

**IN THE TENNESSEE PUBLIC UTILITY COMMISSION  
AT NASHVILLE, TENNESSEE**

**IN RE:** )  
 )  
**JOINT PETITION OF AQUA GREEN** )  
**UTILITY, INC., AND TPUC STAFF** )  
**(AS A PARTY) TO INCREASE RATES** )  
**AND CHARGES** )

**DOCKET NO. 21-00128**

---

**PRE-FILED DIRECT TESTIMONY  
OF  
MICHELLE MAIRS**

---

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

2 A. My name is Michelle Mairs. I am the Deputy Director of the Utilities Division for the  
3 Tennessee Public Utility Commission. My business address is 502 Deaderick Street,  
4 Fourth Floor, Nashville, Tennessee 37243.

5 **Q. Please provide a summary of your educational background and professional**  
6 **experience.**

7 A. I earned B.A. degrees in Economics and Business Administration from Chonnam  
8 National University in South Korea in 2003. I also earned an MBA degree from the  
9 University of Tennessee at Martin in 2005. I have been a Certified Public Accountant in  
10 Tennessee since 2008. I started with TPUC in 2007 and in my time with the Commission  
11 I have previously served in the positions of Economist, Utilities Consultant, and Audit  
12 Manager before serving in my current capacity as the Deputy Director of the Utilities  
13 Division. I have worked on various cases and audits for natural gas, electric, water, and  
14 wastewater public utilities and have supervised the staff of the Utilities Division in the  
15 performance of their work on utility audits and various other matters, including rate cases  
16 and alternative rate mechanism filings.

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

18 A. The purpose of my testimony is to present the forecast of the cost of service and  
19 related revenue deficiency for Aqua Green Utility, Inc. for the Attrition Period ending  
20 December 31, 2022, including the projected operating revenues, expenses, and taxes.  
21 The ratemaking calculations are presented in the TPUC Party Staff Exhibit, Schedules  
22 and Workpapers attached hereto.

23 As reflected on TPUC Party Staff Exhibit, Schedule 2, the forecast of operating

1 revenues at present rates, expenses and taxes resulted in a net operating loss of \$6,712  
2 for the Attrition Period.

3 **Q. Please explain the forecast of Operating Revenues at Present Rates for the Attrition**  
4 **Period.**

5 **A. Schedule 2, Lines 1-3 - Wastewater Revenue - Residential Customers, Commercial**  
6 **Customers and Sewer Access Fees - \$44,542:** This amount represents the forecasted  
7 Wastewater Revenue from Residential Customers, Commercial Customers and Sewer  
8 Access Fees the Company should realize during the Attrition Period, absent any rate  
9 relief.

10 To forecast wastewater service revenue, I first examined the Residential Customer billing  
11 information in the Test Period and performed a revenue price-out, as reflected on  
12 Workpaper 1.01. Based on information obtained from the Company, including current  
13 and projected housing starts, I determined that a reasonable allowance for customer  
14 growth through the Attrition Period would be four new residential customers. Based on  
15 this information, I calculated an Attrition Period figure of \$7,843 as reflected on  
16 Workpaper 1.01.

17 Similar to the revenues from Residential Customers, a revenue price-out was performed  
18 using the Test Period billing information for Commercial Customers, as shown on  
19 Workpaper 1.01. The Commercial Customers consist of two Loves Truck Stops, one  
20 which was in service during the entire Test Period and consists of a 3,000 gallon per day  
21 system, and one which was added to service in June 2021 and consists of a 10,000 gallon  
22 per day system. Based on information obtained from the Company, I determined that no  
23 new Commercial Customers were anticipated to be added to service during the Attrition

1 Period. Based on the foregoing, I computed Attrition Period Commercial Service  
2 revenues of \$20,498, as reflected on Workpaper 1.01.

3 In determining the amount for the Annual Sewer Access Fees for the Attrition Period, I  
4 forecasted, based on the collections of prior access fees, as well as the status of the  
5 completion and availability of wastewater services for systems currently planned or under  
6 construction, that access fees would be collected from 135 lot owners during the Attrition  
7 Period. This results in projected access fees of \$16,200 at present rates, as reflected on  
8 Workpaper 1.03.

