

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

ELECTRONIC PROPOSED ADJUSTMENT OF)
THE WHOLESALE WATER SERVICE RATES OF) Case No. 2017-00199
CENTRAL CITY MUNICIPAL WATER & SEWER)

TESTIMONY OF DAVID RHOADES

1 **Q. Please state your name and business address.**

2 A. My name is David Rhoades. My business address is 214 N. 1st St., Central City,
3 Kentucky 42330.

4 **Q. By whom are you employed?**

5 A. I am employed as City Administrator by the City of Central City. I have served in this
6 position since March 1999.

7 **Q. Please describe the Central City's water operations.**

8 A. The City operates a waterworks system and provides water service to customers in
9 Central City and surrounding areas. The water works system is operated through a Water
10 Commission, pursuant to KRS 96.320. In addition to water service to retail customers, the City
11 provides wholesale water service to Muhlenberg County Water District and Muhlenberg County
12 Water District No. 3. Accordingly, Central City's water treatment plant is a regional facility that
13 provides potable water to the majority of Muhlenberg County and a portion of McLean County.

14 **Q. In general terms, why is additional revenue needed from the Central City's**
15 **wholesale water customers?**

1 A. Several factors have prompted the need for a rate increase. Generally speaking, the
2 known-and-measurable costs of operating Central City's water system have increased over time
3 and consumption has declined. These two factors lead to the need for higher utility rates.

4 **Q. Can you provide more details on why additional revenue is needed from the Central**
5 **City's wholesale water customers?**

6 Central City's wholesale rates were last adjusted in March 2013 shortly after completing
7 a major renovation of its water treatment plant. The treatment plant's capacity was increased
8 from four to seven million gallons per day in order to meet the needs of the vast majority of
9 customers in Muhlenberg County. At that time, the initial rate agreed upon by Central City and
10 the two water districts was based on the anticipated costs of operating the larger treatment
11 facility. The contract authorized Central City to increase rates on or after July 1, 2014, but the
12 City has not proposed an increase until now.

13 Over the course of the past four years, the City has realized increases in operating
14 expenses, when compared with the projected expenses on which the current wholesale rates were
15 based. Current operating expenses for the water system are more than \$350,000 greater than
16 what the projected expenses on which the current rates are based.

17 In addition, consumption has declined. Both water districts have attempted to reduce line
18 loss. Muhlenberg County Water District recently implemented upgrades to its telemetry
19 monitoring system and installed new leak prevention and detection controls. Muhlenberg
20 County Water District No. 3 has also seen a reduced percentage of water loss since Central
21 City's last rate increase.

22 **Q. What steps did Central City take in determining the proposed rate increase to its**
23 **wholesale customers?**

1 A. Recognizing that the City’s wholesale water rates had not changed for several years and
2 that the City’s revenue requirement had changed significantly over that time period, the City
3 requested that engineer Michael McGhee provide calculations on a proposed rate increase.
4 McGhee collaborated with the City’s auditor, Daniel Pate. After reviewing the information
5 presented by McGhee, the City decided to increase the rates to both the wholesale customers as
6 well as the volumetric rate to the in-city customers by approximately 21 percent.

7 **Q. What is the specific proposed rate increase to Central City’s wholesale customers?**

8 A. Central City is proposing to increase its wholesale rates from \$2.63 per 1,000 gallons to
9 \$3.19 per 1,000 gallons.

10 **Q. Are the proposed rates to Muhlenberg County Water District and Muhlenberg
11 County Water District No. 3 the same?**

12 A. Yes. Pursuant to the Water Purchase Contracts, the parties agreed that the City would
13 charge the same rate to both water districts.

14 **Q. Has Central City increased rates to its in-city customers?**

15 A. The City Council has approved a second reading of the ordinance increasing the
16 volumetric rate to its in-city customers by the same percentage as the increase to the wholesale
17 rate.

18 **Q. Does Central City operate other utilities?**

19 A. Yes. Central City also provides wastewater services.

20 **Q. Are water rates increased to offset losses in other departments?**

21 A. No. The rates collected for water service are based solely upon the revenues and
22 expenses of the water department and have no relationship to the revenues and expenses of other
23 utilities or departments.

