STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. W-218, SUB 526A

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application by Aqua North Carolina, Inc., 202 MacKenan Court, Cary, North Carolina 27511, for Approval of Annual Adjustment to Conservation Pilot Program Revenue Reconciliation Charge/Credit	))))))	NOTICE OF PUBLIC STAFF'S PLAN TO PRESENT COMMENTS AND RECOMMENDATIONS AT THE COMMISSION'S APRIL 18, 2022 REGULAR STAFF CONFERENCE

NOW COMES THE PUBLIC STAFF – North Carolina Utilities Commission, by and through its Executive Director, Christopher J. Ayers, and notifies the Commission and Aqua North Carolina, Inc. (Aqua or Company), that the Public Staff plans to present its comments and recommendations regarding Aqua's February 14, 2022 Conservation Pilot Program Annual Reconciliation Request (Reconciliation Request) at the Commission's April 18, 2022 Regular Staff Conference.

On February 14, 2022, Aqua filed a Reconciliation Request pursuant to the Commission's Order Approving Partial Settlement Agreement and Stipulation, Deciding Contested Issues, Granting Partial Rate Increase, and Requiring Customer Notice (Sub 526 Rate Case Order) issued on October 26, 2020, in Docket No. W-218, Sub 526 (Sub 526 rate case).

In the Sub 526 rate case, Aqua proposed to implement a Conservation Pilot Program, including a revenue reconciliation process, for residential customers in five of the Company's service areas in North Carolina. The Sub 526 Rate Case

Order includes the following Findings of Fact regarding the Conservation Pilot Program and the revenue reconciliation process:

> 33. For the pilot program, Aqua NC proposed four usage tiers with inclining block rates and separate irrigation rates to be charged to residential water customers in the Arbor Run, Merion, Pebble Bay, and Bayleaf Master System service areas (a portion of the Aqua NC Water Rate Division) and The Cape service area (Fairways Water Rate Division). The Company stated that its pilot program proposal is contingent upon Commission approval of its proposed revenue reconciliation process specific to the pilot areas. *According to Aqua NC, the purpose of the proposed revenue reconciliation process is to assure that the Company will receive its full authorized revenue requirement, no more and no less.*
>
> . . . .
>
> 43. It is reasonable and appropriate that a Conservation Pilot Program be designed to maintain revenue sufficiency and stability for Aqua NC. *A revenue reconciliation mechanism is appropriate to support the Company's reasonable opportunity to recover its full Commission-approved revenue requirements despite implementation of a Conservation Pilot Program.*
>
> . . . .
>
> 44. *For purposes of implementing the Conservation Pilot Program in a portion of the Aqua NC Water Rate Division, a revenue reconciliation process applicable only to the pilot group is in the public interest. It is reasonable and appropriate that a revenue reconciliation process as set forth by the Company be integral to the pilot program*; however, such revenue reconciliation process allowed in this docket for this specific purpose is not intended to establish the process by which any future revenue reconciliation for Aqua NC or other regulated utilities related to actual consumption variances from Commission-approved levels in general rate case proceedings as allowed by N.C. [Gen. Stat.] § 62-133.12A will be calculated.

(Emphasis added.)

As the Commission noted in its Finding of Fact 33 above, Aqua has stated that the purpose of the revenue reconciliation process is to assure that it will receive its full authorized revenue requirement for the water systems included in the pilot program, no more and no less. However, the Direct Exhibit 4 and Revised Direct Exhibit 4 of Aqua witness Edward Thill filed in the Sub 526 rate case are inconsistent with that statement. Thill Direct Exhibit 4 and Thill Revised Direct Exhibit 4 provided sample revenue reconciliation calculations under three different scenarios. Under Scenario 2, the average usage, and thereby the average usage charge per customer bill, is greater than the average revenue per bill as authorized. In Thill Direct Exhibit 4, the excess average usage charge was to be refunded as a monthly flat rate bill credit to pilot customers over the remaining nine months of the calendar year. In Thill Revised Direct Exhibit 4, the excess average usage charge was to be refunded as a monthly flat rate bill credit to pilot customers over 12 months. Under Scenario 2 in both Thill Direct Exhibit 4 and Thill Revised Direct Exhibit 4, the revenue excess to be refunded produced by Aqua's recommended calculation methodology[1] is equal to $39,179, which is also the Commission authorized usage revenue requirement subtracted from the actual usage revenue collected during the actual 12 months, shown by the Public Staff's highlighted modifications to Thill Direct Exhibit 4 (see **Exhibit A**) and Thill Revised Direct Exhibit 4 (see **Exhibit B**). The calculation methodologies of Aqua and the Public Staff will also net the same result if base facility charge revenue is included in the reconciliation because the same number of bills will result in the base facility

