



**NORTH CAROLINA
PUBLIC STAFF
UTILITIES COMMISSION**

November 27, 2018

M. Lynn Jarvis, Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4300

Re: Docket No. W-354, Sub 360
Application for a General Rate Increase

Dear Ms. Jarvis:

Attached for filing is the Proposed Order of the Public Staff in the above-referenced docket.

By copy of this letter, I am forwarding a copy to all parties of record by electronic delivery.

Sincerely,

Electronically submitted
s/ Gina C. Holt
Staff Attorney
gina.holt@psncuc.nc.gov

GCH/cla

Attachment

Executive Director (919) 733-2435	Communications (919) 733-2810	Economic Research (919) 733-2902	Legal (919) 733-6110	Transportation (919) 733-7766
Accounting (919) 733-4279	Consumer Services (919) 733-9277	Electric (919) 733-2267	Natural Gas (919) 733-4326	Water (919) 733-5610

4326 Mail Service Center • Raleigh, North Carolina 27699-4300 • Fax (919) 733-9565
An Equal Opportunity / Affirmative Action Employer

OFFICIAL COPY

Nov 27 2018

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. W-354, SUB 360

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of

Application by Carolina Water Service, Inc.) of North Carolina, 4944 Parkway Plaza) Boulevard, Suite 375, Charlotte, North) Carolina 28217, for Authority to Adjust and) Increase Rates for Water and Sewer Utility) Service in All of its Service Areas in North) Carolina, Except Corolla Light and Monteray) Shores Service Area)	PUBLIC STAFF'S PROPOSED ORDER APPROVING JOINT PARTIAL SETTLEMENT AGREEMENT AND STIPULATION, GRANTING PARTIAL RATE INCREASE, AND REQUIRING CUSTOMER NOTICE
---	--

HEARD: Tuesday, August 28, 2018, at 7:00 p.m., in the Craven County Courthouse, Courthouse Annex, Courtroom #4, 302 Broad Street, New Bern, North Carolina

Wednesday, August 29, 2018, at 7:00 p.m., in Courtroom 317, New Hanover County Courthouse, 316 Princess Street, Wilmington, North Carolina

Wednesday, September 19, 2018, at 7:00 p.m., in the Mecklenburg County Courthouse, Courtroom 5350, 832 East 4th Street, Charlotte, North Carolina

Tuesday, September 25, 2018, at 7:00 p.m., in the Watauga County Courthouse, Courtroom 1, 842 W. King Street, Boone, North Carolina

Wednesday, September 26, 2018, at 7:00 p.m., in the Buncombe County Courthouse, Courtroom 1A, 60 Court Plaza, Asheville, North Carolina

Monday, October 8, 2018, at 7:00 p.m., and Tuesday, October 16, 2018, at 10:00 a.m., in Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

BEFORE: Chairman Edward S. Finley, Jr., Presiding, and Commissioners ToNola D. Brown-Bland, Jerry C. Dockham, James G. Patterson, Lyons Gray, Daniel G. Clodfelter, and Charlotte A. Mitchell

APPEARANCES:

For Carolina Water Service, Inc. of North Carolina:

Jo Anne Sanford, Sanford Law Office, PLLC, P.O. Box 28085,
Raleigh, North Carolina 27611-8085

Robert H. Bennink, Jr., Bennink Law Office, 130 Murphy Drive, Cary,
North Carolina 27513

For the Using and Consuming Public:

Gina C. Holt, William E. Grantmyre, and John Little, Staff Attorneys,
Public Staff – North Carolina Utilities Commission, 4326 Mail Service
Center, Raleigh, North Carolina 27699-4326

Margaret A. Force, Assistant Attorney General, North Carolina
Department of Justice, Post Office Box 629, Raleigh, North Carolina
27602

For Corolla Light Community Association, Inc.:

Brady W. Allen, The Allen Law Offices, PLLC, 1514 Glenwood Ave.,
Suite 200, Raleigh, North Carolina 27608

BY THE COMMISSION: On March 23, 2018, Carolina Water Service, Inc. of North Carolina (“CWSNC” or “Company”) filed a letter notifying the North Carolina Utilities Commission (“Commission” or “NCUC”) stating its intent to file a general rate case as required by Commission Rule R1-17(a).

On April 6, 2018, CWSNC filed a procedural request whereby the Company proposed that the impact of the Federal Tax Cuts and Jobs Act on the Company's rates be addressed and resolved in this docket, rather than in the Commission's generic tax docket (Docket No. M-100, Sub 148).

On April 27, 2018, CWSNC filed an Application for a general rate increase (the “Application”) seeking authority: (1) to increase and adjust its rates for water

and sewer utility service in all of its service areas in North Carolina¹, except for the Company's Corolla Light/Monteray Shores ("CLMS") service area; and (2) to pass through any increases in purchased bulk water rates, subject to sufficient proof by CWSNC of the increase, as well as any increased costs of wastewater treatment performed by third parties and billed to CWSNC. The Company's Application also included the information and data required by NCUC Form W-1.

On May 16, 2018, the Company filed an Amendment to its Application to provide a revised Page 4 of 7 to Appendix A-1.

On May 22, 2018, the Commission issued its Order Establishing General Rate Case, Suspending Rates, Scheduling Hearings, and Requiring Customer Notice. By that Order, the Commission scheduled the Application for public hearings in New Bern, Wilmington, Charlotte, Boone, Asheville, and Raleigh, North Carolina, and for evidentiary hearing in Raleigh; established the dates for filing testimony; and required that a notice be sent to all affected customers regarding the proposed rate increase and hearings.

On May 30, 2018, CWSNC filed its Ongoing Three-Year WSIC/SSIC Plan.

On July 27, 2018, CWSNC filed the Commission-required Certificate of Service indicating that the required Notices to Customers were served in conformity with the May 22, 2018 Scheduling Order.

On September 4, 2018, CWSNC filed the direct testimony and exhibits of Company witnesses Richard Linneman, Dylan D'Ascendis, and Deborah Clark.

¹ The Company's Elk River water and sewer service area is subject to the rate increase proposed in this docket. The Elk River service area is included in CWSNC's Uniform Water and Sewer Rate Divisions.

On September 18, 2018, CWSNC filed its Report on Customer Comments from Public Hearings in New Bern and Wilmington, North Carolina.

On September 24, 2018, the Corolla Light Community Association, Inc. filed a Petition to Intervene. The Commission allowed Corolla Light's intervention by Order dated October 11, 2018.

On September 25, 2018, the Public Staff filed a motion in this docket whereby the Commission was requested to grant an extension of time to October 3, 2018, for the Public Staff and intervenors to file testimony and exhibits, and an extension to October 12, 2018, for CWSNC to file rebuttal testimony. The requested extensions of time were granted by Commission Order dated September 26, 2018.

On September 26, 2018, the Attorney General's Office filed a Notice of Intervention in this proceeding.

On October 3, 2018, the Public Staff filed the direct testimony and exhibits of Public Staff witnesses Gina Y. Casselberry, John R. Hinton, Lynn Feasel, and Sonja R. Johnson.

On October 4, 2018, CWSNC filed its Report on Customer Comments from Public Hearing in Charlotte, North Carolina.

Public Staff witness Michelle Boswell filed testimony on October 4, 2018, and on October 5, 2018, Public Staff witness Johnson filed supplemental testimony.

On October 11, 2018, the Public Staff filed supplemental testimony of Gina Y. Casselberry, and on October 12, 2018, it filed the supplemental testimony of

Michelle Boswell, Windley E. Henry, John R. Hinton, and additional supplemental testimony from Sonja Johnson. Henry Revised Supplemental Exhibits were also filed on October 12, 2018.

On October 12, CWSNC filed the rebuttal testimony and exhibits of Company witnesses J. Bryce Mendenhall, Dylan D'Ascendis, and Dante DeStefano (no exhibits).

On October 15, 2018, CWSNC filed its Report on Customer Comments from Public Hearing in Asheville, North Carolina.

The evidentiary hearing was convened before the Full Commission on Tuesday, October 16, 2018. CWSNC presented its direct case, followed by the witnesses for the Public Staff, and then the Company presented its rebuttal testimony. The evidentiary hearing concluded the same day.

On October 17, 2018, CWSNC filed its Report on Customer Comments from Public Hearing in Boone, North Carolina.

On October 19, 2018, CWSNC and the Public Staff filed a Partial Joint Settlement Agreement and Stipulation (Stipulation) in this docket.

On October 23, 2018, CWSNC filed a Response to Commissioner Clodfelter's request for a Late-Filed Exhibit addressing the Company's post-test year plant additions.

On October 25, 2018, CWSNC filed its Report on Customer Comments from the Public Hearing in Raleigh, North Carolina.

On October 30, 2018, the Public Staff filed the Confidential Late-Filed Exhibit of Sonja R. Johnson and the Late-filed Exhibits of Gina Y. Casselberry.

On November 19, 2018, the Public Staff filed a motion for extension of time to November 27, 2018, for all parties to file proposed orders, which was granted by Commission Order on the same date.

On November 20, 2018, the Public Staff filed the Late-Filed Exhibits of Gina Y. Casselberry and on November 21, 2018, filed Henry Revised Stipulation Exhibits I and II.

On November 27, 2018, the Public Staff filed Casselberry Revised Late-Filed Exhibits 4, 7 and 9. Also on this date, CWSNC, the Public Staff, and the Attorney General's Office filed their respective Proposed Orders.

Based on the verified Application, the Form W-1, the testimony and exhibits received into evidence at the hearings, the Stipulation, and the record as a whole, the Commission makes the following:

FINDINGS OF FACT

General Matters

1. CWSNC is a corporation duly organized under the laws of and is authorized to do business in the State of North Carolina. It is a franchised public utility providing water and/or sewer utility service to customers in this State.
2. CWSNC is properly before the Commission pursuant to Chapter 62 of the General Statutes of North Carolina for a determination of the justness and reasonableness of its proposed rates for its water and sewer operations.
3. The test period appropriate for use in this proceeding is the twelve-month period ending December 31, 2017, updated for known and measurable changes through the close of the evidentiary hearing.

The Stipulation

4. On October 19, 2018, CWSNC and the Public Staff (Stipulating Parties) entered into and filed the Stipulation resolving some of the issues between the two parties in this docket. Those issues that were not resolved by the Stipulation are referred to herein as the “Unsettled Issues.”

5. The revenue requirement effect of the Stipulation is shown in Settlement Exhibit 1, which provides sufficient support for the annual revenue required for the issues agreed to in the Stipulation.

6. The Stipulation is the product of the give-and-take in settlement negotiations between the Stipulating Parties, is material evidence in this proceeding, and is entitled to be given appropriate weight in this proceeding, along with other evidence from the Company and intervenor parties, along with statements from customers of the Company as well as testimony of public witnesses concerning the Company’s Application.

7. The Unsettled Issues, which were not resolved in the Stipulation include the following:

- a. Return on equity;
- b. Public Staff adjustments to ADIT and EDIT;
- c. Public Staff proposal that CWSNC refund to ratepayers the overcollection of federal taxes related to the decrease in the federal corporate tax rate since January 1, 2018;
- d. Reduction of executive compensation and benefits, and related payroll taxes, by 50%;

- e. Re-allocation of insurance premium expenses, passed to CWSNC from its parent, Utilities, Inc.;
- f. Public Staff use of composite utility plant depreciation rates for calculating CIAC and PAA amortization expense;
- g. Removal of purchased water and purchased sewer treatment expense from the cash working capital calculation;
- h. Implementation of the proposed Consumption Adjustment Mechanism; and
- i. Tariff rate design.

The Unsettled Issues are resolved by the Commission and are addressed later in this Order.

Acceptance of Stipulation

8. The Stipulation will provide CWSNC and its ratepayers just and reasonable rates when combined with the rate effects of the Commission's decisions regarding the Unsettled Issues in this proceeding.

9. The provisions of the Stipulation are just and reasonable to all parties to this proceeding and serve the public interest. Therefore, the Stipulation should be approved in its entirety.

Customer Concerns and Service

10. CWSNC serves approximately 30,436 water customers and 20,233 wastewater customers. There are also 3,774 water availability customers in Carolina Forest, Woodrun, Linville Ridge, Sapphire Valley, Connestee Falls, and Fairfield Harbour and 1,401 sewer availability customers in Sapphire Valley,

Connestee Falls, and Fairfield Harbour. CWSNC operates 92 water utility systems and 39 sewer utility systems.

11. A total of 35 witnesses testified at the six public hearings held for the purpose of receiving customer testimony.

12. As of October 10, 2018, the Public Staff had received approximately 64 position statements from CWSNC customers, a petition with 27 signatures from Amber Acres North, a petition with approximately 263 signatures from Bradfield Farms, including a resolution expressing objection to the rate increase, and a petition from Yachtmans (Queens Harbour) with approximately 100 signatures.

13. CWSNC filed five reports with the Commission, verified by Ms. Deborah Clark, Communications Coordinator for CWSNC, addressing the service-related concerns and other comments expressed by the public witnesses who testified at the public hearings. Such reports described each of the witnesses' specific service-related concerns and comments, the Company's response, and how each concern and comment was addressed, if applicable.

14. Consistent with the statutory requirements of N. C. Gen. Stat. § 62-131(b), the overall quality of service provided by CWSNC is adequate, efficient, and reasonable.

Rate Base

15. The appropriate level of rate base used and useful in providing service is \$115,438,669 for combined operations:

Plant in service	\$ 213,005,526
Accumulated depreciation	<u>(52,955,117)</u>
Net plant in service	160,050,409
Cash working capital	2,067,611
Contributions in aid of construction (CIAC)	(41,895,670)
Advances in aid of construction	(32,940)
Accumulated deferred income taxes (ADIT)	(3,972,592)
Customer deposits	(342,640)
Gain on sale and flow back taxes	(289,628)
Plant acquisition adjustment	(1,029,202)
Excess book value	(456)
Cost-free capital	(261,499)
Average tax accruals	(125,909)
Regulatory liability for excess deferred taxes	(251,770)
Deferred charges	1,522,955
Pro forma plant	<u>0</u>
Original cost rate base	<u>\$115,438,669</u>

16. It is appropriate to exclude purchased water and sewer expense from the calculation of cash working capital.

17. An adjustment to update ADIT to include the deferred tax related to the unamortized balance of rate case expense should be made in this proceeding.

18. ADIT should be adjusted to reflect the deferred tax related to the unamortized balance of deferred maintenance charges.

Operating Revenues

19. It is appropriate to include in miscellaneous revenues allocated proceeds from the sale of utility property.

20. Miscellaneous revenues should be adjusted to correct the allocation of other water/sewer revenues between water and sewer operations for the four rate divisions.

21. It is appropriate to adjust forfeited discounts and uncollectibles using the percentages calculated by the Public Staff based on test year services

revenues and the respective test year forfeited discounts and uncollectibles balances.

22. The appropriate level of operating revenues under present rates for use in this proceeding is \$32,575,467, consisting of service revenues of \$32,429,699 and miscellaneous revenues of \$360,163, reduced by uncollectibles of \$214,395.

Maintenance and General Expenses

23. It is appropriate to amortize the regulatory commission expense over a five-year period.

24. Automobile insurance should be allocated based on the number of vehicles for CWSNC as a percentage to the total number of automobiles.

25. It is appropriate to allocate workers compensation insurance to reflect the adjusted level of payroll.

26. The appropriate methodology to allocate property insurance should be to reflect the value of CWSNC's property covered by the current insurance policies.

Depreciation and Amortization Expense

27. It is appropriate to calculate an ongoing annual level of depreciation expense based on the adjusted amount of plant in service and the depreciation lives for each plant account.

28. Depreciation should be reduced by the annual amortization of excess book value.

29. Amortization expense – CIAC should be calculated using an amortization percentage based on the composite overall depreciation rate for the adjusted level of plant in service.

30. Amortization expense – PAA should be calculated using an amortization percentage based on the composite overall depreciation rate for the adjusted level of plant in service.

31. The appropriate level of depreciation and amortization expense for combined operations used in this proceeding is \$3,762,812.

Franchise, Property, Payroll and Other Taxes

32. The appropriate level of franchise and other taxes for use in this proceeding is \$(49,702) for combined operations.

33. Payroll taxes should be calculated on the adjusted level of salaries and wages and the current and the current payroll tax rates.

34. It is appropriate to remove fifty percent of payroll taxes to match the adjustment to salaries and wages related to executive compensation.

35. The appropriate level of payroll taxes for use in this proceeding is \$526,275 for combined operations.

36. The appropriate level of franchise, property payroll and other taxes for use in this proceeding is \$710,148 for combined operations, consisting of \$(49,702) for franchise and other taxes, \$233,575 for property taxes and \$526,275 for payroll taxes.

Regulatory Fee and Income Taxes

37. The appropriate level of regulatory fee for use in this proceeding is \$45,606.

38. The appropriate level of state income taxes for use in this proceeding is \$189,741.

39. It is appropriate to calculate income taxes for ratemaking purposes based on the adjusted level of revenues and expenses and the tax rate for utility operations.

40. The appropriate level of federal income taxes for use in this proceeding is \$1,288,340.

Income Tax Expense/Federal EDIT/State EDIT/Over-Collection

41. The Company's revenue requirement shall be adjusted to incorporate the effects of the changes in federal income tax related to the Federal Tax Cuts and Jobs Act (Tax Act), including the effects of the reduction of the federal income tax from 35% to 21%, on the Company's ongoing income tax expense.

42. The Company's protected federal Excess Deferred Income Taxes (EDIT) should be amortized over a period of time equal to the expected lifespan of the plant, property and equipment with which they are associated, in accordance with the normalization rules of the United States Internal Revenue Service (IRS).

43. The Company's unprotected federal EDIT should be returned to ratepayers through a levelized rider over a period of three years.

44. The Company's state EDIT recorded pursuant to the Commission's Order Addressing the Impacts of HB 998 on North Carolina Public Utilities issued May 13, 2014, in Docket No. M-100, Sub 138 (Sub 138 Order) should continue to be amortized in accordance with the Commission's November 8, 2017, Order Approving Stipulations, Granting Partial Rate Increase and Requiring Customer Notice.

45. The Company's over-collection of federal income taxes related to the decrease in federal tax rates for the period beginning January 1, 2018, and corresponding interest, based on the overall weighted cost of capital, should be refunded to ratepayers as a credit for a one-year period beginning when the new base rates become effective in the present docket.

Capital Structure, Cost of Capital, and Overall Rate of Return

46. The cost of capital and revenue increase approved in this Order is intended to provide CWSNC, through sound management, the opportunity to earn an overall rate of return of 7.47%. This overall rate of return is derived from applying an embedded cost of debt of 5.68%, and a rate of return on equity of 9.2%, to a capital structure consisting of 49.09% long-term debt and 50.91% common equity.

47. A 9.2% rate of return on equity for CWSNC is just and reasonable in this general rate case.

48. A 50.91% equity and 49.09% debt ratio is a reasonable capital structure for CWSNC in this case.

49. A 5.68 % cost of debt for CWSNC is reasonable for the purpose of this case.

50. The rate increase approved in this case, which includes the approved rate of return on equity and capital structure, will be difficult for some of CWSNC's customers to pay, in particular CWSNC's low-income customers.

51. Continuous safe, adequate, and reliable water and wastewater utility service by CWSNC is essential to CWSNC's customers.

52. The rate of return on equity and capital structure approved by the Commission appropriately balances the benefits received by CWSNC's customers from CWSNC's provision of safe, adequate, and reliable water and wastewater utility service with the difficulties that some of CWSNC's customers will experience in paying the Company's increased rates.

53. The 9.2% rate of return on equity and the 50.91% equity capital structure approved by the Commission in this case result in a cost of capital that is as low as reasonably possible. They appropriately balance CWSNC's need to obtain equity and debt financing with its customers' need to pay the lowest possible rates.

54. The authorized levels of overall rate of return and rate of return on equity set forth above are supported by competent, material, and substantial record evidence, are consistent with the requirements of N.C. Gen. Stat. § 62-133, and are fair to CWSNC's customers generally and in light of the impact of changing economic conditions.

Revenue Requirement

55. CWSN's rates should be changed by amounts which, after pro forma adjustments, will produce the following increases (decreases) in revenues:

<u>Item</u>	<u>Amount</u>
CWSNC Uniform Water	\$150,244
CWSNC Uniform Sewer	(78,011)
BF/FH/TC Water	256,403
BF/FH/TC Sewer	<u>294,256</u>
Total	<u>\$622,892</u>

These increases (decreases) will allow CWSNC the opportunity to earn a 9.20 percent overall rate of return, which the Commission has found to be reasonable upon consideration of the findings in this Order.

Consumption Mechanism Adjustment

56. In its Application, the Company requested Commission approval of a rate adjustment mechanism to account for variability in average monthly consumption per customer, which directly affects revenues.

57. CWSNC has failed to prove by the greater weight of the evidence that a consumption adjustment mechanism is justified.

58. The North Carolina General Assembly in the 2017-2018 session did not pass the consumption adjustment mechanism bill, which was introduced at CWSNC's request.

59. CWSNC's alternative rate design is not reasonable or justified.

Rate Design

60. The Public Staff's recommendations to charge customers of Sapphire Valley CWSNC's uniform metered sewer rates and to charge customers

in Bradfield Farms and Fairfield Harbour CWSNC's flat sewer rate are reasonable and appropriate.

61. The Public Staff's recommendation to charge customers in Linville Ridge and The Ridges at Mountain Harbour CWSNC's uniform metered water rates is reasonable and appropriate.

62. The Public Staff's recommendation to charge customers in The Ridges at Mountain Harbour CWSNC's purchased sewer rates is reasonable and appropriate.

63. The rates and charges recommended by the Public Staff are just and reasonable and should be approved.

Water and Sewer System Improvement Charges

64. Consistent with Commission Rules R7-39(k) and R10-36(k), CWSNC's WSIC and SSIC surcharges will reset to zero as of the effective date of the approved rates in this proceeding.

65. By law, the cumulative maximum charges that the Company can recover between rate cases cannot exceed five percent of the total service revenues approved by the Commission in this rate case.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1 - 3

The evidence supporting these findings of fact and conclusions is contained in the Company's Application and Form W-1, the testimony and exhibits of the witnesses, and the entire record in this proceeding. These findings and conclusions are informational, procedural, and jurisdictional in nature and are not contested by any party.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 4-7

The evidence supporting these findings of fact and conclusions is contained in the Stipulation, and the testimony and exhibits of the witnesses.

On October 17, 2018, CWSNC and the Public Staff entered into and filed a Partial Settlement Agreement and Stipulation, which resolves some of the issues in this proceeding between these two parties. The Stipulation is based upon the same test period as the Company's Application, adjusted for certain changes in plant, revenues, and costs that were not known at the time the case was filed but are based upon circumstances occurring or becoming known through the close of the evidentiary hearing.

The key aspects of the Stipulation are as follows:

Capital Structure - The Stipulating Parties agreed that the capital structure appropriate for use in this proceeding is a capital structure consisting of 50.91% common equity and 49.09% long-term debt at a cost of 5.68%.

ADIT - The Company agreed to the Public Staff's proposed adjustments to accumulated deferred income taxes (ADIT) regarding unamortized rate case expense. The Stipulating Parties agree to revise ADIT for any updates made to regulatory commission expense.

Deferred Maintenance. - The Company has agreed to the amount of unamortized deferred maintenance and annual deferred maintenance and repair expense as calculated by the Public Staff. The Stipulating Parties disagree as to how these amounts should be recovered from ratepayers.

Regulatory Commission Expense. - The Stipulating Parties agreed to a methodology for calculating regulatory commission expense, also known as rate case expense, and agreed to update the number in Settlement Exhibit 1, Line 46, for actual and estimated costs once supporting documentation is provided by the Company. The Stipulating Parties further agreed to amortize regulatory commission expense for a five-year period.

Federal Protected EDIT - The Stipulating Parties agreed that the protected EDIT will be flowed back over a 45-year period using the Reverse South Georgia method, in accordance with tax normalization rules required by IRC Section 203(e).

Deferral Accounting Treatment - The Company agreed to withdraw its request that deferral accounting treatment of costs related to Hurricane Florence be authorized by the Commission in this case and that amortization of such prudently-incurred costs be addressed in the Company's next general rate case.

As the Stipulation has not been adopted by all of the parties to this docket, its acceptance by the Commission is governed by the standards set out by the North Carolina Supreme Court in State ex rel. Utils. Comm'n v. Carolina Util. Customers Ass'n, Inc., 348 N.C. 452, 500 S.E.2d 693 (1998) (CUCA I), and State ex rel. Utils. Comm'n v. Carolina Util. Customers Ass'n, Inc., 351 N.C. 223, 524 S.E.2d 10 (2000) (CUCA II). In CUCA I, the Supreme Court held that:

[A] stipulation entered into by less than all of the parties as to any facts or issues in a contested case proceeding under [C]hapter 62 should be accorded full consideration and weighed by the Commission with all other evidence presented by any of the parties in the proceeding. The Commission must consider the nonunanimous stipulation along with all the evidence presented and

any other facts the Commission finds relevant to the fair and just determination of the proceeding. The Commission may even adopt the recommendations or provisions of the nonunanimous stipulation as long as the Commission sets forth its reasoning and makes “its own independent conclusion” supported by substantial evidence on the record that the proposal is just and reasonable to all parties in light of all the evidence presented.

348 N.C. at 466, 500 S.E.2d at 703. However, as the Court made clear in CUCA II, the fact that fewer than all of the parties have adopted a settlement does not permit the Court to subject the Commission’s order adopting the provisions of a nonunanimous stipulation to a “heightened standard” of review. 351 N.C. at 231, 524 S.E.2d at 16. Rather, the Court said that Commission approval of the provisions of a nonunanimous stipulation “requires only that the Commission ma[k]e an independent determination supported by substantial evidence on the record [and] . . . satisf[y] the requirements of [C]hapter 62 by independently considering and analyzing all the evidence and any other facts relevant to a determination that the proposal is just and reasonable to all parties.” Id. at 231-32, 524 S.E.2d at 17.

The Commission gives substantial weight to the testimony of the Company and Public Staff witnesses regarding the Stipulation, and finds and concludes that the Stipulation is the product of the “give-and-take” of the settlement negotiations between CWSNC and the Public Staff in an effort to appropriately balance the Company’s need for rate relief with the impact of such rate relief on customers. The Stipulation is, therefore, material evidence to be given appropriate weight in this proceeding.

Ample evidence exists in the record to support all of the provisions of the Stipulation. Accordingly, the Commission is fully justified in adopting the Stipulation through the exercise of its own independent judgment, and finding and concluding through such independent judgment that the Stipulation “is just and reasonable to all parties in light of all the evidence presented.” CUCA I, 348 N.C. at 466, 500 S.E.2d at 703. The Commission hereby adopts the Stipulation in its entirety, and its conclusions as to the individual provisions of the Stipulation are set forth more fully below.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 8 - 9

The evidence supporting these findings of fact and conclusions is contained in the Company’s Application and Form W-1, the testimony of the witnesses, the Stipulation and its exhibit, and the entire record in this proceeding.