- 1 Q. Does this conclude your testimony?
- 2 A. Yes, it does.

AFFIDAVIT

The undersigned, David Rhoades, being duly sworn, deposes and says that he is the City Administrator of the City of Central City, that he is authorized to submit this testimony on behalf of City of Central City, and that the information contained in the testimony is true and accurate to the best of his knowledge, information and belief, after reasonable inquiry, and as to those matters that are based on information provided to him, he believes to be true and correct.



David Rhoades, Affiant

NOTARY CERTIFICATE

COMMONWEALTH OF KENTUCKY

COUNTY OF Martin

Subscribed, acknowledged and sworn to before me by DAVID Rhoades on
this 5th day of July, 2017.

My commission expires: 06/29/2019.



NOTARY PUBLIC

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

ELECTRONIC PROPOSED ADJUSTMENT OF)
THE WHOLESALE WATER SERVICE RATES OF) Case No. 2017-00199
CENTRAL CITY MUNICIPAL WATER & SEWER)

TESTIMONY OF MICHAEL W. McGHEE

1 **Q. Please state your name and business address.**

2 A. My name is Michael W. McGhee. My business address is 202 South Ewing Street,
3 Guthrie, KY 42234.

4 **Q. By whom are you employed?**

5 A. I am the President of McGhee Engineering, Inc.

6 **Q. Please provide a summary of your work experience.**

7 A. I have been involved in the water industry for approximately 35 years. In addition, I have
8 significant experience in the design and management of site development, highway, airport,
9 water, wastewater, and drainage projects, as well as a number of engineering reports and analysis
10 projects throughout the southeastern United States.

11 **Q. Please describe your educational background.**

1 A. I have a Bachelor of Science degree in Civil Engineering from the University of
2 Kentucky and a Masters of Business Administration with a specialization in finance from the
3 University of Houston.

4 **Q. Do you hold a professional license?**

5 A. Yes, I am a licensed engineer in Kentucky, Tennessee, and Pennsylvania.

6 **Q. Are you affiliated with any professional organizations?**

7 A. Yes, I am a member of the Kentucky Rural Water Association, the American Water
8 Works Association, and the Kentucky Society of Professional Engineers.

9 **Q. Have you provided assistance to clients in developing rates?**

10 A. Yes. In planning water projects, I am often required to provide guidance on how a utility
11 will pay for the project. Frequently, a utility's financing will require an upward adjustment in
12 rates to ensure that the utility can maintain an appropriate level of debt service coverage. I have
13 frequently been asked to perform those calculations.

14 **Q. What is the purpose of your testimony in this proceeding?**

15 A. The purpose of my testimony is to support the proposed wholesale rate of Central City.

16 **Q. Briefly describe your task in developing proposed rates for Central City.**

17 A. Recognizing that it needed to generate additional revenue from its water system in order
18 to cover expenses, Central City asked me to perform basic calculations to provide the City with
19 options to increase rates.

20 **Q. How did you accomplish your task?**

21 A. I began by reviewing the revenues and expenses for Central City's water system in its
22 audit for the 2016 fiscal year, which is attached to my testimony as Exhibit 1. Using the amounts
23 that were adjusted to account for Generally Accepted Accounting Principles, I calculated the

1 percentage increase in revenue necessary to operate the City's water system, as shown in Table
2 A below.

3 **Q. Please describe what is shown in Table A.**

4 A. Exhibit A contains the basic calculations for how the percentage increase in water
5 revenue was determined. The amounts in the column on the left show the projected amounts
6 used in the Rural Development application on which the \$2.63 per 1,000 gallon wholesale rate
7 was initially set. The middle column shows actual revenue and expenses from the Fiscal Year
8 2016 Audit of the City's Water and Sewer System (water operations only) and demonstrates that
9 the water system is operating at a deficit. The last column on the right shows projected revenues
10 based on the proposed increase based on the Fiscal Year 2016 consumption.