[1] Dividing the volumetric revenue requirement by the number of bills used in determining rates provides Aqua with the Revenue per Bill - as Authorized. Aqua would perform a similar calculation using actual data in the 12 full months following implementation of rates to determine the Revenue per Bill - Actual. The difference between those actual and authorized averages would define the Company's Average per Customer Usage Excess or Deficit. Dividing that Excess or Deficit by the Revenue per Bill - as Authorized provides Aqua's Excess or Deficit Rate. The Rate is then multiplied by the originally authorized volumetric revenue to determine the value of the excess or deficit. (Sub 526 Rate Case Order at 105.)

charge revenues in the determinants and actuals being equal as growth was not considered in witness Thill's illustrations.

In the Sub 526 rate case, the pilot program-annualized billing determinants were 81,972 bills and 562,713,732 gallons, resulting in a monthly average consumption per bill of 6,865 gallons. It is the Public Staff's understanding that the pilot program service revenue requirement authorized by the Commission was $5,482,975, comprised of $1,696,820 for base facility charges and $3,786,155 for consumption charges. During the 12 months of 2021, Aqua issued 83,550 bills for 579,753,300 gallons, resulting in a monthly average consumption per bill of 6,939 gallons. The actual pilot program service revenue was approximately $5,691,105, comprised of $1,729,485 for base facility charges and $3,961,620 for consumption charges. In comparison to the pilot program billing determinants and revenue requirement approved in the Sub 526 rate case, Aqua issued 1,578 more bills for 17,039,568 more gallons in the 12 months of 2021, resulting in the collection of an additional $208,130 of service revenue, comprised of $32,665 for base facility charges and $175,465 for consumption charges.

In its Reconciliation Request, Aqua compared the monthly average bill amount for consumption charges utilizing the number of bills and total consumption from the Sub 526 rate case ($46.19) and from the actual 12 months of 2021 ($47.42) and calculated a revenue excess of $1.23 per bill. Aqua proposes to refund a total of $102,766.50, which is the revenue excess of $1.23 per bill multiplied by the 83,550 bills issued to pilot program customers in 2021. Instead of issuing monthly flat rate bill credits in each of the nine remaining months of the year, as Aqua illustrated in Thill Direct Exhibit 4 and recommended in the Sub 526 rate case, the Reconciliation Request proposes issuing, in April 2022 or subsequent to the Commission's issuance of an order in this matter, a one-time, flat rate bill credit of $14.56 to each pilot program customer as of December 2021.

In comparison to the pilot program billing determinants and revenue requirement approved in the Sub 526 rate case, Aqua billed for 17,039,568 more gallons in the 12 months of 2021, resulting in the collection of $175,465, shown by the Public Staff's highlighted modifications to Appendix A of Aqua's Reconciliation Request (see **Exhibit C**), for consumption charges in excess of the "block revenue" requirement authorized by the Commission.