9 **Q. Please explain the individual components of the Operating Expenses and Taxes**  
10 **forecast for the Attrition Period.**

11 **A. Schedule 2, Line 4 – Sludge Removal Expense - \$9,500:**

12 Based on information obtained from the Company, I determined that, due to the amount  
13 of solids contained in the waste stream, the sewage tanks at the two Loves Truck Stops  
14 would need to be pumped each month in order to provide sufficient wastewater services  
15 to those customers. The cost of pumping the 3,000 gallon per day system was determined  
16 to be \$300 monthly, and the cost of pumping the 10,000 gallon per day system was  
17 determined to be \$450 monthly. In addition, based on information obtained from the  
18 Company, I determined that, on average each year, the tanks of two residential customers  
19 need to be pumped at a cost of \$250 each. Based on this information, I forecasted \$9,500  
20 for Sludge Removal Expense for the Attrition Period, as reflected on Workpaper 2.01.

21 **Schedule 2, Line 5 – Purchased Power (Electric) Expense - \$8,935:** To arrive at this  
22 amount, I first grew the Test Period Purchased Power Expense by an inflation factor to  
23 compute the Attrition Period expense for the Peninsula, Cedar Brooke, Stone Bridge, and

McNairy Loves Truck Stop plants. All of these plants were in operation during the Test Period. To determine the Purchased Power Expense for the Bulls Gap Loves Truck Stop plant, I determined that a monthly power bill of \$300 would be appropriate by examining the power bills from June 2021, which is when this plant first began operating, through August 2021, which was the latest power bill available. I then applied an inflation factor to arrive at the Attrition Period forecast for the Bulls Gap plant. I then totaled the Attrition Year forecasts of the electric bills for the individual plants to arrive at a total Attrition year forecast of \$8,935, as reflected on Workpaper 2.01.

**Schedule 2, Line 6 – Materials and Supplies - \$286:** I grew the Test Period amount by an inflation factor to arrive at the Attrition Period forecast of \$286, which is reflected on Workpaper 2.01.

**Schedule 2, Line 7 – Contract Services Accounting - \$1,434.** Based on discussion with the Company, as well as historical information regarding the use of contract accountants, I determined that \$1,400 was a reasonable amount for contract accounting services for the Test Period. I then grew this amount by an inflation factor to arrive at the Attrition Period forecast of \$1,434, which is reflected on Workpaper 2.01.

**Schedule 2, Line 8 – Contract Services Testing - \$6,554:** To arrive at this amount, I determined from information obtained from the Company that four plants require environmental testing and reporting each quarter at a cost of \$400 each, which produces an annual total of \$6,400. I then grew this amount by an inflation factor to arrive at the Attrition Period forecast of \$6,554. These calculations are shown on Workpaper 2.01.

**Schedule 2, Line 9 – Contract Services Other - \$4,484:** This amount represents two principal items – monthly site visits to wastewater plants by contract personnel and

1 website costs. With regard to website costs, the Test Period amounts were grown by an  
2 inflation factor to arrive at the Attrition Period forecast of \$305.34, as reflected on  
3 Workpaper 2.01 (lines 16 and 17). The contract services for monthly plant site visits  
4 were priced out based on information supplied by the Company, essentially paying one  
5 contractor \$100 per month for visits to two plants and paying another contractor \$240 per  
6 month for visits to other plants. Based on this information, and by applying an inflation  
7 factor, I computed the Attrition Year forecast for plant site visits to be \$4,178.33, as  
8 reflected on Workpaper 2.01 (lines 14 and 15).

9 **Schedule 2, Line 10 – Office Supplies and Expenses - \$500:** Based on discussions with  
10 the Company, and in consideration of the monthly billing and collection activity and  
11 general office administration, I determined that \$500 would be a reasonable projection of  
12 office supplies and expenses for the Attrition Period.

13 **Schedule 2, Line 11 – Telephone and Communications - \$307:** Based on information  
14 obtained from the Company, I determined that internet access should drop to about \$5  
15 per month for each of five plants due to reconfiguration to the Company's internet  
16 services. I grew this amount by an inflation factor to arrive at the Attrition Period forecast  
17 of \$307 as reflected on Workpaper 2.01.

18 **Schedule 2, Line 12 – Utility Expense - \$4,096:** Based on information supplied by the  
19 Company, I determined that there are eight operating permits each year that must be  
20 maintained at a cost of \$350 each. Further, I determined that each plant also must have  
21 its permit updated and renewed every five years at a cost of \$750 each. Based on the  
22 annual costs to maintain the Company's operating permits, and the annualized cost of  
23 updating and renewing the Company's permits every five years, I computed the Attrition

1 Period forecast for this expense item to be \$4,096 after application of an inflation factor.

2 These calculations are shown on Workpaper 2.01.

3 **Schedule 2, Line 13 – Regulatory Commission Expense - \$4,021:** This expense item  
4 includes filing costs, letter of credit costs to comply with the Commission’s financial  
5 security rule, and regulatory legal fees. I computed the Attrition Period forecast of \$4,021  
6 by growing the Test Period amounts for these items by an inflation factor, as reflected on  
7 Workpaper 2.01.

