STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. W-354, SUB 400

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Application by Carolina Water Service, Inc. of North Carolina for Authority to Adjust and Increase Rates and Charges for Water and Sewer Utility Service in All Service Areas of North Carolina and Approval of a Three-Year Water and Sewer Investment Plan	)	ORDER APPROVING PARTIAL SETTLEMENT AGREEMENT AND STIPULATION, DECIDING CONTESTED ISSUES, GRANTING PARTIAL RATE INCREASE, APPROVING WATER AND SEWER INVESTMENT PLAN, AND REQUIRING CUSTOMER NOTICE

HEARD: Monday, October 3, 2022, at 7:00 p.m., Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

Wednesday, October 19, 2022, at 6:30 p.m., via Webex

Thursday, October 20, 2022, at 7:00 p.m., Watauga County Courthouse, Courtroom 1, 842 West King Street, Boone, North Carolina

Tuesday, October 25, 2022, at 7:00 p.m., Onslow County Courthouse, Superior Courtroom, 625 Court Street, Jacksonville, North Carolina

Wednesday, October 26, 2022, at 7:00 p.m., Mecklenburg County Courthouse, Courtroom 5350, 832 East 4th Street, Charlotte, North Carolina

Monday, November 28, 2022, at 2:00 p.m., Dobbs Building, 430 North Salisbury Street, Commission Hearing Room 2115, Raleigh, North Carolina

BEFORE: Commissioner Daniel G. Clodfelter, Presiding; and Commissioners ToNola D. Brown-Bland, Kimberly W. Duffley, Jeffrey A. Hughes, Floyd B. McKissick, and Karen M. Kemerait

APPEARANCES:

For Carolina Water Service, Inc. of North Carolina:

Jo Anne Sanford, Sanford Law Office, PLLC, Post Office Box 28085, Raleigh, North Carolina 27611-8085

Mark R. Alson, Ice Miller LLP, One American Square, Suite 2900, Indianapolis, Indiana 46282-0200

Kay E. Pashos, Ice Miller LLP, One American Square, Suite 2900, Indianapolis, Indiana 46282-0200

For the Using and Consuming Public:

Gina C. Holt, Manager, Legal Division, Natural Gas, Water, Sewer, Telephone, & Transportation Sections

John Little, William E. Grantmyre, William Freeman, and Reita D. Coxton Staff Attorneys, Public Staff – North Carolina Utilities Commission, 4326 Mail Service Center, Raleigh, North Carolina 27699

BY THE COMMISSION: On May 25, 2022, pursuant to North Carolina Gen. Stat. § 62-133.1B (Section 62-133.1B or the WSIP Statute) and Commission Rule R1-17(A) (Rule R1-17A or the WSIP Rule), Carolina Water Service, Inc. of North Carolina (CWSNC or Company) submitted notice of its intent to file a general rate case application in Docket No. W-354, Sub 400 (Sub 400). On July 1, 2022, CWSNC filed its verified Application (Application) for a general rate increase reflecting the Company's proposed three-year Water and Sewer Investment Plan (WSIP), seeking authority to: (1) implement general increases in its North Carolina water and sewer rates by means of a three-year WSIP (or, alternatively, a general increase in rates); (2) continue to pass through any documented increases in purchased bulk water rates and any documented increased costs of wastewater treatment performed by third parties and billed to CWSNC, subject to CWSNC providing sufficient proof of such increases; (3) reset its approved Water and Sewer System Improvement Charge mechanisms (WSIC/SSIC) to zero, and discontinue the WSIC/SSIC mechanisms during the term of an approved WSIP; (4) continue to implement a water efficiency rebate program; (5) continue to implement fee-free payment options for customers; and (6) put in place a new Sewer Use Rule and accompanying new tariff language. CWSNC also requested ratemaking and tariff treatment of its pending acquisition of two Watauga County systems. In addition, the Company included as part of its rate case filing certain information and data required by NCUC Form W-1, Commission Rule R1-17 and Rule R1-17A, and declared its intention to implement temporary, interim rates under N.C.G.S. § 62-135, should the Commission's order not issue within six months after the date that increased rates would have been effective, but for the Commission's suspension. CWSNC filed with its Application the direct testimony of witnesses Donald H. Denton III, Dana Hill (subsequently adopted by witness Tony J. Konsul), Matthew P. Schellinger II, Philip J. Drennan (subsequently adopted by witness Schellinger), and Dylan D'Ascendis.