11 **Q. How did you determine the revenue requirement for the City of Central City?**

12 A. Ultimately, I tried to determine a revenue increase that would produce a near-equal
13 amount for net depreciation as the figure used to calculate the wholesale rates when the water
14 treatment plant was upgraded in 2012. As one can see, the Net for Depreciation in the proposed
15 rates was \$477,623 and under the proposed rates it will be \$483,014.

16 **Q. How did the City propose increasing rate to different customer classifications?**

17 A. The City has two separate classifications: in-city retail rates and wholesale rates. The
18 City is proposing to increase all volumetric rates by 21.2%. This includes the in-city per-gallon
19 charge and the wholesale rates.

20 **Q. Do you believe that this is a reasonable approach to increasing rates?**

21 A. Yes. There are various ways to increase rates between classifications for various utilities.
22 Central City's simplified approach in a flat, across-the-board increase is reasonable based on the
23 City's circumstances.

1 **Q. Do you believe that Central City could have justified a higher rate increase?**

2 A. Yes, there are several factors that Central City could have used to justify a higher rate.
3 The most significant expense for that would likely impact Central City's wholesale rate is
4 depreciation. The approximate amount of \$480,000 of depreciation expense is a conservative
5 estimate. In Table B below, I have calculated the City's water system's annual depreciation
6 expense to be approximately \$805,000. If the City were to take request recovery of full
7 depreciation, it would need to increase revenue by approximately 33 percent, instead of 21
8 percent, to recover full depreciation of \$805,000 annually.

9 **Q. Other than depreciation, what other reasons could assist the City of Central City in**
10 **justifying a higher wholesale rate?**

11 A. There are several other reasons why Central City may be able to justify a higher rate than
12 what it proposed. Central City purchases power from Kentucky Utilities, which increased its
13 rates on July 1, 2017. It is my understanding that most of Kentucky Utilities commercial rates
14 increased by approximately 3.4 percent. In addition, the Base Demand Charge ratchet for certain
15 was increased from 75 to 100 percent. This ratchet increase could impact the water system's
16 expenses depending on its electric consumption patterns.

17 None of the proposed rates reflect any expenses incurred in litigating proposed rates before the
18 Public Service Commission. Reasonable expenses incurred in litigating rate cases are generally
19 accepted to be amortized and included in rates.

20 Central City has noticed declining consumption trends over the past several years since
21 upgrading the water treatment plant. Both water districts reported reduced quantities of water
22 purchases from in their 2015 annual reports, as compared to 2012.

1 **Q. Are there other expenses that some municipally owned utilities reasonably incur**
2 **that are not being incurred by Central City's water system**

3 A. Yes. Many municipal utilities present payments in lieu of taxes (PILOTs) for general
4 services rendered by the municipality. Central City does not collect PILOT from its water
5 system.