8 **Schedule 2, Line 14 – Maintenance Expense - \$3,000:** The Company had no provision  
9 for routine maintenance in its Test Period amounts. Based on discussions with the  
10 Company, in particular the history of service and repair calls from customers to restore  
11 and maintain wastewater services, I determined that a reasonable provision of \$3,000 for  
12 routine maintenance and repair expense should be included in the Attrition Period  
13 forecast.

14 **Schedule 2, Line 15 – Management Fee - \$2,458:** The Company had no provision for  
15 a management fee in its Test Period amounts. Based on discussions with the Company,  
16 and in consideration of the Commission’s allowance of reasonable management fees for  
17 other, similar wastewater utilities in the calculation of base service rates, I determined  
18 that a Test Period management fee of \$200 per month would be reasonable and  
19 appropriate. I computed an Attrition Period forecast by applying an inflation factor to  
20 arrive at an annual Management Fee of \$2,458, as reflected on Workpaper 2.01.

21 **Schedule 2, Line 16 – Property Tax - \$5,781:** As shown on Schedule 3, I projected a  
22 significant increase in property taxes, from a Test Period amount of \$2,009 to an Attrition  
23 Period forecast of \$5,781. The sharp increase in property taxes is due to increased

1 assessments and rates for the Company's existing systems in Jefferson County, for which  
2 I reviewed the property tax assessment. In addition, I made an allowance for taxes on  
3 properties in Greene, Maury, and Williamson Counties which the Company did not have  
4 during the Test Period. The Greene County property relates to the new Bulls Gap Loves  
5 Truck Stop customer that came into service in June 2021, and the properties in Maury  
6 and Williamson Counties relate to systems under development in those counties but for  
7 which there are no current wastewater services or customers.

8 **Schedule 2, Line 20 – Utility Commission Fee - \$168:** This is the amount is calculated  
9 by applying the statutory rate for the Commission's inspection fees to the Company's  
10 forecasted Attrition Period intrastate revenues, as reflected on Schedule 3.

11 **Schedule 2, Line 21 – State Excise Tax - \$(67):** As reflected on Schedule 4, the State  
12 Excise Tax forecast was determined by applying the statutory tax rate to forecasted  
13 Attrition Period taxable income.

14 **Schedule 2, Line 22 – Federal Income Tax - \$(203):** As reflected on Schedule 4, the  
15 Federal Income Tax forecast was determined by applying the statutory tax rate to  
16 forecasted Attrition Period taxable income.

17 **Items Eliminated:** The following Test Period expenses were eliminated from the  
18 determination of the revenue deficiency in the Attrition Period because they represent  
19 nonrecurring items that are not anticipated to be incurred during the Attrition Period:  
20 \$742 road repair in the Peninsulas service territory; \$668 remote access charges; \$75  
21 name change on letter of credit; and \$804 to update the plant router and sim cards. These  
22 ratemaking adjustments are reflected on Schedule 2 and Workpaper 2.01.



1 Q. In addition to requesting an increase in wastewater service rates, the Company is  
2 also requesting authority to withdraw \$9,163 from its escrow account for certain  
3 expense and repair items. Have you reviewed the Company's escrow disbursement  
4 request?

5 A. Yes. The Company's escrow disbursement request relates to the following items:

- 6 1. Quarterly testing of wastewater systems for the Test Period - \$4,800
- 7 2. Replacement of a grinder pump at McNairy Loves - \$2,152
- 8 3. Replacement of controls at customer premise – Stonebridge - \$395
- 9 4. Replacement of control system, pumps, riser and conduit box at customer premise  
10 – Peninsulas - \$1,816.

11 I have reviewed the invoices for these charges, as well as the accounting ledgers for Aqua  
12 Green Utility, and find that these items have not been charged to or recovered from the  
13 utility's operating account. I have also reviewed the escrow account reconciliation and  
14 related bank account statement and verified that there was a balance of \$20,151.48 in the  
15 escrow bank account as of September 2021, which is sufficient available funds to pay the  
16 \$9,163 escrow disbursement request.

17 The Commission's financial security rules for wastewater utilities, Rule 1220-04-13-  
18 .07(7), provides that after first receiving authorization from the Commission, a utility may  
19 use escrow to pay for or reimburse the utility for extraordinary operating expenses or for  
20 necessary capital projects, unless otherwise permitted by the Commission. Additionally,  
21 Rule 1220-04-13-.07(8) provides that the Commission may waive or modify the  
22 requirements of its wastewater rules for good cause shown, including but not limited to

1       affordability of rates, minimization of rate shock or other operating characteristics of the  
2       utility.