The Company stated in its Application that as of March 31, 2022, it serves approximately 31,242 active water customers, 3,323 water availability customers, 20,330 active sewer customers, and 1,139 sewer availability customers in North Carolina. The present rates for water and sewer service have been in effect since April 8, 2022, pursuant to the Commission's Order Granting Partial Rate Increase and Requiring Customer Notice issued in CWSNC's last general rate case in Docket No. W-354, Sub 384 (Sub 384 Order).

On July 26, 2022, the Commission issued an Order Establishing General Rate Case and Suspending Rates.

On September 2, 2022, the Commission issued an Order Scheduling Hearing, Establishing Intervention and Testimony Due Dates and Discovery Guidelines, and Requiring Notice (Scheduling Order), which, among other things, scheduled the matter for public witness and expert witness hearings.

On September 15, 2022, CWSNC filed a certificate of service of notice to customers. On September 19, 2022, CWSNC filed its rate case updates, schedules, and supporting data.

The intervention and participation of the Public Staff – North Carolina Utilities Commission (Public Staff) is recognized pursuant to N.C.G.S. § 62-15(d) and Commission Rule R1-19(e).

Public witness hearings were held as scheduled by the Scheduling Order (with the exception of the public witness hearing scheduled in Boone, for which an additional virtual hearing was held on October 24, 2022).

On October 24, November 8, 10, and 15, 2022, CWSNC filed reports responding to customer concerns expressed at the public hearings. On November 8 and 21, 2022, the Public Staff filed responses to CWSNC's reports.

On October 26, 2022, the Public Staff filed the direct testimony of witnesses Darrell Brown, Lynn Feasel, Lindsay Q. Darden, D. Michael Franklin, Evan M. Houser, Jay B. Lucas, Shashi M. Bhatta, John R. Hinton, Charles M. Junis, Kuei Fen Sun, and Fenge Zhang.

On November 10, 2022, CWSNC filed the rebuttal testimony of witnesses Denton, DeStefano, Schellinger, Konsul, and D'Ascendis.

On November 22, 2022, CWSNC and the Public Staff (Stipulating Parties) filed a Joint Partial Settlement Agreement and Stipulation (Stipulation), as well as testimony and exhibits supporting the Stipulation. Also on that date, the Public Staff filed a motion requesting that the Commission excuse Public Staff witnesses Darden, Franklin, Bhatta, Feasel, Houser, Lucas, and Sun from appearing at the November 28, 2022 expert witness hearing and accept their prefiled testimony and exhibits into the record.

On November 28, 2022, the Commission issued an Order Excusing Witnesses.

The expert witness hearing was held as scheduled.

On December 9, 2022, the Public Staff filed its Late-Filed Supplemental Exhibit 1.

On December 19, 2022, CWSNC filed a supplemental report on the Boone public hearing.

On January 13, 2023, CWSNC filed a Notice of Intent to Place Temporary Rates in Effect Subject to an Undertaking to Refund Pursuant to N.C.G.S. § 62-135.

On January 20, 2023, the Commission issued an Order Approving Customer Notices of Temporary Rates Subject to an Undertaking to Refund.

On January 31, 2023, CWSNC placed temporary rates in effect.

On February 2, 2023, CWSNC filed a proposed order. On February 3, 2023, the Public Staff filed a proposed order, including Updated Public Staff Settlement Exhibit 1.

On March 17, 2023, CWSNC and the Public Staff each filed recommendations related to the proposed performance-based metrics set forth in the Stipulation.

