

AUG 29 2019

#### COMMONWEALTH OF KENTUCKY

PUBLIC SERVICE COMMISSION

#### BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

APPLICATION OF BIG SANDY WATER	)
DISTRICT FOR A CERTIFICATE OF PUBLIC	)
CONVENIENCE AND NECESSITY TO	1)
CONSTRUCT A SYSTEM IMPROVEMENTS	) CASE NO. 2019-00275
PROJECT AND AN ORDER APPROVING A	)
CHANGE IN RATES AND AUTHORIZING	)
THE ISSUANCE OF SECURITIES PURSUANT	)
TO KRS 278.023	")

#### RESPONSE TO STAFF'S SECOND REQUEST FOR INFORMATION

The Applicant, Big Sandy Water District (the "District"), by Counsel, files this Response to the August 27, 2019 Commission Staff's Second Request for Information as follows:

Responding Witness: Joseph F. Sisler, P.E., Sisler-Maggard Engineering, PLLC.

Request No. 1. Refer to the billing analysis (Billing Analysis) filed on August 23, 2019. Provide a copy of the Billing Analysis in Excel spreadsheet format, with formulas intact and unprotected, and all rows and columns fully accessible.

**Response No. 1.** Attached hereto please find a CD with the requested Excel billing analysis.

Request No. 2(a) and (b). Refer to the Billing Analysis, Table XV, Forecast of Water Usage - Income - Existing System - Existing Users - Residential Only and Non-Residential Only (Table XV). The rates listed in the column titled "rate" are proposed rates and should match those listed in Table XVII, Forecast of Water Usage - Income - New Users - Extension Only Proposed Rate Increase - Residential Only and Non-Residential Only (Table XVII).

- (a) Explain why Table XV has different proposed rates per gallon than Table XVII and indicate which table contains the correct proposed rates in the rate column.
- (b) Refile the response with the corrected tables, in both PDF format and Excel spreadsheet format, as directed in Item 1.

- Response No. 2(a). An incorrect formula was used and that has been corrected and now the rates in the tables in question match.
- Response No. 2(b). Attached hereto please find a CD with the corrected tables in PDF format and Excel spreadsheet, as directed in Item 1. A corrected copy of the Billing Analysis is attached hereto as Exhibit "A".
- Request No. 3. Refer to the Billing Analysis, Table XV and Table XVII. Given that both tables are based on the proposed rates with the same number of customers and usage information, explain how the annual revenue for each table is different.
- Response No. 3. An incorrect formula was used and that has been corrected and now the annual revenues in question match (see Exhibit "A" attached hereto).
- Request No. 4. Refer to the Billing Analysis, Table IX, Analysis of Actual Water Usage Existing System 12 Month Period (Table IX). Explain how the rates and current revenue from Division 2, former Overland Development area, are incorporated into the total annual revenue for residential customers. If the Division 2 customer usage and revenue calculation was omitted from Table IX, provide an update to the Billing Analysis in Excel spreadsheet format, as directed in Item 1.
- **Response No. 4.** The rates and current revenues from the Division 2, former Overland Development area users, are included as residential customers in Division 1.
- Request No. 5. State whether the revenue from Cannonsburg Water District was included in the Billing Analysis. If included, explain how the rates and current revenue are included in the Billing Analysis. If not, provide the current and proposed revenue from Cannonsburg Water District and provide an update to the Billing Analysis in Excel spreadsheet format, as directed in Item 1.
- **Response No. 5.** The revenue from Cannonsburg Water District was included in the Billing Analysis along with the other commercial users. Please be reminded that Cannonsburg Water District usage over the last 3 years was: 2017 16,400 gallons; 2018 9,400 gallons; 2019 to date 0 gallons.
- Request No. 6. Confirm that Cannonsburg Water District is served on a 2-inch service line and will be charged both the minimum bill and per-1,000-gallon rate for a 2-inch meter retail customer.
- Response No. 6. Cannonsburg Water District is served on a 2-inch meter, not a 2-inch service line. As shown in the Proposed Rate Schedule (revised on 08/22/2019) and the Notice of Proposed Rate Change (revised on 08/23/2019), Cannonsburg Water District will be billed as a wholesale rate customer and will be charged at the new rate of \$5.70 per 1,000 gallons for any usage and will not be charged a minimum bill.

Request No. 7. Explain whether the revisions to the Billing Analysis discussed in Items 2, 3, 4, and 5 will require the rates to be revised. If the rates must be revised, explain what effect this will have on the Application tendered, but not filed, in this case and on the process of obtaining the loan previously approved by the United States Department of Agriculture, Rural Development.

Response No. 7. No revisions will be necessary.

#### Certification of Response to Commission Staff's Second Request for Information

I hereby certify that I have supervised the preparation of Big Sandy Water District's Response to the Commission Staff's Second Request for Information. This Response is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Joseph F. Sisler, P.E.

Registered Professional Engineer State of Kentucky No. 6324

Respectfully Submitted, Rubin & Hays

By W. Randall Jones, Esq.

450 South Third Street
Louisville, Kentucky 40202

Phone: (502) 569-7525 Fax: (502) 569-7555

Counsel for Big Sandy Water District

wrjones@rubinhays.com

#### **CERTIFICATE OF SERVICE**

The undersigned hereby certifies that a copy of the foregoing Response was duly mailed by first class United States Postal Service mail to all parties of record in this proceeding on this 24 day of August, 2019.