In the scenarios shown in Thill Direct Exhibit 4 and Thill Revised Direct Exhibit 4, the bill count in rate design and the actual bill count were equal. Assuming the purpose of the revenue reconciliation process is to assure that the Aqua will receive its full authorized service revenue requirement (allocated as part of rate design between the base facility charge and consumption charge revenues utilizing the approved billing determinants), for the water systems included in the pilot program, no more and no less, and that there was no growth consistent with witness Thill's scenarios, Aqua's proposed revenue excess to be refunded would be $175,420.08 instead of $102,766.50, shown by the Public Staff's highlighted modifications to Appendix A of Aqua's Reconciliation Request (see **Exhibit D**).

In its Sub 526 Rate Case Order, the Commission authorized revenue requirements for Aqua's five rate divisions, and a portion of the Aqua NC Water rate division, which includes the Arbor Run, Merion, Pebble Bay, and Bayleaf

Master System service areas. The Commission did not authorize a specific service revenue requirement per bill or per customer for any of the rate divisions, or the Conservation Pilot Program service areas. While it is possible using simple mathematics to calculate the service revenue requirement amount per bill or customer, the service revenue requirement is not determined based on number of bills or customers, or on usage. Instead, it is an annualized amount that includes reasonable operating expenses and an authorized overall rate of return using the rate base method as allowed by N.C.G.S. § 62-133. The base facility charge and usage charge are set to generate the service revenue requirement utilizing billing determinants and rate design criteria. Aqua should not be allowed to retain excess revenues because it proposed a revenue reconciliation methodology that was not comprehensive of the likely outcome scenarios. Given that the entirety of the "block revenue" difference, [(D)-(A)], was calculated to be revenue excess refunded to customers under Scenario 2 of Thill Direct Exhibit 4 and Thill Revised Direct Exhibit 4, it is not appropriate for Aqua to retain a significant portion of those usage charge revenues simply because more bills were issued than were included in rate design.

The Public Staff recommends that the entire $208,130 of service revenue in excess of the service revenue requirement approved by the Commission in the Sub 526 rate case be refunded as a one-time, flat rate bill credit of $29.48, plus interest pursuant to N.C.G.S. § 62-130(e). These amounts and the calculations are shown in the Public Staff's highlighted modifications to Appendix A of Aqua's Reconciliation Request (see **Exhibit E**). The Public Staff further recommends that the bill credit, plus interest, be issued as part of Aqua's next billing cycle, but no later than May 31, 2022. The Public Staff is of the opinion that this timing would best preserve the conservation signal the pilot program is intended to produce. During 2021, the pilot program customers used considerably more water in the months of May through October as compared to the annual average (see **Exhibit F)**.

In its Reconciliation Request, Aqua requests that the Commission rule that no interest must be assessed on the excess revenue to be refunded to customers due to the complexity of determining the amount of interest due and the "negligible" amount of interest that would be due.

In prior cases, the Commission has addressed the appropriate interest rate of refunds under N.C.G.S. § 62-130(e), which states:

> In all cases where the Commission requires or orders a public utility to refund moneys to its customers which were advanced by or overcollected from its customers, the Commission shall require or order the utility to add to said refund an amount of interest at such rate as the Commission may determine to be just and reasonable; provided, however, that such rate of interest applicable to said refund shall not exceed ten percent (10%) per annum.

In its Order Granting Partial Rate Increase and Requiring Customer Notice issued on April 15, 2015, in Docket No. W-354, Sub 266, the Commission concluded that the just and reasonable interest rate to be applied under N.C.G.S. § 62-130(e) is the maximum statutory rate of 10%. In that order, the Commission stated:

> [T]hat the appropriate interest rate on the refunds is 10%, compounded annually, consistent with the refund of gross-up in other cases. As discussed by the Commission in Docket No. E-7, Sub 501, since 1981, when G.S. 62-130(e) was enacted, the Commission has consistently used 10% to calculate interest on utility refunds. Since

that time, interest rates have moved up and down. The Commission has used 10% notwithstanding the level of interest rates in the economy on the theory that 10% provides for adequate compensation over the long term considering the fact that a policy of tracking the general level of interest rates would lead to the denial of fair compensation in times when the interest rates exceed the statutory cap of 10%. In addition, the use of a 10% interest rate is also appropriate because the recipient of the return might have been able to avoid incurring higher cost debt, such as credit card debt, which typically involves an interest rate of more than 10%. Accordingly, the Commission is of the opinion that 10% continues to be a just and reasonable rate.