On March 24, 2023, CWSNC filed a verified request for an accounting adjustment as amended seeking to correct certain costs embedded in the Stipulation (March 24, 2023 filing (Amended)).

Based upon the foregoing, including the verified Application and accompanying NCUC Form W-1 and Rule R1-17A data and information, the testimony and exhibits of the public witnesses appearing at the hearings, the testimony and exhibits of the expert witnesses received into evidence, the Stipulation, and the entire record herein, the Commission makes the following

FINDINGS OF FACT

General Matters

1. CWSNC is a corporation duly organized under the laws of North Carolina. It is a franchised public utility providing water and sewer utility service to customers in 38 counties in North Carolina, pursuant to Chapter 62 of the North Carolina General Statutes. CWSNC is a wholly owned subsidiary of Corix Regulated Utilities, Inc. (Corix).

2. CWSNC is properly before the Commission pursuant to Chapter 62 of the North Carolina General Statutes for a determination of the justness and reasonableness of its proposed rates and charges for the water and sewer utility service it provides to customers in North Carolina.

3. The appropriate Base Case test period for use in this proceeding is the 12-month period ending on March 31, 2022, updated for known and measurable changes through the close of the expert witness hearing.

4. CWSNC's present rates for water and sewer utility service have been in effect since April 8, 2022, pursuant to the Commission's Sub 384 Order.

The Stipulation

5. On November 22, 2022, the Stipulating Parties filed the Stipulation, resolving all but two of the contested issues between CWSNC and the Public Staff in this matter. The Stipulating Parties agree that CWSNC should be authorized to implement a multi-year rate plan or WSIP, according to certain parameters, described in more detail below. The two issues that remain in dispute are: (a) the rate of return on common equity (ROE) to be authorized in this proceeding, and (b) whether pursuant to Section 62-133.1B(c) the statutory limitation that any rate adjustment "shall not, on an annual basis for years two and three of the plan, exceed five percent (5%) of the utility's North Carolina retail jurisdictional gross revenues for the preceding plan year" (5% cap), applies on a total company basis or on a rate division basis (Disputed Issues).[1]

6. The Stipulation is a partial settlement between the Stipulating Parties. The Stipulation is the product of give-and-take negotiations between the Stipulating Parties, is material evidence in this proceeding, and is entitled to appropriate weight along with the other evidence of record in this proceeding.

Acceptance of Stipulation

7. The WSIP as agreed to in the Stipulation, along with other provisions of the Stipulation, will result in just and reasonable rates when combined with the rate effects of the Commission's decisions regarding the Disputed Issues.

8. The provisions of the WSIP as agreed to in the Stipulation, along with other provisions of the Stipulation, are just and reasonable to all parties to this proceeding and CWSNC's customers, will produce just and reasonable rates, and will serve the public interest pursuant to N.C.G.S. § 62-133.1B(b) when augmented by a proper system of performance-based metrics, including penalties and incentives.

9. It is appropriate to approve the Stipulation in its entirety, which does not include any specific agreement to the penalties and incentives provisions that were separately addressed by the parties' March 17, 2023 filings.

Customer Concerns and Service

10. As of the 12-month period ended March 31, 2022, CWSNC served approximately 31,242 active water customers and 20,330 active wastewater customers.

[1] One of the stipulations between the parties addressed performance-based metrics. As for specific penalties and incentives the parties committed to provide a schedule for final proposals regarding penalties and incentives no later than 180 days after the Commission's final order in this matter. On March 17, 2023, each party filed separate proposals to this effect.

For the same period, CWSNC also had 3,323 water availability customers and 1,139 sewer availability customers. CWSNC operates approximately 93 discrete water systems and 38 discrete sewer systems.

11. A total of 18 witnesses testified at the public witness hearings held for the purpose of receiving customer testimony. The service areas represented (and number of customers who testified from each) include Carolina Trace (2), Carolina Pines (1), Treasure Cove (1), The Point (7), Aragona Village (1), Fairfield Harbour (1), The Farms (2), and The Harbour (3).