As fully discussed above, the provisions of the Stipulation are the product of the give-and-take of settlement negotiations between CWSNC and the Public Staff. Comparing the Stipulation to CWSNC’s Application, and considering the testimony of the Public Staff’s witnesses, the Commission notes that the Stipulation results in a number of downward adjustments to the costs sought to be recovered by CWSNC. Further, the Commission observes that there are provisions of the Stipulation that are more important to CWSNC, and, likewise, there are provisions that are more important to the Public Staff. Nonetheless, working from different starting points and different perspectives, the Stipulating Parties were able to find common ground and achieve a balanced settlement.

The result is that the Stipulation strikes a fair balance between the interests of CWSNC and its customers. As discussed above, the Commission has fully evaluated the provisions of the Stipulation and concludes, in the exercise of its independent judgment, that the provisions of the Stipulation are just and reasonable to all parties to this proceeding in light of the evidence presented, and serve the public interest. The provisions of the Stipulation strike the appropriate balance between the interests of CWSNC's customers in receiving safe, adequate, and reliable water and sewer service at the lowest reasonably possible rates, and the interests of CWSNC in maintaining the Company's financial strength at a level that enables the Company to attract sufficient capital. Further, the Commission finds and concludes that the revenue requirement, rate design, and the rates that will result from the Stipulation, subject to the Commission's decisions set forth below on the contested issues, will provide just and reasonable rates for CWSNC and its retail customers.

Therefore, the Commission approves the Stipulation in its entirety. In addition, the Commission finds and concludes that the Stipulation is entitled to substantial weight and consideration in the Commission's decision in this docket.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 10 - 14

The evidence supporting these findings of fact is contained in testimony and exhibits of CWSNC witness Clark. Public Staff witness Casselberry, the public witnesses, and in the verified reports filed by CWSNC in response to the concerns testified to by the public witnesses.

Public Staff witness Casselberry testified that her investigation included review of customer complaints; contact with the North Carolina Department of Environmental Quality (DEQ) and the Water Quality and Public Water Supply Sections of the Division of Water Resources (DWR); and review of Company records and analysis of revenues at existing and proposed rates. Witness Casselberry testified that she had contacted representatives of all DEQ regional offices regarding the operation of the CWSNC water and sewer systems. (T 7 p 301) She testified that none of the regional office personnel she contacted expressed any major concerns with the water and sewer systems serving CWSNC customers or identified any major water quality concerns. Id.

In addition, witness Casselberry testified that she had reviewed approximately 64 customer position statements from CWSNC customers received by the Public Staff as a result of this proceeding. Ms. Casselberry stated that the service areas represented are Abington (1), Amber Acres North (1) and petition with 27 signatures, Bradfield Farms (3) including a resolution objecting to the rate increase from the Bradfield Farms Homeowners Association, Board of Directors and petition with approximately 263 signatures, Brandywine Bay (9), Carolina Pines (1), Carolina Trace (13), Connestee Falls (3), Elk River (1), Fairfield Harbour (12), Fairfield Mountain (2), Linville Ridge (1), Nags Head (1), Queens Harbor (1) including a petition with approximately 100 signatures, The Ridges at Mountain Harbor (4), The Villages at Sugar Mountain (1), Wood Haven/Pleasant Hill (2) and unspecified service areas (8). (T 7 p 318) She indicated that all customers objected to the magnitude of the rate increase. She testified that public witnesses were also

concerned with CWSNC's proposed rate of return, the magnitude of the rates compared to inflation, the rates compared to local municipalities, and the federal tax act. (T 7 pp 318 – 334) Customer concerns were addressed in Public Staff witness Casselberry's supplemental testimony filed on October 11, 2018.

Witness Casselberry also testified with regard to the service and water quality complaints registered by customers at each of the six public hearings. (T 7 pp 324 – 334) She stated that she had read each of the five reports filed by CWSNC in response to the customer concerns and complaints which were included in testimony at those six public hearings. Ms. Casselberry testified that there were a few isolated service issues which the Company addressed or was in the process of resolving; however, she had no additional comments or recommendations. (T 7 p 333) It was witness Casselberry's opinion that CWSNC's quality of service had improved since the last general rate case and that, overall, service was good. (T 7 p 333) Ms. Casselberry also testified that the quality of water meets the standards set forth by the Safe Drinking Water Act and is satisfactory. (T 7 p 334)

Based upon the foregoing, and after careful review of the testimony of the customers at the public hearings, the testimony of Company witness Clark, the Company Reports on Customer Comments, the Public Staff's engineering and service quality investigation, and the late-filed and exhibits filed by CWSNC and the Public Staff, the Commission concludes that, consistent with the statutory requirements of N. C. Gen. Stat. § 62-131(b), the overall quality of service provided by CWSNC is adequate, efficient, and reasonable. In reaching this conclusion, the

Commission notes that Public Staff witness Casselberry testified that none of the North Carolina environmental agency regional office personnel she contacted expressed any major concerns with the water and sewer systems serving CWSNC customers or identified any major water quality concerns.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 15-18

The evidence supporting these findings of fact is contained in the Application and Form W-1 of CWSNC, the testimony of Company witness Linneman, testimony of Public Staff witnesses Feasel, Henry, and Boswell, the Stipulation, and the record in this proceeding.

The following table summarizes the differences between the Company's level of rate base from its Application and the amounts recommended by the Public Staff:

<u>Item</u>	<u>Company Application</u>	<u>Public Staff</u>	<u>Difference</u>
Plant in service	\$206,614,909	\$ 213,005,526	\$6,390,617
Accumulated depreciation	<u>(51,498,888)</u>	<u>(52,955,117)</u>	<u>(1,456,229)</u>
Net plant in service	155,116,021	160,050,409	4,934,388
Cash working capital	2,222,369	2,067,611	(154,758)
Contributions in aid of construct.	(42,813,916)	(41,895,670)	918,247
Advances in aid of construction	(32,940)	(32,940)	0
Accum. deferred income taxes	(5,167,701)	(3,972,592)	1,195,109
Customer deposits	(306,974)	(342,640)	(35,666)
Gain on sale and flow back taxes	(425,537)	(289,628)	135,909
Plant acquisition adjustment	(1,062,767)	(1,029,202)	33,565
Excess book value	(448)	(456)	(8)
Cost-free capital	(261,499)	(261,499)	0
Average tax accruals	112,327	(125,909)	(238,236)
Regulatory liability for EDIT	(251,770)	(251,770)	0
Deferred charges	2,538,827	1,522,955	(1,015,872)
Pro forma plant	<u>5,149,664</u>	<u>0</u>	<u>(5,149,664)</u>
Original cost rate base	<u>\$114,815,656</u>	<u>\$115,438,669</u>	<u>\$623,013</u>

On the basis of the Stipulation and revisions made by the Public Staff in its supplemental testimony, Henry Supplemental Exhibit I, and Henry Revised Supplemental Exhibits I and II, the Company does not dispute adjustments recommended by the Public Staff to plant in service, accumulated depreciation, contributions in aid of construction, customer deposits, gain on sale and flow back taxes, plant acquisition adjustment, excess book value, average tax accruals, deferred charges, and pro forma plant. Therefore, the Commission finds and concludes that the adjustments recommended by the Public Staff to plant in service, accumulated depreciation, contributions in aid of construction, customer deposits, gain on sale and flow back taxes, plant acquisition adjustment, excess book value, average tax accruals, deferred charges, and pro forma plant, which are not contested, are appropriate adjustments to be made to rate base in this proceeding.

Based on the testimony of Company witness DeStefano, the Company disagrees with Public Staff adjustments to cash working capital and ADIT.

Cash Working Capital

Public Staff witness Feasel testified that cash working capital provides the Company with the funds necessary to carry on the day-to-day operations of the Company. She testified that her calculation of cash working capital, included 1/8th of total adjusted maintenance and general expenses, less purchased water and sewer expense. Public Staff witness Henry testified the calculation implemented by Ms. Feasel is defined as the “formula method” of calculating cash working capital. (T p 109) Mr. Henry also explained the Public Staff’s rationale for excluding

purchased water and sewer from cash working capital is that the Company may seek recovery of the expenses by filing for a pass-through of purchased water and sewer expenses between rate cases. On cross-examination, Mr. Henry was asked whether there was still a lag in the pass-through application process. Mr. Henry responded that there is a lag, however, the Company could prepare its schedules and calculations ahead of time in anticipation of an increase and also noted that the Public Staff processes pass-through applications pretty quickly. (T p 113)

Company witness DeStefano accepts the commonly used formula method of applying a 1/8th factor to operating and maintenance expense as a measure of cash working capital; however, he submits that it is improper to remove purchased water and sewer expenses, as they are cash expenses. As such, the Company requests that the purchased water and purchased sewer treatment expenses be included in cash working capital in this proceeding.

On cross-examination, Mr. Henry testified that based on his research, the formula method had been used by the Commission for years to set rates in the water, electric, and natural gas industries before lead lag studies were used to calculate cash working capital., Mr. Henry also noted that in its filed rate case, CWSNC also excluded purchased water from its cash working capital calculation. (T p 110)

When asked on cross-examination whether the Company can file for pass-through recovery of purchased water or sewer costs if the system is not 100 percent purchased water, Mr. Henry stated that he did not know, and there was no

evidence provided to explain how many CWSNC systems are not 100% purchased water versus how many would be able to file a pass-through and recover costs.

The Commission has carefully reviewed the evidence in this docket and concludes that it is appropriate to exclude purchased water and sewer expense from the calculation of cash working capital. The Public Staff provided clear and convincing evidence of why it uses the formula method of calculating cash working capital. The Public Staff testified and the Company confirmed that the Company's as-filed case used the formula method. It is also clear from the evidence that, notwithstanding the existence of a lag between the Company incurring a purchased water or sewer expense and receiving authorization to pass through the cost to its customers, the time lag is shorter than seeking recovery through a rate case. Additionally, it is incumbent upon the Company to take measures to anticipate increases when possible and to take the time and effort to prepare pass-through applications and file them as quickly as possible. The Company witness testimony regarding purchased water systems that did not purchase 100 percent of their water was of no import, as there was no evidence of how many systems were prevented from filing pass-through application due to this situation and the amount of purchased water expense that was not recoverable via the pass-through process. The Commission therefore concludes that purchased water and sewer expense should not be included in cash working capital.

ADIT

The difference in the level of ADIT is due to the differing levels of unamortized rate case expense, unamortized deferred maintenance and EDIT

recommended by the Company and the Public Staff. Based on the conclusions reached elsewhere in the Order regarding the levels of rate case expense, deferred maintenance, and EDIT, the Commission concludes that the appropriate level of ADIT for use in this proceeding is \$3,972,592.

Summary Conclusion

Based on the foregoing, the Commission concludes that the appropriate level of rate base for combined operations for use in this proceeding is as follows:

<u>Item</u>	<u>Amount</u>
Plant in service	\$ 213,005,526
Accumulated depreciation	<u>(52,955,117)</u>
Net plant in service	160,050,409
Cash working capital	2,067,611
Contributions in aid of construction (CIAC)	(41,895,670)
Advances in aid of construction	(32,940)
Accumulated deferred income taxes (ADIT)	(3,972,592)
Customer deposits	(342,640)
Gain on sale and flow back taxes	(289,628)
Plant acquisition adjustment	(1,029,202)
Excess book value	(456)
Cost-free capital	(261,499)
Average tax accruals	(125,909)
Regulatory liability for excess deferred taxes	(251,770)
Deferred charges	1,522,955
Pro forma plant	<u>0</u>
Original cost rate base	<u>\$115,438,669</u>

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 19 - 22

The evidence supporting these findings of fact is contained in the testimony of Public Staff witnesses Feasel, Henry, and Casselberry, and Company witness Linneman. The following table summarizes the differences between the Company's level of operating revenues under present rates from its Application and the amounts recommended by the Public Staff:

<u>Item</u>	<u>Company Application</u>	<u>Public Staff</u>	<u>Difference</u>
Service revenues	\$32,435,554	\$32,429,699	(\$5,855)
Miscellaneous revenues	351,867	360,163	8,296
Uncollectible accounts	(193,143)	(214,395)	(21,252)
Total	<u>\$32,594,278</u>	<u>\$32,575,467</u>	<u>(\$18,811)</u>

On the basis of the Stipulation and the revisions made by the Public Staff in its supplemental testimony and Henry Supplemental Exhibit I, and Henry Revised Supplemental Exhibits I and II, the Company does not dispute the following Public Staff adjustments to operating revenues under present rates:

Reflect pro forma level of service revenues	(\$5,855)
Adjustment to forfeited discounts	7,387
Adjustment to other water/sewer revenues	(2)
Adjustment to sale of utility property	911
Adjustment to uncollectible accounts	<u>(21,252)</u>
Total	<u>(\$18,811)</u>

Therefore, the Commission finds and concludes that the adjustments listed above, which are not contested, are appropriate adjustments to be made to operating revenues under present rates in this proceeding.

Summary Conclusion

Based on the foregoing, the Commission concludes that the appropriate level of operating revenues under present rates for combined operations for use in this proceeding is as follows:

<u>Item</u>	<u>Amount</u>
Service revenues	\$32,429,699
Miscellaneous revenues	360,163
Uncollectible accounts	<u>(214,395)</u>
Total	<u>\$32,575,467</u>

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 23 - 26

The evidence supporting these findings of fact is contained in the Application and Form W-1 of CWSNC, the testimony of Public Staff witnesses Feasel, Henry, Johnson, Boswell, and Casselberry, and Company witnesses Linneman, Mendenhall, DeStefano, and Clark. The following table summarizes the differences between the Company's level of maintenance and general expenses from its Application and the amounts recommended by the Public Staff:

<u>Item</u>	<u>Company Application</u>	<u>Public Staff</u>	<u>Difference</u>
<u>Maintenance Expenses:</u>			
Salaries and wages	\$4,908,936	\$4,765,636	(\$143,300)
Purchased power	1,934,268	1,932,358	(1,910)
Purchased water and sewer	2,059,238	1,972,527	(86,711)
Maintenance and repair	3,129,187	2,749,845	(379,342)
Maintenance testing	470,830	544,360	73,530
Meter reading	225,963	225,867	(96)
Chemicals	628,209	632,415	4,206
Transportation	449,313	447,271	(2,042)
Oper. expenses charged to plant	(707,831)	(673,065)	34,766
Outside services – other	<u>482,562</u>	<u>455,369</u>	<u>(27,193)</u>
Total	<u>\$13,580,675</u>	<u>\$13,052,583</u>	<u>(\$528,092)</u>

<u>General Expenses:</u>			
Salaries and wages	\$2,112,000	\$1,972,000	(\$140,000)
Off. supplies & other office exp.	563,875	560,363	(3,512)
Regulatory commission expense	436,013	165,908	(270,105)
Pension and other benefits	1,379,548	1,340,118	(39,430)
Rent	233,928	227,339	(6,589)
Insurance	572,345	429,335	(143,010)
Office utilities	744,196	742,300	(1,896)
Miscellaneous	<u>215,612</u>	<u>23,469</u>	<u>(192,143)</u>
Total	<u>\$6,257,517</u>	<u>\$5,460,832</u>	<u>(\$796,685)</u>

On the basis of the Stipulation and revisions made by the Public Staff in its supplemental testimony and Henry Supplemental Exhibit I, and Henry Revised Supplemental Exhibits I and II, the Company does not dispute adjustments recommended by the Public Staff to maintenance salaries and wages, purchased power, maintenance and repair, maintenance testing, meter reading, chemicals, transportation, operating expenses charged to plant, outside services – other, office supplies and other office expenses, rent, office utilities, and miscellaneous. Therefore, the Commission finds and concludes that the adjustments recommended by the Public Staff to maintenance salaries and wages, purchased power, maintenance and repair, maintenance testing, meter reading, chemicals, transportation, operating expenses charged to plant, outside services – other, office supplies and other office expenses, rent, office utilities, and miscellaneous expense, which are not contested, are appropriate adjustments to be made to maintenance and general expenses in this proceeding.

Based on the testimony of Company witnesses Clark, Mendenhall, and DeStefano, the Company disagrees with the Public Staff adjustments to general

salaries and wages, regulatory commission expense, pensions and benefits, and insurance.

Regulatory Commission Expense

With the Stipulation and revisions made by the Public Staff in its supplemental testimony and Henry Revised Supplemental Exhibit I, the Parties have agreed to total rate case costs of \$395,479 for this current proceeding and \$434,060 of unamortized rate case costs from the prior proceeding, Docket No. W-354, Sub 356. Amortization of the total rate case costs for the current and prior proceedings over five years result in an annual expense amount of \$165,908.

Based on the foregoing the Commission finds and concludes that the regulatory commission expenses, agreed to by the Stipulating Parties and reflected in Henry Revised Supplemental Exhibit I, are just and reasonable and approved.

General Salaries and Wages/Pensions and Benefits

The Company disagrees with the Public Staff's adjustment to salaries and wages for the reduction of executive compensation and benefits, and related payroll taxes, by 50 percent. Public Staff witness Johnson testified that the Public Staff made an adjustment to remove fifty percent of the compensation, including pension and benefits, of the top three executive officers of Utilities, Inc. as reported in the supporting documentation of the Company.

Witness Johnson testified in her supplemental testimony that the three executives whose compensation and benefits were adjusted are the President of Carolina Water Service, Inc., the President and CEO of Utilities, Inc., and the Vice

President General Counsel of Utilities, Inc. (Company Executives). She testified the Public Staff's recommendation is not based on the premise that the compensation of the executives the Public Staff selected are excessive or should be reduced. Public Staff witness Johnson testified the Public Staff recommendation is based on the Public Staff's belief that it is appropriate and reasonable for the shareholder of the water and wastewater utilities to bear some of the cost of compensating those individuals who are most closely linked to furthering shareholder interests, which are not always the same as those of the ratepayers. She testified executive officers have fiduciary duties of care and loyalty to the shareholder, but not to customers. Consequently, the Company Executives are obligated to direct their efforts not only to minimizing the costs and maximizing the reliability of CWSNC's service to customers, but also to maximizing the Company's earnings and the value of its shares. She testified it is reasonable to expect that management will serve the shareholder as well as the ratepayers; therefore, a portion of management compensation and pension and benefits should be borne by the shareholder.

Public Staff witness Johnson testified in her supplemental testimony that the compensation allocated to CWSNC totaled \$185,196, of which the Public Staff recommends 50 percent, totaling \$92,598, be removed as shareholder expense. On redirect examination, Public Staff witness Johnson testified that in each of the respective recent general rate cases, both Duke Energy Progress LLC, (DEP) in Docket No. E-2, Sub 1142, and Duke Energy Carolinas LLC (DEC) in Docket No. E-7, Sub 1146, excluded in their E-1 filings 50 percent of the compensation of their

top four executive officers. (T p 137). Ms. Johnson also testified that in both cases DEP, DEC, and the Public Staff stipulated to removing fifty percent of the compensation and benefits of five top officers in recognition of the work done on behalf of shareholders. Ms. Johnson confirmed that it is the Public Staff's principled position that work and loyalties are divided between shareholders and customers, which was the basis for her adjustment. (T p 130) Additionally, when questioned by the Commission, Ms. Johnson testified that Company Executives received bonuses as a direct result of increasing the earnings per share, which directly benefitted shareholders. (T p 132)

Company's witness DeStefano testified on rebuttal that the function of the Company Executives is not the equivalent of publicly-traded parent company corporate executives whose job focus may be much more on benefits to the shareholder. Mr. DeStefano stated Utilities, Inc. is more of an operating company, as demonstrated by the roles of the individuals at issue. Additionally, he stated that since Utilities, Inc. is not a publicly-traded company, time spent on shareholder related activities is limited to that which is required to make sure risks are mitigated and capital is secured. He also testified that Utilities, Inc. has only one shareholder and dealing with that single investor requires comparable effort as working with their debt holders.

Mr. DeStefano testified that the fundamental focus of the Company Executives is ensuring customer satisfaction and welfare by providing the best service at the most reasonable possible price, which management is required by statute to do, then the interests of the shareholder and the Company's ratepayers

are understood to be exactly aligned. This alignment becomes clearer when one considers the necessity, for the customers' benefit, for a utility to attract both high-quality human resources for management and leadership purposes, and to attract financial capital to support such a capital-intensive industry.

When asked on cross-examination whether it was his contention that 100 percent of the work done by the Company Executives is for the ratepayer benefit, Mr. DeStefano testified that he could not attest to that and offered that there are incentive programs available to the executives. (T p 190:2-4). Company witness DeStefano was also asked on cross-examination whether the work of the Company executives impact the earnings of the entire Company and the shareholders. In response, Mr. DeStefano testified, "To the extent they're focused on shareholder needs, it's primarily to drive the facilitation of capital to continue the operations of the Company." (T p 190: 21-23)

When Mr. DeStefano was asked whether the Company executives kept time logs that might distinguish the work they perform solely on behalf of ratepayers and work they do in furtherance of their earnings initiatives, he stated that he was not aware of the existence of time logs. (T p 192). In response to a question of the Public Staff regarding whether he knew the exact percentage of time worked on behalf of ratepayers and time worked in furtherance of earnings initiatives. Mr. DeStefano stated he did not know of the existence of any data that would support an exact percentage. (Id.)

The Commission has carefully considered the testimonies of Public Staff witness Johnson and Company witness DeStefano and concludes it is reasonable

to expect that management will serve the shareholders as well as the ratepayers; therefore, a portion of management compensation and pension should be borne by the shareholders. Neither the Public Staff nor the Company could quantify the exact percentage of time Company Executives spent on behalf of ratepayers and on behalf of the Company's shareholder. It is clear, however, from the Company that increasing earnings of the Company is important and the Company Executives had an opportunity to earn incentive benefits based on Company earnings, and at least some percentage of time could be attributed to activities on behalf of the one shareholder.

The Commission believes it is appropriate and reasonable to allocate 50 percent of the Company Executives' compensation, pensions and benefits to shareholders. This 50 percent adjustment is consistent with the Commission-approved 50 percent adjustments for DEP in its Order Accepting Stipulation, Deciding Contested Issues and Granting Partial Rate Increase issued February 23, 2018, in Docket No. E-2, Sub 1142 (2018 DEP Rate Order), and for DEC in its Order Accepting Stipulation, Deciding Contested Issues, and Requiring Revenue Reduction issued June 22, 2018, in Docket No. E-7, Sub 1146 (2018 DEC Rate Order). The Commission, therefore concludes that it is reasonable and appropriate for \$\$92,359 in compensation and \$1,519 in pensions and benefits to be allocated to shareholders.

Insurance

Public Staff witness Feasel stated in her direct testimony she adjusted insurance premiums to reflect the current amount for insurance for Utilities, Inc.,

the parent company of CWSNC, which was provided by the Company. Ms. Feasel allocated insurance premiums to CWSNC using the following factors:

- (a) Allocated automobile insurance based on the number of automobiles for CWSNC as a percentage to the total number of automobiles;
- (b) Allocated workers compensation insurance to reflect the adjusted level of payroll;
- (c) Allocated property insurance to reflect the value of the property covered by the current insurance policies; and
- (d) Allocated the remaining insurance items to the various entities based on the number of customers.

The Public Staff testified that where they cannot directly tie a particular item to North Carolina, it does use customer count as a last resort. However, when there are tangible assets to which a value can be determined, it is reasonable and appropriate to directly assign based on actuals as opposed to customer count.

On cross-examination, Public Staff witness Henry testified that customer count was used by the Public Staff to allocate costs in seven out of ten categories when there was no other means of determining distinguish certain items in North Carolina. (T p. 118) On cross-examination in response to the question of whether the Company would ever fully recover through expense and rates its allocated insurance expense if the Public Staff's methodology is adopted, witness Henry stated that ratepayers should not have to bear more costs than necessary based on the Company's methodology of allocating costs based on customer count. (T p 121). Moreover, Mr. Henry stated that the Company should not be able to over-recover the insurance costs that are allocated from Utilities, Inc., and he affirmed

that, in his opinion, the allocation methodology based upon customer count utilized by Utilities, Inc. is incorrect and unfair. (T p 122).

CWSNC disagrees with the Public Staff's methodology of allocating automobile, worker's compensation, and property insurance to CWSNC water and sewer operations. Company witness DeStefano in his rebuttal testimony reiterated CWSNC's as-filed allocation method for insurance expenses as the most reasonable and appropriate allocation method. He stated that there are far too many factors that were not considered by the Public Staff in setting policy premiums, to utilize one for each policy in allocating insurance costs. Mr. DeStefano also testified that the Company's allocation method avoids "going down the rabbit hole" of attempting to identify a perfect allocation method, and utilizes a single, consistent allocation method in each application. The Company's as-filed position for allocating all insurance cost is based on the percentage of customers in each state that it provides water and sewer service.

The Commission concludes based upon all of the evidence presented that the Public Staff appropriately allocated insurance costs to CWSNC based on a more direct allocation methodology than the methodology advocated by the Company. Using vehicle count, payroll and property covered in CWSNS's service ensures that customers are not paying more for cost of service than they would if costs were allocated solely based on customer numbers. Moreover, the Commission believes that there is no perfect methodology for allocating costs, but directly assigning cost to the rate entities that created the cost, is a more reasonable and equitable policy to follow than allocation based on customers,

which does not identify the entity that created the cost. The Commission acknowledges that the Public Staff used customer count when a more accurate allocation method was not available. The Commission agrees with the Public Staff that North Carolina customers should not have to incur extra expense resulting from possible over-recovery by the Company of insurance expense due to a single, consistent allocation method when a more accurate method exists. Therefore the Commission concludes that the methodology employed by the Public Staff in allocating automobile, worker's compensation, and property insurance to CWSNC water and sewer operations is just and reasonable and approved.

