the year.
- 4 Times Interest Earned The ratio of net electric utility income, plus interest paid on long-term debt, to interest on long-term debt. Measures the ability of a utility to cover interest charges and is indicative of the safety margin to lenders.
- 5 Debt Service Coverage The ratio of net revenues available for debt service to total long-term debt service for the year. Measures ability to meet annual long-term debt obligation.
- 6 Uncollectible Accounts per Revenue Dollar

The ratio of total uncollectible accounts to total electric utility operating revenues. Measures portion of revenue dollars that will not be collected by the utility.

7 Capital Expenditures to
Depreciation Expense The amount of capital expenditures in a year divided by depreciation expenses.

BENCHMARK COMPARISON SUMMARY - ELECTRIC COMPARISON TO SPECIFIC COMPARABLE UTILITIES DEBT AND FINANCIAL BENCHMARKS

(compiled by MGT Consulting Group)

_	Kansas City	Independence	City Utilities	Rochester	Lansing Board	Lafayette		APPA Nationa	ıl
Benchmark Category	BPU	Power & Light	Springfield	Public Utilities	Water & Light	Utilities System	1st Quartile	Median	3rd Quartile
DEBT & FINANCIAL BENCHMARKS:									
1 Debt to Total Assets	0.636	0.475	0.309	0.504	0.519	0.331	0.156	0.286	0.468
2 Operating Ratio	0.673	0.806	0.711	0.750	0.745	0.775	0.772	0.845	0.902
3 Current Ratio	2.80	6.53	1.40	4.68	4.52	2.28	1.86	2.79	4.53
4 Times Interest Earned	1.43	2.42	4.04	4.71	3.10	3.57	2.72	4.93	11.35
5 Debt Service Coverage	2.07	2.33	2.39	2.93	2.39	3.50	2.06	3.63	6.88
Uncollectible Accounts per Revenue Dollar	0.0025	0.0018	not reported	0.0012	not reported	0.0038	0.0005	0.0015	0.0027
7 Capital Expenditures to Depreciation Expense	1.78	0.17	1.62	1.33	1.68	0.88	0.85	1.18	1.64
8 Debt Service per Customer	\$700	\$181	\$473	\$252	\$386	\$332	not included	not included	not included

APPA DEFINITIONS:

- 1 Debt to Total Assets The ratio of long-term debt, plus current and accrued liabilities, to total assets and other debits. Measures a utility's ability to meet its current and long-term liabilities based on the availability of assets.
- 2 Operating Ratio

 The ratio of total electric O&M expenses to total electric operating revenues. This ratio measures the proportion of revenues received from electricity sales, rate adjustments and other electric activities required to cover the O&M costs associated with producing and selling electricity
- 3 Current Ratio

 The ratio of total current and accrued assets to total current and accrued liabilities. A measure of the utility's short-term liquidity (i.e., the ability to pay bills). The current ratio takes a snapshot of the utility's liquidity at a point in time and thus may vary considerably at other times of the year.
- 4 Times Interest Earned The ratio of net electric utility income, plus interest paid on long-term debt, to interest on long-term debt. Measures the ability of a utility to cover interest charges and is indicative of the safety margin to lenders.
- 5 Debt Service Coverage Ratio of net revenues available for debt service to total long-term debt service for the year. Measures ability to meet annual long-term debt obligation
- 6 Uncollectible Accounts per Ratio of total uncollectible accounts to total electric utility operating revenues. Measures portion of revenue dollars that will not be collected by the utility Revenue Dollar
- 7 Capital Expenditures to The amount of capital expenditures in a year divided by depreciation expenses.

 Depreciation Expense
- 8 Debt Service per Customer Not included within APPA survey but defined as the total principal and interest payments in the period divided by the number of customers

