<u>Carolina Water Service, Inc. of NC</u> Docket No. W-354, Sub 356A & Sub 360 Calculation of WSIC & SSIC Revenue Requirement WSIC & SSIC Period 1 - Six Months Ended 9/30/19 Appendix A Page 1 of 5 Updated Per Sub 360 Final Order

Line No.	<u>ltem</u>	Year 1 (4/1/19 -3/31/20)
		(a)
1	UNIFORM WATER OPERATIONS	625.475
2	Plant in service	635,175
3	Accumulated depreciation	(11,486)
4	ADIT	(4,658)
5	Net plant investment (L2 + L3 + L4)	619,031
6	Pre-tax rate of return	9.23%
7	Capital costs (L5 x L6)	57,137
8	Depreciation expense	10,847
9	Subtotal, excluding regulatory fee (L7 + L8)	67,984
10	Regulatory fee gross-up factor	0.99860
11	Annual WSIC revenue requirement (L9 / L10)	68,080
12	Projected 12-month revenues	17,421,887
13	WSIC charge (L11 / L12)	0.39%
14		
15	UNIFORM SEWER OPERATIONS	
16	Plant in service	\$364,509
17	Accumulated depreciation	(16,799)
18	ADIT	(328)
19	Net plant investment (L16 + L17 + L18)	347,382
20	Pre-tax rate of return	9.23%
21	Capital costs (L19 x L20)	32,063
22	Depreciation expense	16,475
23	Subtotal, excluding regulatory fee (L21 + L22)	48,538
24	Regulatory fee gross-up factor	0.99860
25	Annual SSIC revenue requirement (L23 / L24)	48,606
26	Projected 12-month revenues	11,815,536
27	SSIC charge (L25 / L26)	0.41%
28		
29	BF/FH/TC WATER OPERATIONS	
30	Plant in service	\$47,676
31	Accumulated depreciation	(878)
32	ADIT	(346)
33	Net plant investment (L30 + L31 + L32)	46,452
34	Pre-tax rate of return	9.23%
35	Capital costs (L33 x L34)	4,288
36	Depreciation expense	856
37	Subtotal, excluding regulatory fee (L35 + L36)	5,144
38	Regulatory fee gross-up factor	0.99860
39	Annual WSIC revenue requirement (L37 / L38)	5,152
40	Projected 12-month revenues	1,316,712
41	WSIC charge (L39 / L40)	0.39%
42		
43	BF/FH/TC SEWER OPERATIONS	
44	Plant in service	\$22,263
45	Accumulated depreciation	(476)
46	ADIT	(146)
47	Net plant investment (L44 + L45 + L46)	21,641
48	Pre-tax rate of return	9.23%
49	Capital costs (L47 x L48)	1,997
50	Depreciation expense	439
51	Subtotal, excluding regulatory fee (L49 + L50)	2,436
52	Regulatory fee gross-up factor	0.99860
53	Annual SSIC revenue requirement (L51 / L52)	2,440
54	Projected 12-month revenues	2,149,100
55	SSIC charge (L54 / L55)	0.11%
,,,	22.0 2.1018c (E2+) E23)	0.11/6

Carolina Water Service, Inc. of NC

Docket No. W-354, Sub 356A & Sub 360
Plant and Depreciation Expense for the
WSIC & SSIC Period 1 - Six Months Ended 9/30/19
Based on Plant Additions Through 12/31/18

Line No.