Summary Conclusion

Based on the foregoing, the Commission concludes that the appropriate level of maintenance and general expenses for combined operations for use in this proceeding are as follows:

<u>Item</u>	<u>Amount</u>
<u>Maintenance Expenses:</u>	
Salaries and wages	\$4,765,636
Purchased power	1,932,358
Purchased water and sewer	1,972,527
Maintenance and repair	2,749,845
Maintenance testing	544,360
Meter reading	225,867
Chemicals	632,415
Transportation	447,271
Oper. expenses charged to plant	(673,065)
Outside services – other	<u>455,369</u>
Total	<u>\$13,052,583</u>
 <u>General Expenses:</u>	
Salaries and wages	\$1,972,000
Off. supplies & other office exp.	560,363
Regulatory commission expense	165,908
Pension and other benefits	1,340,118
Rent	227,339
Insurance	429,335
Office utilities	742,300
Miscellaneous	<u>23,469</u>
Total	<u>\$5,460,832</u>

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 27 – 31

The evidence supporting these findings of fact is contained in the Application and Form W-1 of CWSNC, the testimony of Public Staff witnesses Feasel and Henry and Company witnesses Linneman and DeStefano. The following table summarizes the differences between the Company's level of depreciation and amortization expenses from its Application and the amounts recommended by the Public Staff:

<u>Item</u>	<u>Company Application</u>	<u>Public Staff</u>	<u>Difference</u>
Depreciation expense	\$5,549,406	\$5,617,382	\$67,976
Amortization expense – CIAC	(1,480,909)	(1,776,720)	(295,811)
Amortization expense – PAA	(39,197)	(77,331)	(38,134)
Amortization of ITC	<u>(519)</u>	<u>(519)</u>	<u>0</u>
Total	<u>\$4,028,781</u>	<u>\$3,762,812</u>	<u>(\$265,969)</u>

With the Stipulation and revisions made by the Public Staff in its supplemental testimony and Henry Supplemental Exhibit I, the Company does not dispute adjustments recommended by the Public Staff to depreciation expense. Therefore, the Commission finds and concludes that the adjustments recommended by the Public Staff to depreciation expense, which are not contested, are appropriate adjustments to be made to operating revenue deductions in this proceeding.

Based on the testimony of Company witness DeStefano, the Company disagrees with Public Staff adjustments to amortization expense – CIAC and amortization expense – PAA.

Amortization Expense – CIAC and PAA

Public Staff witness Feasel testified that both CIAC and PAA amortization expense was adjusted to reflect the Public Staff's recommended level of CIAC and PAA times an amortization percentage based on the composite overall depreciation rate for the Public Staff's adjusted level of direct plant in service.

The Company believes, as stated by Mr. DeStefano in his rebuttal testimony, that CIAC and PAA amortization should use the actual amortization rates for each applicable account within the CIAC and PAA groups, and not the proxy of composite depreciation rates. Mr. DeStefano testified that the Public

Staff's calculation presumes the mix of asset account values in plant in service and CIAC and PAA are exactly the same, which they are not. As the Company's actual CIAC and PAA composite rates differ from the composite depreciation rates due to varying asset mix, the Company recommends rates that are more reasonable and supportive.

On cross-examination, Public Staff witness Henry testified that the Public Staff has used composite depreciation rates to calculate CIAC and PAA amortization expense in every CWSNC rate case he worked on as well as all other companies owned by Utilities Inc., in North Carolina. Mr. Henry also states that part of the reason for using a composite depreciation rates was due to CWSNC's problems recording CIAC and PAA on its books in prior years. (T p 123) Mr. Henry also testified that tap-on fees received by CWSNC are not directly allocated or associated with a plant asset account. Therefore, in order for customers to take advantage of those tap-on fees, the Public Staff calculated a composite depreciation rate to reduce the amount of depreciation expense on plant that was either contributed and/or recorded at an amount greater than the net book value of the assets acquired by CWSNC.

Commission finds and concludes that based on the evidence of record, the composite depreciation rates should be used to calculate CIAC and PAA amortization expense in this proceeding.

Summary Conclusion

Based on the foregoing, the Commission concludes that the appropriate level of depreciation and amortization expense for use in this proceeding is as follows:

<u>Item</u>	<u>Amount</u>
Depreciation expense	\$5,617,382
Amortization expense – CIAC	(1,776,720)
Amortization expense – PAA	(77,331)
Amortization of ITC	<u>(519)</u>
Total	<u>\$3,762,812</u>

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 32 - 36

The evidence supporting these findings of fact is contained in the Application and Form W-1 of CWSNC, the testimony of Public Staff witnesses Feasel and Henry and Company witnesses Linneman and DeStefano. The following table summarizes the differences between the Company's level of franchise, property, payroll and other taxes from its Application and the amounts recommended by the Public Staff:

<u>Item</u>	<u>Company Application</u>	<u>Public Staff</u>	<u>Difference</u>
Franchise and other taxes	(\$49,700)	(\$49,702)	(\$2)
Property tax	233,280	233,575	295
Payroll taxes	<u>538,817</u>	<u>526,275</u>	<u>(12,542)</u>
Total	<u>\$722,397</u>	<u>\$710,148</u>	<u>(\$12,249)</u>

With the Stipulation and revisions made by the Public Staff in its supplemental testimony and Henry Supplemental Exhibit I, the Company does not dispute adjustments recommended by the Public Staff to franchise and other taxes and property taxes. Therefore, the Commission finds and concludes that the

adjustments recommended by the Public Staff to franchise and other taxes and payroll taxes, which are not contested, are appropriate adjustments to be made to operating revenue deductions in this proceeding.

Payroll Tax

The difference in the level of payroll taxes is due to the differing levels of salaries and wages recommended by the Company and the Public Staff. Based on the conclusions reached elsewhere in the Order regarding the levels of salaries and wages, the Commission concludes that the appropriate level of payroll taxes for use in this proceeding is \$233,575.

Summary Conclusion

Based on the foregoing, the Commission concludes that the appropriate level of franchise, property, payroll and property other taxes for use in this proceeding is as follows:

<u>Item</u>	<u>Amount</u>
Franchise and other taxes	(\$49,702)
Property tax	233,575
Payroll taxes	<u>526,275</u>
Total	<u>\$710,148</u>

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 37 - 40

The evidence supporting these findings of fact is contained in the testimony of Public Staff witnesses Boswell, Henry, and Feasel, and Company witness Linneman and DeStefano. The following summarizes the differences between the Company's level of regulatory fee and income taxes from its Application and the amounts recommended by the Public Staff:

<u>Item</u>	<u>Company Application</u>	<u>Public Staff</u>	<u>Difference</u>
Regulatory fee	\$51,800	\$45,606	(\$6,194)
Deferred income tax	0	(83,555)	(83,555)
State income tax	273,392	189,741	(83,651)
Federal income tax	<u>1,856,324</u>	<u>1,288,340</u>	<u>(567,984)</u>
Total	<u>\$2,181,516</u>	<u>\$1,440,132</u>	<u>(\$741,384)</u>

With the Stipulation and revisions made by the Public Staff in its supplemental testimony and Henry Supplemental Exhibit I, the Company does not dispute any of the Public Staff adjustments to regulatory fee and income taxes.

Regulatory Fee

The difference in the level of regulatory fee is due to the differing levels of revenues recommended by the Company and the Public Staff. Based on conclusions reached elsewhere in this Order regarding the levels of revenues, the Commission concludes that the appropriate level of regulatory fee for use in this proceeding is \$45,606.

State Income Taxes

The difference in the level of state income taxes is due to the differing levels of revenues and expenses recommended by the Company and the Public Staff. Based on the conclusions reached elsewhere in the Order regarding the levels of revenues and expenses, the Commission concludes that the appropriate level of state income taxes for use in this proceeding is \$189,741.

Federal Income Taxes

The difference in the level of federal income taxes is due to the differing levels of revenues and expenses recommended by the Company and the Public Staff. Based on the conclusions reached elsewhere in the Order regarding the

levels of revenues and expenses, the Commission concludes that the appropriate level of federal income taxes for use in this proceeding is \$1,288,340.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 41 - 45

The evidence in support of these findings of fact is contained in the direct testimony of Company witness Linneman, the rebuttal testimony of Company witness DeStefano, the testimony of Public Staff witness Boswell, and the entire record in this proceeding.

On December 22, 2017, the Tax Act was signed into law. Among other provisions, the Tax Act reduced the federal corporate income tax rate from 35% to 21%, effective January 1, 2018.² It also repealed the manufacturing tax deduction and eliminated bonus depreciation.

The reduction in the corporate income tax rate in the Tax Act also results in federal EDIT for utilities. EDIT arise from the impact of tax changes on accumulated deferred income taxes (ADIT). ADIT occur because of timing differences between when a utility collects income taxes from ratepayers and when those taxes are paid to the IRS. One of the major types of ADIT arises from differing annual depreciation rates applied to the cost of assets purchased by a utility or other business. Under generally accepted accounting principles (and, in many cases, under the regulatory accounting principles followed by this Commission), a utility business is allowed to record on its books an annual

² In response to the enactment of the Tax Act, on January 3, 2018, the Commission opened a rulemaking docket (Docket No. M-100, Sub 148, i.e., the "Tax Docket") for the purpose of determining how the Commission should proceed. In the order establishing the Tax Docket, the Commission placed all public utilities on notice that the federal corporate income tax expense component of all existing rates and charges, effective January 1, 2018, will be billed and collected on a provisional rate basis.

depreciation expense representing the allocation of the cost of an item of property between its acquisition and the end of its useful life, and determine its annual income tax expense recovered from its ratepayers on that basis. The depreciation expense is in most cases determined by the “straight line” method; that is, evenly over each year of the property item’s life. In contrast, the Internal Revenue Code (IRC) allows accelerated depreciation for purposes of annual income tax determination: the business may deduct from its income, on its tax returns, a larger proportion of the property’s value in the initial years of its life and a smaller percentage in the later years. All other things being equal (for example, the tax basis and book basis of the asset), the total depreciation expense over the life of the asset will be the same for ratemaking and income tax purposes.

For accounting and ratemaking purposes, the temporary tax savings that a utility obtains by using accelerated rather than straight-line depreciation for income tax purposes is treated as a deferred tax liability. The total amount of taxes a utility has been able to defer, at any given time, is classified as ADIT. ADIT is treated as cost-free capital and is deducted from rate base because the source of the funds that have not yet been paid to the IRS (or another taxing authority) is the ratepayer. If the income tax rate remains constant, the increased taxes a utility pays in the later years of a property item’s life will be equal to the tax benefit of accelerated depreciation received by the utility in the earlier years (but not flowed through to the ratepayers in the earlier years); and, if the time value of money is disregarded, the total taxes the utility pays with respect to that property item will not be increased or reduced by the use of accelerated depreciation.

When the federal income tax rate is reduced, as it was in the Tax Act, a portion of the federal ADIT that the utility has accumulated from the ratepayers will never be needed by the utility for the payment of taxes. This portion is classified as federal EDIT. The IRC requires that certain federal EDIT must be normalized, or flowed back, subject to certain limitations. Federal EDIT that is subject to this limitation is classified as “protected” federal EDIT. All other types of federal EDIT are termed “unprotected,” in that there are no limitations placed upon them by the IRS with regard to the length of time over which they can be returned to ratepayers.

In its Application, the Company reduced the federal tax rate from 35% to 21%. In the testimony of Company witness Linneman filed on September 4, 2018, the Company proposed to return protected federal EDIT to ratepayers under the IRS normalization rules, return federal unprotected EDIT not protected by normalization rules, but related to property, plant, and equipment (PP&E) to ratepayers over 20 years, and return federal unprotected EDIT not related to PP&E to ratepayers over five years. Company witness DeStefano clarified the Company’s proposal, stating the Company did not have any plant-related unprotected balances. (T p. 161)

CWSNC witnesses Linneman and DeStefano also asserted that the Commission should consider all items within the Company’s revenue requirement and, if the actual return earned by CWSNC during the Review Period exceeded the authorized return considering the new 21% federal corporate tax rate, then, and only at that point, should the Company’s refund obligation be determined and ordered by the Commission. The Company witnesses further stated that should a

refund be required, the Company recommended that such a refund be instituted as a negative surcharge to the customers' bills over a 12-month period. Witness DeStefano also testified that any amount determined to be refunded should be credited to customers over one year, and accrue interest at an appropriate short-term interest rate. Witness DeStefano testified that he did not have a short-term interest rate offhand. (T p. 197)

In his rebuttal testimony filed on October 12, 2018, Company witness DeStefano stated the Company was authorized in its last rate case to amortize state EDIT due to a recent tax change. Witness DeStefano proposed combining the remaining state EDIT with the federal unprotected EDIT and offsetting the balance against the Company's various unamortized deferred maintenance assets in the current proceeding. Witness DeStefano testified the balances and amortization periods for these assets were already decided and approved in prior rate cases. (T p. 195)

In supplemental testimony filed on October 12, 2018, Public Staff witness Boswell presented the Public Staff's proposal regarding the flowback of federal and state EDIT, as well as the flowback of the overcollection of taxes since January 1, 2018. She included three adjustments, based on the information provided by the Company. First, she recommended the return of protected federal EDIT based upon the Company's calculation of the net remaining life of the timing differences, as required under the IRC. For unprotected federal EDIT, she recommended removing the federal EDIT regulatory liability associated with the unprotected differences from rate base, and placing it in a rider to be refunded to ratepayers

over three years on a levelized basis, with carrying costs calculated at the overall weighted average cost of capital. Public Staff witness Boswell stated that immediate removal of unprotected federal EDIT from rate base increases the Company's rate base and mitigates regulatory lag that might occur from refunds of unprotected federal EDIT not contemporaneously reflected in rate base. Further, refunding the unprotected federal EDIT over three years allows the Company to properly plan for any future credit needs.

Additionally, witness Boswell disagreed with the Company's proposal to offset the unprotected federal EDIT and state EDIT against deferred regulatory assets. She stated that the Public Staff believes that offsetting known and measurable reductions in taxes to be paid going forward against either unknown or future regulatory assets, or regulatory assets previously approved by the Commission for recovery over a specified period, presents significant intergenerational issues and constitutes inappropriate ratemaking. Existing deferred regulatory assets are the result of accounting adjustments approved or adopted by the Commission, the purpose of which typically is to spread the recovery of incurred costs over a specified period (amortization period). The amortization period for each regulatory asset is approved by the Commission based upon its determination of what is fair and reasonable for the ratepayers with regard to the costs associated with that specific regulatory asset, or other specific factors taken into consideration by the Commission at the time of that approval. Choosing to simply offset a new unprotected EDIT regulatory liability with the remaining unamortized portion of any regulatory asset would effectively override

the Commission's prior decision as to the appropriate amortization period for the regulatory asset, by equalizing the remaining amortization period and the amortization period for the new EDIT regulatory liability. Witness Boswell stated that the Public Staff believes that the amortization periods for existing regulatory assets and the unprotected EDIT should be determined separately, based on the specific characteristics of each cost or benefit. Departing from this transparent process in the course of a general rate case simply to offset flowing through the benefit of reductions in an entirely separate category of costs (income taxes) is neither fair nor reasonable.

For state EDIT, witness Boswell did not recommend an adjustment in this case, as the Company had been amortizing the applicable regulatory asset over a three-year period as approved in its last rate case in Docket No. W-354, Sub 356.

Finally, witness Boswell recommended that the Company refund to ratepayers the overcollection of federal taxes related to the decrease in federal tax rates for the period beginning January 1, 2018, and corresponding interest calculated at the overall weighted cost of capital, as a negative surcharge for a one-year period beginning when the new base rates become effective in the current docket. Witness Boswell stated that the Public Staff believes the Commission's October 8, 2018 Order in Docket No. M-100, Sub 148 was explicitly clear that the overcollection of taxes since January 1, 2018 should be flowed back to ratepayers and include interest at the overall weighted cost of capital. These

funds rightfully belong to ratepayers and should be returned to them as soon as reasonably possible.

Witness Boswell also disagreed with the Company's proposal to retain the overcollection of taxes since January 1, 2018 in the instance the Company had not earned its approved rate of return during the period. The approved rate of return in any general rate case represents the amount the Company has the potential to earn, with proper management. It does not represent guaranteed dollars or return for the Company. The actual return earned by a utility fluctuates over time, and may fall below the approved rate of return for significant periods of time. Nevertheless, it is ultimately the utility's choice as to when it should file for a general rate increase; otherwise, its rates as they exist at any moment in time are generally presumed to recover its costs. Witness Boswell stated in this particular case that even if the Company had not been recovering its currently approved rate of return during 2018, applying the future Commission-mandated refund of overcollected income taxes against that past return deficiency would, in principle, constitute inappropriate retroactive ratemaking. The tax overcollection in question was to be used to pay taxes that the Company was expected to owe. As of January 1, 2018, the overcollected taxes are no longer owed. The overcollection is ratepayer money that should not be utilized to assist the Company in attaining its return, and thus benefit its shareholders.

The Commission's primary concern regarding the effects of the Tax Act is to ensure that ratepayers receive the full benefit of the reduction of the federal corporate income tax rate. Rates have been set to ensure that the Company has

adequate funds with which to pay taxes; now that the federal income tax rate is reduced, rates should be adjusted accordingly. The question before the Commission is how, and over what length of time, these effects should be implemented.

The evidence shows that there is some agreement regarding how to implement the effects of the Tax Act. The Company and the Public Staff agree upon the revenue requirement effect of the decrease in the corporate income tax rate; additionally, no party disputes the amounts presented by the Company regarding the impact of the Tax Act on these issues. The Commission finds and concludes that the revenue requirement changes presented by the Company related to these issues are appropriate and should be approved.

Additionally, the Company and the Public Staff agree, and no party disputes, that protected federal EDIT, which is subject to tax normalization rules, should not be returned to ratepayers any faster than allowed under the IRS rules. Therefore, the Commission finds and concludes that it is appropriate for the Company to return protected federal EDIT in the amount, and over the time period, recommended by the Company and the Public Staff.

The evidence shows there is not agreement as to how CWSNC should return to ratepayers the unprotected federal EDIT. CWSNC proposed several solutions for handling the unprotected federal EDIT. In direct testimony, the Company proposed to amortize the balance over a five-year period. In rebuttal testimony, the Company proposed to utilize the unprotected federal EDIT as an offset against the Company's various unamortized deferred maintenance assets

in the current proceeding. The Public Staff disagreed with the Company's rebuttal proposal, and proposed refunding the unprotected federal EDIT balance through a levelized rider over a three-year period. The Public Staff further recommended removing the entire federal EDIT balance from rate base in the current case, thus mitigating regulatory lag that might occur from refunds of unprotected federal EDIT not contemporaneously reflected in rate base.

Through the years the Commission has set rates at a level to ensure that the Company would be able to pay its taxes, including deferred taxes, when they came due.³ These funds were paid by ratepayers to the Company to enable the Company to pay its taxes; now that the funds are no longer needed to pay the Company's taxes, they should be flowed back to ratepayers as quickly as practicable. The fact that the Company has enjoyed the use of these funds as cost-free capital does not change the fact that it is ultimately customer money that is no longer needed for tax payments. The only remaining question is over what period of time the refund should occur.

The Commission has carefully considered the evidence as to the appropriate time period over which to return unprotected federal EDIT. The Company no longer needs these funds to pay its taxes, which is why they were collected from ratepayers in the first place. The Commission disagrees with the Company's proposal to offset the unprotected federal EDIT against various unamortized deferred maintenance assets in the current proceeding. The

³ The Commission notes that the last reduction in the corporate income tax rate occurred in 1986. The evidence in the record shows that the Company in that instance did not propose to create two separate classifications of unprotected federal EDIT, but simply refunded all its unprotected federal EDIT through amortization over a five-year period.

Commission agrees with the Public Staff that choosing simply to offset the new unprotected EDIT regulatory liability with the remaining unamortized portion of any regulatory asset would effectively override prior Commission decisions as to the appropriate amortization period for the regulatory asset. Furthermore, the amortization periods for existing regulatory assets and the EDIT regulatory liability should be determined separately, based on the specific characteristics of each cost or benefit. Therefore, based on the evidence in this case, the Commission finds and concludes Public Staff's proposal to return unprotected federal EDIT over a three-year period through a rider to be reasonable; it appropriately balances the interests of ratepayers and the Company. By removing the total amount of the unprotected federal EDIT credit from rate base in the current case, the Company will be provided with an increase in rates to moderate any cash flow issues, to the extent they would exist.

Additionally, the Commission disagrees that the currently amortized state EDIT should be utilized to offset various unamortized deferred maintenance assets in the current proceeding. The Commission previously approved the amortization of state EDIT in Docket No. W-354, Sub 356, and finds no reason for which to change the decision in that docket. Therefore, the Commission finds and concludes that the state EDIT regulatory liability should continue to be amortized over a three-year period as approved in its last rate case in Docket No. W-354, Sub 356.

Finally, the Commission disagrees with the Company's assertion that the overcollection of federal taxes since January 1, 2018 should be retained by the

Company unless the actual return earned by CWSNC during the Review Period exceeded the authorized return considering the new 21% federal corporate tax rate; then, and only at that point, should the Company's refund obligation be determined and ordered by the Commission. The approved rate of return in any general rate case represents the amount the Company has the potential to earn, with proper management. It does not represent guaranteed dollars or return for the Company. Additionally, the Commission has ruled in Docket No. M-100, Sub 148, that "these amounts will ultimately be returned to customers with interest reflected at the overall weighted cost of capital approved in each Company's last general rate case proceeding." Furthermore, the Commission finds the Company's recommendation that the interest on any refund be calculated using a short term debt rate when the Company collects rate base based on the overall weighted cost of capital to not be fair or reasonable to ratepayers. The Commission finds and concludes that the Public Staff's proposal to return the overcollection of federal taxes related to the decrease in federal tax rates, including interest calculated at the overall weighted cost of capital, as a credit over a one-year period beginning when new base rates become effective to be reasonable; it appropriately balances the interests of ratepayers and the Company.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 46 - 54

The evidence supporting these findings of fact and conclusions is contained in the Application and Form W-1 of the Company, the testimony and exhibits of the public witnesses, the testimony and exhibits of Company witness D'Ascendis, Public Staff witness Hinton, and the entire record of this proceeding.

Rate of Return on Equity

In its Application and in the direct testimony of CWSNC witness Dylan D'Ascendis ('D'Ascendis'), the Company requested approval for its rates to be set using a rate of return on equity of 11.90%. Mr. D'Ascendis in his rebuttal testimony based upon his updated analysis reduced his recommended rate of return on equity to a range of 10.80% to 11.20%. For the reasons set forth herein, the Commission finds that a rate of return on equity of 9.2% is just and reasonable.

Rate of return on equity, also referred to as the cost of equity capital, is often one of the most contentious issues to be addressed in a rate case. In the absence of a settlement agreed to by all parties, the Commission must exercise its independent judgment and arrive at its own independent conclusion as to all matters at issue, including the rate of return on equity. See, e.g., CUCA I, 348 N.C. at 466, 500 S.E.2d at 707. In order to reach an appropriate independent conclusion regarding the rate of return on equity, the Commission should evaluate the available evidence, particularly that presented by conflicting expert witnesses. State ex rel. Utils. Comm'n v. Attorney Gen. Roy Cooper, 366 N.C. 484, 739 S.E.2d 541, 546-47 (2013) (Cooper I).

In this case, the evidence relating to the Company's cost of equity capital was presented by D'Ascendis, and Public Staff witness Hinton (Hinton). No rate of return on equity expert evidence was presented by any other party.

In addition to its evaluation of the expert evidence, the Commission must also make findings of fact regarding the impact of changing economic conditions on customers when determining the proper rate of return on equity for a public

utility. Cooper I, 366 N.C. 484, 739 S.E.2d at 548. This was a factor newly announced by the Supreme Court in its Cooper I Decision and not previously required by the Commission, the Court of Appeals, or the Supreme Court as an element to be considered in connection with the Commission's determination of an appropriate rate of return on equity. The Commission's discussion of the evidence with respect to the findings required by Cooper I is set out in detail in this Order.

Cooper I was the result of the Supreme Court's reversal and remand of the Commission's approval of the agreement regarding the rate of return on equity in a stipulation between the Public Staff and Aqua in Aqua's 2011 Rate Case. The Commission has had occasion to apply both prongs of Cooper I in subsequent orders, specifically the following:

- Order Granting General Rate Increase in the DEP's Rate Case, Docket No. E-2, Sub 1023 (May 30, 2013) (2013 DEP Rate Order), which was affirmed by the Supreme Court in State ex rel. Utils. Comm'n v. Cooper, 367 N.C. 444, 761 S.E.2d 640 (2014) (Cooper III)⁴;
- Order on Remand resulting from the Supreme Court's Cooper I Decision, in Docket No. E-7, Sub 989 (October 23, 2013) (Aqua Remand Order), which was affirmed by the Supreme

⁴ An intervening Cooper case, State ex rel. Utils. Comm'n v. Cooper, 367 N.C. 430, 758 S.E.2d 635 (2014) (Cooper II), arose from the 2012 Rate Case by Dominion North Carolina Power (DNCP) and resulted in a remand to the Commission, inasmuch as the Commission's Order in that case predated Cooper I.

Court in State ex rel. Utils. Comm'n v. Cooper, 367 N.C. 644, 766 S.E.2d 827 (2014) (Cooper IV);

- Order Granting General Rate Increase in Aqua's 2013 Rate Case, Docket No. E-7, Sub 1026 (September 24, 2013) (2013 Aqua Rate Order), which was affirmed by the Supreme Court in State ex rel. Utils. Comm'n v. Cooper, 367 N.C. 741, 767 S.E.2d 305 (2015) (Cooper V);
- Order on Remand resulting from the Supreme Court's Cooper II Decision, in Docket No. E-22, Sub 479 (July 23, 2015) (DNCP Remand Order), which was not appealed to the Supreme Court;
- Order Approving Rate Increase and Cost Deferrals and Revising PJM Regulatory Conditions, in Docket No. E-22, Sub 532, dated December 22, 2016 (2016 DNCP Rate Order); and
- Order Accepting Stipulation, Deciding Contested Issues and Granting Partial Rate Increase, in Docket No. E-2, Sub 1142, dated February 23, 2018. (2018 DEP Rate Order).
- Order Accepting Stipulation, Deciding Contested Issues, and Requiring Revenue Reduction, in Docket No. E-7, Sub 1146, dated June 22, 2018. (2018 DEC Rate Order).

In order to give full context to the Commission's Decision herein and to elucidate its view of the requirements of the General Statutes as they relate to rate of return on equity, as interpreted by the Supreme Court in Cooper I, the

Commission deems it important to provide in this Order an overview of the general principles governing this subject.

A. Governing Principles in Setting the Rate of Return on Equity

First, there are, as the Commission noted in the 2013 DEP Rate Order, constitutional constraints upon the Commission's rate of return on equity Decisions established by the United States Supreme Court Decisions in Bluefield Waterworks & Improvement Co., v. Pub. Serv. Comm'n of W. Va., 262 U.S. 679 (1923) (Bluefield), and Fed. Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944) (Hope):

To fix rates that do not allow a utility to recover its costs, including the cost of equity capital, would be an unconstitutional taking. In assessing the impact of changing economic conditions on customers in setting an ROE, the Commission must still provide the public utility with the opportunity, by sound management, to (1) produce a fair profit for its shareholders, in view of current economic conditions, (2) maintain its facilities and service, and (3) compete in the marketplace for capital. State ex rel. Utilities Commission v. General Telephone Co. of the Southeast, 281 N.C. 318, 370, 189 S.E.2d 705, 757 (1972). As the Supreme Court held in that case, these factors constitute "the test of a fair rate of return" in Bluefield and Hope. Id.