12. The primary concern of the testifying customers was the magnitude of the rate increase, including overall cost of service and the frequency of rate increases. Customers also raised concerns about base rates, comparisons of rates to municipalities, and service issues, including discoloration of water and high mineral content.

13. As of October 19, 2022, the Public Staff received approximately 56 written customer statements of position from CWSNC customers. Five out of 56 complaints were related to water quality issues (e.g., frequent water outages, multiple boil water notices within a short period, a rotten egg smell, and low pressure). Per the Company's complaint tracking notes: the frequent outages were due to either power outages or water main breaks; multiple boil water notices were due to water main breaks and the related repair work that followed; the low water pressure was due to a power outage; and the rotten egg smell was associated with the collection of water samples.

14. CWSNC filed verified reports after each of the public hearings, which described each of the witnesses' specific service-related concerns and comments, the Company's response, and any resolution, if applicable. The Commission finds these reports to be responsive and reasonable.

15. The record supports that the quality of service provided by CWSNC is "adequate, efficient, and reasonable" as required by N.C.G.S. § 62-131(b).

16. The overall quality of water service provided by CWSNC is adequate on a company-wide and system-wide basis. The Company meets the North Carolina Department of Environmental Quality (DEQ) and the United States Environmental Protection Agency's (EPA) health-based primary quality standards.

17. The overall company-wide and system-wide quality of wastewater service provided by CWSNC is adequate and the Company operates its wastewater treatment plants in a reasonable and prudent manner.

Capital Structure and Cost of Debt

18. A 50.00% common equity and 50.00% debt ratio is a reasonable and appropriate capital structure for CWSNC in this proceeding.

19. A 4.64% cost of long-term debt for CWSNC is reasonable and appropriate for the purpose of this proceeding.

Return on Equity (ROE)

20. A 9.80% rate of return on common equity for CWSNC is just and reasonable and appropriate for use in this proceeding.

21. 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 7.22%. This overall rate of return is derived from applying an embedded cost of debt of 4.64%, and a rate of return on common equity of 9.80% to a capital structure consisting of 50.00% long-term debt and 50.00% common equity.

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

23. The 9.80% rate of return on common equity and the 50.00% common equity capital structure approved by the Commission appropriately balance CWSNC's need to obtain equity and debt financing with its customers' need to pay the lowest possible rates.

24. The authorized levels of overall rate of return and rate of return on common equity set forth above are supported by competent, material, and substantial record evidence; are consistent with the requirements of N.C.G.S. § 62-133 and § 62-133.1B; and are fair to CWSNC's customers generally and in light of the impact of changing economic conditions.

WSIP

25. The appropriate term for the WSIP is a three year-period, as follows:

(a) WSIP Rate Year 1 will begin on April 1, 2023, and end on March 31, 2024;

(b) WSIP Rate Year 2 will begin on April 1, 2024, and end on March 31, 2025; and

(c) WSIP Rate Year 3 will begin on April 1, 2025, and end on March 31, 2026.

The WSIP may be terminated prior to the end of WSIP Rate Year 3 as permitted by N.C.G.S. § 62-133.1B(f) and Rule R1-17A(f). The WSIP Rate Year 3 rates approved herein should remain in place until the effective date of a new base rate case order in a subsequent general rate case.

26. The Base Case revenue requirements shown in the Stipulation and Updated Public Staff Settlement Exhibit 1 are appropriate for use as the starting point for the revenue requirements for WSIP Rate Years 1, 2, and 3.

27. Using the Base Case revenue requirements as a starting point, it is appropriate to calculate WSIP Rate Year 1 revenue requirements by using a general escalation factor of 3.40%, with a 3.00% escalation factor specifically for salaries and wages, pension and other benefits, and payroll taxes. Purchased water and sewer treatment revenue requirements are at Base Case levels, with future expenses to be offset through the pass-through mechanism. Adjustments for plant, rate base, revenues, and costs are reflected through the end of WSIP Rate Year 1.