W. Randall Jones, Esq.

450 South Third Street

Louisville, Kentucky 40202 Phone: (502) 569-7525

Fax: (502) 569-7555

Counsel for Big Sandy Water District

#### IX. ANALYSIS OF ACTUAL WATER USAGE - EXISTING SYSTEM - 12 MONTH PERIOD

For Period January 2017 to December 2017

Residential Only

Gallons		Cellons	 	dusers	of users	x1000 Gal	
			 	Residentia	Non-Residen		
0-1K		500	 17.02		0	271	 9,225
1-2K		1,500	21.36		0	819	11,660
23K		2,500	30.03	769	0	1923	\$ 23,089
34K		3,500	 38.70		0	2671	 29,524
45K		4,500	 47.37		0	3069	32,333
56k		5,500	 56.04		0	2585	\$ 26,336
6-7K		6,500	64.71	325	0	2113	\$ 21,029
7 <del>.</del> 8K		7,500	73.38	170	0	1275	\$ 12,474
89K		8,500	8205	130	0	1105	\$ 10,666
9-10K		9,500	89.42	90	0	855	\$ 8,047
10-12k		11,000	98.52		0	770	\$ 6,896
12-15k		13,500	11370		0	675	\$ 5,685
15-20K		17,500	137.98	40	0	700	\$ 5,519
20-30K		25,000	181.40	20	0	500	\$ 3,628
3040k		35,000	 237.90	6	0	210	\$ 1,427
40-50K		45,000	293.25	2	0	90	\$ 587
50-75K		62,500	388.10	1	0	63	\$ 388
75-100K		87,500	523.60	0	0	0	\$ -
100-150K		125,000	726.85	0	0	0	\$ -
150-200K		175,000	997.85	0	0	0	\$ -
200-300K		250,000	1,404.35	0	0	0	\$ -
300400K		350,000	 1,946.35	0	0	0	\$ -
							•
subtotal			 	4676	C	19,692	\$ 208,484
	ential rate per month				4676		\$ 44.59
averageresid	ential usage per month	nin Gallans					4,211
amud revenu							\$ 2,501,805
anual flowq.	<i>antityingallanss</i> dd						236,304,000

#### IX. ANALYSIS OF ACTUAL WATER USAGE - EXISTING SYSTEM - 12 MONTH PERIOD

For Period January 2017 to December 2017

#### Non – Residential

Gallons		Gellans	 	of users Residential	of users Non-Resider	x1000Gal		
0.414		EM	 4700	_		иа 16	Φ	
0-1K		500	 17.02		31			528
1-2K	-	1,500	21.36		26	39		555
23K		2,500	30.03		3	8		90
34K		3,500	38.70		4	14	\$	155
45K		4,500	 47.37		3	14		142
56k		5,500	56.04		2	11	\$	112
6-7K		6,500	64.71		1	7	\$	65
7-8K		7,500	73.38		1	8	\$	73
89K		8,500	 8205		1		\$	82
9-10K		9,500	89.42		1	10		89
10-12k		11,000	98.52	0	1	11		99
12-15k		13,500	11370	0	1	14	\$	114
15-20K		17,500	137.98	0	0	0	\$	-
20:30K		25,000	181.40	0	1	25	\$	181
3040k		35,000	237.90	0	1	35	\$	238
40-50K		45,000	293.25	0	1	45	\$	293
50-75K		62,500	388.10	0	0	0	\$	-
75-100K		87,500	52360	0	0	0	\$	-
100-150K		125,000	726.85	0	0	0	\$	-
150-200K		175,000	997.85		0	0	\$	-
200-300K		250,000	1,404.35	0	1	250	\$	1,404
300400K		350,000	1,946.35	0	1	350		1,946
			•				-	,
subtotal				(	80	862	\$	6,167
		•						<i>-</i>
average residen	tial rate per month	·····			80		\$	77.09
	tial usage per month	nin Gallons						10,775
anual revenue	,						\$	74,003
	ntityingallansadd						-	10,344,000

XV. FORECAST OF WATER USAGE - INCOME - EXISTING SYSTEM - EXISTING USERS Residential only

næde		rate	northy#	northy#	usage	inco	n <del>e</del>
Callons	Gallons		duses	dues:	x1000Ga		
			Residential	Non Residential			
01K	500	1825	542	0	271	\$	9892
1-2K	1,500	2295	546	0	819	\$	12,531
23K	2,500	3235	769	0	1923	\$	24,877
34K	3500	41.75	<b>7</b> 63	0	2571	\$	31,855
48K	4500	51.15	682	0	3083	\$	34884
56k	5500	6055	470	0	258	\$	28,450
67K	6500	6995	325	0	2113	\$	22,734
<b>78</b> K	7,500	7935	170	0	1275	\$	13,490
89K	8500	8875	130	0	1105	\$	11,538
910K	9500	9815	90	0	855	\$	8834
10·12k	11,000	10925	<b>7</b> 0	0	770	\$	7,648
12-15k	13,500	12525	50	0	675	\$	6263
15:20K	17,500	15085	<b>4</b> 0	0	700	\$	6034
20:30K	25,000	19660	20	0	500	\$	3932
3940k	35,000	25610	6	0	210	\$	1,537
4950K	45,000	31435	2	0	90	\$	629
5075K	62,500	41410	1	0	63	\$	414
75100K	87,500	55660	0	0	C		-
100-150K	125,000	77035	0	0	C	\$	_
150-200K	175,000	1,05535	0	0	C	\$	-
200-300K	250,000	1,48285	0	0	C	\$	-
3040K	350,000	2,052.85	0	0	C	\$	_
subtotal			46	76 C	19421	\$	225,547
					127 ==1	<u> </u>	
averageresidential rate per month	n			4676		\$	4824
aveagenesidential usagepennoo	thin Gallons						4,153
andreere						<b>¢</b> ′	2,706,565