3       In this case, the items requested for payment from escrow could not have been paid from  
4       the utility's operations without exacerbating its operating losses. As reflected on  
5       Schedule 2, I computed an adjusted Test Period operating loss of \$9,239 and a projected  
6       Attrition Period loss of \$6,712. Further, due to the very small customer base – fifteen  
7       current residential customers and two current commercial customers – individual  
8       customers would have to be assessed \$539 each to recover the cost of these items through  
9       a service rate or rider mechanism. Using existing escrow funds to recover the cost of  
10      these items would help keep service rates lower and, thus more affordable, and it provides  
11      a funding mechanism that limits substantial rate impacts to individual customers. In these  
12      particular circumstances, I recommend the Commission permit the Company to recover  
13      the cost of these items through a one-time, nonrecurring disbursement of \$9,163 from the  
14      Company's escrow account.

15   **Does this conclude your testimony?**

16   A.     Yes it does.

## VERIFICATION

STATE OF TENNESSEE )

COUNTY OF DAVIDSON )

I, Michelle Mairs, being duly sworn, state that I am authorized to make this verification on behalf of TPUC Staff (As a Party); that I have read the foregoing Pre-filed Direct Testimony of Michelle Mairs and know the content thereof; and that the same are true and correct to the best of my knowledge, information and belief.

Michelle Mairs

Michelle Mairs

Sworn to and subscribed before me on the 4th day of November, 2021.

Eckey Layless

Notary Public



My Commission Expires: 3/8/2022

**BEFORE THE  
TENNESSEE PUBLIC UTILITY COMMISSION**

IN RE:



---

TPUC Party Staff  
EXHIBITS and WORKPAPERS

---

**Aqua Green Utility, Inc.  
Exhibits Directory  
For the 12 Months Attrition Period Ending December 31, 2022**

	<b><u>Schedule</u></b>
Results of Operations - Operating Margin Method	1
Income Statement at Current Rates	2
Taxes Other Than Income Tax Expense	3
Income Tax Expense at Current Rates	4
Revenue Conversion Factor	5
Income Statement at Proposed Rates	6
Rate Design	7

Aqua Green Utility, Inc.  
Results of Operations - Operating Margin Method  
For the 12 Months Attrition Period Ending December 31, 2022

<u>Line</u>			
1	Operating Income At Current Rates		(\$6,712) A/
2	Total Operating Expenses	\$51,254 A/	
3	Less: Expenses Recoverable without application of Operating Margin		
4	Management Fees	\$2,458	
5	State Income Tax Expense	(\$67)	
6	Federal Income Tax Expense	<u>(\$203)</u>	
		49,066	
7	Operating Expenses Subject to Operating Margin		
3	Fair Operating Margin	<u>10.00% B/</u>	
4	Required Operating Income		<u>4,907</u>
5	Operating Income Deficiency/(Surplus)		\$11,619
6	Gross Revenue Conversion Factor		<u>1.353821 C/</u>
7	Revenue Deficiency (Operating Margin Method)		<u><u>\$15,730</u></u>
8	Monthly Service Rate Average Percentage Increase		<u><u>35.32%</u></u>

A/ Schedule 3  
B/ Proposed operating margin  
C/ Schedule 5

Aqua Green Utility, Inc.  
Income Statement at Current Rates  
For the 12 Months Attrition Period Ending December 31, 2022