BENCHMARK COMPARISON SUMMARY - WATER Key Definitions

1	Debt Ratio	- Measure of the extent to which assets are financed through borrowing. The higher the ratio the more dependent the utility is on debt financing.
2	Return on Assets	- An estimate of a utility's financial effectiveness. Higher ratios are deemed better.
3	Debt Service Coverage Ratio	- Represents the amount of cash flow available to meet interest, principal, and sinking fund payments. Higher ratios are deemed better.
4	Operating Ratio	- Operating expenses divided by operating revenue. Lower percentages are deemed better.
5	O&M Cost Per Account	- Total O&M cost (less depreciation) divided by the average number of customers (accounts). Lower amounts are deemed better.
6	O&M Cost Per MG	- Total O&M cost (less depreciation) divided by the million gallons produced. Lower amounts are deemed better.
7	O&M Cost Per 100 Miles Pipe	- Total O&M cost (less depreciation) divided by the number of miles of water mains (per 100). Lower amounts are deemed better.
8	Prod/Treatment O&M Cost Per MG	- Production/treatment O&M cost divided by the million gallons produced. Lower amounts are deemed better.
9	Distr. O&M Cost Per 100 Miles Pipe	- Transmission/distribution O&M cost divided by the number of miles of water mains (per 100). Lower amounts are deemed better.
10-12	O&M % - Water Treatment/Supply	- Production/treatment O&M cost reflected as a percentage of total O&M cost (less depreciation). Defines "where" a utility is spending their dollars.
13	O&M % - Water Transm./Distr.	- Transm./Distr. O&M cost reflected as a percentage of total O&M cost (less depreciation). Defines "where" a utility is spending their dollars.
14	MGD Water Produced Per Employee	- A measure of employee efficiency expressed by the amount of water delivered by utility employees. Higher ratios are deemed better.
15-18	% of Operating Expenses	- Various O&M functions cost reflected as a percentage of total O&M cost (lincluding depreciation). Defines "where" a utility is spending their dollars.

BENCHMARK COMPARISON SUMMARY WATER

(Based on 2017 Fiscal Year - last AWWA survey)

compiled by MGT Consulting Group

		AV	/WA Aggrega	te	AWW	/A Region IV (a) (b)	AWWA	50,001-100,00	0 cust.
Element of Cost	Kansas City BPU	75th percentile	Median	25th percentile	75th percentile	Median	25th percentile	75th percentile	Median	25th percentile
FINANCIAL & OPERATIONAL:										
1 Debt Ratio	51%	20%	33%	52%	12%	37%	53%	13%	30%	44%
2 Return on Assets	2.7%	3.8%	2.4%	1.2%	4.4%	3.5%	1.4%	4.2%	2.0%	-0.5%
3 Debt-Service Coverage Ratio	4.32	4.29	2.34	1.67	4.43	2.73	2.04	4.20	4.02	2.19
4 Operating Ratio	51%	46%	55%	68%	41%	47%	58%	50%	64%	72%
5 O&M Cost Per Account	\$505	\$318	\$470	\$641	\$362	\$480	\$585	\$319	\$483	\$632
6 O&M Cost Per MG	\$2,500	\$1,778	\$2,425	\$3,337	\$1,790	\$2,306	\$2,799	\$1,838	\$2,913	\$3,929
7 O&M Cost Per 100 Miles Pipe	\$2,691,788	\$2,022,662	\$2,904,472	\$4,148,850	\$2,178,126	\$2,854,621	\$3,428,162	\$2,321,733	\$2,947,364	\$3,788,645
8 Prod, & Treatment O&M Cost Per MG	\$505	\$335	\$559	\$803	\$434	\$677	\$809	\$88	\$246	\$802
9 Distribution O&M Cost Per 100 Miles Pipe	\$1,367,655	\$362,576	\$546,503	\$872,607	\$467,261	\$673,985	\$863,295	\$734,486	\$1,241,014	\$1,567,419
10 O&M % - Water Supply 11 O&M % - Water Treatment 12 O&M % - Water Treatment & Supply	20.2%	6.2% 19.1%	17.9% 29.6% 47.5%	36.8% 37.8%	8.6% 19.6%	15.2% 29.3% 44.5%	26.5% 37.7%	16.2% 5.7%	41.0% 9.7% 50.7%	53.5% 33.9%
13 O&M % - Water Transm. & Distr.	50.8%	15.1%	23.5%	38.7%	14.8%	22.3%	30.6%	17.7%	41.5%	53.7%
14 MGD of Water Produced Per Employee	0.26	0.29	0.23	0.17	0.28	0.22	0.17	0.28	0.21	0.17

⁽a) Region IV includes Arkansas, Arizona, Colorado, Idaho, Kansas, Louisiana, Missouri, Nebraska, New Mexico, Oklahoma, Texas, Utah and Wyoming.

⁽b) Includes from Kansas and Missouri - City of Olathe, Lawrence Water & Sewer Department, Water District No. 1 of Johnson County, Chillicother Municipal Utilities (Mo), KC Water (Mo) City of Saint Charles (Mo), and City Utilities of Springfield.