### XV. FORECAST OF WATER USAGE - INCOME - EXISTING SYSTEM - EXISTING USERS Non - Residential only

Gellons		Gallons			fueers	dues	x1000Gal	
					<b>esidential</b>	Non-Residential		 
01K		500		<b>25</b> 0		31		\$ 5566
1-2K		1,500		<b>25</b> 0		26	39	597
23K		2,500	32:	35 0	)	3	8	\$ 97
34K		3,500	41.	<b>75</b> 0	)	4	14	 167
45K		4500		15 0		3	14	153
56k		5,500		<b>35</b> 0		2	11	 121
67K		6,500	69	<b>35</b> 0	)	1	7	\$ 70 79
7 <del>8</del> K		7,500	79.	35 0	)	1	8	79
89K		8,500	88	<b>75</b> 0	)	1	9	89 98
910K		9,500	98:	15 0	)	1	10	\$ 98
10-12k		11,000	1092	<b>25</b> 0	)	1	11	\$ 109
12-15k		13,500	125	25 0	)	1	14	\$ 125
15-20K		17,500	150.	35 0	)	0	0	\$ -
20:30K		25,000	196	<b>30</b> 0	)	1	25	\$ 197
3040k		35,000	256	10 C	)	1	35	\$ 256
4050K		45,000	314:	35 0	)	1	45	314
50-75K		62,500	414	10 C	)	0	O	 -
75-100K		87,500	556	30 0	)	0	0	\$ -
100-150K		125,000	770.	35 0	)	0	0	\$ -
150-200K		175,000	1,055	35 0	)	0	0	\$ -
200-300K		250,000	1,482	<b>35</b> 0	)	1	250	\$ 1,483
300400K		350,000	2,052	<b>35</b> 0	)	1	350	\$ 2,053
s.btdal					0	80	847	\$ 65/5
averageresid	ential rate per month					80		\$ 8218
averageresid	ential usage per mont	nin Gallons						10,581
anud reven.	e							\$ 78,894
anual flowq.	entityingellonsedd							10,158,000

### XVII. FORECAST OF WATER USAGE - INCOME - NEW USERS - EXTENSION ONLY PROPOSED RATE INCREASE - Residential Only

ræite		rate	northy#	northy#	USSUE	r	ne
Glos	George Carlons		duss	ofuses	XIDDG		
			Reidetia	No Peidetia			
01K	500	1825	<b>5</b> 12	0	27	\$	989
12K	1,500	2295	<b>54</b> 6	0	818	)\$	12531
23K	2500	3235	<b>76</b> 9	0	192	3\$	2487
34K	3500	4175	<b>76</b> 3	0	257	\$	3,85
45K	4500	5115	<b>682</b>	0	385	<b>)</b> \$	3488
56k	5600	6055	<b>4</b> 70	0	28	\$	28/45
67K	630	6295	<b>32</b> 5	0	2113	3\$	22,734
<b>78</b> K	7,500	7935	170	0	127	\$	1349
89K	8300	8875	130	0	113	5\$	11,538
91K	9500	9815	90	0	83	5\$	833
1012k	11,000	13925	<b>7</b> 0	0	77	)\$	7,64
1215k	13500	12525	50	0	675	\$	625
1520K	17,500	15085	<b>4</b> 0	0	70	)\$	603
2931K	25,000	19860	<b>2</b> D	0	500	)\$	398
3949k	35,000	25610	6	0	20	)\$	1,537
4950K	45000	3435	2	0	90	)\$	62
5975K	62500	44410	1	0	රි	3\$	414
7510K	87,500	55660	0	0	(	)\$	-
100·150K	125,000	77035	0	0		\$	_
150£20K	175000	1,05535	0	0	C	)\$	-
20930K	25000	1,48285	0	0	(	)\$	-
3040K	35000	205285	0	0	(	\$	-
s.btda			4	<b>57</b> 6 (	) 19421	\$	25;A
acageresidental ratepernorth				46%	6	\$	4824
acceptations	nin@los					·	4153
<b>anareene</b>						<u></u>	270635

# XVII. FORECAST OF WATER USAGE - INCOME - NEW USERS - EXTENSION ONLY PROPOSED RATE INCREASE - Non - Residential Only

usage		rate .	northy#	nonthy#	usage	incone	
Gellons	Gallons		dues :	of users	x1000Gal		
			Residential	Non Residential			
01K	500	1825	0	31		\$	5566
1-2K	1,500	2295	0	26		\$	597
23K	2,500	3235	0	3	8		97
34K	3,500	41.75	0	4	14	\$	167
45K	4500	51.15	0	3	14		153
56k	5,500	60.55	0	2	11	\$ \$	121
67K	6500	69.95	0	1 .	7	\$	70
7 <del>8</del> K	7,500	7935	0	1		\$	79
89K	8500	8875	0	1	9	\$	89
910K	9500	9815	0	1	10	\$	98
10-12k	11,000	10925	0	1	11		109
12-15k	13,500	12525	0	1	14	\$	125
15:20K	17,500	150.85	0	0	C	\$	-
2030K	25,000	19660	0	1	25	\$	197
3040k	35,000	25610	0	1		\$	256
40:50K	45,000	31435	0	1		\$	314
50-75K	62,500	41410	0	0	O	\$	-
75-100K	87,500	55660		0		\$	-
100-150K	125,000	770.35	0	0		\$	
150200K	175,000	1,05535		0		\$	-
200300K	250,000	1,482.85		1	250		1,483
300400K	350,000	2,05285	0	1	350	\$	2,053
s.btdal				80	847	œ.	6575
aniua			C	a.	OH/	Φ	6575
averageresidential ratep	ernorth			80		\$	8218
avezgeresidential usag						•	0,581
andreene						\$ 7	8894

KENTUCKY GUIDE 7 August 2018 Revised June 2019

SUMMARY ADDENDUM

TO

FINAL ENGINEERING REPORT

DATED June 2019

FOR

# Big Sandy Water District - Phase V Water System Improvements REVISED AUGUST 28, 2019 PER PSC

APPLICANT CONTACT PERSON., Teresa Brown, Office Manager

APPLICANT PHONE NUMBER (606)928-2075

APPLICANT TAX IDENTIFICATION NUMBER (TIN) ■

In order to avoid unnecessary delays in application processing, the applicant and its consulting engineer should prepare a summary of the preliminary report in accordance with this Guide.

Please complete the applicable sections of the Summary Addendum.

Big Sandy Water District receives revenues from WATER SALES only.

Feasibility reviews and <u>grant determinations</u> may be processed more accurately and more rapidly if the Summary/Addendum is submitted simultaneously with the preliminary engineering report, or as soon thereafter as possible.

#### I. GENERAL

A. Proposed Project: Provide a brief description of the proposed project. In addition to this summary, the applicant/engineer should submit a project map of the service area.