Line		Test Period	Adjustments	Adusted Test Period	Growth Adjustments	Attrition Period
1	Residential Revenue	\$6,192 A/	\$0	\$6,192	\$1,651	\$7,843 A/
2	Commercial	4,730 A/	0	4,730	15,768	20,498 A/
3	Access Fees	16,200 B/	0	16,200	0	16,200 B/
	<b>Total Operating Revenues</b>	<b>\$27,122</b>	<b>\$0</b>	<b>\$27,122</b>	<b>\$17,419</b>	<b>\$44,542</b>
4	Sludge Removal Expense	\$2,150 C/	\$0	\$2,150	\$7,350	\$9,500 C/
5	Power Purchased (Electric)	5,454 C/	3,270	8,724	210	8,935 C/
6	Materials & Supplies	279 C/	0	279	7	286 C/
7	Contract Services -Accounting	45 C/	1,355	1,400	34	1,434 C/
8	Contract Services -Testing	0 C/	6,400	6,400	154	6,554 C/
9	Contract Services -Other	3,989 C/	\$389	4,378	106	4,484 C/
10	Office supplies & Expenses	957 C/	(668)	288	212	500 C/
11	Telephone & Communications	938 C/	(638)	300	7	307 C/
12	Utility Expense	3,170 C/	830	4,000	96	4,096 C/
13	Regulatory Commission Expense	4,001 C/	(75)	3,926	95	4,021 C/
14	Maintenance Expenses	804 C/	(\$804)	0	3,000	3,000 C/
15	Management Fee	0 C/	2,400	2,400	58	2,458 C/
16	Property Tax	2,009 D/	0	2,009	3,772	5,781 D/
17	Payroll Taxes	0	0	0	0	0
18	Gross Receipts Tax	0	0	0	0	0
19	Franchise Tax	0	0	0	0	0
20	Utility Commission Fee	106 D/	0	106	62	168 D/
21	State Excise Tax	0	0	0	(67)	(67)
22	Federal Income Tax	1,740 E/	0	0	(203)	(203) E/
23	<b>Total Operating Expenses</b>	<b>\$25,643</b>	<b>\$12,459</b>	<b>\$36,362</b>	<b>\$14,892</b>	<b>\$51,254</b>
24	<b>Net Operating Income/(Loss)</b>	<b>\$1,480</b>	<b>(\$12,459)</b>	<b>(\$9,239)</b>	<b>\$2,527</b>	<b>(\$6,712)</b>

A/ Workpaper 1.01  
B/ Workpaper 1.03  
C/ Workpaper 2.01  
D/ Schedule 3  
E/ Schedule 4

**Aqua Green Utility, Inc.  
Taxes Other Than Income Tax Expense  
For the 12 Months Attrition Period Ending December 31, 2022**

Line No.		<u>Test Period</u>	<u>Adjustments</u>	<u>Attrition Period</u>
1	Jefferson Trustee (Peninsulas and Stone Bridge)	\$1,153	\$1,848	\$3,001
2	McNairy Trustee (McNairy Loves)	385	63	448
3	Maury Trustee (Cedar Brooke)	471	0	471
4	Greene Trustee ( Loves Bulls Gap)	0	448	448
5	Maury Trustee (Flat Creek)		471	471
6	Maury Trustee (Forest Trails)		471	471
7	Willamson Trustee (Bethesda Road)		471	471
8	<b>Property Taxes</b>	<u>\$ 2,009.36</u>	<u>\$2,359</u>	<u>\$5,781</u>
9	<b>Payroll Taxes</b>	\$0	\$0	\$0
10	<b>Gross Receipts Tax</b>	0	0	0
11	<b>Franchise Tax</b>	0	0	0
12	<b>Utility Commission Fee</b>	100	68	168 A/
13	<b>Total Taxes Other Than Income Taxes</b>	<u><u>\$2,109</u></u>	<u><u>\$68</u></u>	<u><u>\$5,949</u></u>

A/ 2022 Revenues less 5,000 / 1000 \*4.25



**Aqua Green Utility, Inc.**  
**Income Tax Expense at Current Rates**  
**For the 12 Months Attrition Period Ending December 31, 2022**

<u>Line</u>		<u>Attrition Amount</u>
1	Total Operating Revenues	\$44,542 A/
2	Total Operating Expenses Before Excise Tax	<u>45,575 A/</u>
3	NOI Before Tennessee Excise & Federal Income Tax	(\$1,033)
4	Less Interest Expense	<u>0</u>
5	Pre-Tax Book Income	(\$1,033)
6	Tennessee Excise Tax Rate	<u>6.50% B/</u>
7	Tennessee Excise Tax Expense	<u>(\$67)</u>
	Federal Income Tax Calculation:	
8	Net Income Before Income Taxes	(\$966)
9	Federal Income Tax Rate	<u>21.00% B/</u>
10	Federal Income Tax Expense	<u>(\$203)</u>

A/ Schedule 2  
B/ Statutory Rate

Aqua Green Utility, Inc.  
Revenue Conversion Factor  
For the 12 Months Attrition Period Ending December 31, 2022

Line		Amount	Balance
1	Operating Revenues		1.000000
2	State Excise Tax	6.50% A/	0.065000
3	Balance		0.935000
4	Federal Income Tax	21.000% B/	0.196350
5	Balance		0.738650
6	Revenue Conversion Factor (Line 1 / Line 5)		1.353821

A/ Statutory State Excise Tax Rate of 6.50%.  
B/ Statutory Federal Income Tax Rate of 21%.