BENCHMARK COMPARISON SUMMARY WATER

(Based on 2017 Fiscal Year - last AWWA survey)

compiled by MGT Consulting Group

		AWWA Region IV (a) (b) AWWA 50,001-100,000 cust.							Area Utilities	
Element of Cost	Kansas City BPU	75th percentile	Median	25th percentile	75th percentile	Median	25th percentile	Water Dist. No. 1	K.C. Mo.	Indep. Mo.
FINANCIAL & OPERATIONAL:										
1 Debt Ratio	51%	12%	37%	53%	13%	30%	44%	26%	37%	48%
2 Return on Assets	2.7%	4.4%	3.5%	1.4%	4.2%	2.0%	-0.5%	1.6%	4.2%	3.7%
3 Debt-Service Coverage Ratio	4.32	4.43	2.73	2.04	4.20	4.02	2.19	2.77	6.40	3.61
4 Operating Ratio	51%	41%	47%	58%	50%	64%	72%	49%	50%	63%
5 O&M Cost Per Account	\$505	\$362	\$480	\$585	\$319	\$483	\$632	\$363	\$562	\$748
6 O&M Cost Per MG	\$2,500	\$1,790	\$2,306	\$2,799	\$1,838	\$2,913	\$3,929	\$2,560	\$2,476	\$2,249
7 O&M Cost Per 100 Miles Pipe	\$2,691,788	\$2,178,126	\$2,854,621	\$3,428,162	\$2,321,733	\$2,947,364	\$3,788,645	\$2,035,646	\$3,257,283	\$2,537,070
8 Prod. & Treatment O&M Cost Per MG	\$505	\$434	\$677	\$809	\$88	\$246	\$802	NA	\$558	NA
9 Distribution O&M Cost Per 100 Miles Pipe	\$1,367,655	\$467,261	\$673,985	\$863,295	\$734,486	\$1,241,014	\$1,567,419	\$438,773	\$688,277	\$427,498
10 O&M % - Water Supply 11 O&M % - Water Treatment		8.6% 19.6%	15.2% 29.3%	26.5% 37.7%	16.2% 5.7%	41.0% 9.7%	53.5% 33.9%			
12 O&M % - Water Treatment & Supply	20.2%		44.5%			50.7%		49.7%	32.4%	36.0%
13 O&M % - Water Transm. & Distr.	50.8%	14.8%	22.3%	30.6%	17.7%	41.5%	53.7%	21.6%	22.2%	18.9%
14 MGD of Water Produced Per Employee	0.26	0.28	0.22	0.17	0.28	0.21	0.17	0.22	0.26	0.28
 % of Oper. Expenses- Production % of Oper. Expenses- Transm. & Distr. % of Oper. Expenses- Admin. & Cust. % of Oper. Expenses- Depreciation 	15.5% 39.1% 22.3% 23.1% 100.0%	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	33.7% 14.6% 19.5% 32.2% 100.0%	24.8% 22.1% 32.5% 20.6% 100.0%	30.7% 16.1% 38.3% 14.9%

⁽a) Region IV includes Arkansas, Arizona, Colorado, Idaho, **Kansas**, Louisiana, **Missouri**, Nebraska, New Mexico, Oklahoma, Texas, Utah and Wyoming.

⁽b) Includes from Kansas and Missouri - City of Olathe, Lawrence Water & Sewer Department, Water District No. 1 of Johnson County, Chillicother Municipal Utilities (Mo), KC Water (Mo) City of Saint Charles (Mo), and City Utilities of Springfield.

BENCHMARK COMPARISON SUMMARY - WATER COMPARISON TO SPECIFIC COMPARABLE UTILITIES DEBT AND FINANCIAL BENCHMARKS

(compiled by MGT Consulting Group)