Based on the foregoing, the Public Staff recommends an interest rate of 10% per annum be used in determining the interest on any excess revenues collected from pilot program customers, which is allowable pursuant N.C.G.S. § 62-130(e) and consistent with the interest rate applied to over collections of WSIC and SSIC surcharges. Applying 10% annual interest for four months to the amount of $29.48 equals $0.98, resulting in a recommended one-time, flat rate bill credit of $30.46.

On February 3, 2022, the Public Staff notified the Company of the recommendations detailed in this Notice, as well as its recommendation that the refund be issued to pilot program customers as of December 2021 in the form of a one-time, flat rate bill credit. The Company implemented this recommendation but did not agree with the Public Staff's remaining recommendations detailed in this Notice.

Public Staff Recommendation

The Public Staff plans to present this matter at the Commission's April 18, 2022 Regular Staff Conference and to recommend that Aqua be allowed to implement the revenue reconciliation credit recommended by the Public Staff as part of Aqua's next billing cycle, but no later than May 31, 2022. The Public Staff further recommends that the Commission direct Aqua to file any response to this Notice within seven days in order to provide the Commission with adequate time to review the parties' respective positions.

Respectfully submitted this the 1st day of April, 2022.

PUBLIC STAFF
Christopher J. Ayers
Executive Director

Dianna W. Downey
Chief Counsel

Electronically submitted
/s/ Megan Jost
Staff Attorney

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CERTIFICATE OF SERVICE

I hereby certify that I served the foregoing Public Staff Notice on all parties of record, or their attorneys, or both, by United States mail, first class or better; by hand delivery; or by means of facsimile or electronic delivery upon agreement of the receiving party.

This the 1st day of April, 2022.

Electronically submitted
/s/ Megan Jost

Docket No. W-218, Sub 526A
Public Staff Exhibit A

Thill Direct Exhibit 4

Aqua North Carolina, Inc.
Docket No. W-218, Sub 526
Illustration of Revenue Reconciliation for Pilot Program

Scenario 1 - Total gallons consumed equal that used in determining rates, but allocation between consumption tiers is different

	Determinants used in calculating rates							Assumed "Actuals" for Illustration			
	Upper Limit	Factor	$/kGal	Usg kGals	Revenue			Usg kGals		Revenue	
Block 1	4,000	1.00	$ 4.65	250,000	$ 1,162,500			260,000		$ 1,209,000	
Block 2	8,000	1.50	$ 6.98	100,000	$ 698,000			95,000		$ 663,100	
Block 3	15,000	2.25	$ 10.46	90,000	$ 941,400			90,000		$ 941,400	
Block 4	15,000+	3.00	$ 13.95	80,000	$ 1,116,000			75,000		$ 1,046,250	
			7.53	520,000	$ 3,917,900	(A)		520,000	(J)	$ 3,859,750	(D)
			Bill count in rate design		79,200	(B)	Actual bill count			80,000	(E)
			Revenue per Bill as Authorized [(A)/(B)]		$ 49.47	(C)	Rev/Bill-Actual [(D)/(E)]			$ 48.25	(F)
							Average per Customer Usage Excess/Deficit [(F)-(C)]			$ (1.22)	(G)
							Excess/Deficit Rate [(G)/(C)]			-2.47%	(H)

Revenue **DEFICIT** to be recovered on a **VOLUMETRIC BASIS:**

Revenue deficit to be recovered [(A)*(H)]	$	96,748	(I)
Surcharge **per kilogallon** [(I)/(J*9/12)]	$	0.25	*

Scenario 2 - Customers conserve 1% LESS than modeled for rates; average consumption is HIGHER than in rates