**Aqua Green Utility, Inc.**  
**Income Statement at proposed Rates**  
**For the 12 Months Attrition Period Ending December 31, 2022**

<u>Line</u>		<u>Current Rates</u>		<u>Rate Increase</u>		<u>Required Rates</u>
1	Residential Revenue	\$7,843				
2	Commercial	20,498				
3	Access Fees	16,200				
	<b>Total Operating Revenues</b>	<b>\$44,542</b>		<b>\$15,730</b>	A/	<b>\$60,271</b>
4	Sludge Removal Expense	\$9,500	D/	0		\$9,500
5	Power Purchased (Electric)	\$8,935	D/	0		\$8,935
6	Materials & Supplies	\$286	D/	0		\$286
7	Contract Services -Accounting	\$1,434	D/	0		\$1,434
8	Contract Services -Testing	\$6,554	D/	0		\$6,554
	Contract Services -Other	\$4,484	D/	0		\$4,484
9	Office supplies & Expenses	\$500	D/	0		\$500
10	Telephone & Communications	\$307	D/	0		\$307
11	Utility Expense	\$4,096	D/	0		\$4,096
12	Regulatory Commission Expense	\$4,021	D/	0		\$4,021
13	Maintenance Expenses	\$3,000	D/	0		\$3,000
14	Management Fee	\$2,458	D/	0		\$2,458
15	Property Tax	\$5,781	D/	0		\$5,781
16	Payroll Taxes	\$0	D/	0		\$0
17	Gross Receipts Tax	\$0	D/	0		\$0
18	Franchise Tax	\$0	D/	0		\$0
19	Utility Commission Fee	\$168	D/	0		\$168
20	State Excise Tax	(\$67)	D/	1,022	B/	\$955
21	Federal Income Tax	(\$203)	D/	3,089	C/	\$2,886
22	<b>Total Operating Expenses</b>	<b>\$51,254</b>		<b>\$4,111</b>		<b>\$55,365</b>
23	<b>Net Operating Income/(Loss)</b>	<b>(\$6,712)</b>		<b>\$11,619</b>		<b>\$4,907</b> A/

A/ Schedule 1.

B/ Schedule 1, Line 7 x Schedule 5, Line 2.

C/ Schedule 1, Line 7 x Schedule 5, Line 4.

D/ Schedule 2.

Aqua Green Utility, Inc.  
Rate Design  
For the 12 Months Attrition Period Ending December 31, 2022

TPUC Party Staff  
Exhibit  
Schedule 7

<u>Line</u>		<u>Attrition Year Determinates</u>	<u>Current Base Rates</u>	<u>Current Escrow Rates</u>	<u>Current Operating Revenues</u>	<u>Current Escrow Revenues</u>	<u>Proposed Base Rates</u>	<u>Proposed Escrow Rates</u>	<u>Proposed Base Revenues</u>	<u>Proposed Escrow Revenues</u>	<u>Base Revenue Increase</u>	<u>Proposed Combined Increase %</u>
1	<b>Residential (Rate Class 1)</b>	228	\$34.40	\$10.13	\$7,843	\$2,310	\$45.50	\$10.13	\$10,374	\$2,310	\$2,531	24.9%
2	<b>Commercial (Rate Class 2)</b>					\$0						
3	McNairy Loves	1,080	4.38	1.37	\$4,730	\$1,480	6.30	1.37	\$6,804	\$1,480	\$2,074	33.4%
4	Bulls Gap Loves	3,600	4.38	1.37	\$15,768	\$4,932	6.30	1.37	\$22,680	\$4,932	\$6,912	33.4%
5					<b>\$28,342</b>	<b>\$8,721</b>			<b>\$39,858</b>	<b>\$8,721</b>	<b>\$11,516</b>	
6	<u>Access Fee</u>	135	\$120.00		\$16,200		\$150.00		\$20,250		<b>\$4,050</b>	25%
<b>Total Revenue Increase</b>											\$15,566	
<b>Revenue Decifiency</b>											\$15,730	A/
											<u>(\$163)</u>	

A/ Schedule 1.

**Aqua Green Utility, Inc.  
Workpaper Directory  
For the 12 Months Attrition Period Ending December 31, 2022**

<b><u>Line</u></b>		
<b>1</b>	<b>Revenue Priceout</b>	<b>1.01</b>
<b>2</b>	<b>Escrow Priceout</b>	<b>1.02</b>
<b>3</b>	<b>Access Fee</b>	<b>1.03</b>
<b>4</b>	<b>O&amp;M Expense</b>	<b>2.01</b>
<b>5</b>	<b>Inflation</b>	<b>3.01</b>