The project consists of: Water loss improvement such as service line replacement, stream crossing replacement, leak detection assemblies, in line master meters and valves, pump station upgrades, tank painting and repairs. New Water District office building.

#### II. <u>FACILITY CHARACTERISTICS OF EXISTING WATER SYSTEM</u>

A. Water Source Describe adequacy of source (quality and quantity). Include an explanation of raw water source, raw water intake structure, treatment plant capacity, and current level of production (WTP). Also describe the adequacy of Water Purchase Contract if applicable. Water Source Discussion no applicable.

The Big Sandy Water District does not have it's own water source or Water Treatment Plant. They have (6) six Water Purchase Contracts from separate entities as follows: City of Ashland; City of Kenova, WV; Cannonsburg Water District (Backup Only); City of Louisa; Rattlesnake Ridge Water District; City of Paintsville. The Big Sandy Water District averages 1,150,000 GPD in summer. These agreements have capacity to meet any and all District needs, now and for future.

If the applicant purchases water:

#### Seller(s):

- 1. City of Kenova, WV
- 2. Cannonsburg Water District (Backup Only)
- 3. City of Louisa
- 4. Rattlesnake Ridge Water District
- 5. City of Ashland
- 6. City of Paintsville (backup only)

Price/1,000 gallons:	Month 06/18
1 \$2.55/1000 <u>City of Kenova, WV</u>	34.02%
2\$4.42/1000 Cannonsburg Water District	13.74%
3 \$3.06/1000 <u>City of Louisa</u>	24.80%
4\$2.96/1000 <u>Rattlesnake Ridge Water District</u>	1.64%
5 \$2.19/1000 City of Ashland	25.80%
6 City of Paintsville	0

Present Estimated Market Value of Existing System: \$\_18,500,000

#### B. Water Storage:

Type: Ground Storage Tank: 11

Elevated Tank: 0

Standpipe: 0

Other: 0

Number of Storage Structures: 11

Total Storage Volume Capacity: 1,412,500 Gallons

Date Storage Tank(s) Constructed: <u>1985 - 2004</u> 11 - tanks

#### C. Water Distribution System:

Pipe Material:

### Majority PVC, HDPE Stream Crossings & some lines

**Lineal Feet of Pipe:** 

>3" Diameter + 5 miles

3" Diameter <u>157.8 miles</u>

4" Diameter 60.0 miles

6" Diameter 104.0 miles

8" Diameter 23.94 miles

10" Diameter 5.8 miles

12" Diameter 2.13 miles

Total Length of all lines 358.67 miles

Date(s) Water Lines Constructed: 1985 - 2010

Number and Capacity of Pump Station(s): 11 total as follows:

State Route 538 – 2 @ 700 gpm each
Whites Creek – 250 gpm each
Burnaugh – 200 gpm each
US 60 (Coalton) – 200 gpm each
Ced Gap – 150 gpm each
Fullers Ridge – 60 gpm each
Cunningham Hill – 60 gpm each
Quarry Branch – 96 gpm each
Point Section – 100 gpm each
Deephole – 20 gpm each
Raven Rock – 40 gpm each

#### D. Condition of Existing Water System:

Briefly describe the condition and suitability for continued use of facility now owned by the applicant. Include any major renovation that will be needed within five to ten years.

The system is five (5) to thirty three (33) years old. It is operated and maintained properly and should meet its life expectancy of:

40 to 60 years	Water lines
40 to 50 years	Tanks
15 to 20 years	<b>Pumps</b>
10 years	Meters

E. Percentage of Water Loss Existing System \_\_\_\_\_\_\_ 20% + \_\_\_\_\_\_ Recent reports in P.E.R.

#### III. EXISTING LONG-TERM INDEBTEDNESS

#### A. List of Bonds and Notes:

	Date Of Issue	Bond/ Note Holder	Principal Balance	Payment Date	Bond Type	Amount on Deposit in Reserve Account
1	91-7	RD	780,000	1/1	Water	24,500
1	91-10	RD	361,500	1/1	Water	8,500
1	91-11	RD	423,500	1/1	Water	7,500
1	91-16	RD	1,018,500	1/1	Water	13,212
1	91-18	RD	112,000	1/1	Water	7,500
1	2007	KRWFC	557,000	1/1	Water	7,500
1	2013	KRWFC	620,000	1/1	Water	7,500

#### B. Principal and Interest Payments: (Begin with Next Fiscal Year Payment)

			Paymer 20	nt Year 18	Payment Year 2019		•	nt Year 20
	Date Of Issue	Bond/Note Holder	Principal Payment	Interest Payment	Principal Payment	Interest Payment	Principal Payment	Interest Payment
1	91-7	RD	33,000	34,358	Water 33,000	34,358	33,000	34,358
2	91-10	RD	11,500	16,009	Water 11,500	16,009	11,500	16,009
3	91-11	RD	10,000	18,833	Water 10,000	18,833	10,000	18,833
4	91-16	RD	16,000	27,789	Water 16,000	27,789	16,000	27,789
5	91-18	RD	1,500	3,616	Water 1,500	3,616	1,500	3,616
6	2007	KRWFC	47,833	21,632	Water 47,833	21,632	47,833	21,632
7	2013	KRWFC	75,000	22,704	Water 75,000	22,704	75,000	22,704
8	2018	RD						39,662

#### IV. <u>EXISTING SHORT-TERM INDEBTEDNESS</u>

A. List of All Short Term Debts: N/A -

Kubota Credit Corporation – Balance of Loan - \$48,726 Rate 0% Principal – Monthly Payment - \$1,249

#### V. LAND AND RIGHTS - EXISTING SYSTEM(S)

Number of Treatment Plant Sites: Water 0

Number of Storage Tank Sites Water 11

Number of Pump Stations: Water 11

Total Acreage: Water +/-1 Acres each

Purchase Price: Water \$3,000 to \$5,000 each

#### VI. NUMBER OF EXISTING USERS

	Water
Non - Residential	80
Residential (Out of Town) *	4,676
Commercial	0
Industrial	
Total	4,756
Number to Total Potential Users living in the Service Area	4,900

\*Note: Residential Users: Classify by type of user regardless of quantity of water used.