28. To arrive at WSIP Rate Year 2 revenue requirements, it is appropriate to escalate the Rate Year 1 revenue requirements by 2.40%, except for salaries and wages, pension and other benefits, payroll taxes, and purchased water and sewer. WSIP Rate Year 2 salaries and wages, pension and other benefits, and payroll taxes revenue requirements are escalated by 3.00% and WSIP Rate Year 2 purchased water and sewer treatment revenue requirements are those stated in the Base Case, with future expenses to be offset through the pass-through mechanism.

29. To arrive at WSIP Rate Year 3 revenue requirements, it is appropriate to escalate the Rate Year 2 revenue requirements by 2.40%, except for salaries and wages, pension and other benefits, payroll taxes, and purchased water and sewer. WSIP Rate Year 3 salaries and wages, pension and other benefits, and payroll taxes revenue requirements are escalated by 3.00% and WSIP Rate Year 3 purchased water and sewer treatment revenue requirements are those stated in the Base Case, with future expenses to be offset through the pass-through mechanism.

30. It is appropriate to use the capital improvement plan costs for WSIP Rate Years 1, 2, and 3 as such are projected by CWSNC in its September 19, 2022 update filing (Form W-1, Item 10, Schedule 2), but with (1) all project estimates reduced by 10%, (2) adjustment for retirements related to The Point secondary interconnect, and (3) inclusive of annual recurring spend net of contributions in aid of construction (CIAC). It is appropriate to calculate the plant in service and accumulated depreciation amounts for WSIP Rate Years 1, 2, and 3 under the Public Staff's methodology of assuming that in each WSIP Rate Year, both plant in service and accumulated depreciation for the WSIP Rate Year occurs on Day 1 of such WSIP Rate Year.

31. With respect to the banding of authorized ROEs required by N.C.G.S. § 62-133.1B(g), for Rate Year 1 it is appropriate to utilize a band of 100 basis points — 50 basis points above the authorized ROE and 50 basis points below the authorized ROE. For WSIP Rate Years 2 and 3 it is appropriate to utilize a band of 50 basis points — 0 basis points above the authorized ROE and 50 basis points below the authorized ROE.

5% Revenue Cap for WSIP Rate Years 2 and 3

32. The 5% cap set forth in the WSIP Statute applicable to WSIP Rate Years 2 and 3 applies to CWSNC's utility operations as a whole, not to its individual rate divisions.

33. The rate adjustment allowed under the WSIP approved in this proceeding exceeds, on an annual basis for WSIP Rate Year 2 and WSIP Rate Year 3, the 5% statutory cap as appropriately applied to CWSNC's total service revenues, on a combined basis, for the preceding year. It is reasonable and appropriate to reduce service revenues for the BF/FH Sewer Rate Division for WSIP Rate Year 2 and service revenues for the Uniform Sewer Rate Division for WSIP Rate Year 3 to reflect the 5% statutory cap for CWSNC's utility operations as a whole for WSIP Rate Years 2 and 3.

Performance-Based Metrics and Penalties and Incentives

34. Pursuant to N.C.G.S. § 62-133.1B(a), the following performance-based metrics are appropriate to be adopted for CWSNC; these metrics will benefit customers and ensure the provision of safe, reliable, and cost-effective utility service. CWSNC shall report on its performance on such metrics on annual bases in accordance with Rule R1-17A(g)(1)(b).