2013 DEP Rate Order, at 29.

Second, the rate of return on equity is, in fact, a cost. The return that equity investors require represents the cost to the utility of equity capital. In his dissenting opinion in Missouri ex rel. Southwestern Bell Tel. Co. v. Missouri Pub. Serv. Comm'n, 262 U.S. 276 (1923), Justice Brandeis remarked upon the lack of any functional distinction between the rate of return on equity (which he referred to as a "capital charge") and other items ordinarily viewed as business costs, including operating expenses, depreciation, and taxes:

Each is a part of the current cost of supplying the service; and each should be met from current income. When the capital charges are for interest on the floating debt paid at the current rate, this is readily seen. But it is no less true of a legal obligation to pay interest on long-term bonds ... and it is also true of the economic obligation to pay dividends on stock, preferred or common.

Id. at 306 (Brandeis, J. dissenting) (emphasis added). Similarly, the United States Supreme Court observed in Hope, “From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business ... [which] include service on the debt and dividends on the stock.” Hope, 320 U.S. 591, 603.

Leading academic commentators also define rate of return on equity as the cost of equity capital. Professor Charles Phillips, for example, states that “the term ‘cost of capital’ may be defined as the annual percentage that a utility must receive to maintain its credit, to pay a return to the owners of the enterprise, and to ensure the attraction of capital in amounts adequate to meet future needs.” Phillips, Charles F., Jr., The Regulation of Public Utilities (Public Utilities Reports, Inc. 1993), at 388. Professor Roger Morin approaches the matter from the economist’s viewpoint:

While utilities enjoy varying degrees of monopoly in the sale of public utility services, they must compete with everyone else in the free open market for the input factors of production, whether it be labor, materials, machines, or capital. The prices of these inputs are set in the competitive marketplace by supply and demand, and it is these input prices which are incorporated in the cost of service computation. This is just as true for capital as for any other factor of production. Since utilities must go to the open capital market and sell their securities in competition with every other issuer, there is obviously a market price to pay for the capital they require, for example, the interest on capital debt, or the expected return on equity.

* * *

[T]he cost of capital to the utility is synonymous with the investor's return, and the cost of capital is the earnings which must be generated by the investment of that capital in order to pay its price, that is, in order to meet the investor's required rate of return.

Morin, Roger A., Utilities' Cost of Capital (Public Utilities Reports, Inc. 1984), at 19-21 (emphasis added). Professor Morin adds: "The important point is that the prices of debt capital and equity capital are set by supply and demand, and both are influenced by the relationship between the risk and return expected for those securities and the risks expected from the overall menu of available securities." Id. at 20 (emphasis added).

Changing economic circumstances as they impact CWSNC's customers may affect those customers' ability to afford rate increases. For this reason, customer impact weighs heavily in the overall rate setting process, including, as set out in detail elsewhere in this Order, the Commission's own decision of an appropriate authorized rate of return on equity. In addition, in the event of a settlement, customer impact no doubt influences the process by which the parties to a rate case decide to settle contested matters and the level of rates achieved by any such settlement.

However, a customer's ability to afford a rate increase has absolutely no impact upon the supply of or the demand for capital. The economic forces at work in the competitive capital market determine the cost of capital – and, therefore, the utility's required rate of return on equity. The cost of capital does not go down because some customers may find it more difficult to pay for an increase in water and wastewater prices as a result of prevailing adverse economic conditions, any

more than the cost of capital goes up because some customers may be prospering in better times.

Third, the Commission is and must always be mindful of the North Carolina Supreme Court's command that the Commission's task is to set rates as low as possible consistent with the dictates of the United States and North Carolina Constitutions. State ex rel. Utils. Comm'n v. Pub. Staff-N. Carolina Utils. Comm'n, 323 N.C. 481, 490, 374 S.E.2d 361, 370 (1988). Further, and echoing the discussion above concerning the fact that rate of return on equity represents the cost of equity capital, the Commission must execute the Supreme Court's command "irrespective of economic conditions in which ratepayers find themselves." (2013 DEP Rate Order, at 37.) The Commission noted in that order:

The Commission always places primary emphasis on consumers' ability to pay where economic conditions are difficult. By the same token, it places the same emphasis on consumers' ability to pay when economic conditions are favorable as when the unemployment rate is low. Always there are customers facing difficulty in paying utility bills. The Commission does not grant higher rates of return on equity when the general body of ratepayers is in a better position to pay than at other times, which would seem to be a logical but misguided corollary to the position the Attorney General advocates on this issue.

Id. Indeed, in Cooper I the Supreme Court emphasized "changing economic conditions" and their impact upon customers. 366 N.C. 484, 739 S.E.2d at 548.

Fourth, while there is no specific and discrete numerical basis for quantifying the impact of economic conditions on customers, the impact on customers of changing economic conditions is embedded in the rate of return on equity expert witnesses' analyses. The Commission noted this in the 2013 DEP Rate Order: "This impact is essentially inherent in the ranges presented by the

return on equity expert witnesses, whose testimony plainly recognized economic conditions – through the use of econometric models – as a factor to be considered in setting rates of return.” 2013 DEP Rate Order, at 38.

Fifth, under long-standing Decisions of the North Carolina Supreme Court, the Commission’s subjective judgment is a necessary part of determining the authorized rate of return on equity. State ex rel. Utils. Comm’n v. Pub. Staff, 323 NC 481, 490,374 S.E.2d 361, 369. As the Commission also noted in the 2013 DEP Rate Order:

Indeed, of all the components of a utility’s cost of service that must be determined in the ratemaking process, the appropriate [rate of return on equity] the one requiring the greatest degree of subjective judgment by the Commission. Setting an ROE [rate of return on equity] for regulatory purposes is not simply a mathematical exercise, despite the quantitative models used by the expert witnesses. As explained in one prominent treatise,

Throughout all of its Decisions, the [United States] Supreme Court has formulated no specific rules for determining a fair rate of return, but it has enumerated a number of guidelines. The Court has made it clear that confiscation of property must be avoided, that no one rate can be considered fair at all times and that regulation does not guarantee a fair return. The Court also has consistently stated that a necessary prerequisite for profitable operations is efficient and economical management. Beyond this is a list of several factors the commissions are supposed to consider in making their Decisions, but no weights have been assigned.

The relevant economic criteria enunciated by the Court are three: financial integrity, capital attraction and comparable earnings. Stated another way, the rate of return allowed a public utility should be high enough: (1) to maintain the financial integrity of the enterprise, (2) to enable the utility to attract the new capital it needs to serve the public, and (3) to provide a return on common equity that is commensurate with returns on investments in other enterprises of corresponding risk. These three economic criteria are interrelated and have been used widely for many years by regulatory commissions

throughout the country in determining the rate of return allowed public utilities.

In reality, the concept of a fair rate of return represents a “zone of reasonableness.” As explained by the Pennsylvania commission:

There is a range of reasonableness within which earnings may properly fluctuate and still be deemed just and reasonable and not excessive or extortionate. It is bounded at one level by investor interest against confiscation and the need for averting any threat to the security for the capital embarked upon the enterprise. At the other level it is bounded by consumer interest against excessive and unreasonable charges for service.

As long as the allowed return falls within this zone, therefore, it is just and reasonable. . . . It is the task of the commissions to translate these generalizations into quantitative terms.

Charles F. Phillips, Jr., The Regulation of Public Utilities, 3d ed. 1993, pp. 381-82. (notes omitted)

2013 DEP Rate Order, pp. 35-36.

Thus, the Commission must exercise its subjective judgment so as to balance two competing rate of return on equity-related factors – the economic conditions facing the Company’s customers and the Company’s need to attract equity financing in order to continue providing safe and reliable service.

The Supreme Court in Cooper V affirmed the 2013 Aqua Rate Order, in which this framework was fully articulated. But to the framework we can add additional factors based upon the Supreme Court’s Decisions in Cooper III, Cooper IV, and Cooper V. Specifically, the Supreme Court held that nothing in Cooper I requires the Commission to “quantify” the influence of changing economic conditions upon customers (see, e.g., Cooper V, 367 N.C. at 745-46; Cooper IV, 367 N.C. at 650; Cooper III, 367 N.C. at 450), and, indeed, the Supreme Court

reiterated that setting the rate of return on equity is a function of the Commission's subjective judgment: "Given th[e] subjectivity ordinarily inherent in the determination of a proper rate of return on common equity, there are inevitably pertinent factors which are properly taken into account but which cannot be quantified with the kind of specificity here demanded by [the appellant]." Cooper III, 367 N.C. at 450, quoting State ex rel. Utils. Comm'n v. Pub. Staff-North Carolina Utils. Comm'n, 323 NC 481, 490 (1988).

Finally, the Supreme Court discussed with approval the Commission's reference to and reliance upon expert witness testimony that used econometric models that the Commission had noted "inherently" contained the effects of changing economic circumstances upon customers, and also discussed with approval the Commission's reference to and reliance upon expert witness testimony correlating the North Carolina economy with the national economy. See, e.g., Cooper V, 367 N.C. at 747; Cooper III, 367 N.C. at 451.

It is against this backdrop of overarching principles that the Commission turns to the evidence presented in this case.

B. Application of the Governing Principles to the Rate of Return Decision

Public Staff Witness Hinton Testimony

Public Staff Director of Economic Research John R. Hinton testified the Public Staff recommends an overall rate of return of 7.47%, based on a capital structure consisting of 49.09% long-term debt at a cost rate of 5.68% and 50.91% common equity at a cost rate of 9.20%. He testified his recommendations result

in pre-tax interest coverage equaling 3.2 times and a funds flow to debt ratio of 26%, which should qualify for a single “A” bond rating.

Public Staff witness Hinton described the current financial market conditions testifying the cost of financing is much lower today than in the more inflationary period of the 1990s. More recently, the continued low rates of inflation and expectations of future low inflation rates have contributed to even lower long-term interest rates. He testified according to Moody’s Bond Survey, yields on long-term “A” rated public utility bonds as of August 2018 were 4.26% and 4.27% for July 2018, as compared to 4.63% for January, 2014 which is the time of filing of the Public Staff and Company Stipulation in the Sub 336 CWSNC rate case which is 37 basis points higher than the current yields on long-term bonds, as illustrated by Hinton Exhibit JRH-1

Mr. Hinton testified there has been little changes in the cost rates for 30-year treasury securities which are indicators of the interest rates for long-term utility bonds. He testified as illustrated in the graph on page 14 of his direct testimony, since the time of the last CWSNC stipulation filed on September 19, 2017, yields on 30-year treasury securities have risen 12 basis points; however, the yields on 30-year treasury securities are 60 basis points lower since January 10, 2014, the date that the cost of capital stipulation was filed in Docket No. W-354, Sub 336.

Public Staff witness Hinton testified the current lower interest rates and stable inflationary environment of today indicate that borrowers are paying less for the time value of money. He testified this is significant since utility stocks and utility

capital costs are highly interest rate-sensitive relative to most industries with the securities markets. He testified given that investors often view purchases of the common stocks of utilities as substitutes for fixed income investments, the reductions in interest rates observed over the past ten years or more has paralleled the decreases in investor required rates of return on common equity.

Public Staff witness Hinton testified he generally does not rely on interest rate forecasts. Rather, he believes that relying on current interest rates, especially in relation to yields on long-term bonds, is more appropriate for ratemaking in that, it is reasonable to expect that as investors are pricing bonds, they are based on expectations on future interest rates, inflation rates, etc. He testified while he has a healthy respect for forecasting, he is aware of the risk of relying on predictions of rising interest rate cases. He presented a case can be observed in the testimony of Aqua North Carolina, Inc. witness Ahern in the 2013 Aqua rate case. In that case, she identified several point forecasts of 30-year Treasury Bond yields that were predicted to rise to 4.3% in 2015, 4.7% in 2016, and 5.2% in 2017. He presented the graph 30-Year US Treasury Bonds on page 17 of his direct testimony, which showed in 2015, the range was approximately 2.5% to 3.1%, in 2016 the range was approximately 2.50% to 3.10%, and in 2017 the range was approximately 2.25% to 3.10%.

Public Staff witness Hinton testified he used the discounted cash flow (DCF) model and the Risk Premium model to determine the cost of equity for Aqua. He testified the discounted cash flow model is a method of evaluating the expected cash flows from an investment by giving appropriate consideration to the time

value of money. The DCF model is based on the theory that the price of the investment will equal the discounted cash flows of return. The return to an equity investor comes in the form of expected future dividends and price appreciation. He testified as the new price will again be the sum of the discounted cash flows, price appreciation is ignored and attention focused on the expected stream of dividends.

Public Staff witness Hinton testified he applied the DCF method to a comparable group of water utilities followed by Value Line Investment Survey (Value Line). He testified the standard edition of Value Line covers nine water companies. He excluded Connecticut Water Service, Inc. and the SJW Group because of a merger of the two companies and also excluded Consolidated Water Co. because of its significant overseas operations.

Public Staff witness Hinton testified he calculated the dividend yield component of the DCF by using the Value Line estimate of dividends to be declared over the next 12 months divided by the price of the stock as reported in the Value Line Summary and Index sections for each week of the 13-week period June 29, 2018 through September 21, 2018. He testified a 13-week averaging period tends to smooth out short-term variations in the stock prices. This process resulted in an average dividend yield of 2.1% for his proxy group of water utilities.

To calculate the expected growth rate component of the DCF, Public Staff witness Hinton testified he employed the growth rates of his proxy group in earnings per share (EPS), dividend per share (DPS), and book value per share (BPS) as reported in Value Line over the past ten and five years. He also

employed the forecasts of the growth rates of his proxy group in EPS, DPS, and BPS as reported in Value Line. He testified the historical and forecast growth rates are prepared by analysts of an independent advisory service that is widely available to investors, and should also provide an estimate of investor expectations. He testified he includes both historical known growth rates and forecast growth rates, because it is reasonable to expect that investors consider both sets of data in deriving their expectations.

Public Staff witness Hinton testified he also incorporated the consensus of various analysts' forecasts of five-year EPS growth rate projections as reported in Yahoo Finance. He testified the dividend yields and growth rates for each of the companies and for the average for his comparable proxy group are shown in Exhibit JRH-3.

Public Staff witness Hinton concluded based upon his DCF analysis that a reasonable expected dividend yield is 2.1% with an expected growth rate of 6.1% to 7.1%. He testified his DCF analysis produces a cost of common equity for his comparable proxy group of water utilities of 8.20% to 9.20%.

Public Staff witness Hinton testified the equity risk premium method can be defined as the difference between the expected return on a common stock and the expected return on a debt security. The differential between the two rates of return are indicative of the return investors require in order to compensate them for the additional risk involved with an investment in the Company's common stock over an investment in the Company's bonds that involves less risk.

Public Staff witness Hinton testified his method relies on approved returns on common equity for water utility companies from various public utility commissions that is published by the Regulatory Research Associates, Inc. (RRA), within SNL Global Market Intelligence. In order to estimate the relationship with a representative cost of debt capital, he regressed the average annual allowed equity returns with the average Moody's A-rated yields for Public Utility bonds from 2006 through 2018. His regression analysis which incorporates years of historical data is combined with recent monthly yields to provide an estimate of the current cost of common equity.

Public Staff witness Hinton testified the use of allowed returns as the basis for the expected equity return has two strengths over other approaches that involve various models that estimate the expected equity return on common stocks and subtracting a representative cost of debt. He testified one strength of his approach is that authorized returns on equity are generally arrived at through lengthy investigations by various parties with opposing views on the rate of return required by investors. He testified it is reasonable to conclude that the approved allowed returns are good estimates of the cost of equity.

Public Staff witness Hinton testified the summary data of risk premiums shown on his Exhibit JRH-4, page 1 of 2, indicates that the average risk premium is 4.95% with a maximum premium of 5.78% and minimum premium of 3.73%, which when combined with the last six months of Moody's A-rated utility bond yields produces yields with an average cost of equity of 9.11%, a maximum cost of equity of 9.94%, and a minimum cost of equity of 7.89%. He performed a

statistical regression analysis as shown on Exhibit JRH 4, page 2 of 2 in order to quantify the relationship of allowed equity returns and bond costs. He testified by applying the allowed returns to the current utility bond cost of 4.22%, resulted in a current estimate of the equity risk premium of equity of 9.70%, which reflects a risk premium of 5.48%.

Public Staff witness Hinton concluded that based on all of the results of his DCF model that indicate a cost of equity from 8.2% to 9.2% with a central point estimate of 8.70%, and the risk premium model that indicates a cost of equity of 9.69%, he determined that the investor required rate of return on equity for CWSNC is between 8.70% and 9.70%. He concluded that 9.20% is his single best estimate of the Company's cost of common equity.

Public Staff witness Hinton testified as to the reasonableness of his recommended return, that he considered the pre-tax interest coverage ratio produced by his cost estimates for the cost equity. He testified based on his recommended capital structure, cost of debt, and equity return of 9.20%, the pre-tax interest coverage ratio is approximately 3.2 times. He testified this tax interest coverage and a funds flow to debt ratio of 26%, should allow CWSNC to qualify for a single "A" bond rating.

Public Staff witness Hinton testified his recommended return on common equity takes into consideration the impact of the water and sewer system improvement charges (WSIC and SSIC) pursuant to N.C. Gen. Stat. §62-113.12 on CWSNC's financial risk. He testified the WSIC and SSIC has the ability for enhanced cost recovery of the eligible capital improvements which reduces

regulatory lag through incremental and timely recovery. He testified he believes this mechanism is seen by debt and equity investors as supportive regulation that mitigates business risk. Witness Hinton testified he believes that this mechanism is noteworthy and is supportive of his 9.2% return on equity recommendation.

Public Staff witness Hinton testified it is not appropriate to add a risk premium to the cost of equity due to the size of the company. He testified from a regulatory policy perspective, ratepayers should not be required to pay higher rates because they are located in the franchise area of a utility of a size which is arbitrarily considered to be small. He further testified if such adjustments were routinely allowed, an incentive would exist for large existing utilities to form subsidiaries when merging or even to split-up into subsidiaries as to obtain higher allowed returns. He further testified CWSNC operates in a franchise environment that insulates the company from competition and it operates with procedures in place that allow for rate adjustments for eligible capital improvements, cost increases, and other unusual circumstances that impact its earnings.

1. Evidence from expert witnesses on cost of equity capital

Company witness D'Ascendis recommended in his direct testimony a rate of return on equity of 11.90%. This 11.90% was based upon his indicated cost of common equity of 11.50%, a recommended size adjustment of .40%. In his rebuttal testimony, Mr. D'Ascendis reduced his recommended rate of return on equity to a range of 10.80% to 11.20%.

CWSNC Witness D'Ascendis Testimony

CWSNC witness D'Ascendis' recommendation was based upon his Discounted Cash Flow ("DCF") model, his Risk Premium Model ("RPM"), and his Capital Asset Pricing Model ("CAPM"), applied to market data of a proxy group of six water companies ("Utility Proxy Group"). He also applied the DCF, RPM, and CAPM to a proxy group of domestic, non-price regulated companies (Non-Price Regulated Proxy Group) which he described as comparable in total risk to the his Utility Proxy Group.

The results derived from Mr. D'Ascendis' analyses in his direct testimony are as follows:

Table 2: Summary of Common Equity Cost Rate

<u>Utility Proxy Group</u>	
Discounted Cash Flow Model	9.10%
Risk Premium Model	12.12
Capital Asset Pricing Model	11.31
Cost of Equity Models Applied to Comparable Risk, Non-Price Regulated Companies	<u>12.63</u>
Indicated Common Equity Cost Rate Before Adjustments	11.50%
Size Adjustment	0.40
Range of Common Equity Cost Rates After Adjustments	<u>11.50% - 11.90%</u>

He concluded that a common equity cost rate of 11.50% for CWSNC is indicated before any Company-specific adjustments. He then adjusted upward by 0.40% to reflect CWSNC's smaller relative size as compared with the members of his Utility Proxy Group, resulting in a size-adjusted indicated common equity cost rate of 11.90%.

CWSNC witness D'Ascendis testified the six companies in his Utility Proxy Group were: American States Water Co., American Water Works Co., Inc., Aqua America, Inc., California Water Service Group, Middlesex Water Co., and York Water Co.

CWSNC witness D'Ascendis testified he used the single-stage constant growth DCF model. He testified his unadjusted dividend yields are based on the proxy companies' dividends as of March 29, 2018, divided by the average of closing market prices for the 60 trading days ending March 29, 2018.⁵ He made an adjustment to the dividend yield because dividends are paid periodically, usually quarterly.

For CWSNC witness D'Ascendis' DCF growth rate he testified he only used analysts' five-year forecasts of earning per share (EPS) growth. He testified the mean result of his application of the single-stage DCF model is 9.12%, the median result is 9.07%, and the average of the two is 9.10% for his Utility Proxy Group as shown on D'Ascendis Direct Exhibit 1, Schedule DWD-3, page 1. He testified in arriving at a conclusion for the DCF-indicated common equity cost rate for his Utility Proxy Group, he relied on an average of the mean and the median results of the DCF.

CWSNC witness D'Ascendis used two risk premium methods. He testified his first method is the PRPM, while the second method is a risk premium model using a total market approach. He testified the inputs to his PRPM are the historical returns on the common shares of each company in the Utility Proxy

⁵ See Schedule DWD-3, page 1, column 1.

Group minus the historical monthly yield on long-term U.S. Treasury securities through March 2018. He testified he added the forecasted 30-year U.S. Treasury Bond yield, 3.69% to each company's PRPM-derived equity risk premium to arrive at an indicated cost of common equity. He testified the mean PRPM indicated common equity cost rate for the Utility Proxy Group is 13.52%, the median is 13.33%, and the average of the two is 13.43%. He testified he relied on the average of the mean and median results of the Utility Proxy Group PRPM to calculate a cost of common equity rate of 13.43%.

CWSNC witness D'Ascendis testified his total market approach RPM adds a prospective public utility bond yield to an average of 1) an equity risk premium that is derived from a beta-adjusted total market equity risk premium, and 2) an equity risk premium based on the S&P Utilities Index. He calculated his adjusted prospective bond yield for the Utility Proxy Group to be 5.00%, and the average equity risk premium to be 5.80% resulting in risk premium derived common equity to be 10.80% for his PRPM using his total market approach.

For his CAPM, CWSNC witness D'Ascendis testified he applied both the traditional CAPM and the ECAPM to the companies in his Utility Proxy Group and averaged the results. For his CAPM beta coefficient, he considered two methods of calculation: the average of the Beta coefficients of the Utility Proxy Group companies reported by Bloomberg Professional Services, and the average of the Beta coefficients of the Utility Proxy Group companies as reported by Value Line resulting in a mean beta of .78 and median beta of .74.

CWSNC witness D'Ascendis testified the risk-free rate adopted for both applications of the CAPM is 3.69%. This risk-free rate of 3.69% is based on the average of the *Blue Chip* consensus forecast of the expected yields on 30-year U.S. Treasury bonds for the six quarters ending with the second calendar quarter of 2019, and long-term projections for the years 2019 to 2023 and 2024 to 2028.

CWSNC witness D'Ascendis testified he used three sources (historical, Value Line, and Bloomberg), when averaged, result in an average total market equity risk premium of 9.12%. He testified the mean result of his CAPM/ECAPM analyses is 11.25%, the median is 11.37%, and the average of the two is 11.31%.

CWSNC witness D'Ascendis testified he also selected seventeen domestic non-price regulated companies for his Non-Price Regulated Proxy Group, that he believes are comparable in total risk to his Utility Proxy Group. He calculated common equity cost rates using the DCF, RPM, and CAPM for the Non-Price Regulated Proxy Group. His DCF result was 14.15%, his RPM cost rate was 12.46%, and his CAPM/ECAPM cost rate was 11.78%.

CWSNC witness D'Ascendis testified he made a .40% equity cost rate adjustment due to CWSNC's small size relative to the Utility Proxy Group. He testified the Company has greater relative risk than the average company in the Utility Proxy Group because of its smaller size compared with the group, as measured by an estimated market capitalization of common equity for CWSNC (whose common stock is not publicly-traded).

Witness D'Ascendis Cross-Examination

On cross examination, CWSNC witness D'Ascendis testified he was aware that CWSNC has approximately 50,000 customers in North Carolina and that CWSNC is the second largest regulated water and wastewater company in North Carolina.

CWSNC witness D'Ascendis testified on cross examination that CWSNC obtains all of its debt and all of its equity from Utilities, Inc., and in this general rate case both CWSNC and the Public Staff are using Utilities, Inc.'s capital structure and cost of debt.

Mr. D'Ascendis further testified on cross examination that Public Staff D'Ascendis Cross Examination Exhibit 1 lists the market capitalizations for four of the companies in his Utility Proxy Group as shown on D'Ascendis Direct Exhibit No. 1, Schedule DWD-8, page 2, column 8. He testified this cross examination exhibit correctly listed the Utilities, Inc. book equity on June 30, 2018, at \$252.2 million and when the Utility Proxy Group market to book ratio of 300.5 was applied to Utilities Inc.'s \$252.2 book equity, the resulting Utilities, Inc. market capitalization is \$758 million. He testified Utilities, Inc.'s \$758 million market capitalization was larger than two of his Utility Proxy Group companies, Middlesex Water Company at \$600 million and York Water Company at \$399 million.

Mr. D'Ascendis also testified that he was aware that as testified to by Public Staff witness Hinton, in the 1990s the Commission specifically rejected a size adjustment for CWS Systems, an affiliate of CWSNC.

CWSNC witness D'Ascendis testified on cross examination that Public Staff D'Ascendis Cross Examination 2 was his response to a Public Staff data request showing water and wastewater utility general rate cases in which he testified recommending a return on equity range or a specific return on equity. He testified that in the Emporium Water case in Pennsylvania, which was a fully litigated case, he recommended an 11.05% ROE and the Commission approved a 10.0% ROE in January 2015, being 105 basis points below his recommendation.

He testified that in the Carolina Water Service, Inc. general rate case in South Carolina with decision on December 22, 2015, he recommended an ROE range of 10.0% to 10.50% which had a mid-point of 10.25%, and the Commission approved an ROE of 9.34% which was 91 basis points below his mid-point. He further testified in the Aqua Illinois, Inc. general rate case with decision on March 2, 2018, he recommended a specific ROE of 10.85%, and the Commission approved an ROE of 9.60%, which was 125 basis points below his recommendation.