	Determinants in calculating rates							Assumed "Actuals" for Illustration			
	Upper Limit	Factor	$/kGal	Usg kGals	Revenue			Actual		Revenue	
Block 1	4,000	1.00	$ 4.65	250,000	$ 1,162,500			252,500		$ 1,174,125	
Block 2	8,000	1.50	$ 6.98	100,000	$ 698,000			101,000		$ 704,980	
Block 3	15,000	2.25	$ 10.46	90,000	$ 941,400			90,900		$ 950,814	
Block 4	15,000+	3.00	$ 13.95	80,000	$ 1,116,000			80,800		$ 1,127,160	
			7.53	520,000	$ 3,917,900	(A)		525,200	(J)	$ 3,957,079	(D)
			Bill count in rate design		79,200	(B)	Actual bill count			79,200	(E)
			Revenue per Bill as Authorized [(A)/(B)]		$ 49.47	(C)	Rev/Bill-Actual [(D)/(E)]			$ 49.96	(F)
							Average per Customer Usage Excess/Deficit [(F)-(C)]			$ 0.49	(G)
							Excess/Deficit Rate [(G)/(C)]			1.00%	(H)

Revenue **EXCESS** to be refunded as a **FLAT RATE CREDIT**:

Revenue excess to be refunded [(A)*(H)]	$	39,179	(I)	[(D)-(A)]	$ 39,179
Surcredit **per customer** [(I)/(E*9/12)]	$	0.66	*	[(I)/(E*9/12)]	$ 0.66

Scenario 3 - Customers conserve MORE than modeled for rates; average consumption is LOWER than in rates

	Determinants in calculating rates							Assumed "Actuals" for Illustration			
	Upper Limit	Factor	$/kGal	Usg kGals	Revenue			Actual		Revenue	
Block 1	4,000	1.00	$ 4.65	250,000	$ 1,162,500			247,500		$ 1,150,875	
Block 2	8,000	1.50	$ 6.98	100,000	$ 698,000			99,000		$ 691,020	
Block 3	15,000	2.25	$ 10.46	90,000	$ 941,400			89,100		$ 931,986	
Block 4	15,000+	3.00	$ 13.95	80,000	$ 1,116,000			79,200		$ 1,104,840	
			7.53	520,000	$ 3,917,900	(A)		514,800	(J)	$ 3,878,721	(D)
			Bill count in rate design		79,200	(B)	Actual bill count			79,200	(E)
			Revenue per Bill as Authorized [(A)/(B)]		$ 49.47	(C)	Rev/Bill-Actual [(D)/(E)]			$ 48.97	(F)
							Average per Customer Usage Excess/Deficit [(F)-(C)]			$ (0.49)	(G)
							Excess/Deficit Rate [(G)/(C)]			-1.00%	(H)

Revenue **DEFICIT** to be recovered on a **VOLUMETRIC BASIS:**

Revenue deficit to be recovered [(A)*(H)]	$	39,179	(I)
Surcharge **per kilogallon** [(I)/(J*9/12)]	$	0.10	*

* The revenue adjustment will be collected or refunded over 9 months (after allowing 3 months for computation of the adjustment) following the end of each 12 month period after implementation of new rates.

Docket No. W-218, Sub 526A
Public Staff Exhibit B

Aqua North Carolina, Inc.
Docket No. W-218, Sub 526
Illustration of Revenue Reconciliation for Pilot Program

Thill Revised Direct Exhibit 4

Scenario 1 - Total gallons consumed equal that used in determining rates, but allocation between consumption tiers is different