Aqua Green Utility Inc.  
Revenue Priceout

	2020 Test Period	Growth Adjustment	2022 Attr Period
<b>Residential (Rate Class 1)</b>			
Total Bills	180 A/	48 B/	228
Base Rate	\$34.40	\$34.40	\$34.40
<b>Residential Base Revenue</b>	<b>\$6,192.00</b>	<b>\$1,651.20</b>	<b>\$7,843.20</b>
<b>Commercial (Rate Class 2)</b>			
Total Bills (McNairy Loves)	12		12
Base Rate	\$394.20 C/		\$394.20
Total Bills (Bulls Gap Loves)		12	12
Base Rate		\$1,314.00 D/	\$1,314.00
<b>Commercial Base Revenue</b>	<b>\$4,730.40</b>	<b>\$15,768.00</b>	<b>\$20,498.40</b>
<b>Total Revenues</b>	<b>\$10,922.40</b>	<b>\$17,419.20</b>	<b>\$28,341.60</b>

A/ Currently 15 customers in the Peninsula subdivision. (Total Bills = 15 customer \* 12month)

B/ Two (2) homes in the Peninsula subdivision under construction and 2 more due at the first of 2022. (4 new customer \* 12 month)

C/ McNairy Loves - Minimum bill is 90,000 Gallons

D/ Bulls Gap Loves - 10,000 gallon per day

**Aqua Green Utility Inc.  
Escrow Priceout**

	<u>2020 Test Period</u>	<u>Growth Adjustment</u>	<u>2022 Attr Period</u>
<b>Residential</b>			
Total Bills	180 A/	48 B/	228
Escrow Rate	\$10.13	\$10.13	\$10.13
<b>Residential Escrow Revenue</b>	<u><b>\$1,823.40</b></u>	<u><b>\$486.24</b></u>	<u><b>\$2,309.64</b></u>
 <b>Commercial</b>			
Total Bills (McNairy Loves)	1,080 C/		1,080
Escrow Rate	\$1.37		\$1.37
 Total Bills (Bulls Gap Loves)		3,600	3,600
Escrow Rate		\$1.37	\$1.37
<b>Commercial Escrow Revenue</b>	<u><b>\$1,479.60</b></u>	<u><b>\$4,932.00</b></u> D/	<u><b>\$6,411.60</b></u>
 <b>Total Revenues</b>	<u><b>\$3,303.00</b></u>	<u><b>\$5,418.24</b></u>	<u><b>\$8,721.24</b></u>

\* Aqua Green has \$20,151.48 in their escrow account as of 9/30/2021.

A/ Currently 15 customers in the Peninsula subdivision. (Total Bills = 15 customer \* 12month)

B/ Two (2) homes in the Peninsula subdivision under construction and 2 more due at the first of 2022. (4 new customer \* 12 month)

C/ McNairy Loves - Minimum Fee : Minimum bill is 90,000 Gallons.

D/ Bulls Gap Loves - 10,000 gallon per day (300\*1.37=\$411/ per month)