6 **Q. Does this conclude your testimony?**

7 A. Yes.

Table A

	2012 Projected	FYE 6/30/2016	FYE 6/30/2016
	from RD Ap	Audit (GAAP)	Audit (GAAP)
Operating Income		w/o Increase	with Proposed Inc.
City	\$ 782,249	\$ 762,354	\$ 923,973
MCWD	\$ 1,405,465	\$ 1,180,411	\$ 1,430,658
MCWD#3	\$ 749,650	\$ 728,794	\$ 883,298
Other	\$ 7,424	\$ 22,937	\$ 22,937
Total Operating Income	\$ 2,944,788	\$ 2,694,496	\$ 3,260,867
Operating Expenses			
Water Plant Operation	\$ 683,810	\$ 787,302	\$ 787,302
Water Distribution & Transmission	\$ 314,003	\$ 390,059	\$ 390,059
Administrative	\$ 142,916	\$ 261,897	\$ 261,897
Insurance	\$ 82,212	\$ 125,491	\$ 125,491
Rent & Utilities	\$ 228,986	\$ 246,317	\$ 246,317
Professional Fees	\$ 8,319	\$ 7,740	\$ 7,740
Office Supplies	\$ 17,680	\$ 16,897	\$ 16,897
Miscellaneous	\$ 2,485	\$ 10,936	\$ 10,936
Total Operating Expenses	\$ 1,480,411	\$ 1,846,639	\$ 1,846,639
Net Operating Income	\$ 1,464,377	\$ 847,857	\$ 1,414,228
Non-Operating Income			
Interest on Deposits	\$ 14,084	\$ 4,851	\$ 4,851
Other	\$ -	\$ -	\$ -
Total Non-Operating Income	\$ 14,084	\$ 4,851	\$ 4,851
Net Income	\$ 1,478,461	\$ 852,708	\$ 1,419,079
Debt Repayment	\$ 840,395	\$ 781,513	\$ 781,513
Balance for Coverage & Depreciation	\$ 638,066	\$ 71,195	\$ 637,566
Debt Service Coverage & Reserves			
Debt Service Coverage (10%)	\$ 84,040	\$ 78,151	\$ 78,151
Short-Lived Asset Replacement	\$ 76,400	\$ 76,400	\$ 76,400
Total - Debt Service & Reserve Funds	\$ 160,440	\$ 154,551	\$ 154,551
Net for Depreciation	\$ 477,627	\$ (83,356)	\$ 483,014
Depreciation	\$ 423,000	\$ -	\$ 482,582
Net Income	\$ 54,627	\$ (83,356)	\$ 432
Rate Analysis			
Percent Change in Rates	0%	0%	21.2%
Wholesale Rate	\$ 2.63	\$ 2.63	\$ 3.19

Table B

Item	In-Service Date	Useful Life (YR)	Cost	Annual Depreciation	Notes
Water Treatment Plant (pre-renovation)	1963	40	\$ -	\$ -	Fully Depreciated
Water Treatment Plant Renovations - Electronics & Short-Lived Assets	2013	10	\$ 918,271	\$ 91,827.10	
Water Treatment Plant - Equipment	2013	20	\$ 4,958,633	\$ 247,932	
Water Treatment Plant - Basins and Structures	2013	40	\$ 12,488,425	\$ 312,211	
Reservoir Hill Tank No. 1	1938	40	\$ -	\$ -	Fully Depreciated
Reservoir Hill Tank No. 2	1982	40	\$ 400,000	\$ 10,000	
Stringtown Road Tank	1967	40	\$ -	\$ -	Fully Depreciated
Rose Hill Tank	2001	40	\$ 759,000	\$ 18,975	
Community College Tank	2013	40	\$ 1,912,473	\$ 47,812	
Reservoir Hill Tank No. 1 - Renovation	2014	15	\$ 156,190	\$ 10,413	
Water Distribution System	1938	50	\$ -	\$ -	Fully Depreciated
New Transmission Lines	2014	50	\$ 872,107	\$ 17,442	
Distribution SCADA	2016	20	\$ 977,825	\$ 48,891	
TOTAL			\$ 23,442,924	\$ 805,502	

AFFIDAVIT

The undersigned, Michael W. McGhee, being duly sworn, deposes and says that he is the President of McGhee Engineering and that he is authorized to submit this testimony on behalf of City of Central City, and that the information contained in the testimony is true and accurate to the best of his knowledge, information and belief, after reasonable inquiry, and as to those matters that are based on information provided to his, he believes to be true and correct.

Michael W McGhee
Michael W. McGhee, Affiant

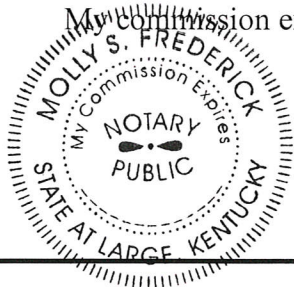
NOTARY CERTIFICATE

COMMONWEALTH OF KENTUCKY

COUNTY OF Todd

Subscribed, acknowledged and sworn to before me by Michael W McGhee on
this 6 day of July, 2017.

My commission expires: 4-14-18



Molly S. Frederick
NOTARY PUBLIC