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	Benchmark Category	Kansas City BPU	Independence Power & Light	City Utilities Springfield	Rochester Public Utilities	Lansing Board Water & Light	Lafayette Utilities System	WaterOne Johnson Co.
	Benchmark Category	БРО	Fower & Light	Springileiu	Fublic Otilities	water & Light	Othities System	Johnson Co.
DEB	T & FINANCIAL BENCHMARKS:							
1	Debt to Total Assets	0.453	0.161	0.309	0.504	0.519	0.331	0.201
2	Operating Ratio	0.589	0.681	0.711	0.652	0.745	0.775	0.522
3	Current Ratio	0.66	8.64	1.40	7.56	4.52	2.28	4.35
4	Times Interest Earned	1.98	10.23	4.04	4.71	3.10	3.57	3.05
5	Debt Service Coverage	2.44	4.02	2.39	2.93	2.39	3.50	2.37
6	Uncollectible Accounts per Revenue Dollar	0.0025	0.0024	not reported	0.0012	not reported	0.0038	0.0005
7	Capital Expenditures to Depreciation Expense	1.78	1.05	1.62	1.33	1.68	0.88	2.59
8	Debt Service per Customer	\$234	\$52	\$473	\$252	\$386	\$332	\$142
DEF	INITIONS:			combined	combined	combined	combined	
1	Debt to Total Assets	•	erm debt, plus curr s current and long-				its. This ratio meas	sures a utility's
2	Operating Ratio	proportion of rev		om water sales, rat	e adjustments & ot		es. This ratio mea required to cover t	
3	Current Ratio	liquidity (i.e., the		. The current ratio			measure of the uti ity at a point in time	
4	Times Interest Earned		ater utility income, litility to cover intere				term debt. This rat ers.	io measures
5	Debt Service Coverage		venues available fo s annual long-term		otal long-term debt	service for the yea	ar. This ratio meas	ures the utility's
6	Uncollectible Accounts per Revenue Dollar		incollectible accoui hat will not be colle		tility operating reve	nues. This ratio m	easures the portion	n of each
7	Capital Expenditures to Depreciation Expense	The amount of cap	pital expenditures i	n a year divided by	/ depreciation expe	enses.		
8	Debt Service per Customer	Defined as the tot	al principal and inte	erest payments in t	the period divided b	by the number of c	ustomers.	

WATER	ВС	ARD OF PU	BLIC UTILITIES	;	WATE	R DISTRICT	1 OF JOHNSON	1 CO.
(2019 Costs)		52,484	11,157,640	6,738,982		148,525	19,473,415	16,859,772
compiled by MGT Consulting Group		Per Retail	Per 000	Per 000		Per Retail	Per 000	Per 000
	Cost	Customer	Gal. Pumped	Gal. Sold	Cost	Customer	Gal. Pumped	Gal. Sold
Operating Expenses:								
Personnel Costs		\$0.00	\$0.00	\$0.00		\$0.00	\$0.00	\$0.0
Services		\$0.00	\$0.00	\$0.00		\$0.00	\$0.00	\$0.0
Commodities	Data Not	\$0.00	\$0.00	\$0.00	Data Not	\$0.00	\$0.00	\$0.0
Capital Outlay	Obtained	\$0.00	\$0.00	\$0.00	Obtained	\$0.00	\$0.00	\$0.0
Redistribution (Cust Svc/Admin/Etc)		\$0.00	\$0.00	\$0.00	-	\$0.00	\$0.00	\$0.0
Other Expenses		\$0.00	\$0.00	\$0.00		\$0.00	\$0.00	\$0.0
Subtotal Operating Expenses	\$29,960,521	\$570.85	\$2.69	\$4.45	\$54,398,113	\$366.26	\$2.79	\$3.2
Depreciation and Amortization	\$7.809.086	\$148.79	\$0.70	\$1.16	\$25,910,243	\$174.45	\$1.33	\$1.5
Total Operating Expenses	\$37,769,607	\$719.64	\$3.39	\$5.60	\$80,308,356	\$540.71	\$4.12	\$4.7
Nonoperating Expenses:								
Interest Expense	\$4,126,976	\$78.63	\$0.37	\$0.61	\$8,826,565	\$59.43	\$0.45	\$0.5
Other .	(\$403,878)	(\$7.70)	(\$0.04)	(\$0.06)	\$0	\$0.00	\$0.00	\$0.0
Total Nonoperating Expenses	\$3,723,098	\$70.94	\$0.33	\$0.55	\$8,826,565	\$59.43	\$0.45	\$0.5
Transfers:								
Payments In Lieu of Taxes	\$5,316,134	\$101.29	\$0.48	\$0.79	\$0	\$0.00	\$0.00	\$0.0
Other	\$0	\$0.00	\$0.00	\$0.00	\$0	\$0.00	\$0.00	\$0.0
Total Transfers	\$5,316,134	\$101.29	\$0.48	\$0.79	\$0	\$0.00	\$0.00	\$0.0
GRAND TOTALS	\$46,808,839	\$891.87	\$4.20	\$6.95	\$89,134,921	\$600.13	\$4.58	\$5.2
Production								
Total Production	\$5,505,371	\$104.90	\$0.49	\$0.82	\$27,199,222	\$183.13	\$1.40	\$1.6
Transmission and Distribution								
Total Transm. and Distr.	\$16,052,995	\$305.86	\$1.44	\$2.38	\$10,008,784	\$67.39	\$0.51	\$0.5
General & Administrative (incl Cust Svc) Total General & Administrative	\$8,402,155	\$160.09	\$0.75	¢1 25	¢17 100 107	\$115.74	\$0.88	\$1.0
SUBTOTAL	\$29,960,521	\$570.85	\$2.69	\$1.25 \$4.45	\$17,190,107 \$54,398,113	\$366.26	\$2.79	\$3.2
	\$29,900,521	\$370.03	φ2.09	φ4.45	φ04,390,113	φ300.20	ΦΖ.19	Φ 3.2
Other Operating Expenses: Depreciation and Amortization	\$7,809,086	\$148.79	\$0.70	\$1.16	\$25,910,243	\$174.45	\$1.33	\$1.5
Other	\$7,809,086 \$0	\$146.79	\$0.70 \$0.00	\$1.16	\$25,910,243	\$174.45	\$1.33 \$0.00	\$1.5 \$0.0
Total Other Operating Exp.	\$7,809,086	\$148.79	\$0.00	\$0.00	\$25,910,243	\$174.45	\$1.33	\$0.0 \$1.5
Reimbursed/Reconciling Items	ψ1,000,000	ψ. το. ι ο	ψ0.70	ψ1.10	Ψ <u></u> Ξο,ο 10, <u>Σ</u> ¬Ο	ψ.1.4.40	ψ1.00	Ψ1.0
Total Reimbursed/Reconciled	\$9,039,232	\$172.23	\$0.81	\$1.34	\$8,826,565	\$59.43	\$0.45	\$0.5
GRAND TOTAL OPER, EXP.	\$46,808,839	\$891.87	\$4.20	\$6.95	\$89,134,921	\$600.13	\$4.58	\$5.2
GRAND TOTAL OPER, EXP.	\$46,808,839	\$891.87	\$4.20	\$6.95	\$89,134,921	\$600.13	\$4.58	\$