Aqua witness D'Ascendis testified that in the Middlesex Water Company general rate case in New Jersey with decision on March 6, 2018, he recommended a specific ROE of 10.70% and the Commission approved an ROE of 9.60%, which was 110 basis points below his recommendation. Mr. D'Ascendis testified that in the current Aqua Virginia general rate case, he recommended a specific ROE of 10.60%. Aqua Virginia recently agreed in a settlement to a 9.25% ROE, which the Hearing Examiner accepted, and the accepted 9.25% ROE was 135 basis points below his specific recommendation.

Aqua witness D'Ascendis testified that most of authorized ROEs on Public Staff D'Ascendis Direct Cross Examination Exhibit 2 were the result of settlements which the Commission approved. He testified for the nine cases with approved ROEs, the average approved ROE was 142 basis points below his recommendation.

He testified his most recent litigated and most relevant case was for Carolina Water Service, Inc. in South Carolina where on May 26, 2018, the Commission approved a ROE of 10.50%, which was within his range of 10.45% to 10.95%.

Aqua witness D'Ascendis testified that Public Staff Direct Cross Examination Exhibit 3 is a RRA Water Advisory, S&P Global, dated July 27, 2018, which lists water utility rate case decisions in the years 2014 through 2017, and through June 30, 2018. He testified that in 2018 through June 30, 2018, the average approved ROE was 9.41%. He testified if for any reason the South Carolina 10.5% ROE decision for Carolina Water Service was dropped, the 2018 average would be 9.23% ROE. He testified the four 2018 California ROE decisions have fully forecasted test years, full decoupling, and three year rate plans. He testified these California decisions dated March 22, 2018, were all fully litigated, and the approved ROEs were: California America Water 9.20% ROE, California Water Service 9.20% ROE, Golden State Water Co. 8.90% ROE, and San Jose Water Co. 8.90% ROE. He testified more relevant was the recent Duke Energy Carolinas case Docket No. E-7, Sub 1146 with a settlement approved 9.90% ROE.

Aqua witness D'Ascendis further testified in 2014 where the RRA Advisory reported thirteen Commission decisions with approved ROEs, none were 10% or above. He testified in 2015 where the RRA Water Advisory reported eleven Commission decisions with approved ROEs, only two were 10.0% or above, being Maryland American Water at 10.0% and Kona Water in Hawaii with 10.10% ROE. He testified in 2016 where RRA Water Advisory reported nine Commission decisions with approved ROEs, only Hawaii Water Service at 10.10% ROE, had an approved ROE at 10.0% or above. He testified in 2017 where RRA Water Advisory reported nine Commission decisions with approved ROEs averaging 9.56, only Utilities, Inc. of Florida with a **FORMULA** approved ROE of 10.40% and a 41.92% approved common equity capital structure, had an approved ROE at 10.0% or above.

CWSNC witness D'Ascendis further testified on cross examination as shown on Public Staff D'Ascendis Direct Cross Examination 5, that three of the four California water utilities with the litigated decisions dated March 22, 2018, being California American Water with a 9.2% approved ROE, California Water Service with a 9.2% approved ROE, and Golden State Water with an approved 8.9% ROE, being a subsidiary of American States Water, are companies included in his Utility Proxy Group. CWSNC witness D'Ascendis testified that Public Staff D'Ascendis Cross Examination Exhibit 5 contained the 2018 ROE decisions for five of the companies in his Utility Proxy Group and the average approved ROE was 9.30%.

On cross-examination Mr. D'Ascendis further testified there was a backlash in the investment community relating to the four California March 22, 2018, ROE decisions. He testified that MSN Money is a reliable source for the market prices on Public Staff D'Ascendis Cross Examination Exhibit 4. This cross examination exhibit listed the market close prices on March 22, 2018, and October 15, 2018, for American Waterworks, American States Water, California Water Service and San Jose Water. The respective market price percentage **increases** between March 22, 2018, and October 15, 2018 were: American Waterworks 9.8%, American States Water 8.4%, California Water Service 7.3%, and San Jose Water 9.5%. He testified in comparison the S&P 500 from March 22, 2018 to October 15, 2018 had increased 4.1%, being less than one half the four water companies.

On cross examination CWSNC witness D'Ascendis testified that subject to check the Exhibit RBH-R28 is an exhibit of Scott Madden's Robert Hevert from the recent Duke Energy Carolinas, LLC general rate case Docket No. E-7, Sub 1146. He testified that Robert Hevert testified on page 195 of his rebuttal testimony that RRA provides an assessment as to the extent to which regulatory jurisdictions are constructive from an investor's perspective. He testified RRA rates California an above average 3. He testified that on Exhibit RBH-R28 only two Commissions are rated above California being Wisconsin and Florida with above average 2, and Tennessee was only one other Commission rated equal to California at above average 3.

In response to questions from Chairman Finley CWSNC witness D'Ascendis testified he believed the California three year rate plan was the leading

factor that influenced the California Commission approved ROEs. Mr. D'Ascendis testified that in these March 22, 2018 decisions, the California Commission did not make an explicit downward ROE adjustment for decoupling, whereas the California Commission had done so in the past.

2. Discussion of Rate of Return Evidence and Conclusions

The Commission determines the appropriate rate of return on equity based upon the evidence and particular circumstances of each case. However, the Commission believes that the rate of return on equity trends and decisions by other regulatory authorities deserve some weight, as (1) they provide a check or additional perspective on the case-specific circumstances, and (2) the Company must compete with other regulated utilities in the capital markets, meaning that a rate of return on equity significantly lower than that approved for other utilities of comparable risk would undermine the Company's ability to raise necessary capital, while a rate of return on equity significantly higher than other utilities of comparable risk would result in customers paying more than necessary. In this connection, the Public Staff D'Ascendis Cross Examination Exhibit No. 3 provides credible, positive and corroborative evidence.

RRA APPROVED ROEs

This RRA Water Advisory dated July 27, 2018, contains ROE decisions by the different state utilities commissions from January 2014 through June 30, 2018. The seven decisions in 2018 with approved ROEs average 9.41% ROE, and excluding the one South Carolina outlier decision of May 2, 2018, of 10.5% ROE, the average for the remaining six decisions is 9.23% ROE. The average approved

ROEs have been declining since 2014. In 2014 there were thirteen decisions averaging 9.59% ROE; in 2015 there were eleven decisions averaging 9.76% ROE; in 2016 there were nine decisions averaging 9.71% ROE; in 2017 there were nine decisions averaging 9.56% ROE; and in 2018 there are seven decisions averaging 9.41% ROE, including the South Carolina outlier.

There were no approved ROEs at or above 10.0% in 2014; only two ROEs at or above 10.0% in 2015 being 10.10% in Hawaii and 10.0% in Maryland; only one at or above 10.0% in 2016 being 10.10% in Hawaii; and only one at or above 10.0% in 2017 being a 10.40% in Florida with a formula based ROE and with an approved equity capital structure of 41.92%.

Accordingly, the evidence presented concerning other authorized rates of return on equity, when put into proper context, lends substantial support to the Commission approved 9.2% rate of return on equity level.

3. Evidence of Impact of Changing Economic Conditions on Customers

As noted above, utility rates must be set within the constitutional constraints made clear by the United States Supreme Court in Bluefield and Hope. To fix rates that do not allow a utility to recover its costs, including the cost of equity capital, would be an unconstitutional taking. In assessing the impact of changing economic conditions on customers in setting a return on equity, the Commission must nonetheless provide the public utility with the opportunity, by sound management, to (1) produce a fair profit for its shareholders, in view of current economic conditions, (2) maintain its facilities and service, and (3) compete in the marketplace for capital. State ex rel. Utils. Comm'n v. General Telephone Co. of

the Southeast, 281 N.C. 318, 370, 189 S.E.2d 705 (1972). As the Supreme Court held in that case, these factors constitute “the test of a fair rate of return” in Bluefield and Hope. Id.

a. Discussion and Conclusions Regarding Evidence Introduced During the Evidentiary Hearing

In this case, all parties had the opportunity to present the Commission with evidence concerning changing economic conditions as they affect customers. The testimony of witnesses D’Ascendis and Hinton, which the Commission finds entitled to substantial weight, addresses changing economic conditions.

As to the impact of changing economic conditions on CWSNC’s customers, Public Staff witness Hinton testified he reviewed information on the economic conditions in the areas served by CWSNC, specifically, the 2014, 2015, and 2016 data on total personal income from the Bureau of Economic Analysis (BEA) and the Development Tier Designations published by the North Carolina Department of Commerce for the counties in which CWSNC’s systems are located. The BEA data indicates that from 2014 to 2016, total personal income weighted by the number of water customers by county grew at a compound annual growth rate (CAGR) of approximately 3.0%.

Public Staff witness Hinton testified the North Carolina Department of Commerce annually ranks the state’s 100 counties based on economic well-being and assigns each a Tier designation. The most distressed counties are rated a “1” and the most prosperous counties are rated a “3”. The rankings examine several economic measures such as, household income, poverty rates, unemployment rates, population growth, and per capita property tax base. For 2017, the average

Tier ranking that has been weighted by the number of water customers by county is 2.6. He testified both these economic measures indicate that there have been improvement in the economic conditions for CWSNC's service area relative to the three previous CWSNC rate increases in Docket Nos. W-354, Subs 356, 344, and 336 that were approved in 2017, 2015, and 2014, respectively.

CWSNC witness D'Ascendis testified on economic conditions in North Carolina that he reviewed. He testified he reviewed: unemployment rates from the United States, North Carolina, and the counties comprising CWSNC's service territory; the growth in Gross National Product ("GDP") in both the United States and North Carolina; median household income in the United States and in North Carolina; and national income and consumption trends.

He testified that the rate of unemployment has fallen substantially in North Carolina and the U.S. since late 2009 and early 2010, when the rates peaked at 10.00% and 12.00%, respectively. He testified by February 2018, the unemployment rate had fallen to less than one-half of those peak levels: 4.10% nationally; and 4.60% in North Carolina.

He testified he was also able to review (seasonally unadjusted) unemployment rates in the counties served by CWSNC. At its peak, which occurred in late 2009 into early 2010, the unemployment rate in those counties reached 12.58% (58 basis points higher than the State-wide average); by February 2018 it had fallen to 4.87% (27 basis points higher than the State-wide average).

CWSNC witness D'Ascendis testified for real Gross Domestic Product growth, there also has been a relatively strong correlation between North Carolina

and the national economy (approximately 69%). Since the financial crisis, the national rate of growth at times (during portions of 2010 and 2012) outpaced North Carolina. He testified since the second quarter of 2015, however, North Carolina has consistently exceeded the national growth rate.

CWSNC witness D'Ascendis testified as to median household income, the correlation between North Carolina and the U.S. is relatively strong (approximately 88% from 2005 through 2015). Since 2009 (that is, the years subsequent to the financial crisis), median household income in North Carolina has grown at a faster annual rate than the national median income (3.62% vs. 2.47%).

CWSNC witness D'Ascendis summarized stating in the Commission's Order on Remand in Docket No. E-22, Sub 479, the Commission observed that economic conditions in North Carolina were highly correlated with national conditions, such that they were reflected in the analyses used to determine the cost of common equity. He testified those relationships still hold: Economic conditions in North Carolina continue to improve from the recession following the 2008/2009 financial crisis, and they continue to be strongly correlated to conditions in the U.S., generally. He testified unemployment, at both the State and county level, continues to fall and remains highly correlated with national rates of unemployment; real Gross Domestic Product recently has grown faster in North Carolina than the national rate of growth, although the two remain fairly well correlated; and median household income also has grown faster in North Carolina than the rest of the Country, and remains strongly correlated with national levels.

b. Evidence Introduced During Public Hearings and Further Conclusions

The Commission's review also includes consideration of the evidence presented during the public hearings by public witnesses, almost all of whom presently are customers of CWSNC. The hearings provided 35 witnesses the opportunity to be heard regarding their respective positions on CWSNC's application to increase rates. The Commission held six evening hearings throughout CWSNC's North Carolina service territory to receive public testimony. The testimony presented at the hearings illustrates the difficult economic conditions facing many North Carolina citizens. The Commission accepts as credible, probative, and entitled to substantial weight the testimony of the public witnesses.

c. Commission's Decision Setting Rate of Return and Approving Rate Increase Takes Into Account and Ameliorates the Impact of Current Economic Conditions on Customers

As noted above, the Commission's duty under N.C. Gen. Stat. § 62-133 is to set rates as low as reasonably possible without impairing the Company's ability to raise the capital needed to provide reliable water and wastewater service and recover its cost of providing service. The Commission is especially mindful of this duty in light of the evidence in this case concerning the impact of current economic conditions on customers.

Chapter 62 in general, and N.C. Gen. Stat. § 62-133 in particular, set forth an elaborate formula the Commission must employ in establishing rates. The rate of return on cost of property element of the formula in N.C. Gen. Stat. § 62-

133(b)(4) is a significant, but not independent one. Each element of the formula must be analyzed to determine the utility's cost of service and revenue requirement. The Commission must make many subjective Decisions with respect to each element in the formula in establishing the rates it approves in a general rate case. The Commission must approve accounting and pro forma adjustments to comply with N.C. Gen. Stat. § 62-133(b)(3). The Commission must approve depreciation rates pursuant to N.C. Gen. Stat. § 62-133(b)(1). The Decisions the Commission makes in each of these subjective areas have multiple and varied impacts on the Decisions it makes elsewhere in establishing rates, such as its Decision on rate of return on equity.

Economic conditions existing during the test year, at the time of the public hearings, and at the date of this Commission Order affect not only the ability of CWSNC's consumers to pay water and wastewater utility rates, but also the ability of CWSNC to earn the authorized rate of return during the period rates will be in effect. Pursuant to N.C. Gen. Stat. § 62-133, rates in North Carolina are set based on a modified historic test period.⁶ A component of cost of service as important as return on investment is test year revenues.⁷ The higher the level of test year revenues the lower the need for a rate increase, all else remaining equal. Historically, and in this case, test year revenues are established through resort to regression analysis, using historic rates of revenue growth or decline to determine end of test year revenues.

⁶ N.C. Gen. Stat. § 62-133(c).

⁷ N.C. Gen. Stat. § 62-133(b)(3).

When costs and expenses grow at a faster pace than revenues during the period when rates will be in effect, the utility will experience a decline in its realized rate of return on investment to a level below its authorized rate of return. Differences exist between the authorized return and the earned, or realized, return. Components of the cost of service must be paid from the rates the utility charges before the equity investors are paid their return on equity. Operating and administrative expenses must be paid, depreciation must be funded, taxes must be paid, and the utility must pay interest on the debt it incurs. To the extent revenues are insufficient to cover the entire cost of service, the shortfall reduces the return to the equity investor, last in line to be paid. When this occurs, the utility's realized, or earned, return is less than the authorized return.

This phenomenon, caused by incurrence of higher costs prior to the implementation of new rates to recover those higher costs, is commonly referred to as regulatory lag. Just as the Commission confronts constitutional and statutory restrictions in making discrete decrements to rate of return on equity to mitigate the impact of rates on consumers, it also confronts statutory constraints on its ability to adjust test year revenues to mitigate for regulatory lag. However, the WSIC and SSIC legislation N. C. Gen. Stat. § 62-133.12 and Commission Rules R7-39 and R10-26, have substantially mitigated the regulatory lag for CWSNC. The Commission, in its expert experience and judgment and based on evidence in the record, is aware of the effects of regulatory lag in the existing economic environment. However, just as the Commission is constrained to address difficult economic times on customers' ability to pay for service by establishing a lower rate

of return on equity in isolation from the many subjective determinations that must be made in a general rate case, it likewise does not address the effect of regulatory lag on the Company by establishing a higher rate of return on equity. Instead, in setting the rate of return, the Commission considers both of these negative impacts in its ultimate decision fixing CWSNC's rates. The Commission keeps all factors affected by current economic conditions in mind in the many subjective decisions it makes in establishing rates. In doing so in the case at hand, the Commission approved the 9.2% rate of return on equity in the context of weighing and balancing numerous factors and making many subjective decisions. When these decisions are viewed as a whole, including the decision to establish the rate of return on equity at 9.2%, the Commission's overall decision fixing rates in this general rate case results in lower rates to consumers in the existing economic environment.

Consumers pay rates, a charge in dollars per 1,000 gallons for the water they consume and a monthly flat rate for residential wastewater customers. Investors are compensated by earning a return on the capital they invest in the business. Consumers do not pay a rate of return on equity.

All of the scores of adjustments the Commission approves reduce the revenues to be recovered from ratepayers and the return to be paid to equity investors. Some adjustments reduce the authorized rate of return on investment financed by equity investors. The noted adjustments are made solely to reduce rates and provide rate stability to consumers (and return to equity investors) to recognize the difficulty for consumers to pay in the current economic environment. While the equity investor's cost was calculated by resort to a rate of return on equity

of 9.2% instead of within the range of 10.80% to 11.20%, this is only one approved adjustment that reduced ratepayer responsibility and equity investor reward. Many other adjustments reduced the dollars the investors actually have the opportunity to receive. Therefore, nearly all of these other adjustments reduce ratepayer responsibility and equity investor returns in compliance with the Commission's responsibility to establish rates as low as reasonably permissible without transgressing constitutional constraints.

For example, to the extent the Commission makes downward adjustments to rate base, or disallows test year expenses, or increases test year revenues, or reduces the equity capital structure component, the Commission reduces the rates consumers pay during the future period when rates will be in effect. Because the utility's investors' compensation for the provision of service to consumers takes the form of return on investment, downward adjustments to rate base or disallowances of test year expenses or increases to test year revenues, or reduction in the equity capital structure component, reduce investors' return on investment irrespective of its determination of rate of return on equity.

The rate base, expenses, and revenue examples listed above are instances where the Commission makes decisions in each general rate case, including the present case, that influence the Commission's determination on rate of return on equity and cost of service and the revenue requirement. The Commission always endeavors to comply with the North Carolina Supreme Court's requirements that it "fix rates as low as may be reasonably consistent" with U.S. Constitutional requirements irrespective of economic conditions in which ratepayers find

themselves. While compliance with these requirements may have been implicit and, the Commission reasonably assumed, self-evident as shown above, the Commission makes them explicit in this case to comply with the Supreme Court requirements of Cooper I.

Based on the changing economic conditions and their effects on CWSNC's customers, the Commission recognizes the financial difficulty that the increase in CWSNC's rates will create for some of CWSNC's customers, especially low-income customers. As shown by the evidence, relatively small changes in the rate of return on equity have a substantial impact on a utility's base rates. Therefore, the Commission has carefully considered the changing economic conditions and their effects on CWSNC's customers in reaching its decision regarding CWSNC's approved rate of return on equity. The Commission also recognizes that the Company is investing significant sums in system improvements to serve its customers, thus requiring the Company to maintain its creditworthiness in order to compete for large sums of capital on reasonable terms. The Commission must weigh the impact of changing economic conditions on CWSNC's customers against the benefits that those customers derive from the Company's ability to provide safe, adequate, and reliable water and wastewater service. Safe, adequate, and reliable water and wastewater service is essential to the well-being of CWSNC's customers.

The Commission finds and concludes that these investments by the Company provide significant benefits to CWSNC's customers. The Commission concludes that the return on equity approved by the Commission in this proceeding

appropriately balances the benefits received by CWSNC's customers from CWSNC's provision of safe, adequate, and reliable water and wastewater service with the difficulties that some of CWSNC's customers will experience in paying CWSNC's increased rates.

The Commission in every case seeks to comply with the North Carolina Supreme Court mandate that the Commission establish rates as low as possible within constitutional limits. The scores of adjustments the Commission approves in this case comply with that mandate. Nearly all of them reduced the requested return on equity and benefit consumers' ability to pay their bills in this economic environment.

The Commission has carefully examined the Company's Application and supporting testimony, exhibits and Form W-1 filings seeking to justify this increase. The Public Staff represents the using and consuming public, including those having difficulty paying their bills. Public Staff representatives attended all of the hearings held across the state to receive customers' testimony. The Public Staff has a staff of expert engineers, economists, and accountants who investigate and audit the Company's filings. The Public Staff must recommend rates consumers should pay and the return on investment equity investors should receive. The Public Staff considers all factors included in cost of service.

Summary and Conclusions on the Rate of Return on Equity

The Commission has carefully evaluated the return on equity testimony of CWSNC witness D'Ascendis and Public Staff witness Hinton. The Commission finds that the DCF analyses and risk premium testimony of Public Staff witness

Hinton, and the DCF testimony of CWSNC witness D'Ascendis are credible, probative, and are entitled to substantial weight.

Conclusion ROE

Public Staff witness Hinton performed his DCF analysis on his proxy group of six water companies, all of which were included in the Utility Proxy Group of CWSNC witness D'Ascendis. Witness Hinton demonstrated the comparability of investing in CWSNC to investing in other water companies through his evaluation of the Value Line Safety Rank, which is defined as a measure of the total risk of a stock. The Safety Rank is calculated by averaging two variables: (1) the stock's index of price stability; and (2) the Financial Strength rating of the company. He also reviewed the beta coefficients, the S&P Common Stock Ratings, and the S&P's Bond Ratings.

Witness Hinton evaluated the growth rates of his proxy group for EPS, DPS and BPS historically over the past ten and five years, in addition to the forecasted five-year EPS growth rates as reported in Value Line and Yahoo Finance. The Commission concludes that both historical and projected growth rates are probative and both should be carefully analyzed in the DCF. The Commission concludes that investors evaluate many factors and not only projected EPS growth rates as testified by CWSNC witness D'Ascendis. The Commission concludes that Public Staff witness Hinton's DCF with a midpoint of 8.7% ROE is credible, probative, and entitled to substantial weight, and when averaged with witness Hinton's 9.7% ROE from his Risk Premium analysis results in a 9.2% ROE which the Commission finds is just and reasonable.

The Commission finds that witness Hinton's Risk Premium analysis is credible, probative, and entitled to substantial weight. The Commission concludes that using approved ROEs from many different Commission orders in the period 2006 to date in 2018, is a reasonably good estimate of the cost of equity for a Risk Premium analysis, as these returns on equity are generally arrived at through lengthy investigations by various parties with opposing views. The Commission finds that witness Hinton's Risk Premium using Moody's A-rated bond yields from 2006 through August 31, 2018, corresponding to the same year approved ROEs to calculate the Risk Premium is probative and credible. In comparison, projected bond yields as utilized by CWSNC witness D'Ascendis are highly speculative and provide little probative value.

The Commission finds as credible, probative and entitled to substantial weight the testimony of Public Staff witness Hinton that the continued low rates of inflation and expectations of future low inflation rates have contributed to continued lower long-term interest rates. According to Moody's Bond Survey, yields on long-term "A" rated public utility bonds as of August 2018, were 4.26% as compared to 4.63% for January 2014, which is the time of filing the CWSNC cost of capital settlement in Docket No. W-354, Sub 336, a reduction of 37 basis points. The overall decline in long-term interest rates over the last seven years is shown in Exhibit JRH-1. As such, the relative decrease in long-term bond yields over the last seven years is not indicative of an increase in financing costs for utilities; rather it supports lowering of financing costs for long-term capital.

The RRA Water Advisory dated July 27, 2018 shows the average of 9.58% ROE for thirteen Commission approvals in 2014 to a drop in 2018 to the average of 9.23% ROE excluding the 10.5% South Carolina outlier, resulting in a 35 basis point decrease. The information in this RRA Water Advisory corroborates Mr. Hinton's testimony that reductions in interest rates has paralleled the decreases in investor required rates of return on common equity and support the Commission's approved 9.2% ROE.

The Commission finds as credible, probative and entitled to substantial weight Mr. Hinton's testimony as to the risk in relying on predictions of rising interest rates for rate cases. He testified that, in the testimony of Aqua witness Ahern in the 2013 Aqua rate case Docket No. W-218, Sub 363, she identified several points of forecasts of thirty-year Treasury Bond yields that were predicted to rise to 4.3% in 2015, 4.7% in 2016, and 5.2% in 2017. However, as illustrated in the thirty-year U.S. Treasury Bond graph on page seventeen of Mr. Hinton's direct testimony, in 2015, the range was approximately 2.50% to 3.10%, in 2016, the range was approximately 2.50% to 3.10%, and in 2017, the range was approximately 2.25% to 3.10%. He testified the forecasts used by Ms. Ahern significantly over-estimated actual interest rates for 30-year U.S. Treasury Bonds.

The Commission finds as credible, probative and entitled to substantial weight of the evidence contained in Public Staff D'Ascendis Cross Examination Exhibit 4 on the investor reactions to the four California March 22, 2018, ROE decisions approving two ROEs of 9.2% and two ROEs of 8.9%. This exhibit showed from March 22, 2018 until October 15, 2018, the market prices of the

common stock of the four California companies increased 9.8%, 8.4%, 7.3%, and 9.5% for an average increase of 8.7%. In comparison, the S & P 500 during this identical time period increased 4.1%. This cross examination exhibit is credible and probative evidence that the investor community reacted favorably to these four California ROE decisions, being ROEs of 9.2% and 8.9%. This exhibit is credible and probative evidence entitled to substantial weight, that with the Commission's approved 9.2% ROE for CSWNC, CWSNC will be able to compete in the markets for capital funds on terms that are reasonable and are fair to its customers and its existing investors, as required by N.C. Gen. Stat. § 62-133 (b)(4).

The Commission concludes that CWSNC witness D'Ascendis' DCF analysis for his Utility Proxy Group, resulting in a 9.10% ROE in his direct testimony and 9.15% ROE in his rebuttal testimony, is credible, probative, and entitled to substantial weight, although the Commission as previously stated concludes that the DCF growth rates should not be based solely on analysts projected five-year growth in earnings per share.

The Commission has carefully evaluated Mr. D'Ascendis' RPM, CAPM, and Cost of Equity Models Applied to Non-Price Regulated Companies and gives no weight to these analyses. The results of each of these models are outliers. The RPM in his rebuttal testimony at 10.73% is 116 basis points above the RRA Water Advisory, Public Staff D'Ascendis Cross Examination Exhibit 3, average of 9.56% approved ROEs for 2017, and 131 basis points above the 9.41% approved ROEs average in 2018, which includes the outlier South Carolina 10.5% ROE outlier. Of the 49 RRA reported ROE decisions from 2014 through June 30, 2018, only five

were at 10.0% or above, with the two highest being the 10.40% Florida formula approved ROE with a 41.92% approved equity capital structure dated September 25, 2017, and the South Carolina 10.50% ROE approved on May 2, 2018. In addition the Commission gives no weight to the predicted future bond yields in Mr. D'Ascendis' RPM, as they are highly speculative.

Mr. D'Ascendis' CAPM at 10.93% in his rebuttal testimony is also an outlier being 137 basis points above the RRA 2017 ROE 9.56% average, and 152 basis points above the RRA 2018 average of 9.41%. In addition, the Commission gives no weight to the predicted future bond yields in witness D'Ascendis' CAPM, as they are highly speculative.