This classification should include those meters serving individual rural

residence.

### VII. CURRENT WATER CONNECTION FEES FOR EACH SIZE WATER METER CONNECTION

Meter Size	Water Connection Fee
5/8 "X 3/4"	\$835
1"	Actual Cost
1 1/2"	Actual Cost
2"	Actual Cost
3"	Actual Cost
> than 3"	Actual Cost

#### VIII. WATER RATES – RESIDENTIAL EXISTING SYSTEM

Existing Residential Rate Schedule: **EFFECTIVE January 1, 2017** 

5/8 inch x ¾ inch Meter

First <u>1,000</u> Gallons @ \$ 17.02 Minimum.

Next <u>9,000</u> Gallons @ \$ 8.67 per 1,000 Gallons.

Next <u>10,000</u> Gallons @ \$ 6.07 per 1,000 Gallons.

Next <u>20,000</u> Gallons @ \$ <u>5.65</u> per 1,000 Gallons.

ALL OVER 40,000 Gallons @ \$ 5.42 per 1,000 Gallons.

Meter Size:
First <u>10,000</u> Gallons @ \$ <u>94.97</u> Minimum.
Next <u>10,000</u> Gallons @ \$ 6.07 per 1,000 Gallons.
Next <u>20,000</u> Gallons @ \$ <u>5.65</u> per 1,000 Gallons.
ALL OVER <u>40,000</u> Gallons @ \$ <u>5.42</u> per 1,000 Gallons.
Meter Size <u>1 1/2"</u> :
First <u>20,000</u> Gallons @ \$ <u>155.67</u> Minimum.
Next <u>20,000</u> Gallons @ \$ <u>5.65</u> per 1,000 Gallons.
ALL OVER <u>40,000</u> Gallons @ \$ <u>5.42</u> per 1,000 Gallons.
Meter Size:
First <u>40,000</u> Gallons @ \$ <u>268.67</u> Minimum.
ALL OVER 40,000 Gallons @ \$ 5.42 per 1,000 Gallons.
Meter Size:
First <u>100,000</u> Gallons @ \$ <u>593.87</u> Minimum.
ALL OVER 100,000 Gallons @ \$ 5.42 per 1,000 Gallons.
φ
Meter Size:
First <u>200,000</u> Gallons @ \$ <u>1135.87</u> Minimum.
ALL OVER <u>200,000</u> Gallons @ \$ <u>5.42</u> per 1,000 Gallons.
Overland Development Customers Same as above

Same as above

Cannonsburg Water District

#### IX. <u>ANALYSIS OF ACTUAL WATER USAGE - EXISTING SYSTEM - 12 MONTH PERIOD</u>

### For Period January 2017 to December 2017 . Residential Only

Gallons	Gallons		of users Residential	of users Non-Resident	x 1000 Gal		
0-1K	500	17.02	542	0	271	\$	9,225
1-2K	1,500		546	0	819		11,660
2-3K	2,500		769	0	1923		23,089
3-4K	3,500		763	0	2671	\$	29,524
4-5K	4,500		682	0	3069		32,303
5-6k	5,500	56.04		0	2585	_	26,336
6-7K	6,500		325	0	2113		21,029
7-8K	7,500		170	0	1275	-	12,474
8-9K	8,500	82.05	130	0	1105		10,666
9-10K	9,500		90	0	855		8,047
10-12k	11,000		70	0	770	\$	6,896
12-15k	13,500		50	0	675	т	
15-20K	17,500	137.98		0	700		5,685
20-30K	25,000		20	0	500	\$	5,519 3,628
30-40k	35,000	237.90		0	210	\$	1,427
40-50K	45,000	293.25		0	90	\$	587
50-75K	62,500	388.10	4	0	63		388
			0			\$	
75-100K	87,500	523.60		0	0		-
100-150K	125,000	726.85		0	0	\$	-
150-200K	175,000		0	0	0	\$	-
200-300K	250,000	1,404.35		0	0	\$	•
300-400K	350,000	1,946.35	U	0	0	\$	-
sub total			4676	0	19,692	\$	208,484
average residential rate per month				4676		\$	44.59
average residential usage per moni	th in Gallons			.370		Ψ	4,211
							·
annual revenue						\$	2,501,805
annual flow quantity in gallons sold							236,304,000

#### IX. <u>ANALYSIS OF ACTUAL WATER USAGE - EXISTING SYSTEM - 12 MONTH PERIOD</u>

#### For Period January 2017 to December 2017 .

#### Non – Residential

Gallons	Gallons		of users	of users	x 1000 Gal	
			Residential	Non-Resider		
0-1K	500		0	31	16	 528
1-2K	1,500		0	26	39	\$ 555
2-3K	2,500	30.03	0	3	8	\$ 90
3-4K	3,500	38.70	0	4	14	\$ 155
4-5K	4,500	47.37	0	3	14	\$ 142
5-6k	5,500	56.04	0	2	11	\$ 112
6-7K	6,500	64.71	0	1	7	\$ 65
7-8K	7,500	73.38	0	1	8	\$ 73
8-9K	8,500	82.05	0	1	9	\$ 82
9-10K	9,500	89.42	0	1	10	\$ 89
10-12k	11,000	98.52	0	1	11	\$ 99
12-15k	13,500	113.70	0	1	14	\$ 114
15-20K	17,500	137.98	0	0	0	\$ -
20-30K	25,000	181.40	0	1	25	\$ 181
30-40k	35,000	237.90	0	1	35	\$ 238
40-50K	45,000	293.25	0	1	45	\$ 293
50-75K	62,500	388.10	0	0	0	\$ -
75-100K	87,500	523.60	0	0	0	\$ -
100-150K	125,000	726.85	0	0	0	\$ -
150-200K	175,000	997.85	0	0	0	\$ -
200-300K	250,000	1,404.35	0	1	250	\$ 1,404
300-400K	350,000	1,946.35	0	1	350	\$ 1,946
sub total			(	) 80	862	\$ 6,167
average residential rate per month				80	)	\$ 77.09
average residential usage per mon						10,775
						·
annual revenue						\$ 74,003
annual flow quantity in gallons sold						10,344,000

#### X. FACILITY CHARACTERISTICS OF PROPOSED WATER SYSTEM

A. Water Source: Describe adequacy of source (quality and quantity). Include an explanation of raw water source, raw water intake structure, treatment plant capacity, and current level of production (WTP). Also describe the adequacy of Water Purchase Contract if applicable.