BENCHMARK COMPARISON COMPARISON TO SPECIFIC COMPARABLE UTILITIES RELIANCE UPON PAYMENT-IN-LIEU OF TAXES

(compiled by MGT Consulting Group)

COMPONENT	Kansas City BPU	Independence Power & Light	City Utilities Springfield	Rochester Public Utilities	Lansing Board Water & Light	Lafayette Utilities System
ELECTRIC:						
Payment-in-lieu of taxes	\$28,800	\$12,758	\$8,882	\$8,714	\$17,392	\$18,303
Operating Revenues	\$286,321	\$128,576	\$306,218	\$164,893	\$294,101	\$178,008
Ratio	10.1%	9.9%	2.9%	5.3%	5.9%	10.3%
WATER:						
Payment-in-lieu of taxes	\$5,316	\$3,070	\$2,083	\$358	\$2,600	\$6,748
Operating Revenues	\$50,845	\$31,793	\$52,159	\$11,657	\$42,851	\$51,493
Ratio	10.5%	9.7%	4.0%	3.1%	6.1%	13.1%

BENCHMARK COMPARISON COMPARISON TO SPECIFIC COMPARABLE UTILITIES DAYS OF CASH

(compiled by MGT Consulting Group)

COMPONENT	Kansas City BPU	Independence Power & Light	City Utilities Springfield	Rochester Public Utilities	Lansing Board Water & Light	Lafayette Utilities System
A Total Cash & Equivalents	\$84,294,473	\$145,291,906	\$28,076,000	\$17,342,605	\$209,377,897	\$122,140,273
B Unrestricted Cash & Equivalents	\$54,227,944	\$120,357,522	not reported	\$16,168,013	not reported	\$14,175,036
Total Operating Expenses Less Depreciation/Amortizatior	\$258,594,120 \$35,835,585	\$139,474,118 \$16,409,004	\$390,187,000 \$64,501,000	\$147,533,946 \$16,307,352	\$312,050,903 \$46,123,865	\$203,621,568 \$25,731,165
C Daily Operating Expenseং	\$222,758,535 \$610,297	\$123,065,114 \$337,165	\$325,686,000 \$892,290	\$131,226,594 \$359,525	\$265,927,038 \$728,567	\$177,890,403 \$487,371
A/C Total Days of Cash	138.12	430.92	31.47	48.24	287.38	250.61
B/C UNRESTRICTED Days of Cash	88.85	356.97	not reported	44.97	not reported	29.08