Mr. D'Ascendis' cost of equity models applied to Non-Price Regulated Companies with his 12.43% ROE is an extreme outlier being 287 basis points above the 2017 RRA reported average and 302 basis points above the 2018 RRA average of 9.41%. In addition, the Commission finds the Non-Price Regulated Companies, which Mr. D'Ascendis asserts are comparable, are not comparable to the Utility Proxy Group for purposes of risk comparison. Non-utility earnings are dependent on a company's ability to price products or services at rates a buyer is willing to pay in a competitive market. Regulated utility earnings are limited by a regulatory return on rate base in a monopolistic market. While a non-regulated company faces the possibility of loss of business (or bankruptcy) to any number of competitors, a regulated utility in a monopolistic market faces the possibility of under-earning its allowed return but the regulatory mechanism largely insulates it from factors beyond its control. This difference in the nature of the risks

faced by regulated and non-regulated companies is an additional reason to reject Mr. D'Ascendis' financial modeling results for the Non-Price Regulated Companies.

The Commission after carefully evaluating Public Staff witness Hinton's DCF at 8.70%, his Risk Premium at 9.70%, and CWSNC witness D'Ascendis' Rebuttal DCF at 9.15% concludes that a 9.2% ROE in this proceeding is supported by credible and probative evidence entitled to substantial weight, and is just and reasonable. The Commission has also considered that the WSIC/SSIC mechanisms help reduce regulatory lag.

The Commission concludes that CWSNC has failed to justify a small size ROE adjustment. On cross examination CWSNC witness D'Ascendis agreed with Public Staff witness Hinton's testimony that the Commission rejected such an adjustment for CWS Systems, an affiliate of CWSNC, in Order Granting Partial Rate Increase, Docket No. W-778, Sub 31 (Sub 31), issued November 26, 1997, Finding of Fact No. 43, pages 61 – 62. The Commission further notes that in the 1997 proceeding, the Commission reviewed quite similar cost of equity methods of Frank Hanley with the Traditional CAPM, the Empirical CAPM, and a proxy group of non-regulated companies. Company witness D'Ascendis employed this approach as noted by the footnotes and references to Frank Hanley in his testimony. The Commission found in the Sub 31 case that minimal weight should be accorded to those methodologies.

In addition, CWSNC receives all of its debt and equity from Utilities, Inc. As shown on Public Staff D'Ascendis Cross Examination Exhibit 1, Utilities, Inc. has

book equity on June 30, 2018, of \$252.2 million and has the equivalent market capitalization of \$758 million, appreciably larger than two of the companies in CWSNC witness D'Ascendis Utility Proxy Group.

The Commission concludes that the RRA Water Advisory stating other recent authorized rates of return on equity as a check on reasonableness, lends substantial support to the decreasing trend in approved ROEs and the Commission approved 9.2% ROE in this proceeding. In 2016, the average approved ROE was 9.71%; in 2017, the average ROE was 9.56%; in 2018, the average ROE is 9.41%; and in 2018, the average ROE is 9.23% excluding the South Carolina outlier 10.5% ROE. As shown on page six of the RRA Water Advisory, in 2017, there were approved ROEs of 9.00% and 9.10% in New York, 9.25% in Virginia, and in 2018, two 9.20% and two 8.90% ROEs in California. Furthermore, the Commission finds Public Staff witness Hinton's calculation of a 3.2 Pre-Tax interest coverage ratio of 3.2 times and a Funds Flow to Debt ratio as also supportive of a 9.20% ROE.

The Commission notes further that its approval of a rate of return on equity at the level of 9.2% or for that matter at any level, is not a guarantee to the Company that it will earn a rate of return on equity at that level. Rather, as North Carolina law requires, setting the rate of return on equity at this level merely affords CWSNC the opportunity to achieve such a return. The Commission finds and concludes, based upon all the evidence presented, that the rate of return on equity provided for herein will indeed afford the Company the opportunity to earn a reasonable and sufficient return for its shareholders while at the same time producing rates that are just and reasonable to its customers.

CAPITAL STRUCTURE

CWSNC witness D'Ascendis recommended the use of the actual capital structure of Utilities, Inc., on June 30, 2018, consisting of 49.09% long-term debt and 50.91% common equity.

Public Staff witness Hinton in his supplemental testimony also recommended a 49.09% long-term debt and 50.91% common equity capital structure based upon updated information provided by CWSNC for June 30, 2018. The Partial Stipulation also supports a 49.09% long-term debt, 50.91% common equity capital structure. No other party presented evidence as to a different capital structure.

Finally, the Commission has also carefully considered changing economic conditions in connection with its capital structure determination, including their effect upon the Company's customers. As discussed in the rate of return on equity section above, which is incorporated herein, the public witnesses in this case provided testimony concerning economic stress they are currently experiencing and have experienced for the last several years. The Commission accepts as credible and probative this testimony.

Accordingly, the Commission finds and concludes that the recommended capital structure of 50.91% common equity and 49.09% long-term debt is just and reasonable to all parties in light of all the evidence presented.

Cost of Debt

In its Application, the Company proposed a long-term debt cost of 6.00%. The Partial Stipulation provides for a 5.68% cost of debt. The Commission finds for the reasons set forth herein that a 5.68% cost of debt is just and reasonable.

Public Staff witness Hinton, in his supplemental testimony, supported the embedded cost of CWSNC's long-term debt on June 30, 2018, being Utilities Inc.'s actual cost of debt of 5.68%. The Partial Stipulation's 5.68% debt cost gives customers the benefit of reductions in CWSNC's cost of debt after the end of the test year.

No intervenor offered any evidence supporting a debt cost below 5.68%. The Commission, therefore, finds and concludes that the use of a debt cost of 5.68% is just and reasonable to all parties based upon all the evidence presented.

Overall Cost of Capital

The overall fair rate of return which the Company should be allowed an opportunity to earn on its rate base is 7.47%. This overall rate of return is derived from applying an embedded cost of debt of 5.68% and a rate of return on equity of 9.20%, to a capital structure consisting of 49.09% long-term debt and 50.91% common equity.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 55

The following schedules summarize the gross revenue and rate of return that the Company should have a reasonable opportunity to achieve based on the increases and decreases in revenues approved in this Order for each rate entity.

These schedules, illustrating the Company's gross revenue requirements, incorporate the adjustments found appropriate by the Commission in this Order.

SCHEDULE I
Carolina Water Service, Inc. of NC
 Docket No. W-354, Sub 360
 Net Operating Income for a Return
 For the Twelve Months Ended December 31, 2017
 Combined Operations

<u>Operating Revenues:</u>			
Service revenues	\$32,429,699	\$630,313	\$33,060,012
Miscellaneous revenues	360,163	1,191	361,354
Uncollectibles	<u>(214,395)</u>	<u>(8,612)</u>	<u>(223,007)</u>
Total operating revenues	<u>32,575,467</u>	<u>622,892</u>	<u>33,198,359</u>
<u>Operating Revenue Deductions:</u>			
Salaries and wages – Maintenance	4,765,636	0	4,765,636
Purchased power	1,932,358	0	1,932,358
Purchased water and sewer	1,972,527	0	1,972,527
Maintenance and repair	2,749,845	0	2,749,845
Maintenance testing	544,360	0	544,360
Meter reading	225,867	0	225,867
Chemicals	632,415	0	632,415
Transportation	447,271	0	447,271
Operating expense charged to plant	(673,065)	0	(673,065)
Outside services – other	455,369	0	455,369
Salaries and wages – General	1,972,000	0	1,972,000
Office supplies & other office expense	560,363	0	560,363
Regulatory commission expense	165,908	0	165,908
Pension and other benefits	1,340,118	0	1,340,118
Rent	227,339	0	227,339
Insurance	429,335	0	429,335
Office utilities	742,300	0	742,300
Miscellaneous	23,469	0	23,469
Depreciation expense	5,617,382	0	5,617,382
Amortization of CIAC	(1,776,720)	0	(1,776,720)
Amortization of PAA	(77,331)	0	(77,331)
Amortization of ITC	(519)	0	(519)
Franchise and other taxes	(49,702)	0	(49,702)
Property taxes	233,575	0	233,575
Payroll taxes	526,275	0	526,275
Regulatory fee	45,606	871	46,477
Deferred income tax	(83,555)	0	(83,555)
State income tax	189,741	18,660	208,401
Federal income tax	<u>1,288,340</u>	<u>126,706</u>	<u>1,415,046</u>
Total operating revenue deductions	<u>24,426,507</u>	<u>146,237</u>	<u>24,572,744</u>
Net operating income for a return	<u>\$8,148,960</u>	<u>\$476,655</u>	<u>\$8,625,615</u>

SCHEDULE II
Carolina Water Service, Inc. of NC
Docket No. W-354, Sub 360
Original Cost Rate Base
For the Twelve Months Ended December 31, 2017
Combined Operations

Plant in service	\$213,005,526
Accumulated depreciation	<u>(52,955,117)</u>
Net plant in service	160,050,409
Cash working capital	2,067,611
Contributions in aid of constructions	(41,895,670)
Advance in aid of construction	(32,940)
Accumulated deferred income taxes	(3,972,592)
Customer deposits	(342,640)
Gain on sale and flow back taxes	(289,628)
Plant acquisition adjustment	(1,029,202)
Excess book value	(456)
Cost-free capital	(261,499)
Average tax accruals	(125,909)
Regulatory liability for excess deferred taxes	(251,770)
Deferred charges	1,522,955
Pro forma plant	<u>0</u>
Original cost rate base	<u>\$115,438,669</u>

Rates of return:	
Present	7.06%
Approved	7.47%

SCHEDULE III
Carolina Water Service, Inc. of NC
 Docket No. W-354, Sub 360
 Statement of Capitalization and Related Costs
 For the Twelve Months Ended December 31, 2017
 Combined Operations

	<u>Ratio</u>	<u>Original Cost Rate Base</u>	<u>Embedded Cost %</u>	<u>Net Operating Income</u>
PRESENT RATES				
Long Term Debt	49.09%	\$ 56,668,843	5.68%	\$3,218,790
Common Equity	50.91%	<u>58,769,826</u>	8.39%	<u>4,930,170</u>
Total		<u>\$115,438,669</u>		<u>\$8,148,960</u>
APPROVED RATES				
Long Term Debt	49.09%	\$ 56,668,843	5.68%	\$3,218,790
Common Equity	50.91%	<u>58,769,826</u>	9.20%	<u>5,406,825</u>
Total		<u>\$115,438,669</u>		<u>\$8,625,615</u>

SCHEDULE I(a)
Carolina Water Service, Inc. of NC
Docket No. W-354, Sub 360
Net Operating Income for a Return
For the Twelve Months Ended December 31, 2017
CWSNC Water Operations

<u>Operating Revenues:</u>			
Service revenues	\$16,931,032	\$150,711	\$17,081,743
Miscellaneous revenues	189,225	407	189,632
Uncollectibles	<u>(98,200)</u>	<u>(874)</u>	<u>(99,074)</u>
Total operating revenues	<u>17,022,057</u>	<u>150,244</u>	<u>17,172,301</u>
<u>Operating Revenue Deductions:</u>			
Salaries and wages – Maintenance	2,587,126	0	2,587,126
Purchased power	957,880	0	957,880
Purchased water and sewer	1,285,290	0	1,285,290
Maintenance and repair	828,186	0	828,186
Maintenance testing	208,965	0	208,965
Meter reading	197,562	0	197,562
Chemicals	224,644	0	224,644
Transportation	238,827	0	238,827
Operating expense charged to plant	(370,288)	0	(370,288)
Outside services – other	254,847	0	254,847
Salaries and wages – General	1,070,542	0	1,070,542
Office supplies & other office expense	306,345	0	306,345
Regulatory commission expense	90,071	0	90,071
Pension and other benefits	713,025	0	713,025
Rent	123,289	0	123,289
Insurance	233,072	0	233,072
Office utilities	413,686	0	413,686
Miscellaneous	15,929	0	15,929
Depreciation expense	2,877,977	0	2,877,977
Amortization of CIAC	(772,761)	0	(772,761)
Amortization of PAA	(115,514)	0	(115,514)
Amortization of ITC	(287)	0	(287)
Franchise and other taxes	(21,943)	0	(21,943)
Property taxes	134,372	0	134,372
Payroll taxes	285,700	0	285,700
Regulatory fee	23,831	210	24,041
Deferred income tax	(35,576)	0	(35,576)
State income tax	105,935	4,501	110,436
Federal income tax	<u>719,298</u>	<u>30,562</u>	<u>749,860</u>
Total operating revenue deductions	<u>12,580,029</u>	<u>35,273</u>	<u>12,615,302</u>
Net operating income for a return	<u>\$4,442,028</u>	<u>\$114,971</u>	<u>\$4,556,999</u>

SCHEDULE II(a)
Carolina Water Service, Inc. of NC
Docket No. W-354, Sub 360
Original Cost Rate Base
For the Twelve Months Ended December 31, 2017
CWSNC Water Operations

Plant in service	\$109,412,912
Accumulated depreciation	<u>(27,471,271)</u>
Net plant in service	81,941,641
Cash working capital	1,011,714
Contributions in aid of constructions	(18,359,254)
Advance in aid of construction	(23,760)
Accumulated deferred income taxes	(1,699,612)
Customer deposits	(191,669)
Gain on sale and flow back taxes	(196,947)
Plant acquisition adjustment	(2,272,494)
Excess book value	(456)
Cost-free capital	(121,791)
Average tax accruals	(71,951)
Regulatory liability for excess deferred taxes	(144,323)
Deferred charges	1,116,295
Pro forma plant	<u>0</u>
Original cost rate base	<u>\$60,987,393</u>
Rates of return:	
Present	7.29%
Approved	7.47%

SCHEDULE III(a)
Carolina Water Service, Inc. of NC
 Docket No. W-354, Sub 360
 Statement of Capitalization and Related Costs
 For the Twelve Months Ended December 31, 2017
 CWSNC Water Operations

	<u>Ratio</u>	<u>Original Cost</u> <u>Rate Base</u>	<u>Embedded</u> <u>Cost %</u>	<u>Net Operating</u> <u>Income</u>
PRESENT RATES				
Long Term Debt	49.09%	\$ 29,938,711	5.68%	\$1,700,519
Common Equity	50.91%	<u>31,048,682</u>	8.83%	<u>2,741,509</u>
Total		<u>\$ 60,987,393</u>		<u>\$4,442,028</u>
APPROVED RATES				
Long Term Debt	49.09%	\$ 29,938,711	5.68%	\$1,700,519
Common Equity	50.91%	<u>31,048,682</u>	9.20%	<u>2,856,479</u>
Total		<u>\$ 60,987,393</u>		<u>\$4,556,998</u>

SCHEDULE I(b)
Carolina Water Service, Inc. of NC
Docket No. W-354, Sub 360
Net Operating Income for a Return
For the Twelve Months Ended December 31, 2017
CWSNC Sewer Operations

<u>Operating Revenues:</u>			
Service revenues	\$12,685,778	(\$78,254)	\$12,607,524
Miscellaneous revenues	110,138	(219)	109,919
Uncollectibles	<u>(74,846)</u>	<u>462</u>	<u>(74,384)</u>
Total operating revenues	<u>12,721,070</u>	<u>(78,011)</u>	<u>12,643,059</u>
<u>Operating Revenue Deductions:</u>			
Salaries and wages – Maintenance	1,540,179	0	1,540,179
Purchased power	748,066	0	748,066
Purchased water and sewer	687,237	0	687,237
Maintenance and repair	1,606,630	0	1,606,630
Maintenance testing	302,561	0	302,561
Meter reading	0	0	0
Chemicals	347,986	0	347,986
Transportation	142,640	0	142,640
Operating expense charged to plant	(219,769)	0	(219,769)
Outside services – other	154,330	0	154,330
Salaries and wages – General	637,320	0	637,320
Office supplies & other office expense	183,350	0	183,350
Regulatory commission expense	53,622	0	53,622
Pension and other benefits	424,543	0	424,543
Rent	73,562	0	73,562
Insurance	138,751	0	138,751
Office utilities	246,763	0	246,763
Miscellaneous	9,931	0	9,931
Depreciation expense	2,271,822	0	2,271,822
Amortization of CIAC	(774,595)	0	(774,595)
Amortization of PAA	(17,244)	0	(17,244)
Amortization of ITC	(232)	0	(232)
Franchise and other taxes	(17,738)	0	(17,738)
Property taxes	79,520	0	79,520
Payroll taxes	170,084	0	170,084
Regulatory fee	17,809	(109)	17,700
Deferred income tax	(39,438)	0	(39,438)
State income tax	80,882	(2,337)	78,545
Federal income tax	<u>549,190</u>	<u>(15,869)</u>	<u>533,321</u>
Total operating revenue deductions	<u>9,397,762</u>	<u>(18,315)</u>	<u>9,379,447</u>
Net operating income for a return	<u>\$3,323,308</u>	<u>(\$59,696)</u>	<u>\$3,263,612</u>

SCHEDULE II(b)
Carolina Water Service, Inc. of NC
Docket No. W-354, Sub 360
Original Cost Rate Base
For the Twelve Months Ended December 31, 2017
CWSNC Sewer Operations

Plant in service	\$84,335,000
Accumulated depreciation	<u>(21,353,928)</u>
Net plant in service	62,981,072
Cash working capital	798,808
Contributions in aid of constructions	(18,242,160)
Advance in aid of construction	(9,180)
Accumulated deferred income taxes	(1,862,686)
Customer deposits	(114,105)
Gain on sale and flow back taxes	(92,681)
Plant acquisition adjustment	266,333
Excess book value	0
Cost-free capital	(139,708)
Average tax accruals	(43,322)
Regulatory liability for excess deferred taxes	(85,491)
Deferred charges	220,825
Pro forma plant	<u>0</u>
Original cost rate base	<u>\$43,677,705</u>

Rates of return:	
Present	7.61%
Approved	7.47%

SCHEDULE III(b)
Carolina Water Service, Inc. of NC
 Docket No. W-354, Sub 360
 Statement of Capitalization and Related Costs
 For the Twelve Months Ended December 31, 2017
 CWSNC Sewer Operations

	<u>Ratio</u>	<u>Original Cost Rate Base</u>	<u>Embedded Cost %</u>	<u>Net Operating Income</u>
PRESENT RATES				
Long Term Debt	49.09%	\$ 21,441,385	5.68%	\$1,217,871
Common Equity	50.91%	<u>22,236,320</u>	9.47%	<u>2,105,437</u>
Total		<u>\$ 43,677,705</u>		<u>\$3,323,308</u>
APPROVED RATES				
Long Term Debt	49.09%	\$ 21,441,385	5.68%	\$1,217,871
Common Equity	50.91%	<u>22,236,320</u>	9.20%	<u>2,045,741</u>
Total		<u>\$ 43,677,705</u>		<u>\$3,263,612</u>

SCHEDULE I(c)
Carolina Water Service, Inc. of NC
Docket No. W-354, Sub 360
Net Operating Income for a Return
For the Twelve Months Ended December 31, 2017
BF/FH/TC Water Operations

<u>Operating Revenues:</u>			
Service revenues	\$1,043,134	\$259,754	\$1,302,888
Miscellaneous revenues	46,306	467	46,773
Uncollectibles	<u>(15,334)</u>	<u>(3,818)</u>	<u>(19,152)</u>
Total operating revenues	<u>1,074,106</u>	<u>256,403</u>	<u>1,330,509</u>
<u>Operating Revenue Deductions:</u>			
Salaries and wages – Maintenance	312,749	0	312,749
Purchased power	70,816	0	70,816
Purchased water and sewer	0	0	0
Maintenance and repair	62,128	0	62,128
Maintenance testing	9,286	0	9,286
Meter reading	28,305	0	28,305
Chemicals	32,714	0	32,714
Transportation	32,241	0	32,241
Operating expense charged to plant	(40,679)	0	(40,679)
Outside services – other	22,632	0	22,632
Salaries and wages – General	129,414	0	129,414
Office supplies & other office expense	34,624	0	34,624
Regulatory commission expense	10,884	0	10,884
Pension and other benefits	99,239	0	99,239
Rent	14,938	0	14,938
Insurance	28,178	0	28,178
Office utilities	40,103	0	40,103
Miscellaneous	(1,172)	0	(1,172)
Depreciation expense	127,603	0	127,603
Amortization of CIAC	(47,886)	0	(47,886)
Amortization of PAA	12,967	0	12,967
Amortization of ITC	0	0	0
Franchise and other taxes	(3,653)	0	(3,653)
Property taxes	9,645	0	9,645
Payroll taxes	34,537	0	34,537
Regulatory fee	1,504	359	1,863
Deferred income tax	1,178	0	1,178
State income tax	(1,300)	7,681	6,381
Federal income tax	<u>(8,829)</u>	<u>52,156</u>	<u>43,327</u>
Total operating revenue deductions	<u>1,012,166</u>	<u>60,196</u>	<u>1,072,362</u>
Net operating income for a return	<u>\$61,940</u>	<u>\$196,207</u>	<u>\$258,147</u>

SCHEDULE II(c)
Carolina Water Service, Inc. of NC
Docket No. W-354, Sub 360
Original Cost Rate Base
For the Twelve Months Ended December 31, 2017
BF/FH/TC Water Operations

Plant in service	\$5,924,076
Accumulated depreciation	<u>(1,625,325)</u>
Net plant in service	4,298,751
Cash working capital	110,800
Contributions in aid of constructions	(1,103,471)
Advance in aid of construction	0
Accumulated deferred income taxes	48,827
Customer deposits	(18,063)
Gain on sale and flow back taxes	0
Plant acquisition adjustment	24,262
Excess book value	0
Cost-free capital	0
Average tax accruals	(5,124)
Regulatory liability for excess deferred taxes	(10,756)
Deferred charges	109,634
Pro forma plant	<u>0</u>
Original cost rate base	<u>\$3,454,860</u>
Rates of return:	
Present	1.79%
Approved	7.47%

SCHEDULE III(c)
Carolina Water Service, Inc. of NC
 Docket No. W-354, Sub 360
 Statement of Capitalization and Related Costs
 For the Twelve Months Ended December 31, 2017
 BF/FH/TC Water Operations

	<u>Ratio</u>	<u>Original Cost Rate Base</u>	<u>Embedded Cost %</u>	<u>Net Operating Income</u>
PRESENT RATES				
Long Term Debt	49.09%	\$ 1,695,991	5.68%	\$96,332
Common Equity	50.91%	<u>1,758,869</u>	(1.96%)	<u>(34,392)</u>
Total		<u>\$ 3,454,860</u>		<u>\$61,940</u>
APPROVED RATES				
Long Term Debt	49.09%	\$ 1,695,991	5.68%	\$ 96,332
Common Equity	50.91%	<u>1,758,869</u>	9.20%	<u>161,816</u>
Total		<u>\$ 3,454,860</u>		<u>\$258,148</u>

SCHEDULE I(d)
Carolina Water Service, Inc. of NC
 Docket No. W-354, Sub 360
 Net Operating Income for a Return
 For the Twelve Months Ended December 31, 2017
 BF/FH/TC Sewer Operations

<u>Operating Revenues:</u>			
Service revenues	\$1,769,755	\$298,102	\$2,067,857
Miscellaneous revenues	14,494	536	15,030
Uncollectibles	<u>(26,015)</u>	<u>(4,382)</u>	<u>(30,397)</u>
Total operating revenues	<u>1,758,234</u>	<u>294,256</u>	<u>2,052,490</u>
<u>Operating Revenue Deductions:</u>			
Salaries and wages – Maintenance	325,582	0	325,582
Purchased power	155,596	0	155,596
Purchased water and sewer	0	0	0
Maintenance and repair	252,901	0	252,901
Maintenance testing	23,548	0	23,548
Meter reading	0	0	0
Chemicals	27,071	0	27,071
Transportation	33,563	0	33,563
Operating expense charged to plant	(42,329)	0	(42,329)
Outside services – other	23,560	0	23,560
Salaries and wages – General	134,724	0	134,724
Office supplies & other office expense	36,044	0	36,044
Regulatory commission expense	11,331	0	11,331
Pension and other benefits	103,311	0	103,311
Rent	15,550	0	15,550
Insurance	29,334	0	29,334
Office utilities	41,748	0	41,748
Miscellaneous	(1,220)	0	(1,220)
Depreciation expense	339,980	0	339,980
Amortization of CIAC	(181,478)	0	(181,478)
Amortization of PAA	42,460	0	42,460
Amortization of ITC	0	0	0
Franchise and other taxes	(6,368)	0	(6,368)
Property taxes	10,040	0	10,040
Payroll taxes	35,954	0	35,954
Regulatory fee	2,462	411	2,873
Deferred income tax	(9,719)	0	(9,719)
State income tax	4,224	8,815	13,039
Federal income tax	<u>28,681</u>	<u>59,857</u>	<u>88,538</u>
Total operating revenue deductions	<u>1,436,550</u>	<u>69,083</u>	<u>1,505,633</u>
Net operating income for a return	<u>\$321,684</u>	<u>\$225,173</u>	<u>\$546,857</u>

SCHEDULE II(d)
Carolina Water Service, Inc. of NC
Docket No. W-354, Sub 360
Original Cost Rate Base
For the Twelve Months Ended December 31, 2017
BF/FH/TC Sewer Operations

Plant in service	\$13,333,538
Accumulated depreciation	<u>(2,504,593)</u>
Net plant in service	10,828,945
Cash working capital	146,289
Contributions in aid of constructions	(4,190,785)
Advance in aid of construction	0
Accumulated deferred income taxes	(459,121)
Customer deposits	(18,803)
Gain on sale and flow back taxes	0
Plant acquisition adjustment	952,697
Excess book value	0
Cost-free capital	0
Average tax accruals	(5,512)
Regulatory liability for excess deferred taxes	(11,200)
Deferred charges	76,202
Pro forma plant	<u>0</u>
Original cost rate base	<u>\$7,318,712</u>
Rates of return:	
Present	4.40%
Approved	7.47%

SCHEDULE III(d)
Carolina Water Service, Inc. of NC
 Docket No. W-354, Sub 360
 Statement of Capitalization and Related Costs
 For the Twelve Months Ended December 31, 2017
 BF/FH/TC Sewer Operations

	<u>Ratio</u>	<u>Original Cost Rate Base</u>	<u>Embedded Cost %</u>	<u>Net Operating Income</u>
PRESENT RATES				
Long Term Debt	49.09%	\$ 3,592,756	5.68%	\$204,069
Common Equity	50.91%	<u>3,725,956</u>	3.16%	<u>117,615</u>
Total		<u>\$ 7,318,712</u>		<u>\$ 321,684</u>
APPROVED RATES				
Long Term Debt	49.09%	\$ 3,592,756	5.68%	\$ 204,069
Common Equity	50.91%	<u>3,725,956</u>	9.20%	<u>342,788</u>
Total		<u>\$ 7,318,712</u>		<u>\$ 546,857</u>

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS 56 - 59

The evidence supporting these findings of fact is contained in the application, Commission's records, testimony of the public witnesses; testimony of CWSNC witness Richard Linneman (adopted by Dante DeStefano), rebuttal testimony of Dante DeStefano; and in the testimony and exhibits, rebuttal testimony, and late-filed exhibits of Public Staff witness Gina Casselberry.