**Aqua Green Utility Inc.**  
Access Fee Priceout

	Test Period
Total Customer	135
Access Fee	\$120
	<hr/>
	16,200
	<hr/>



Line		<u>Test Period</u>	<u>Adjustment</u>	<u>Adjusted Test Period</u>	<u>Growth Factor</u> A/	<u>Attrition Period</u>	
1	Sludge removal	\$ 1,250.00		\$ 1,250.00	\$ 8,250.00	\$ 9,500.00	Bulls Gap Loves add \$450 monthly McNairy Loves \$300 monthly Residential \$500 -a couple of houses per year
2	Pump Septic Tank	\$ 700.00		\$ 700.00			
3	Septic Pumping	\$ 200.00		\$ 200.00			
4	<b>Sludge Removal Expense</b>	\$ 2,150.00	\$ -	\$ 2,150.00	\$ 8,250.00	\$ 9,500.00	
5	Peninsula Plant	\$ 563.99		\$ 563.99	\$ 13.59	\$ 577.58	
6	Cedar Brooke Plant	\$ 516.79		\$ 516.79	\$ 12.45	\$ 529.24	
7	Stone Bridge Plant	\$ 385.81		\$ 385.81	\$ 9.30	\$ 395.11	
8	McNairy Loves Plant	\$ 3,657.81		\$ 3,657.81	\$ 88.15	\$ 3,745.96	
9	Bulls Gap Plant	\$ 330.00	\$ 3,270.00	\$ 3,600.00	\$ 86.76	\$ 3,686.76	Bulls Gap Loves add \$300 monthly
10	<b>Power Purchased (Electric)</b>	\$ 5,454.40	\$ 3,270.00	\$ 8,724.40	\$ 210.26	\$ 8,934.66	
11	<b>Materials &amp; Supplies</b>	\$ 279.22	\$ -	\$ 279.22	\$ 6.73	\$ 285.95	2020 - \$35.95 bank Chekcs and \$243.27 Sign Replacement - Non-recurring
12	<b>Contract Services -Accounting</b>	\$ 45.00	\$ 1,355.00	\$ 1,400.00	\$ 33.74	\$ 1,433.74	
13	<b>Contract Services -Testing</b>	\$ -	\$ 6,400.00	\$ 6,400.00	\$ 154.24	\$ 6,554.24	\$1,600 per qtr (4 plants * \$400 each)
14	Plant Visits - Lori Zebley	\$ 549.00	\$ 651.00	\$ 1,200.00	\$ 28.92	\$ 1,228.92	\$50 per visit/month -add Bulls Gap Loves \$50 monthly \$240 per visit/month
15	Plant Visits - Sam Frazier	\$ 2,400.00	\$ 480.00	\$ 2,880.00	\$ 69.41	\$ 2,949.41	
16	Website cost - Dreamhost	\$ 11.95	\$ -	\$ 11.95	\$ 0.29	\$ 12.24	
17	Web Hosting - Dreamhost	\$ 286.20	\$ -	\$ 286.20	\$ 6.90	\$ 293.10	
18	Replace pump control panel	\$ -	\$ -	\$ -	\$ -	\$ -	Non-recurring 2020 - \$2,152.01 Advanced Septic is holding invoices until the utility is more Non-recurring capable of paying invoices.
19	Road Repair Peninsulas	\$ 742.00	\$ (742.00)	\$ -	\$ -	\$ -	
20	<b>Contract Services -Other</b>	\$ 3,989.15	\$ 389.00	\$ 4,378.15	\$ 105.51	\$ 4,483.66	
21	<b>Office supplies &amp; Expenses</b>	\$ 956.70	\$ (668.30)	\$ 288.40	\$ 211.60	\$ 500.00	Non-recurring 2020-Remote Access \$668.30
22	<b>Telephone &amp; Communications</b>	\$ 938.00	\$ (638.00)	\$ 300.00	\$ 7.23	\$ 307.23	Plant Internet should drop to about \$5 per month per plant *5 plants (routers)
23	<b>Utility Expense</b>	\$ 3,170.00	\$ 830.00	\$ 4,000.00	\$ 96.40	\$ 4,096.40	Annual -\$350 each for 8 SOP Permits, Every 5 years \$750 for update each plant permit (750*8/5)
24	Filing	179.6	\$ -	\$ 179.60	\$ 4.33	\$ 183.93	
25	Letter of Credit	\$ 521.78	\$ -	\$ 521.78	\$ 12.57	\$ 534.35	
26	Change name on LOC	\$ 75.00	\$ (75.00)	\$ -	\$ -	\$ -	Non-recurring Change name on LOC
27	Lawyer	\$ 3,225.00	\$ -	\$ 3,225.00	\$ 77.72	\$ 3,302.72	
28	<b>Regulatory Commission Expense</b>	\$ 4,001.38	\$ (75.00)	\$ 3,926.38	\$ 94.63	\$ 4,021.01	
29	<b>Maintenance Expenses</b>	\$ 803.64	\$ (803.64)	\$ -	\$ 3,000.00	\$ 3,000.00	Non-recurring 2020- \$632.82 Update <b>Plant Router</b> and \$155.82 <b>Sim cards</b> - Nonrecurring add \$3,000 annual expense for a maintenance and repair allowance \$200 per month
30	<b>Management Fee</b>	\$ -	\$ 2,400.00	\$ 2,400.00	\$ 57.84	\$ 2,457.84	
31	<b>Total Operating Expense</b>	\$ 21,787.49	\$ 12,459.06	\$ 34,246.55	\$ 12,228.18	\$ 45,574.73	

**Aqua Green, Inc.**  
Calculation of Inflation  
**For the 12 Months Attrition Period Ending December 31, 2022**

<b><u>YEAR</u></b>	<b><u>QUARTER</u></b>				<b>ATTR YR GDP IDP</b>
	<b>1/1 - 3/31</b>	<b>4/1 - 6/30</b>	<b>7/1 - 9/30</b>	<b>10/1 - 12/31</b>	
2019	111.514	112.152	112.517	112.978	112.2903
2020	113.346	112.859	113.888	114.439	<u>113.6330</u>
AVERAGE GDP DEFLATOR FOR YEAR 2020					1.20%
<b><u>Two-Year Inflation Factor</u></b>					1.0241 A/

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Table 1.1.9 (information available as of September, 2021).

A/ This number represents the GDP deflator compounded for 12 months of 2021 and 12 months in 2022.