DEFINITION:

This indicator quantifies the number of days of available cash on hand as a measure of financial liquidity. It has been calculated and reported above based upon both Total and Unrestricted cash and cash equivalents divided by operating expenses excluding depreciation divided by 365 days.

BENCHMARK COMPARISON COMPARISON TO SPECIFIC COMPARABLE UTILITIES BOND RATINGS

(compiled by MGT Consulting Group)

	Kansas City	Independence	City Utilities	Rochester	Lansing Board	Lafayette
	BPU	Power & Light	Springfield	Public Utilities	Water & Light	Utilities System
MOODY'S	A2	no	no	Aa3	Aa3	A1
	Upper Medium Grade	application	application	High Grade	High Grade	Upper Medium Grade
S&P	A	A	AA+	no	AA-	AA-
	Upper Medium Grade	Upper Medium Grade	High Grade	application	High Grade	High Grade
FITCH	A	no	AA	AA-	no	no
	Upper Medium Grade	application	High Grade	High Grade	application	application
Fitch provide evaluationare expressed as letter	s a grade that indicates its credit ons of a bond issuer's financial s rs ranging from "AAA" or "Aaa" v but use various combinations o as follows:	trength based on its ability to which is the highest grade,	to pay a bond's principal to "D" (junk), which is th	and interest in a timely fas e lowest grade. Different ra	shion. Bond ratings ating services use	Ratings listed are
	Moody's	-	S&P	_	Fitch	based upon most
Primo	٨٥٥		^ ^ ^ ^		A A A	currently available and

Prime Aaa AAA AAA are subject to bond issuance activity High Grade Aa1,Aa2,Aa3 AA+,AA,AA-AA+,AA,AA-Upper Medium Grade A1,A2,A3 A+,A,B A+,A,A-Baa 1 2 3 BBB +/-B +/-Lower Medium Grade

BENCHMARK COMPARISON COMPARISON TO SPECIFIC COMPARABLE UTILITIES CAPITAL EXPENDITURES/DEPRECIATION & AMORTIZATION RATIO

(compiled by MGT Consulting Group)

COMPONENT	Kansas City BPU	Independence Power & Light	City Utilities Springfield	Rochester Public Utilities	Lansing Board Water & Light	Lafayette Utilities System
0 1 11 11 11 11 11						
Construction Work In Progress						
A Electric	\$52,043,016	\$12,624,128		\$5,988,993		
B Water	\$6,375,556	\$4,562,642		\$1,919,608		
C Combined	\$58,418,572	\$17,186,770	\$122,305,000	\$7,908,601	\$69,536,946	\$17,080,210
Depreciation & Amortization						
D Electric	\$28,026,499	\$13,297,863		\$13,565,823		
E Water	\$7,809,086	\$3,111,141		\$2,741,529		
F Combined	\$35,835,585	\$16,409,004	\$64,650,000	\$16,307,352	\$46,123,865	\$25,731,165
CapEx/Depreciation Ratio						
A/D Electric	1.86	0.95		0.44		
B/E Water	0.82	1.47		0.70		
C/F Combined	1.63	1.05	1.89	0.48	1.51	0.66

DEFINITION:

This indicator determines the relationship between Capital spending (CapEx or capital expenditures) and the depreciation of existing assets. Th average business has a capital expenditures to depreciation ratio of about 1. A firm that is growing often has a higher ratio, while a firm that is n longer investing in long-term assets usually has a lower ratio. According to Goldman Sachs, the S&P 500 companies have averaged 1.4 in capital expenditures to depreciation over the last couple of decades. Usually, companies in the utilities and energy fields have higher capital expenditure to depreciation ratios than the S&P 500 average.