Ms. Casselberry testified that it is the Public Staff's position that any new rate mechanism, such as a CAM, should be authorized by the North Carolina General Assembly before being considered by the Commission for rulemaking. (T 7 pp 312-313) Ms. Casselberry further testified that, assuming the Commission does have authority or is granted authority to approve CAM, the Public Staff still opposes CAM. Id. Ms. Casselberry testified that the Public Staff has serious

concerns with the 1% threshold proposed by CWSNC. In her testimony she gave two examples where, the average usage could be triggered by 50 seconds longer in the shower or one additional flush per day, and that an alternate rate design should not be triggered by such an insignificant deviation in normal customer usage. (T 7 p 313) When asked how customer growth may influence consumption, Ms. Casselberry testified that that consumption and customer growth would have to be evaluated annually, that it is possible that customer growth may decrease and consumption increase or some other combination; and that any mechanism that benefits the Company by ensuring it collects its full revenue requirement should also benefit customers by crediting customers with revenue resulting from increased usage due to customer growth. Id.

In Mr. DeStefano's pre-filed rebuttal testimony, he testified that the overall trend of per-capita usage continues to decline. Mr. DeStefano referred to Table 1 in his testimony, which highlighted the Company's average usage for a non-seasonal window. (T 8 p 182) In addition, he suggested that the increase in conservation is attributed to a conservation ethic among customers as well as strict manufacturing standards in regard to water fixtures. Ms. Casselberry disagreed and testified that the Company's average did not take into account the newly consolidated seasonal customers, such as those who live in Sapphire Valley, Connestee Falls, and Fairfield Mountain who do not use water in the winter months and use 50 percent less than the average residential customer. She stated that the reduction in consumption could also be due to higher rates due to the

consolidation of the service areas in the last rate case. (T 8 pp 10-12) Ms. Casselberry also testified that water efficient appliances have been on the market for close to ten years and in her opinion many customers have already installed them in prior years and that the reduction in consumption is more likely due to the age of the meters. Ms. Casselberry testified that to the best of her knowledge, CWSNC has no meter replacement program and that many of the meters are more than 30 years old and that it is common knowledge that as meters age they slow down. (T 8 pp 10-12) She suggests that more historical data was necessary to determine what the trend will be now that CWSNC's service areas have been consolidated. Id.

Based on the evidence, the Commission concludes that CWSNC has not provided any substantial evidence that a consumption adjustment mechanism is reasonable or necessary. The Company's over-all trend for average consumption was based on a 3-month snap-shot during the winter months when usage is generally at its lowest and seasonal customers are not normally present. The Commission agrees with the Public Staff that more historical data is necessary to determine if the average consumption, on an annual basis, will continue to decline or has stabilized. Furthermore, the Commission questions whether consumption is declining due to the installation of new water efficient appliances or because of aging meters. If it is the later, then the loss in revenue is due to an inefficient meter replacement program. In addition, the North Carolina General Assembly in 2017-2018 Session has the opportunity in House Bill 752 to authorize the Commission

to establish a consumption adjustment mechanism, but decided not to. The Commission denies CWSNC's request for a consumption adjustment mechanism.

Public Staff witness Casselberry testified that should the Commission deny the Company's request to implement a CAM, the Public Staff also opposes CWSNC's alternative rate design proposal. Ms. Casselberry testified it is the Public Staff's position that higher usage charges promote conservation. (T 7 p 332, p 339, p 345). She also stated that families have better control over their monthly bill if they have an opportunity to reduce their monthly bill by adjusting what they consume. She agreed that there are winner and losers and that seasonal customers prefer a higher base charge and lower usage charge, whereas families prefer a lower base charge and higher usage charge. Id. However, in order for seasonal customers to have service year round, a reasonable base charge is necessary to cover fixed costs. (T 7 p 347) She reiterated that it is the Public Staff's position that the ratio of base charge to usage charge, should remain at 40/60, because it would promote conservation and allow the Company to recover a reasonable portion of its fixed cost. (T 7 p 332, p 339) Ms. Casselberry also testified that to her best recollection, in the last general rate case, she determined that the Company's fixed costs were approximately 75 percent. (T 7 p 343) She further testified that if the Company were recovering 75% of its fixed costs for water and 100% of its fixed costs for sewer, it would reduce the Company's risk. (T 7 pp 343 - 344)

The Commission has reviewed the application, Commission's records, the testimony from public witnesses, the adopted testimony and rebuttal testimony of

CWSNC witness DeStefano, and the testimony and exhibits, supplemental testimony, late-filed exhibits from Public Staff witness Casselberry; and concludes that the preservation of water is critical to customers across the state, especially community water systems where the majority of water comes from wells and has limited storage capacity. The majority of CWSNC's water comes from community wells. Alternative water sources or acquiring additional land for new wells is limited in the event that a well becomes nonproductive, due to over pumping, a severe drought or some other unforeseen situation. As a result, the 40/60 ratio, base charge to usage charge, is an effective means to promote conservation while allowing the utility a reasonable cash flow for fixed costs. Ms. Casselberry testified that the current ratio was 47/53 and that she recommend that the ratio remain in the range of 45/55 but that it should move closer to the 40/60 range. At this time, the Commission see no justification as to why this long standing precedent should be changed. In fact just the opposite, the demand for more conservation is on the rise. Therefore, the Commission agrees with the Public Staff in that the rate design should move closer towards the 40/60 ratio, base charge to usage charge, rather than further away to a 60/40 ratio and that a 45/55 range is a reasonable adjustment towards that goal.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 60 -63

The evidence supporting these findings of fact and conclusions is contained in the Company's Application and Form W-1, and the testimony and exhibits of Public Staff witness Casselberry.

Public Staff witness Casselberry testified that In CWSNC's last general rate case, Docket No. W-354, Sub 356, the Public Staff recommended that CWSNC consider implementing metered sewer rates for customers in its Sapphire Valley service area, its Fairfield Harbour service area, and Bradfield Farms Subdivision, and reserved the right to independently propose metered sewer rates for these systems. As part of the settlement agreement, CWSNC supported the recommendation and agreed to undertake such consideration in conjunction with its next general rate case. In this proceeding, CWSNC decided not to implement metered sewer rates for customers in those service areas. The Public Staff still maintains the position that in order to be fair to all uniform sewer customers, sewer customers in Sapphire Valley, who also have metered water, should be charged the same rate as all of the other uniform metered sewer customers. Since sewer customers in Sapphire Valley were incorporated into CWSNC's uniform sewer rate division, they should be charged the same rate as other metered sewer customers within that rate division. In addition, customers with multiple units behind a master meter should be billed the same way as the other master metered customers, which specifies that commercial customers, including condominiums or other property owner associations who bill their members directly, shall have a separate account set up for each meter and each meter shall be billed separately based on the size of the meter and usage associated with the meter as stated in the schedule of rates for water and sewer service. It was also the Public Staff's position that since BF/FH are in their own separate rate division and all of the customers in that rate division have flat sewer rates and the Public Staff received only one complaint

concerning the flat rate, the Public Staff agrees with the Company that the flat rate should remain for the BF/FH rate division. However, in the future, should the rate division for BF/FH be eliminated and customers are incorporated into the CWSNC uniform sewer rate division, they too should be charged the metered sewer rate for customers who also have metered water. It is my understanding that the Company agrees with the Public Staff's recommendation that customers in Sapphire Valley should be billed the uniform metered sewer rate and that customers in BF/FH should be billed a flat sewer rate in this general rate case.

Ms. Casselberry also testified regarding the metered residential customers in Linville Ridge Subdivision and The Ridges at Mountain Harbour. Ms. Casselberry testified that since CWSNC's last general rate case, water meters have been installed for all of the residential customers in Linville Ridge and The Ridges at Mountain Harbour (The Ridges). Both systems are located in the mountains and are considered seasonal mountain systems, since many of the customers are only there during the summer months and holidays. Ms. Casselberry stated she evaluated the consumption for the other seasonal mountain systems and determined that the average residential monthly consumption is 1,920 gallons, which Ms. Casselberry also stated that the Company agreed that using 1,920 gallons as the estimated consumption for calculating revenue is reasonable and acceptable for Linville Ridge and the Ridges.

In its Application, the Company proposes a company-wide rate increase of 13.51 percent over the total revenue level generated by the rates currently in effect

for the four rate divisions. As discussed above, Public Staff witness Casselberry recommends that rates be designed to adjust to a 40/60 percent split between the base facilities charges and the metered commodity charges, balancing the promotion of conservation and sustainability of revenues, for the average monthly metered residential bill for each of the Company's rate divisions.

Based on the evidence presented by the Public Staff in support of its recommendations and agreement of the Company, the Commission finds that the Public Staff's recommendations in regard to a uniform metered sewer rate for Sapphire Valley, Flat sewer rate for Bradfield Farms and Fairfield Harbour, metered uniform water rate for Linville Ridge and The Ridges at Mountain Harbour, and purchased sewer rates for The Ridges at Mountain Harbour are just and reasonable and should be approved.

The rate design and rates necessary and appropriate to provide CWSNC a reasonable opportunity to recover the approved revenue requirement in this proceeding are reflected in Casselberry Late-Filed Exhibits 3, 5, and 6 filed on October 12, 2018, and Casselberry Revised Late-Filed Exhibit 4 filed on November 27, 2018. The rates shown on these late-filed Exhibits are the result of the adjustments agreed upon by the Stipulating Parties and the Public Staff's adjustment to the Company's filed position in this proceeding, as described in the Partial Stipulation and the supplemental direct testimony and the Revised Supplemental Exhibits I and II of Public Staff witness Henry. No party has presented evidence rebutting witness Casselberry's rate design. Based upon the Stipulation, the Public Staff adjustments, and other record evidence in this

proceeding, the Commission concludes that the Public Staff's rate design is reasonable and appropriate for use in this proceeding. The Commission further concludes that the Public Staff's recommended rates and rate design attached as Appendices A-1, A-2, A-3, A-4 are just and reasonable and should be approved.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 64 -65

The evidence supporting these findings of fact is contained in the Commission's prior Orders approving rulemaking in Docket No. W-100, Sub 54 establishing the procedures for implementing and applying the Water System Improvement Charge (WSIC) and Sewer System Improvement Charge (SSIC) approved in CWSNC's rate case in Docket No. W-354, Sub 336 and in the Commission's prior Orders approving WSIC and SSIC mechanisms for CWSNC and the other Utilities, Inc. companies that have been merged into CWSNC.

The Commission's previously approved WSIC/SSIC improvement charge rate adjustment mechanism continues in effect, although it has been reset to zero in this rate case. The WSIC/SSIC mechanism is designed to recover, between rate case proceedings, the costs associated with investment in certain completed, eligible projects for system or water quality improvements. The WSIC/SSIC surcharge is subject to commission approval and to audit and refund provisions. Any cumulative system improvement charge recovered pursuant to the WSIC/SSIC mechanism may not exceed five percent of the total annual service revenues approved by the Commission in this rate case proceeding.

Based on the service revenues set forth and approved in this Order, the maximum WSIC/SSIC charges as of the effective date of this Order are:

Item	Service Revenues		WSIC & SSIC Cap
CWSNC Uniform Water Operations	\$17,081,743	X 5% =	\$854,087
CWSNC Uniform Sewer Operations	12,607,524	X 5% =	630,376
BF/FH/TC Water Operations	1,302,888	X 5% =	65,144
BF/FH/TC Sewer Operations	2,067,857	X 5% =	103,393

IT IS, THEREFORE, ORDERED as follows:

1. That the Partial Joint Settlement Agreement and Stipulation is incorporated by reference herein and are hereby approved in its entirety.

2. That the Schedules of Rates, attached hereto as Appendices A-1, A-2, A-3, and A-4, and the Schedules of Connection Fees for Uniform Water and Uniform Sewer, attached hereto as Appendices B-1 and B-2, are hereby approved and deemed to be filed with the Commission pursuant to N. C. Gen. Stat. § 62-138, and are hereby authorized to become effective for service rendered on and after the issuance date of this Order.

3. That the Notices to Customers, attached hereto as Appendices C-1 and C-2 shall be mailed with sufficient postage or hand delivered to all affected customers in each relevant service area, respectively, in conjunction with the next regularly scheduled billing process.

4. That CWSNC shall file the attached Certificate of Service, properly signed and notarized, not later than 10 days after the Notices to Customers are mailed or hand delivered to customers.

5. That the Partial Joint Settlement Agreement and Stipulation, and the parts of this Order pertaining to the contents of that agreement shall not be cited or treated as precedent in future proceedings.

ISSUED BY ORDER OF THE COMMISSION.

This the _____ day of _____, 2018.

NORTH CAROLINA UTILITIES COMMISSION

M. Lynn Jarvis, Chief Clerk

SCHEDULE OF RATES

for

CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA

for providing water and sewer utility service

in

ALL OF ITS SERVICE AREAS IN NORTH CAROLINA

(excluding Corolla Light, Monteray Shores, Fairfield Harbour Service Area, Treasure Cove, Register Place Estates, North Hills and Glen Arbor/North Bend Subdivisions, Bradfield Farms, Larkhaven, Silverton and Woodland Farms Subdivisions and Hawthorne at the Green Apartments

WATER RATES AND CHARGES

Monthly Metered Service (Residential and Commercial):

Base Facility Charge (based on meter size with zero usage)

< 1" meter	\$ 23.31
1" meter	\$ 58.28
1 1/2" meter	\$ 116.55
2" meter	\$ 186.48
3" meter	\$ 349.65
4" meter	\$ 582.75
6" meter	\$1,165.50

Usage Charge:

Treated Water/1,000 gallons \$ 8.20

Untreated Water/1,000 gallons
(Brandywine Bay Irrigation Water) \$ 4.11

Purchased Water for Resale/1,000 gallons:

<u>Service Area</u>	<u>Bulk Provider</u>	
Carolina Forest	Montgomery County	\$ 3.19

High Vista Estates	City of Hendersonville	\$	3.25
Riverpointe	Charlotte Water	\$	6.30
Whispering Pines	Town of Southern Pines	\$	2.23
White Oak Plantation/ Lee Forest	Johnston County	\$	2.40
Winston Plantation	Johnston County	\$	2.40
Winston Point	Johnston County	\$	2.40
Woodrun	Montgomery County	\$	3.19
Yorktown	City of Winston Salem	\$	5.01
Zemosa Acres	City of Concord	\$	5.27
Carolina Trace	City of Sanford	\$	2.21

Commercial customers, including condominiums or other property owner associations who bill their members directly, shall have a separate account set up for each meter and each meter shall be billed separately based on the size of the meter and usage associated with the meter.

When because of the method of water line installation utilized by the developer or owner, it is impractical to meter each unit or other structure separately, the following will apply:

Sugar Mountain
Where service to multiple units or other structures is provided through a single meter, the average usage for each unit or structure served by that meter will be calculated. Each unit or structure will be billed based upon that average usage plus the base monthly charge for a <1” meter.

Mount Mitchell
Service will be billed based upon the Commission-approved monthly flat rate.

Monthly Flat Rate Service: (Billed in Arrears) \$ 53.49

Availability Rate: (Semi-Annual)

Applicable only to property owners in Carolina Forest and Woodrun Subdivisions in Montgomery County \$ 24.65

<u>Availability Rate:</u> (Monthly)		
Applicable only to property owners in Linville Ridge Subdivision		\$ 12.35
<u>Availability Rate:</u> (Monthly)		
Applicable only to property owners in Fairfield Sapphire Valley Service Area		\$ 9.10
<u>Availability Rate:</u> (Monthly)		
Applicable only to property owners in Connestee Falls		\$ 4.80
<u>Meter Testing Fee:</u> ^{1/}		\$ 20.00
<u>New Water Customer Charge:</u>		\$ 27.00
<u>Reconnection Charge:</u> ^{2/}		
If water service is cut off by utility for good cause		\$ 27.00
If water service is discontinued at customer's request		\$ 27.00
<u>Reconnection Charge:</u> ^{3/} (Flat rate water customers)		
If water service is cut off by utility for good use		Actual Cost
<u>Management Fee:</u> (in the following subdivisions only)		
Wolf Laurel		\$150.00
Covington Cross Subdivision (Phases 1 & 2)		\$100.00
<u>Oversizing Fee:</u> (in the following subdivision only)		
Winghurst		\$400.00
<u>Meter Fee:</u>		
For <1" meters		\$ 50.00
For meters 1" or larger		Actual Cost
<u>Irrigation Meter Installation:</u>		Actual Cost

SEWER RATES AND CHARGES

Monthly Metered Service:

Base Facility Charge:

Residential (zero usage)	\$ 44.51
Commercial (based on meter size with zero usage)	
< 1" meter	\$ 44.51
1" meter	\$ 111.28
1 1/2" meter	\$ 222.55
2" meter	\$ 356.08
3" meter	\$ 667.65
4" meter	\$1,112.75
6" meter	\$2,225.50

Usage charge per 1,000 gallons \$ 3.58

Commercial customers, including condominiums or other property owner associations who bill their members directly, shall have a separate account set up for each meter and each meter shall be billed separately based on the size of the meter and usage associated with the meter.

Monthly Metered Purchased Sewer Service:

Collection Charge (residential and commercial) \$ 30.40

Usage charge, per 1,000 gallons based on purchased water consumption

<u>Service Area</u>	<u>Bulk Provider</u>	
White Oak Plantation/ Lee Forest/Winston Pt.	Johnston County	\$ 5.06
Kings Grant	Two Rivers Utilities	\$ 3.80
College Park	Town of Dallas	\$ 5.70

Monthly Flat Rate Service: \$ 55.89

Multi-residential customers who are served by a master meter shall be charged the flat rate per unit. \$ 55.89

Mt. Carmel Subdivision Service Area:

Monthly Base Facility Charge	\$ 6.77
Monthly Collection Charge (Residential and commercial)	\$ 30.40
Usage Charge/1,000 gallons based on purchased water	\$ 5.88

Regalwood and White Oak Estates Subdivision Service Area:

Monthly Flat Rate Sewer Service	
Residential Service	\$ 55.89
White Oak High School	\$1,759.20
Child Castle Daycare	\$ 218.55
Pantry	\$ 116.10

Fairfield Mountain/Apple Valley (a.k.a. Rumbling Bald) Service Area, Highland Shores Subdivisions and Laurel Mountain Estates

Monthly Sewer Rates:

Residential	
Collection charge/dwelling unit	\$ 30.40
Treatment charge/dwelling unit	\$ 69.50
Total monthly flat rate/dwelling unit	\$ 99.90
Commercial and Other	
Minimum monthly collection and treatment charge	\$ 99.90
Monthly collection and treatment charge for customers Who do not take water service (per SFE)	\$ 99.90
Treatment charge per dwelling unit	
Small (less than 2,500 gallons per month)	\$ 78.50
Medium (2,500 to 10,000 gallons per month)	\$ 139.50
Large (over 10,000 gallons per month)	\$ 219.50
Collection Charge (per 1,000 gallons)	\$ 13.93

The Ridges at Mountain Harbour

Monthly Sewer Rates:

Collection charge (Residential and Commercial)	\$ 30.40
Treatment Charge (Residential and Commercial)	
< 1 inch meter	\$ 18.42
2 inch meter	\$ 147.36

Availability Rate: (Monthly)

Applicable only to property owners in Fairfield Sapphire Valley Service Area	\$ 8.30
--	---------

Availability Rate: (Monthly)

Applicable only to property owners in Connestee Falls	\$ 4.70
---	---------

<u>New Sewer Customer Charge:</u> ^{4/}	\$ 27.00
---	----------

<u>Reconnection Charge:</u> ^{5/}	
If sewer service is cut off by utility for good cause:	Actual Cost

MISCELLANEOUS UTILITY MATTERS

<u>Charge for processing NSF Checks:</u>	\$ 25.00
--	----------

<u>Bills Due:</u>	On billing date
-------------------	-----------------

<u>Bills Past Due:</u>	21 days after billing date
------------------------	----------------------------

<u>Billing Frequency:</u>	Bills shall be rendered monthly in all service areas, except for Mt. Carmel, which will be billed bimonthly.
---------------------------	--

Availability rates will be billed quarterly in advance for Connestee Falls, semiannually in advance for Carolina Forest, Woodrun, and Fairfield Sapphire valley, and monthly for Linville Ridge.

Finance Charge for Late Payment:

1% per month will be applied to the unpaid balance of all bills still past due 25 days after billing date.

Notes:

^{1/} If a customer requests a test of a water meter more frequently than once in a 24-month period, the Company will collect a \$20.00 service charge to defray the cost of the test. If the meter is found to register in excess of the prescribed accuracy limits, the meter testing charge will be waived. If the meter is found to register accurately or below prescribed accuracy limits, the charge shall be retained by the Company. Regardless of the test results, customers may request a meter test once in a 24-month period without charge.

^{2/} Customers who request to be reconnected within nine months of disconnection at the same address shall be charged the base facility charge for the service period they were disconnected.

^{3/} The utility shall itemize the estimated cost of disconnecting and reconnecting service and shall furnish this estimate to customer with cut-off notice.

^{4/} This charge shall be waived if customer is also a water customer within the same service area.

^{5/} The utility shall itemize the estimated cost of disconnecting and reconnecting service and shall furnish this estimate to customer with cut-off notice. This charge will be waived if customer also receives water service from Carolina Water Service within the same service area. Customers who request to be reconnected within nine months of disconnection at the same address shall be charged the base facility charge for the service period they were disconnected.

SCHEDULE OF RATES

for

CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA

for providing sewer utility service

in

COROLLA LIGHT AND MONTERAY SHORES SERVICE AREA

SEWER RATES AND CHARGES

Monthly Metered Service (Residential and Commercial):

Base Facility Charge (based on meter size with zero usage)

< 1" meter	\$ 52.06
1" meter	\$ 130.15
1 1/2" meter	\$ 260.31
2" meter	\$ 416.49
3" meter	\$ 780.92
4" meter	\$1,301.54
6" meter	\$2,603.07

Usage Charge per 1,000 gallons \$ 6.62

Commercial customers, including condominiums or other property owner associations who bill their members directly, shall have a separate account set up for each meter and each meter shall be billed separately based on the size of the meter and usage associated with the meter.

New Sewer Customer Charge: \$ 21.92

Reconnection Charge: ^{1/}

If sewer service cut off by utility for good cause Actual Cost

Uniform Connection Fees: ^{2/}

The following uniform connection fees apply unless specified differently by contract approved by and on file with the North Carolina Utilities Commission.

Connection Charge (CC), per SFE (Single Family Equivalent)	\$ 100.00
Plant Modification Fee (PMF), per SFE	\$1,000.00

The systems where connection fees other than the uniform fees have been approved and/or allowed to become effective by the North Carolina Utilities Commission are as follows. These fees are per SFE:

<u>Subdivision</u>	<u>CC</u>	<u>PMF</u>
Corolla Light	\$ 700.00	\$ 0.00
Monteray Shores	\$ 700.00	\$ 0.00
Monteray Shores (Degabrielle Bldrs.)	\$ 0.00	\$ 0.00
Corolla Bay ^{3/}	\$ 100.00	\$1,000.00
Corolla Bay ^{4/}	\$ 700.00	\$ 0.00
Corolla Shores	\$ 700.00	\$ 0.00

1 SFE shall equal 360 gallons per day of capacity.

MISCELLANEOUS UTILITY MATTERS

<u>Charge for processing NSF Checks:</u>	\$ 24.91
<u>Bills Due:</u>	On billing date
<u>Bills Past Due:</u>	21 days after billing date
<u>Billing Frequency:</u>	Bills shall be rendered monthly
<u>Finance Charge for Late Payment:</u>	1% per month will be applied to the unpaid balance of all bills still past due 25 days after billing date.

Notes:

^{1/} The Utility shall itemize the estimated cost of disconnecting and reconnecting service and shall furnish the estimate to customer with cut-off notice.

Customers who request to be reconnected within nine months of disconnection at the same address shall be charged the base facility charge for the service period they were disconnected.

^{2/} These fees are only applicable one time, when the unit is initially connected to the system.

^{3/} The connection charge of \$100 per SFE and the plant modification fee of \$1,000 per SFE specified herein apply to new wastewater connections requested at Corolla Bay prior to June 4, 2015.

^{4/} The connection charge of \$700 per SFE applies to new wastewater connections requested at Corolla Bay on and after June 4, 2015.