	Determinants used in calculating rates						Assumed "Actuals" for Illustration		
	Upper Limit	Factor	$/kGal	Usg kGals	Revenue		Usg kGals	Revenue	
Block 1	4,000	1.00	$ 4.65	250,000	$ 1,162,500		260,000	$ 1,209,000	
Block 2	8,000	1.50	$ 6.98	100,000	$ 698,000		95,000	$ 663,100	
Block 3	15,000	2.25	$ 10.46	90,000	$ 941,400		90,000	$ 941,400	
Block 4	15,000+	3.00	$ 13.95	80,000	$ 1,116,000		75,000	$ 1,046,250	
			7.53	520,000	$ 3,917,900	**(A)**	520,000 **(J)**	$ 3,859,750	**(D)**
				Bill count in rate design	79,200	**(B)**	Actual bill count	79,200	**(E)**
				Revenue per Bill as Authorized [(A)/(B)]	$ 49.47	**(C)**	Rev/Bill-Actual [(D)/(E)]	$ 48.73	**(F)**
							Average per Customer Usage Excess/Deficit [(F)-(C)]	$ (0.73)	**(G)**
							Excess/Deficit Rate [(G)/(C)]	-1.48%	**(H)**

Revenue **DEFICIT** to be recovered on a **VOLUMETRIC BASIS:**

Revenue deficit to be recovered [(A)*(H)]	$ 58,150	**(I)**
Surcharge **per kilogallon** [(I)/(J*9/12)]	$ 0.15	*****

Scenario 2 - Customers conserve 1% LESS than modeled for rates; average consumption is HIGHER than in rates

	Determinants in calculating rates						Assumed "Actuals" for Illustration		
	Upper Limit	Factor	$/kGal	Usg kGals	Revenue		Actual	Revenue	
Block 1	4,000	1.00	$ 4.65	250,000	$ 1,162,500		252,500	$ 1,174,125	
Block 2	8,000	1.50	$ 6.98	100,000	$ 698,000		101,000	$ 704,980	
Block 3	15,000	2.25	$ 10.46	90,000	$ 941,400		90,900	$ 950,814	
Block 4	15,000+	3.00	$ 13.95	80,000	$ 1,116,000		80,800	$ 1,127,160	
			7.53	520,000	$ 3,917,900	**(A)**	525,200 **(J)**	$ 3,957,079	**(D)**
				Bill count in rate design	79,200	**(B)**	Actual bill count	79,200	**(E)**
				Revenue per Bill as Authorized [(A)/(B)]	$ 49.47	**(C)**	Rev/Bill-Actual [(D)/(E)]	$ 49.96	**(F)**
							Average per Customer Usage Excess/Deficit [(F)-(C)]	$ 0.49	**(G)**
							Excess/Deficit Rate [(G)/(C)]	1.00%	**(H)**

Revenue **EXCESS** to be refunded as a **FLAT RATE CREDIT**:

Revenue excess to be refunded [(A)*(H)]	$ 39,179	**(I)**	[(D)-(A)]	$ 39,179
Surcredit **per customer** [(I)/(E)]	$ 0.49	*	[(I)/(E)]	$ 0.49

Scenario 3 - Customers conserve MORE than modeled for rates; average consumption is LOWER than in rates

	Determinants in calculating rates						Assumed "Actuals" for Illustration		
	Upper Limit	Factor	$/kGal	Usg kGals	Revenue		Actual	Revenue	
Block 1	4,000	1.00	$ 4.65	250,000	$ 1,162,500		247,500	$ 1,150,875	
Block 2	8,000	1.50	$ 6.98	100,000	$ 698,000		99,000	$ 691,020	
Block 3	15,000	2.25	$ 10.46	90,000	$ 941,400		89,100	$ 931,986	
Block 4	15,000+	3.00	$ 13.95	80,000	$ 1,116,000		79,200	$ 1,104,840	
			7.53	520,000	$ 3,917,900	**(A)**	514,800 **(J)**	$ 3,878,721	**(D)**
				Bill count in rate design	79,200	**(B)**	Actual bill count	79,200	**(E)**
				Revenue per Bill as Authorized [(A)/(B)]	$ 49.47	**(C)**	Rev/Bill-Actual [(D)/(E)]	$ 48.97	**(F)**
							Average per Customer Usage Excess/Deficit [(F)-(C)]	$ (0.49)	**(G)**
							Excess/Deficit Rate [(G)/(C)]	-1.00%	**(H)**

Revenue **DEFICIT** to be recovered on a **VOLUMETRIC BASIS:**

Revenue deficit to be recovered [(A)*(H)]	$ 39,179	**(I)**
Surcharge **per kilogallon** [(I)/(J)]	$ 0.08	*****

* The revenue adjustment will be collected or refunded over 12 months (after allowing 3 months for computation of the adjustment) following the end of each 12 month period after implementation of new rates.