#### No new facilities. Only upgrades as outlined herein before.

, ,	
B. Water Storage:	
Type: Ground Storage Ta	nk: 0
Number of Storage Structures:	0
Total Storage Volume Capacity:	0
C. Water Distribution System:	
Pipe Material: PVC, and P.E. Str.	ream Crossings
Lineal Feet of Pipe: Total: 600 line	ear feet of 6" & 4" stream crossings, 40,000 L.F. of
3/4" Service line replacement for w	ater loss reduction, misc. valves & Meters for water
loss control.	
Number and Capacity of Pump Sta	ation(s):
Six (6) pump station upgrades from	m 20 GPM to 100 GPM
Eight (8) water tank repairs & pair	nting
XI. <u>LAND AND RIGHTS - PROPOSED WA</u>	ATER SYSTEM
Number of Treatment Plant Sites	0
Number of Pump Sites	<u>1</u>
Number of Tank Sites	0
Total Acreage	+/- 0.1 Acres
Purchase Price	\$0.00

#### XII. NUMBER OF NEW WATER USERS

Residential (In Town) *	0
Residential (Out of Town) *	0
Non-Residential (In Town)	0
Non-Residential (Out of Town)	0
Total	0

Number to Total Potential Users Living in the Service Area

4900\_

\*Note: Residential Users: Classify by type of user regardless of quantity of water

used. This classification should include those meters serving individual rural

residences.

### XIII. PROPOSED WATER CONNECTION FEES FOR EACH SIZE WATER METER CONNECTION:

Meter Size	Service Connection Charge
5/8 X <sup>3</sup> / <sub>4</sub> inch	\$ 835.00
1 inch	Actual Cost
1 ½ inch	Actual Cost
2 inch	Actual Cost
3 inch	Actual Cost
4 inch	Actual Cost
6 inch	Actual Cost
8 inch	Actual Cost

#### XIV. WATER RATES – PROPOSED

06/25/2019

A. Proposed Rate Schedule without RUS Grant:

First	1,000	Gallons @ \$	18.25	Minimum.
Next	9,000	Gallons @ \$	9.40	per 1,000 Gallons.
Next	10,000	Gallons @ \$	6.40	per 1,000 Gallons.
Next	20,000	_ Gallons @ \$	5.95	per 1,000 Gallons.
All Over	40,000	Gallons @ \$	5.70	per 1,000 Gallons

The above-proposed rate, without RUS grant, must be completed for each grant. If the applicant/engineer desires, there is no objection to recommending a proposed rate with an estimated RUS grant in the Table below. However, the preparer should

remember that the Table (A) above must be completed prior to Table (B).

B. Recommended Rate Schedule with RUS Grant:

06/25/2019

Meter Size 5/8"

 First
 1,000\_\_\_\_\_\_Gallons @ \$ 18.25\_\_\_\_\_\_\_Minimum.

 Next
 9,000\_\_\_\_\_\_Gallons @ \$ 9.40\_\_\_\_\_\_\_per 1,000 Gallons.

 Next
 10,000\_\_\_\_\_\_Gallons @ \$ 6.40\_\_\_\_\_\_\_per 1,000 Gallons.

 Next
 20,000\_\_\_\_\_\_Gallons @ \$ 5.95\_\_\_\_\_\_\_\_per 1,000 Gallons.

 All Over
 40,000\_\_\_\_\_\_Gallons @ \$ 5.70\_\_\_\_\_\_\_per 1,000 Gallons.

Meter Size \_\_\_\_:

First <u>10,000</u> Gallons @ \$ <u>102.85</u> Minimum.

Next <u>10,000</u> Gallons @ \$ <u>6.40</u> per 1,000 Gallons.

Next <u>20,000</u> Gallons @ \$ <u>5.95</u> per 1,000 Gallons.

ALL OVER 40,000 Gallons @ \$ 5.70 per 1,000 Gallons.

Meter Size \_\_\_\_\_1 1/2" :

First <u>20,000</u> Gallons @ \$ 166.85 Minimum.

Next <u>20,000</u> Gallons @ \$ <u>5.95</u> per 1,000 Gallons.

ALL OVER 40,000 Gallons @ \$ 5.70 per 1,000 Gallons.

Meter Size \_\_\_\_ :

First <u>40,000</u> Gallons @ \$ <u>285.85</u> Minimum.

ALL OVER 40,000 Gallons @ \$ 5.70 per 1,000 Gallons.

Meter Size \_\_\_\_\_:

First <u>100,000</u> Gallons @ \$ 627.85 Minimum.

ALL OVER 100,000 Gallons @ \$ 5.70 per 1,000 Gallons.

**Meter Size** \_\_\_\_\_: 06/25/2019

First <u>200,000</u> Gallons @ \$ 1,197.85 Minimum.

ALL OVER 200,000 Gallons @ \$ 5.70 per 1,000 Gallons.

Overland Development Same as above

Cannonsburg Water District Same as above

• If more than one rate, use additional sheets.