2

3

4 5

6 7

8 9 10

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17 18

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28

BF/FH/TC WATER OPERATIONS

BF/FH/TC SEWER OPERATIONS

1380 - Pumping Equipment Pump

1350 - Sewer Gravity Main

1360 - Services to Customers

1125 - T&D Mains

1130 - Service Lines

Total BF/FH/TC Water

Total BF/FH/TC Sewer

1.00%

2.00%

1.00%

1.33%

14.29%

2,727

7,998

10,725

2,750

2,750

480

1,348

1,348

6,988

7,860

873

11,303

11,303

9,700

9,700

6,762

6,762

1,403

1,403

4,400

4,880

550

550

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97

759

856

125

112

203

439

45

405

450

69

62

125

256

<u>Item</u>	Depr. Rate (a)	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total 7/11- 12/31/2018 Additions	Total Plant in Service (j)	Annual Depr. Expense 4/1/2019- 3/31/20 (k)	Accum. Depr. as of 4/1/19	Annual Depr. Expense for this Period Additions	Accum. Depr. For this Period Additions
UNIFORM WATER OPERATIONS	2 220/												
1105 - Electric Pum Equip WTP 1125 - T&D Mains	3.33% 1.00%	35,624	54,486	56,514	36,969	26,949	22,879	233,423	233,423	- 2,334	- 1,333	2,334	1,333
						,			,		,		
1130 - Service Lines	2.00%	70,100	69,498	49,345	74,147	56,741	38,957	358,788	358,788	7,176	4,028	7,176	4,028
1135 - Meters	3.33%	3,136	4,893	4,598	4,094	4,502	6,593	27,817	27,817	926	480	926	480
1140 - Meter Installations	3.33%				750	2,850	300	3,900	3,900	130	55	130	55
1145 - Hydrants	2.50%	625	2,846	4,383	3,392			11,247	11,247	281	165	281	165
Total Uniform Water		109,485	131,724	114,841	119,352	91,043	68,730	635,175	635,175	10,847	6,062	10,847	6,062
UNIFORM SEWER OPERATIONS													
1345 - Sewer Force Main	1.33%		867	2,762	1,850	850	1,434	7,763	7,763	103	52	103	52
1350 - Sewer Gravity Main	1.00%		17,455	8,911	39,625	94,181	2,850	163,022	163,022	1,630	768	1,630	768
1360 - Services to Customers	1.33%	13,564	5,098	11,161	8,773	11,354	6,497	56,447	56,447	751	417	751	417
1380 - Pumping Equipment Pump	14.29%	9,819	20,628	8,008	14,229	22,567	14,310	89,561	89,561	12,798	6,727	12,798	6,727
1400 - Treat/Disp Equip Trt Pl	2.50%		-	-	47,715	-	-	47,715	47,715	1,193	596	1,193	596
Total Uniform Sewer		23,383	44,047	30,842	112,192	128,953	25,091	364,509	364,509	16,475	8,562	16,475	8,562

6,500

6,158

12,658

9,707

37,969

47,676

12,450

8,391

1,423

22,263

9,707

37,969

47,676

12,450

8,391

1,423

22,263

97

759

856

125

112

203

439

45

405

450

69

62

125

256

WSIC & SSIC Plant Additions

<u>Carolina Water Service, Inc. of NC</u> Docket No. W-354, Sub 356A & Sub 360 Calculation of Accumulated Depreciation and ADIT WSIC & SSIC Period 1 - Six Months Ended 9/30/19

Appendix A Page 3 of 5 Updated Per Sub 360 Final Order

Line No.	<u>Item</u>	Year 1 (4/1/19 -3/31/20)
	LINIFORM WATER OPERATIONS	(a)
1 2	UNIFORM WATER OPERATIONS Assumulated depresention beginning balance	(¢6.063)
3	Accumulated depreciation beginning balance	(\$6,062)
4	WSIC & SSIC depreciation expense Ending balance (L2 + L3)	(10,847)
5	Average accumulated depreciation for year ((L2 + L4) / 2)	(16,910)
5	Average accumulated depreciation for year ((L2 + L4) / 2)	(\$11,486)
6	Tax depreciation reserve beginning balance	(\$19,055)
7	WSIC & SSIC tax depreciation expense	(25,407)
8	Ending balance (L6 + L7)	(44,462)
9	Average tax depreciation reserve for year ((L6 + L8) / 2)	(31,758)
10	Average book depreciation reserve for year (L5)	(11,486)
11	Difference between tax and book reserves (L9 - L10)	(20,272)
12	Composite tax rate	22.98%
13	Average ADIT (L11 x L12)	(\$4,658)
14	UNIFORM SEWER OPERATIONS	
15	Accumulated depreciation beginning balance	(8,562)
16	WSIC & SSIC depreciation expense	(16,475)
17	Ending balance (L15 + L16)	(25,037)
18	Average accumulated depreciation for year ((L15 + L17) / 2)	(\$16,799)
19	Tax depreciation reserve beginning balance	(\$10,935)
20	WSIC & SSIC tax depreciation expense	(14,580)
21	Ending balance (L19 + L20)	(25,515)
22	Average tax depreciation reserve for year ((L19 + L21) / 2)	(18,225)
23	Average book depreciation reserve for year (L18)	(16,799)
24	Difference between tax and book reserves (L22 - L23)	(1,426)
25	Composite tax rate	22.98%
26	Average ADIT (L24 x L25)	(\$328)
27	BF/FH/TC WATER OPERATIONS	
28	Accumulated depreciation beginning balance	(\$450)
29	WSIC & SSIC depreciation expense	(856)
30	Ending balance (L28 + L29)	(1,307)
31	Average accumulated depreciation for year ((L28 + L30) / 2)	(\$878)
32	Tax depreciation reserve beginning balance	(\$1,431)
33	WSIC & SSIC tax depreciation expense	(1,907)
34	Ending balance (L32 + L33)	(3,338)
35	Average tax depreciation reserve for year ((L32 + L34) / 2)	(2,384)
36	Average book depreciation reserve for year (L31)	(878)
37	Difference between tax and book reserves (L35 - L36)	(1,506)
38	Composite tax rate	22.98%
39	Average ADIT (L37 x L38)	(\$346)
40	BF/FH/TC SEWER OPERATIONS	
41	Accumulated depreciation beginning balance	(\$256)
42	WSIC & SSIC depreciation expense	(439)
43	Ending balance (L41 + L42)	(696)
44	Average accumulated depreciation for year ((L41 + L43) / 2)	(\$476)
45	Tax depreciation reserve beginning balance	(\$668)
46	WSIC & SSIC tax depreciation expense	(891)
47	Ending balance (L45 + L46)	(1,558)
48	Average tax depreciation reserve for year ((L45 + L47) / 2)	(1,113)
49	Average book depreciation reserve for year (L44)	(476)
50	Difference between tax and book reserves (L48 - L49)	(637)
51	Composite tax rate	22.98%
52	Average ADIT (L50 x L51)	(\$146)