Docket No. W-218, Sub 526A
Public Staff Exhibit C

NC Tier Pilot - 2021 YEAR-END Revenue Reconciliation

Row	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Based on Scenario 2 of NC Thill Ex.4 from W-218 Sub 526							
2	**Scenario 2 - Customers conserve LESS than modeled for rates; average consumption is HIGHER than in rates**							
3	**Rate Order Rate Design (W-218 Sub 526) - per NCUC**							
4	**$/kGal**	**Usage Kgals**	**Block Revenue**					
5	$ 6.73	562,714	$ 3,786,155.00	**(A)**				
6		Bill count in rate design	81,972	**(B)**				
7		Gallons per Bill	6,865	**Line 5 Kgal / (B) x 1000**				
8		Revenue per Bill as Authorized [(A)/(B)]	$ 46.19	**(C)**				
9								
10	**Actual 2021 Billing Information (from Summary schedules in this filing)**							
11	**$/kGal**	**Usage Kgals**	**Block Revenue**					
12	$ 6.83	579,753	$ 3,961,620.00	**(D)**				
13		Actual 2021 Bill Count	83,550	**(E)**				
14		Gallons per Bill	6,939	**Line 12 Kgal / (E) x 1000**				
15		Revenue per Bill-Actual [(D)/E)]	$ 47.42	**(F)**				
16		Revenue per Bill Excess/(Deficit) [(F)-(C)	$ 1.23	**(G)**				
17		Excess/(Deficit) Rate [(G)/(C)]	2.7%	**(H)**				
18								
19	Revenue **EXCESS** to be refunded as a **FLAT RATE CREDIT**:							
20		Revenue Excess to be refunded [(E) * (G)]	$ 102,766.50	**(I)**	[(D) - (A)]	$ 175,465.00		
21		Year-end 2021 Bill Count	7,059	**(J) below**				
22		Proposed refund to each year-end customer	$ 14.56	**applied during April 2022**				
23								
24								
25	(A) & (B) final rate design numbers provided to Company by NCUC							
26	(D) & (E) from the Tiered Pilot summary in Aqua NC's Compliance Filing Pursuant to Ordering Paragraph 14 of W-218 Sub 526, filed on 1/31/2022							