### XV. FORECAST OF WATER USAGE - INCOME - EXISTING SYSTEM - EXISTING USERS Residential only

usage			rat	e	monthly #	monthly #	usage	inc	ome
Gallons		Gallons			of users	of users	x 1000 Gal		
					Residential	Non-Residential			
0-1K		500		18.25	542	0	271	\$	9,892
1-2K		1,500		22.95	546	0	819	\$	12,531
2-3K		2,500		32.35	769	0	1923	\$	24,877
3-4K		3,500		41.75	763	0	2671	\$	31,855
4-5K		4,500		51.15	682	0	3069	\$	34,884
5-6k		5,500		60.55	470	0	2585	\$	28,459
6-7K		6,500		69.95	325	0	2113	\$	22,734
7-8K		7,500		79.35	170	0	1275	\$	13,490
8-9K		8,500		88.75	130	0	1105	\$	11,538
9-10K		9,500		98.15	90	0	855	\$	8,834
10-12k		11,000		109.25	70	0	770	\$	7,648
12-15k		13,500		125.25	50	0	675	\$	6,263
15-20K		17,500		150.85	40	0	700	\$	6,034
20-30K		25,000		196.60	20	0	500	\$	3,932
30-40k		35,000		256.10	6	0	210	\$	1,537
40-50K		45,000		314.35	2	0	90	\$	629
50-75K		62,500		414.10	1	0	63	\$	414
75-100K		87,500		556.60	0	0	0	\$	-
100-150K		125,000		770.35	0	0	0	\$	-
150-200K		175,000		1,055.35	0	0	0	\$	-
200-300K		250,000		1,482.85	0	0	0	\$	-
300-400K		350,000		2,052.85	0	0	0	\$	-
sub total					4676	0	19,421	\$	225,547
11 3	1 4 3					10-0		^	
average residentia						4676		\$	48.24
average residentia	al usage per month	in Gallons							4,153
annual revenue								\$	2,706,565

# XV. FORECAST OF WATER USAGE - INCOME - EXISTING SYSTEM - EXISTING USERS Non - Residential only

Gallons	Gallons		of users	of users	x 1000 Gal		
			Residential	Non-Residential			
0-1K	500	18.25	0	31	16	_	566
1-2K	1,500	22.95		26	39	\$	597
2-3K	2,500	32.35	0	3	8	\$	97
3-4K	3,500	41.75	0	4	14	\$	167
4-5K	4,500	51.15	0	3	14	\$	153
5-6k	5,500	60.55	0	2	11	\$	121
6-7K	6,500	69.95	0	1	7	\$	70
7-8K	7,500	79.35		1	8	\$	79
8-9K	8,500	88.75	0	1	9	\$	89
9-10K	9,500	98.15	0	1	10	\$	98
10-12k	11,000	109.25	0	1	11	\$	109
12-15k	13,500	125.25	0	1	14	\$	125
15-20K	17,500	150.85	0	0	0	\$	-
20-30K	25,000	196.60	0	1	25		197
30-40k	35,000	256.10		1	35		256
40-50K	45,000	314.35	0	1	45		314
50-75K	62,500	414.10		0	0	_	-
75-100K	87,500	556.60		0	0	\$	-
100-150K	125,000	770.35		0	0		-
150-200K	175,000	1,055.35	0	0	0	-	-
200-300K	250,000	1,482.85	0	1	250		1,483
300-400K	350,000	2,052.85	0	1	350	\$	2,053
sub total			0	80	847	\$	6,575
average residential rate per month				80		\$	82.18
average residential usage per month	n in Gallons						10,581
annual revenue						\$	78,894
annual flow quantity in gallons sold							10,158,000

XVI.  $\frac{\text{FORECAST OF WATER USAGE - INCOME - EXISTING SYSTEM - EXISTING }}{\text{USERS}}$ 

#### MULTI-FAMILY AND APARTMENT USER ANALYSIS

If billed as a typical user, the information should be included in the residential information above. If not billed as a typical residential user, please explain below.

Name <u>of Unit</u>	Number of Units	Number of Meters	Revenue <u>Calculations</u>

<sup>\*</sup> Breakdown of meter size usage is <u>not</u> required unless different water rates are charged based on size of water meter.

<sup>\*\*</sup> Number of users should reflect the actual number of "meter settings".

### XVII. FORECAST OF WATER USAGE - INCOME - NEW USERS - EXTENSION ONLY PROPOSED RATE INCREASE - Residential Only

usage Gallons	Gallons	rate	monthly # of users	monthly # of users	usage x 1000 Gal	income
		1 1 1000	Residential	Non-Residential		<b>A</b>
0-1K	500	18.25		0	271	
1-2K	1,500	22.95		0	819	
2-3K	2,500	32.35		0	1923	
3-4K	3,500	41.75		0	2671	
4-5K	4,500	51.15	682	0	3069	\$ 34,884
5-6k	5,500	60.55	470	0	2585	\$ 28,459
6-7K	6,500	69.95	325	0	2113	\$ 22,734
7-8K	7,500	79.35	170	0	1275	\$ 13,490
8-9K	8,500	88.75	130	0	1105	\$ 11,538
9-10K	9,500	98.15	90	0	855	\$ 8,834
10-12k	11,000	109.25	70	0	770	\$ 7,648
12-15k	13,500	125.25	50	0	675	\$ 6,263
15-20K	17,500	150.85	40	0	700	\$ 6,034
20-30K	25,000	196.60	20	0	500	\$ 3,932
30-40k	35,000	256.10	6	0	210	
40-50K	45,000	314.35	2	0	90	\$ 629
50-75K	62,500	414.10	1	0	63	\$ 414
75-100K	87,500	556.60	0	0	0	\$ -
100-150K	125,000	770.35	0	0	0	\$ -
150-200K	175,000	1,055.35	0	0	0	\$ -
200-300K	250,000	1,482.85	0	0	0	\$ -
300-400K	350,000	2,052.85		0	0	\$ -
sub total			4676	0	19,421	\$ 225,547
average regidential rate new man	ih			A676		¢ 40.04
average residential rate per mon				4676		\$ 48.24
average residential usage per mo	onun in Gailons					4,153
annual revenue						\$ 2,706,565