Carolina Water Service, Inc. of NC

Docket No. W-354, Sub 356A & Sub 360
Calculation of Tax Reserve Balance
WSIC & SSIC Period 1 - Six Months Ended 9/30/19

Appendix A Page 4 of 5 Updated Per Sub 360 Final Order

Line No. 1	<u>Item</u>	Uniform Water	Uniform Sewer	BF/FH/TC Water	BF/FH/TC Sewer
2	Tax Reserve Balance on 2018 Additions				
3	2018 Additions (July - Dec 2018)	635,175	\$364,509	47,676	\$22,263
4	Bonus Depreciation - not applicable	0	0	0	0
5	Remaining balance to be depreciated (L3 - L4)	635,175	364,509	47,676	22,263
6	Tax depreciation rate in Year 1	2.00%	2.00%	2.00%	2.00%
7	Tax depreciation on 2018 additions (L5 x L6)	12,703	7,290	954	445
8	Bonus Depreciation - not applicable	0	0	0	0
9	Total Tax depreciation for 2018 (L7 + L8)	12,703	7,290	954	445
10	Tax Depreciation for 3 months of 2019 (L5*4%*25%)	6,352	3,645	477	223
11	Tax reserve balance as of 3/31/19 (-L9 - L10)	(19,055)	(10,935)	(1,431)	(668)
12					
13	Total Tax Depreciation Expense for 4/1/19 through 3/31/20 (L5*4%)	25,407	14,580	1,907	891
14					
15	Tax Reserve Balance as of 3/31/20 (L11 + L13)	(44,462)	(25,515)	(3,338)	(1,558)
16					
17	Cumulative Tax Reserve Balance @ 3/31/19 (L11)	(19,055)	(10,935)	(1,431)	(668)
18					
19	Cumulative Tax Reserve Balance @ 3/31/20 (L13)	(44,462)	(25,515)	(3,338)	(1,558)

^[1] Tax depreciation rate is based on a 25 year straight line method with half year in first year.

Carolina Water Service, Inc. of NC

Docket No. W-354, Sub 356A & Sub 360
Calculation of Pre-Tax Return for
WSIC & SSIC Period 1 - Six Months Ended 9/30/19

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Updated Per Sub 360 Final Order

Line No.	Item	Capital Structure From Sub 356 (a)	Cost Rates From Sub 356 (b)	Overall Rate of Return (c)	Pre Tax Rate of Return (d)
1	Debt	49.09%	5.68%	2.79%	2.79%
2	Equity	50.91%	9.75%	4.96%	6.44%
3	Total	100.00%		7.75%	9.23%
4	State income tax rate for 2019	2.50%			
5	Federal income tax rate for 2019	21.00%			
6	Composite income tax rate	22.98%			