Docket No. W-218, Sub 526A
Public Staff Exhibit D

NC Tier Pilot - 2021 YEAR-END Revenue Reconciliation

Row	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Based on Scenario 2 of NC Thill Ex.4 from W-218 Sub 526							
2	**Scenario 2 - Customers conserve LESS than modeled for rates; average consumption is HIGHER than in rates**							
3	**Rate Order Rate Design (W-218 Sub 526) - per NCUC**							
4	**$/kGal**	**Usage Kgals**	**Block Revenue**		**Base Revenue**	**Service Revenue**		
5	$ 6.73	562,714	$ 3,786,155.00	**(A)**	$ 1,696,820.40	$ 5,482,975.40		
6		Bill count in rate design	81,972	**(B)**	81,972	81,972		
7		Gallons per Bill	6,865	**Line 5 Kgal / (B) x 1000**				
8		Revenue per Bill as Authorized [(A)/(B)]	$ 46.19	**(C)**	$ 20.70	$ 66.89		
9								
10	**Actual 2021 Billing Information (from Summary schedules in this filing)**							
11	**$/kGal**	**Usage Kgals**	**Block Revenue**		**Base Revenue**	**Service Revenue**		
12	$ 6.83	579,753	$ 3,961,620.00	**(D)**	$ 1,696,820.40	$ 5,658,440.40		
13		2021 Bill Count with No Growth	81,972	**(E)**	81,972	81,972		
14		Gallons per Bill	7,073	**Line 12 Kgal / (E) x 1000**				
15		Revenue per Bill-Actual [(D)/E)]	$ 48.33	**(F)**	$ 20.70	$ 69.03		
16		Revenue per Bill Excess/(Deficit) [(F)-(C)]	$ 2.14	**(G)**	$ -	$ 2.14		
17		Excess/(Deficit) Rate [(G)/(C)]	4.6%	**(H)**	0.0%	3.2%		
18								
19	Revenue **EXCESS** to be refunded as a **FLAT RATE CREDIT**:							
20		Revenue Excess to be refunded [(E) * (G)]	$ 175,420.08	**(I)**	[(D)-(A)] = [(f)12-(f)5]	$ 175,465.00		
21		Year-end 2021 Bill Count	7,059	**(J) below**		7,059		
22		Proposed refund to each year-end customer	$ 24.85	**applied during April 2022**		$ 24.86		
23					difference [(f)22 - (c)22]	$ 0.01	rounding error	
24								
25	(A) & (B) final rate design numbers provided to Company by NCUC							
26	(D) & (E) from the Tiered Pilot summary in Aqua NC's Compliance Filing Pursuant to Ordering Paragraph 14 of W-218 Sub 526, filed on 1/31/2022							

Docket No. W-218, Sub 526A
Public Staff Exhibit E

NC Tier Pilot - 2021 YEAR-END Revenue Reconciliation

Row	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Based on Scenario 2 of NC Thill Ex.4 from W-218 Sub 526							
2	**Scenario 2 - Customers conserve LESS than modeled for rates; average consumption is HIGHER than in rates**							
3	**Rate Order Rate Design (W-218 Sub 526) - per NCUC**							
4	**$/kGal**	**Usage Kgals**	**Block Revenue**		**Base Revenue**	**Service Revenue**		
5	$ 6.73	562,714	$ 3,786,155.00	**(A)**	$ 1,696,820.40	$ 5,482,975.40		
6		Bill count in rate design	81,972	**(B)**	81,972	81,972		
7		Gallons per Bill	6,865	**Line 5 Kgal / (B) x 1000**				
8		Revenue per Bill as Authorized [(A)/(B)]	$ 46.19	**(C)**	$ 20.70	$ 66.89		
9								
10	**Actual 2021 Billing Information (from Summary schedules in this filing)**							
11	**$/kGal**	**Usage Kgals**	**Block Revenue**		**Base Revenue**	**Service Revenue**		
12	$ 6.83	579,753	$ 3,961,620.00	**(D)**	$ 1,729,485.00	$ 5,691,105.00		
13		Actual 2021 Bill Count	83,550	**(E)**	83,550	83,550		
14		Gallons per Bill	6,939	**Line 12 Kgal / (E) x 1000**				
15		Revenue per Bill-Actual [(D)/E)]	$ 47.42	**(F)**	$ 20.70	$ 68.12		
16		Revenue per Bill Excess/(Deficit) [(F)-(C)]	$ 1.23	**(G)**	$ -	$ 1.23		
17		Excess/(Deficit) Rate [(G)/(C)]	2.7%	**(H)**	0.0%	1.8%		
18								
19	Revenue **EXCESS** to be refunded as a **FLAT RATE CREDIT**:							
20		Revenue Excess to be refunded [(E) * (G)]	$ 102,766.50	**(I)**	[(f)12-(f)5]	$ 208,129.60		
21		Year-end 2021 Bill Count	7,059	**(J) below**		7,059		
22		Proposed refund to each year-end customer	$ 14.56	**applied during April 2022**		$ 29.48		
23								
24								
25	(A) & (B) final rate design numbers provided to Company by NCUC							
26	(D) & (E) from the Tiered Pilot summary in Aqua NC's Compliance Filing Pursuant to Ordering Paragraph 14 of W-218 Sub 526, filed on 1/31/2022							

Docket No. W-218, Sub 526A
Public Staff Exhibit F