BENCHMARK COMPARISON COMPARISON TO SPECIFIC COMPARABLE UTILITIES SALARY & BENEFITS AS % OF ADJUSTED OPERATING EXPENSES

(compiled by MGT Consulting Group)

COMPONENT		Kansas City BPU		Independence Power & Light			
	Electric	Water	Combined	Electric	Water	Combined	
T.1.10	# 000 004 540	407 700 007	#050 504 400	#447.000.007	#00.070.004	0.400.474.440	
Total Operating Expenses	\$220,824,513	\$37,769,607	\$258,594,120	\$117,203,297	\$22,270,821	\$139,474,118	
Less Purchased Power	\$57,826,233		\$57,826,233	\$42,861,547		\$42,861,547	
Less Depreciation and Amortization	\$28,026,499	\$7,809,086	\$35,835,585	\$13,297,863	\$3,111,141	\$16,409,004	
Subtotal	\$134,971,781	\$29,960,521	\$164,932,302	\$61,043,887	\$19,159,680	\$80,203,567	
Labor (salary & benefits)	\$61,115,045	\$20,437,657	\$81,552,702	\$23,796,693	\$8,035,973	\$31,832,666	
	, , , , , ,	, , , , , , ,	, , , , , ,	, -,,	, -, , -	¥ - , ,	
Labor (salary & benefits) as % of Oper Expense	45.28%	68.22%	49.45%	38.98%	41.94%	39.69%	
			Kansas City BPU				
COMPONENT		Kansas City BPU			Rochester Public Utilities		
COMPONENT	Electric	•	Combined	Electric		Combined	
		BPU Water			Public Utilities Water		
Total Operating Expenses	\$220,824,513	BPU	\$258,594,120	\$137,187,413	Public Utilities	\$147,533,946	
Total Operating Expenses Less Purchased Power	\$220,824,513 \$57,826,233	BPU Water \$37,769,607	\$258,594,120 \$57,826,233	\$137,187,413 \$89,721,650	Public Utilities Water \$10,346,533	\$147,533,946 \$89,721,650	
Total Operating Expenses Less Purchased Power Less Depreciation and Amortization	\$220,824,513 \$57,826,233 \$28,026,499	BPU Water \$37,769,607 \$7,809,086	\$258,594,120 \$57,826,233 \$35,835,585	\$137,187,413 \$89,721,650 \$13,565,823	Public Utilities Water \$10,346,533 \$2,741,529	\$147,533,946 \$89,721,650 \$16,307,352	
Total Operating Expenses Less Purchased Power	\$220,824,513 \$57,826,233	BPU Water \$37,769,607	\$258,594,120 \$57,826,233	\$137,187,413 \$89,721,650	Public Utilities Water \$10,346,533	\$147,533,946 \$89,721,650	
Total Operating Expenses Less Purchased Power Less Depreciation and Amortizatior Subtotal	\$220,824,513 \$57,826,233 \$28,026,499 \$134,971,781	\$37,769,607 \$7,809,086 \$29,960,521	\$258,594,120 \$57,826,233 \$35,835,585 \$164,932,302	\$137,187,413 \$89,721,650 \$13,565,823 \$33,899,940	\$10,346,533 \$2,741,529 \$7,605,004	\$147,533,946 \$89,721,650 \$16,307,352 \$41,504,944	
Total Operating Expenses Less Purchased Power Less Depreciation and Amortization	\$220,824,513 \$57,826,233 \$28,026,499	BPU Water \$37,769,607 \$7,809,086	\$258,594,120 \$57,826,233 \$35,835,585	\$137,187,413 \$89,721,650 \$13,565,823	Public Utilities Water \$10,346,533 \$2,741,529	\$147,533,946 \$89,721,650 \$16,307,352	
Total Operating Expenses Less Purchased Power Less Depreciation and Amortizatior Subtotal	\$220,824,513 \$57,826,233 \$28,026,499 \$134,971,781	\$37,769,607 \$7,809,086 \$29,960,521	\$258,594,120 \$57,826,233 \$35,835,585 \$164,932,302	\$137,187,413 \$89,721,650 \$13,565,823 \$33,899,940	\$10,346,533 \$2,741,529 \$7,605,004	\$147,533,946 \$89,721,650 \$16,307,352 \$41,504,944	

DEFINITION:

This indicator determines the relationship between labor (salary and benefits or personnel costs) and total operating expenses less purchased power and depreciation and amortization expenses.

Data sources - Comprehensive Annual Financial Reports

Note - City Utilities Springfield, Lansing Board of Water & Light, and Lafayette Utilities do not publish labor (personnel cost) data.