SCHEDULE OF RATES

for

CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA

for providing water and sewer utility service

in

TREASURE COVE, REGISTER PLACE ESTATES, NORTH HILLS, GLEN ARBOR/NORTH BEND SUBDIVISIONS, FAIRFIELD HARBOUR SERVICE AREA, BRADFIELD FARMS SUBDIVISION, LARKHAVEN SUBDIVISION, SILVERTON AND WOODLAND FARMS SUBDIVISIONS AND HAWTHORNE AT THE GREEN APARTMENTS

WATER RATES AND CHARGES

Monthly Metered Service (Residential and Commercial):

Base Facility Charge (based on meter size with zero usage)

< 1" meter	\$ 14.46
1" meter	\$ 36.15
1 1/2" meter	\$ 72.30
2" meter	\$ 115.68

Usage Charge per 1,000 gallons	\$ 4.22
--------------------------------	---------

Availability Rate: (Monthly)

Applicable only to property owners in Fairfield Harbour Service Area	\$ 3.28
--	---------

Connection Charge:

Treasure Cove Subdivision	\$ 0.00
North Hills Subdivision	\$ 100.00
Glen Arbor/North Bend Subdivision	\$ 0.00
Register Place Estates	\$ 500.00

Fairfield Harbor: ^{1/}

All Areas Except Harbor Pointe II Subdivision

Recoupment of capital fees per tap	\$ 335.00
Connection charge	\$ 140.00

Harbor Pointe Subdivision and any area where mains have been installed after July 24, 1989

Recoupment of capital fee	\$ 650.00
Connection charge	\$ 320.00

Bradfield Farms:

Connection charge	None
-------------------	------

<u>Meter Testing Fee:</u> ^{2/}	\$ 20.00
---	----------

<u>New Water Customer Charge:</u>	\$ 27.00
-----------------------------------	----------

Reconnection Charge: ^{3/}

If water service is cut off by utility for good cause	\$ 27.00
If water service is discontinued at customer's request	\$ 27.00

<u>Irrigation Meter Installation:</u>	Actual Cost
---------------------------------------	-------------

SEWER RATES AND CHARGES

Monthly Sewer Service:

Residential:

Flat Rate, per dwelling unit	\$ 48.52
Bulk Flat Rate, per REU	\$ 48.52

Commercial and Other:

Monthly Flat Rate (Customers who do not take water service)	\$ 48.52
--	----------

Monthly Metered Rates
(based on meter size with zero usage)

<1" meter	\$ 42.92
1" meter	\$107.30
1 1/2" meter	\$214.60
2" meter	\$343.36

Usage Charge, per 1,000 gallons	\$ 1.36
---------------------------------	---------

Bulk Sewer Service for Hawthorne at the Green Apartments: ^{4/}

Bulk Flat Rate, per REU	\$ 48.52
-------------------------	----------

(To be collected from Hawthorne and delivered to Carolina Water Service, Inc. of North Carolina for treatment of the Hawthorne wastewater pursuant to Docket No. W-218, Sub 291)

Availability Rate: (Monthly)

Applicable only to property owners in Fairfield Harbour Service Area	\$ 2.65
--	---------

Connection Charge

Fairfield Harbour: ^{1/}

All Areas Except Harbor Pointe II Subdivision

Recoupment of capital fees per tap	\$ 735.00
Connection charge	\$ 140.00

Harbor Pointe Subdivision and any area where mains have been installed after July 24, 1989

Recoupment of capital fee	\$2,215.00
Connection charge	\$ 310.00

Bradfield Farms:

Connection charge	None
-------------------	------

<u>New Sewer Customer Charge:</u> ^{5/}	\$ 27.00
---	----------

Reconnection Charge:^{6/}
If sewer service is cut off by utility for good cause: Actual Cost

MISCELLANEOUS UTILITY MATTERS

Charge for processing NSF Checks: \$ 25.00

Bills Due: On billing date

Bills Past Due: 21 days after billing date

Billing Frequency: Bills shall be monthly for service in arrears.

Finance Charge for Late Payment: 1% per month will be applied to the unpaid balance of all bills still past due 25 days after billing date.

Notes:

^{1/} The recoupment of capital portion of the connection charges shall be due and payable at such time as the main water and sewer lines are installed in front of each lot, and the tap-on fee for water and sewer shall be payable upon request by the owner of each lot to be connected to the water and sewer lines. With written consent of the company, payment of the recoupment capital portion of the connection charge may be made payable over five year period following the installation of the water and sewer mains in front of each lot, payment to be made in such a manner and in such installments as agreed upon between lot owner and the company, together with interest on the balance of the unpaid recoupment of capital fee from said time until payment in full at the rate of six percent per annum.

^{2/} If a customer requests a test of a water meter more frequently than once in a 24-month period, the Company will collect a \$20.00 service charge to defray the cost of the test. If the meter is found to register in excess of the prescribed accuracy limits, the meter testing charge will be waived. If the meter is found to register accurately or below prescribed accuracy limits, the charge shall be retained by the Company. Regardless of the test results, customers may request a meter test once in a 24-month period without charge.

^{3/} Customers who request to be reconnected within nine months of disconnection at the same address shall be charged the base facility charge for the service period they were disconnected.

^{4/} Each Apartment building will be considered 92.42% occupied on an ongoing basis for billing purposes as soon as the certificate of occupancy is issued for that apartment building.

^{5/} This charge shall be waived if customer is also a water customer within the same service area.

^{6/} The utility shall itemize the estimated cost of disconnecting and reconnecting service and shall furnish this estimate to customer with cut-off notice. This charge will be waived if customer also receives water service from Carolina Water Service within the same service area. Customers who request to be reconnected within nine months of disconnection at the same address shall be charged the base facility charge for the service period they were disconnected.

CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA
SCHEDULE OF CONNECTION FEES
FOR WATER UTILITY SERVICE UNDER UNIFORM RATES

Uniform Connection Fees: ^{1/}

The following uniform connection fees apply unless specified differently by contract approved by and on file with the North Carolina Utilities Commission.

Connection Charge (CC), per SFE (Single Family Equivalent)	\$ 100.00
Plant Modification Fee (PMF), per SFE	\$ 400.00

The systems where connection fees other than the uniform fees have been approved and/or allowed to become effective by the North Carolina Utilities Commission are as follows. These fees are per SFE:

<u>Subdivision</u>	<u>CC</u>	<u>PMF</u>
Abington	\$ 0.00	\$ 0.00
Abington, Phase 14	\$ 0.00	\$ 0.00
Amherst	\$ 250.00	\$ 0.00
Bent Creek	\$ 0.00	\$ 0.00
Blue Mountain at Wolf Laurel	\$ 925.00	\$ 0.00
Buffalo Creek, Phase I, II, III, IV	\$ 825.00	\$ 0.00
Carolina Forest	\$ 0.00	\$ 0.00
Chapel Hills	\$ 150.00	\$ 400.00
Eagle Crossing	\$ 0.00	\$ 0.00
Elk River Development	\$1,000.00	\$ 0.00
Forest Brook/Old Lamp Place	\$ 0.00	\$ 0.00
Harbour	\$ 75.00	\$ 0.00
Hestron Park	\$ 0.00	\$ 0.00
Hound Ears	\$ 300.00	\$ 0.00
Kings Grant/Willow Run	\$ 0.00	\$ 0.00
Lemmond Acres	\$ 0.00	\$ 0.00
Linville Ridge	\$ 400.00	\$ 0.00
Monterrey (Monterrey LLC)	\$ 0.00	\$ 0.00
Quail Ridge	\$ 750.00	\$ 0.00
Queens Harbour/Yachtsman	\$ 0.00	\$ 0.00
Riverpointe	\$ 300.00	\$ 0.00
Riverpointe (Simonini Bldrs.)	\$ 0.00	\$ 0.00
Riverwood, Phase 6E (Johnston County)	\$ 825.00	\$ 0.00

Saddlewood/Oak Hollow (Summey Bldrs.)	\$ 0.00	\$ 0.00
Sherwood Forest	\$ 950.00	\$ 0.00
Ski Country	\$ 100.00	\$ 0.00
The Ridges at Mountain Harbour	\$2,500.00	\$ 0.00
White Oak Plantation	\$ 0.00	\$ 0.00
Wildlife Bay	\$ 870.00	\$ 0.00
Willowbrook	\$ 0.00	\$ 0.00
Winston Plantation	\$1,100.00	\$ 0.00
Winston Pointe, Phase 1A	\$ 500.00	\$ 0.00
Wolf Laurel	\$ 925.00	\$ 0.00
Woodrun	\$ 0.00	\$ 0.00
Woodside Falls	\$ 500.00	\$ 0.00

Other Connection Fees:

The following connection fees apply unless specified differently by contract approved and/or filed with the North Carolina Utilities Commission.

Amber Acres, Amber Acres North, Amber Ridge, Ashley Hills North, Bishop Pointe, Carriage Manor, Country Crossing, Covington Cross, Heather Glen, Hidden Hollow, Jordan Woods, Lindsey Point, Neuse Woods, Oakes Plantation, Randsdell Forest, Rutledge Landing, Sandy Trails, Stewart’s Ridge, Tuckahoe, Wilder’s Village and Forest Hill Subdivisions

Connection Charge

5/8” meter	\$ 500.00
All other meter sizes	Actual cost of meter and installation

The systems where other connection fees have been approved and/or allowed to become effective by the North Carolina Utilities Commission are as follows.

<u>Subdivision</u>	<u>CC</u>
Lindsey Point Subdivision	\$ 0.00
Amber Acres North, Sections II & IV	\$ 570.00
Fairfield Mountain/Apple Valley (a.k.a. Rumbing Bald) Service Area	\$ 500.00
Highland Shores Subdivision	\$ 500.00
Laurel Mountain Estates	\$ 0.00
Carolina Trace	\$ 605.00
Connestee Falls	\$ 600.00

The following connection fees apply unless specified differently by contract approved and/or filed with the North Carolina Utilities Commission.

All Areas Except Holly Forest XI, Holly Forest XIV, Holly Forest XV, Whisper Lake I, Whisper Lake II, Whisper Lake III, Deer Run, Lonesome Valley Phases I and II, and Chattooga Ridge

Recoupment of Capital Fee (RCF) ^{2/}	\$ 0.00
Connection charge	\$ 400.00

The systems where other connection fees have been approved and/or allowed to become effective by the North Carolina Utilities Commission are as follows.

<u>Subdivision</u>	<u>CC</u>	<u>RCF</u>
Holly Forest XI	\$ 400.00	\$2,400.00
Holly Forest XIV	\$ 400.00	\$ 250.00
Holly Forest XV	\$ 400.00	\$ 500.00
Whispering Lake Phase I	\$ 400.00	\$1,250.00
Whispering Lake Phases II and III	\$ 400.00	\$2,450.00
Deer Run	\$ 400.00	\$1,900.00
Lonesome Valley Phases I and II	\$ 0.00	\$ 0.00
Chattooga Ridge	\$ 0.00	\$ 0.00

^{1/} These fees are only applicable one time, when the unit is initially connected to the system.

^{2/} The recoupment of capital portion of the connection charges shall be due and payable at such time as the main water and sewer lines are installed in front of each lot, and the tap-on fee for water and sewer shall be payable upon request by the owner of each lot to be connected to the water and sewer lines. With written consent of the company, payment of the recoupment capital portion of the connection charge may be made payable over five year period following the installation of the water and sewer mains in front of each lot, payment to be made in such a manner and in such installments as agreed upon between lot owner and the company, together with interest on the balance of the unpaid recoupment of capital fee from said time until payment in full at the rate of six percent per annum.

CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA
SCHEDULE OF CONNECTION FEES FOR
SEWER UTILITY SERVICE UNDER UNIFORM RATES

Uniform Connection Fees: ^{1/}

The following uniform connection fees apply unless specified differently by contract approved by and on file with the North Carolina Utilities Commission.

Connection Charge (CC), per SFE (Single Family Equivalent)	\$ 100.00
Plant Modification Fee (PMF), per SFE	\$1,000.00

The systems where connection fees other than the uniform fees have been approved and/or allowed to become effective by the North Carolina Utilities Commission are as follows. These fees are per SFE:

<u>Subdivision</u>	<u>CC</u>	<u>PMF</u>
Abington	\$ 0.00	\$ 0.00
Abington, Phase 14	\$ 0.00	\$ 0.00
Amber Acres North (Phases II & IV)	\$ 815.00	\$ 0.00
Ashley Hills	\$ 0.00	\$ 0.00
Amherst	\$ 500.00	\$ 0.00
Bent Creek	\$ 0.00	\$ 0.00
Brandywine Bay	\$ 100.00	\$1,456.00
Camp Morehead by the Sea	\$ 100.00	\$1,456.00
Elk River Development	\$1,200.00	\$ 0.00
Hammock Place	\$ 100.00	\$1,456.00
Hestron Park	\$ 0.00	\$ 0.00
Hound Ears	\$ 30.00	\$ 0.00
Independent/Hemby Acres/Beacon Hills (Griffin Bldrs.)	\$ 0.00	\$ 0.00
Kings Grant/Willow Run	\$ 0.00	\$ 0.00
Kynwood	\$ 0.00	\$ 0.00
Mt. Carmel/Section 5A	\$ 500.00	\$ 0.00
Queens Harbor/Yachtsman	\$ 0.00	\$ 0.00
Riverpointe	\$ 300.00	\$ 0.00
Riverpointe (Simonini Bldrs.)	\$ 0.00	\$ 0.00
Steeplechase (Spartabrook)	\$ 0.00	\$ 0.00
The Ridges at Mountain Harbour	\$2,500.00	\$ 0.00

APPENDIX B-2
PAGE 2 OF 3

White Oak Plantation	\$ 0.00	\$ 0.00
Willowbrook	\$ 0.00	\$ 0.00
Willowbrook (Phase 3)	\$ 0.00	\$ 0.00
Winston pointe (Phase 1A)	\$2,000.00	\$ 0.00
Woodside Falls	\$ 0.00	\$ 0.00

Other Connection Fees:

The systems where other connection fees have been approved and/or allowed to become effective by the North Carolina Utilities Commission are as follows.

Subdivision

Carolina Pines

Residential	\$1,350.00 per unit (including single family homes, condominiums, apartments, and mobile homes)
Hotels	\$750.00 per unit
Nonresidential	\$3.57 per gallon of daily design of discharge or \$900.00 per unit, whichever is greater

Subdivision

CC

Fairfield Mountain/Apply Valley (a.k.a. Rumbling Bald)	
Service Area	\$ 550.00
Highland Shores	\$ 550.00
Carolina Trace	\$ 533.00
Connestee Falls	\$ 400.00

The following connection fees apply unless specified differently by contract approved and/or filed with the North Carolina Utilities Commission.

All Areas Except Holly Forest XIV, Holly Forest XV, Deer Run, and Lonesome Valley Phases I and II

Recoupment of Capital Fee (RCF) ^{2/}	\$ 0.00
Connection charge	\$ 550.00

The systems where other connection fees have been approved and/or allowed to become effective by the North Carolina Utilities Commission are as follows:

<u>Subdivision</u>	<u>CC</u>	<u>RCF</u>
Holly Forest XIV	\$ 550.00	\$1,650.00
Holly Forest XV	\$ 550.00	\$ 475.00
Deer Run	\$ 550.00	\$1,650.00
Lonesome Valley Phases I and II	\$ 0.00	\$ 0.00

^{1/} These fees are only applicable one time, when the unit is initially connected to the system.

^{2/} The recoupment of capital portion of the connection charges shall be due and payable at such time as the main water and sewer lines are installed in front of each lot, and the tap-on fee for water and sewer shall be payable upon request by the owner of each lot to be connected to the water and sewer lines. With written consent of the company, payment of the recoupment capital portion of the connection charge may be made payable over five year period following the installation of the water and sewer mains in front of each lot, payment to be made in such a manner and in such installments as agreed upon between lot owner and the company, together with interest on the balance of the unpaid recoupment of capital fee from said time until payment in full at the rate of six percent per annum.

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. W-354, SUB 360

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of
Application by Carolina Water Service, Inc. of North Carolina, 4944 Parkway Plaza Boulevard, Suite 375, Charlotte, North Carolina 28217, for Authority to Adjust and Increase Rates for Water and Sewer Utility Service in All of its Service Areas in North Carolina, Except Corolla Light and Monteray Shores Service Area)

NOTICE TO CUSTOMERS

NOTICE IS HEREBY GIVEN that the North Carolina Utilities Commission has issued an Order authorizing Carolina Water Service, Inc. of North Carolina ("CWSNC") to increase rates for water and sewer utility service in all of its service areas in North Carolina (excluding Corolla Light, Monteray Shores. The new approved rates are as follows:

WATER RATES AND CHARGES

(Excluding Corolla Light, Monteray Shores, Fairfield Harbour Service Area, Treasure Cove, Register Place Estates, North Hills and Glen Arbor/North Bend Subdivisions, Bradfield Farms, Larkhaven Subdivision, Silverton and Woodland Farms Subdivisions and Hawthorne at the Green Apartments

Uniform Water Customers:

Monthly Metered Service (Residential and Commercial):

Base Facility Charge (based on meter size with zero usage)	
< 1" meter	\$ 23.31
1" meter	\$ 58.28
1 1/2" meter	\$ 116.55
2" meter	\$ 186.48
3" meter	\$ 349.65
4" meter	\$ 582.75
6" meter	\$1,165.50

Usage Charge:

Treated Water/1,000 gallons	\$	8.20
Untreated Water/1,000 gallons (Brandywine Bay Irrigation Water)	\$	4.11

Purchased Water for Resale/1,000 gallons:

<u>Service Area</u>	<u>Bulk Provider</u>		
Carolina Forest	Montgomery County	\$	3.19
High Vista Estates	City of Hendersonville	\$	3.25
Riverpointe	Charlotte Water	\$	6.30
Whispering Pines	Town of Southern Pines	\$	2.23
White Oak Plantation/ Lee Forest	Johnston County	\$	2.40
Winston Plantation	Johnston County	\$	2.40
Winston Point	Johnston County	\$	2.40
Woodrun	Montgomery County	\$	3.19
Yorktown	City of Winston Salem	\$	5.01
Zemosa Acres	City of Concord	\$	5.27
Carolina Trace	City of Sanford	\$	2.21

Commercial customers, including condominiums or other property owner associations who bill their members directly, shall have a separate account set up for each meter and each meter shall be billed separately based on the size of the meter and usage associated with the meter.

When because of the method of water line installation utilized by the developer or owner, it is impractical to meter each unit or other structure separately, the following will apply:

Sugar Mountain

Where service to multiple units or other structures is provided through a single meter, the average usage for each unit or structure served by that meter will be calculated. Each unit or structure will be billed based upon that average usage plus the base monthly charge for a <1" meter.

Mount Mitchell

Service will be billed based upon the Commission-approved monthly flat rate.

Monthly Flat Rate Service: (Billed in Arrears) \$ 53.49

Availability Rate: (Semi-Annual)

Applicable only to property owners in Carolina Forest and Woodrun Subdivisions in Montgomery County \$ 24.65

Availability Rate: (Monthly)

Applicable only to property owners in Linville Ridge Subdivision \$ 12.35

Availability Rate: (Monthly)

Applicable only to property owners in Fairfield Sapphire Valley Service Area \$ 9.10

Availability Rate: (Monthly)

Applicable only to property owners in Connestee Falls \$ 4.80

SEWER RATES AND CHARGES

(Excluding Corolla Light, Monterey Shores, Fairfield Harbour Service Area, Treasure Cove, Register Place Estates, North Hills and Glen Arbor/North Bend Subdivisions, Bradfield Farms, Larkhaven Subdivision, Silverton and Woodland Farms Subdivisions and Hawthorne at the Green Apartments)

Uniform Sewer Customers:

Monthly Metered Service:

Base Facility Charge:

Residential (zero usage) \$ 44.51

Commercial (based on meter size with zero usage)

< 1" meter	\$ 44.51
1" meter	\$ 111.28
1 1/2" meter	\$ 222.55
2" meter	\$ 356.08
3" meter	\$ 667.65
4" meter	\$1,112.75
6" meter	\$2,225.50

Usage charge per 1,000 gallons \$ 3.58

Commercial customers, including condominiums or other property owner associations who bill their members directly, shall have a separate account set up for each meter and each meter shall be billed separately based on the size of the meter and usage associated with the meter.

Monthly Metered Purchased Sewer Service:

Collection Charge (residential and commercial) \$ 30.40

Usage charge, per 1,000 gallons based on purchased water consumption

<u>Service Area</u>	<u>Bulk Provider</u>		
White Oak Plantation/ Lee Forest/Winston Pt.	Johnston County	\$	5.06
Kings Grant	Two Rivers Utilities	\$	3.80
College Park	Town of Dallas	\$	5.70

Monthly Flat Rate Service: \$ 55.89

Multi-residential customers who are served by a master meter shall be charged the flat rate per unit. \$ 55.89

Mt. Carmel Subdivision Service Area:

Monthly Base Facility Charge \$ 6.77

Monthly Collection Charge
(Residential and commercial) \$ 30.40

Usage Charge/1,000 gallons based on purchased water \$ 5.88

Regalwood and White Oak Estates Subdivision Service Area:

Monthly Flat Rate Sewer Service		
Residential Service	\$	55.89
White Oak High School	\$	1,759.20
Child Castle Daycare	\$	218.55
Pantry	\$	116.10

Fairfield Mountain/Apple Valley (a.k.a. Rumbling Bald) Service Area, Highland Shores Subdivisions and Laurel Mountain Estates
Monthly Sewer Rates:

Residential	
Collection charge/dwelling unit	\$ 30.40
Treatment charge/dwelling unit	\$ 69.50
Total monthly flat rate/dwelling unit	\$ 99.90
Commercial and Other	\$ 99.90
Minimum monthly collection and treatment charge	\$ 99.90
Monthly collection and treatment charge for customers Who do not take water service (per single family unit)	\$ 99.90
Treatment charge per dwelling unit	
Small (less than 2,500 gallons per month)	\$ 78.50
Medium (2,500 to 10,000 gallons per month)	\$ 139.50
Large (over 10,000 gallons per month)	\$ 219.50
Collection Charge (per 1,000 gallons)	\$ 13.93

The Ridges at Mountain Harbour

Monthly Sewer Rates:

Collection charge (Residential and Commercial)	\$ 30.40
Treatment Charge (Residential and Commercial)	
< 1 inch meter	\$ 18.42
2 inch meter	\$ 147.36

Availability Rate: (Monthly)

Applicable only to property owners in Fairfield Sapphire Valley Service Area	\$ 8.30
--	---------

Availability Rate: (Monthly)

Applicable only to property owners in Connestee Falls	\$ 4.70
---	---------

RATE ADJUSTMENT MECHANISM:

The Commission-authorized water and sewer system improvement charge (WSIC/SSIC) rate adjustment mechanism continues in effect and will now be applicable to all customers in CWSNC's North Carolina service areas. It has been reset at zero in the Docket No. W-354, Sub 360 rate case, but CWSNC may, under the Rules and Regulations of the Commission, next apply for a rate surcharge on F, to become effective . The WSIC/SSIC mechanism is designed to recover, between rate case proceedings, the costs associated with investment in certain completed, eligible projects for system or water quality improvement. The WSIC/SSIC mechanism is subject to Commission approval and to audit and refund provisions. Any cumulative system improvement charge recovered pursuant to the WSIC/SSIC mechanism may not exceed 5% of the total annual service revenues approved by the Commission in this general rate case proceeding. Additional information regarding the WSIC/SSIC mechanism is contained in the Commission's Order and can be accessed from the Commission's website at www.ncuc.net, under Docket Information, using the Docket Search feature for docket number "W-354 Sub 356".

ISSUED BY ORDER OF THE COMMISSION.

This the _____ day of _____, 2018.

NORTH CAROLINA UTILITIES COMMISSION

M. Lynn Jarvis, Chief Clerk

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. W-354, SUB 360

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of
Application by Carolina Water Service, Inc.)
of North Carolina, 4944 Parkway Plaza)
Boulevard, Suite 375, Charlotte, North)
Carolina 28217, for Authority to Adjust and)
Increase Rates for Water and Sewer Utility)
Service in All of its Service Areas in North)
Carolina, Except Corolla Light and Monteray)
Shores Service Area and Elk River)
Development)

**NOTICE TO CUSTOMERS
IN TREASURE COVE,
REGISTER PLACE ESATES,
NORTH HILLS, AND GLEN
ARBOR/NORTH BEND
SUBDIVISIONS, FAIRFIELD
HARBOUR SERVICE AREA,
BRADFIELD FARMS
SUBDIVISION, LARKHAVEN
SUBDIVISION, SILVERTON
AND WOODLAND FARMS
SUBDIVISIONS, AND
HAWTHORNE AT THE GREEN
APARTMENTS**

NOTICE IS HEREBY GIVEN that the North Carolina Utilities Commission has issued an Order authorizing Carolina Water Service, Inc. of North Carolina to charge the following new rates for water and sewer utility service in Treasure Cove, Register Place Estates, North Hills, and Glen Arbor/North Bend Subdivisions, Fairfield Harbour Service Area, Bradfield Farms Subdivision, Larkhaven Subdivision, Silverton and Woodland Farms Subdivisions and Hawthorne at the Green Apartments:

WATER RATES AND CHARGES

Monthly Metered Service (Residential and Commercial):

Base Facility Charge (based on meter size with zero usage)	
< 1" meter	\$ 14.46
1" meter	\$ 36.15
1 1/2" meter	\$ 72.30
2" meter	\$ 115.68

Usage Charge per 1,000 gallons \$ 4.22

Availability Rate: (Monthly)

Applicable only to property owners in Fairfield Harbour Service Area \$ 3.28

SEWER RATES AND CHARGES

Monthly Sewer Service:

Residential:

Flat Rate, per dwelling unit \$ 48.52
Bulk Flat rate, per REU \$ 48.52

Commercial and Other:

Monthly Flat Rate
(Customers who do not take water service) \$ 48.52

Monthly Metered Rates
(based on meter size with zero usage)

<1" meter \$ 42.92
1" meter \$107.30
1 1/2" meter \$214.60
2" meter \$343.36

Usage Charge, per 1,000 gallons \$ 1.36

Bulk Sewer Service for Hawthorne at the Green Apartments:

Bulk Flat Rate, per REU \$ 48.52

(To be collected from Hawthorne and delivered to Carolina Water Service, Inc. of North Carolina for treatment of the Hawthorne wastewater pursuant to Docket No. W-218, Sub 291)

Availability Rate: (Monthly)

Applicable only to property owners in Fairfield Harbour Service Area \$ 2.65

RATE ADJUSTMENT MECHANISM:

The Commission-authorized water and sewer system improvement charge (WSIC/SSIC) rate adjustment mechanism continues in effect and will now be applicable to all customers in CWSNC's North Carolina service areas. It has been reset at zero in the Docket No. W-354, Sub 360 rate case, but CWSNC may, under the Rules and Regulations of the Commission, next apply for a rate surcharge on _____, to become effective _____. The WSIC/SSIC mechanism is designed to recover, between rate case proceedings, the costs associated with investment in certain completed, eligible projects for system or water quality improvement. The WSIC/SSIC mechanism is subject to Commission approval and to audit and refund provisions. Any cumulative system improvement charge recovered pursuant to the WSIC/SSIC mechanism may not exceed 5% of the total annual service revenues approved by the Commission in this general rate case proceeding. Additional information regarding the WSIC/SSIC mechanism is contained in the Commission's Order and can be accessed from the Commission's website at www.ncuc.net, under Docket Information, using the Docket Search feature for docket number "W-354 Sub 356".

ISSUED BY ORDER OF THE COMMISSION.

This the _____ day of _____, 2018.

NORTH CAROLINA UTILITIES COMMISSION

M. Lynn Jarvis, Chief Clerk

CERTIFICATE OF SERVICE

I, _____, mailed with sufficient postage or hand delivered to all affected customers the attached Notice to Customers issued by the North Carolina Utilities Commission in Docket No. W-354, Sub 360, and the Notice was mailed or hand delivered by the date specified in the Order.

This the ____ day of _____, 2018.

By: _____
Signature

Name of Utility Company

The above named Applicant, _____, personally appeared before me this day and, being first duly sworn, says that the required Notice to Customers was mailed or hand delivered to all affected customers, as required by the Commission Order dated _____ in Docket No. W-354, Sub 360.

Witness my hand and notarial seal, this the ____ day of _____, 2018.

Notary Public

Address

(SEAL) My Commission Expires: _____
Date