### XVII. FORECAST OF WATER USAGE - INCOME - NEW USERS - EXTENSION ONLY PROPOSED RATE INCREASE - Non - Residential Only

usage		rate	monthly #	monthly #	usage	income	
Gallons	Gallons		of users	of users	x 1000 Gal		
			Residential	Non-Residential			
0-1K	500	18.25	0	31	16	\$	566
1-2K	1,500	22.95	0	26	39	\$	597
2-3K	2,500	32.35	0	3	8	\$	97
3-4K	3,500	41.75	0	4	14	\$	167
4-5K	4,500	51.15	0	3	14	\$	153
5-6k	5,500	60.55	0	2	11	\$	121
6-7K	6,500	69.95	0	1	7	\$	70
7-8K	7,500	79.35	0	1	8	\$	79
8-9K	8,500	88.75	0	1	9	\$	89
9-10K	9,500	98.15		1	10	\$	98
10-12k	11,000	109.25	0	1	11	\$	109
12-15k	13,500	125.25	0	1	14	\$	125
15-20K	17,500	150.85	0	0	0	\$	
20-30K	25,000	196.60	0	1	25	\$	197
30-40k	35,000	256.10	0	1	35	\$	256
40-50K	45,000	314.35	0	1	45	\$	314
50-75K	62,500	414.10	0	0	0	\$	-
75-100K	87,500	556.60	0	0	0	\$	-
100-150K	125,000	770.35	0	0	0	\$	-
150-200K	175,000	1,055.35	0	0	0	\$	-
200-300K	250,000	1,482.85	0	1	250	\$	1,483
300-400K	350,000	2,052.85	0	1	350	\$	2,053
sub total			0	80	847	\$	6,575
average residential rate per month				80		\$	82.18
average residential usage per mon				00			10,581
						ф ·	70.004
annual revenue						\$	78,894

### XVIII. FORECAST OF WATER USAGE - INCOME - NEW USERS - EXTENSION ONLY **PROPOSED RATE INCREASE**

#### Not applicable

#### XIX. <u>CURRENT OPERATING BUDGET - (WATER SYSTEM)</u>

(As of the last full operating year "2017")

Α	Operating Income	
	Water Sales Disconnect/ Reconnect Feees Other Tap Fees Total Operating Income	2,575,375 60,400 33,393 20,075 2,689,243
В	O & M Expenses	
	Source of Supply Taxes & Benefits Materials & Supply Transmission & Distribution Bad Debt Admisistrative & General Total Operating Expenses	1,003,000 168,185 220,700 438,506 13,008 246,000 2,089,399
	Net Operating Income	599,844
С	Non - Operating Income	
	Interest on Deposits Other Total Non - Operating Income	1,100 - 1,100
D	Net Income	600,944
E	Debt Repayment	
	Rus Interest Rus Principal Debt Reserve Non RUS Interest Non RUS Principal Total Debt Repayment	100,605 72,000 17,200 44,336 122,833 356,974
F	Balance Avalable for Coverage	243,970

AND I	OPOSED OPERATING BUDGET - (WATE NEW USERS (1st Full Year of Operation) Operating Income:		
71.	Water Sales		\$_2,785,459
	Disconnect/Reconnect/Late Charge Fees		35,000
	Other (Describe) – Tap Fees		20,000
	Less Allowances and Deductions	(	<u>()</u>
	Total Operating Income	\$	2,804,459
В.	Operation and Maintenance Expenses: (Based on Uniform System of Accounts pres Regulatory Utility Commissioners)	cribed by National	Association of
	Source of Supply Expense, Pumping Expense	·,	
	Water Treatment Expense	g	1,053,150
	Transmission and Distribution Expense		_
705,17	74		
	Taxes and Benefits		229,823
	Administrative and General Expense		276,202
	Total Operating Expenses	9	2,264,349
	Net Operating Income	9	576,110
C.	Non-Operating Income:		
	Interest on Deposits	3	§
	Other (Identify)		
	Total Non-Operating Income	9	1,050
D.	Net Income	S	577,160
E.	Debt Repayment:		
	RUS Interest	5	§
	RUS Principal		83,340
	Debt Reserve		
	Non-RUS Interest		35,525
	Non-RUS Principal		144,491
	Short Lived Asset Reserve		<u>75,300_</u>

	Total Debt Repayment	\$ 447,307
F.	Balance Available for Coverage	\$ 129,853

#### XXI. PROPOSED OPERATING BUDGET - (WATER SYSTEM)

### EXTENSION ONLY (1st Full Year of Operation) Year Ending 2019 A. Operating Income:

A.	Operating income.		
	Water Sales	\$	N/A
	Disconnect/Reconnect/Late Charge Fees		
	Other (Describe)		
	Less Allowances and Deductions	(_	
	Total Operating Income	\$	
В.	Operation and Maintenance Expenses: (Based on Uniform System of Accounts prescribed by Nation Regulatory Utility Commissioners)	al As	ssociation of
	Source of Supply Expense	\$	N/A
	Pumping Expense		
	Water Treatment Expense		
	Transmission and Distribution Expense		
	Customer Accounts Expense		
	Administrative and General Expense		
	Total Operating Expenses	\$	
	Net Operating Income	\$	
C.	Non-Operating Income:		
	Interest on Deposits	\$	N/A
	Other (Identify)		
	Total Non-Operating Income	\$_	
D.	Net Income	\$	N/A
E.	Debt Repayment:		
	RUS Interest	\$	N/A
	RUS Principal		
	Non-RUS Interest		
	Non-RUS Principal		
	Total Debt Repayment	\$	
F	Balance Available for Coverage	\$	N/A

# XXII. FINAL PROJECT COST - WATER (Round to nearest \$100)

	Water System Improvements
Development	\$ 2,412,675
Existing project reimbursements	\$ 0
Land and Rights	\$ 62,500
Legal and admin	\$ 36,000
Engineering	\$ 368,500
Interest	\$ 40,000
Contingencies	\$ 120,325
Sub Total	\$ 3,040,000
Initial O & M	\$ 0
Total	\$ 3,040,000

#### XXIII. FINAL PROJECT FUNDING – WATER

	TOTAL
Applicant	\$ 88,000
ADDITIONAL Applicant	\$ 42,000
RD Loan	\$ 1,670,000
ADDITIONAL RD Loan	\$ 395,000
ADDITIONAL Grant	\$ 145,000
RD Grant	\$ 700,000
Total	\$ 3,040,000