Description	Measure
1. Safe Drinking Water Act Compliance	% days in compliance – (sum of all days – sum of all days out of compliance) / sum of all days Sum of all days = No. of systems x 365 days
2. Clean Water Act Compliance	% days in compliance – (sum of all days – sum of all days out of compliance) / sum of all days Sum of all days = No. of systems x 365 days
3. Timely Answering of Customer Calls	Telephone service factor – calls answered within 60 seconds / total calls answered (tracked by quarter)
4. Water Service Quality Customer Complaints	Technical service complaints in specific categories (no water, air in water, discolored water, high/low pressure, mineral amount, taste/odor, and water quality) / (active accounts / 1,000) Underlying data should incorporate subdivision and system name.
5. Water Service Disruptions	Unplanned water service disruption – recorded Lucity water main breaks / 1,000 accounts
6. Sewer Overflows	Number of sanitary sewer overflows (SSOs) – wastewater SSOs / (100 miles of gravity line)
7. Employee Safety	OSHA incident rate – (number of injuries and illnesses *200,000 / 4) / employee hours worked
8. Field Employee Safety Training	Field employee safety training – hours of field employee safety training / field employee Field employee means employee with job title listed below or the equivalent:

	Field Tech I Field Tech II Field Tech III Water-Wastewater Operator I Water-Wastewater Operator II Water-Wastewater Operator III Lead Water-Wastewater Operator Area Manager Director, State Operations Training means structured, organized training (not peer-to-peer training)
9. Timely Completion of CIP Projects	Percentage of CIP Program projects in the approved WSIP incomplete during the planned rate year on a Company basis
10. Completion of CIP Projects on Budget	Percentage of CIP Program projects that cost in excess of 110% of the estimate in the approved WSIP on a Company basis
11. Expense Efficiency	Operation & Maintenance expense per Equivalent Residential Connection (ERC) on a Company basis, excluding certain accounts outside of management control (Purchased Water / Sewer Treatment, Purchased Power, etc.)
12. Utilization of the SRF Program	Whether the Company applied for SRF funds for certain eligible projects approved in the WSIP.
13. Water Loss	Water produced/purchased – water sold / water produced/purchased
14. Employee Turnover	Number of North Carolina employees that leave / total number of North Carolina employees for same time period, excluding transfers and/or promotions within Corix or an affiliate
15. Routine Flushing	Percent of systems means number of systems flushed / total number of systems during the WSIP rate year
16. Customer Call Abandonment Rate	Percentage of calls abandoned by customers during the WSIP rate year
17. Injury Severity	OSHA DART Rate – (number of OSHA Recordable Injuries and Illnesses that resulted in Days Away, Restricted Duty, or a Transfer of Duties)

35. In their March 17, 2023 filings, the Stipulating Parties agreed on a framework for penalties and incentives with regard to the above performance-based metrics. The parties were unable to agree, however, on specific levels and thresholds for several of the performance-based metrics. In its discretion, the Commission finds the following set of penalties and incentives just and reasonable for purposes of the WSIP Statute's and WSIP Rule's framework. All penalties and incentives apply as an adjustment to the upper end of the WSIP ROE band.

	Lower Bound	Upper Bound	Penalty for falling to or below the lower bound	Incentive for meeting or exceeding upper bound
1	97.49%	100.00%	10 basis points	10 basis points
2	93.73%	98.78%	10 basis points	10 basis points
3	77.98%	90.00%	4 basis points	4 basis points
4*	N/A	N/A	Tracking metric only	
5*	N/A	N/A	Tracking metric only	
6*	N/A	N/A	Tracking metric only	
7*	N/A	N/A	Tracking metric only	
8*	N/A	N/A	Tracking metric only	
9	Penalty only: 10 basis point reduction if net movement results in 10% fewer projects being completed in Rate Year 1, 20% fewer projects in Rate Year 2, and 30% fewer projects in Rate Year 3.			
10	N/A	N/A	Tracking metric only	
11*	N/A	N/A	Penalty as stipulated in March 17 filings	Incentive as stipulated in March 17 filings
12*	N/A	N/A	None	Incentive as stipulated in March 17 filings
13*	N/A	N/A	Tracking metric only	
14*	N/A	N/A	Tracking metric only	
15	N/A	N/A	Tracking metric only as proposed by Public Staff in its March 17, 2023 filing	
16	N/A	N/A	Tracking metric only as proposed by Public Staff in its March 17, 2023 filing	
17	N/A	N/A	Tracking metric only as proposed by Public Staff in its March 17, 2023 filing	

*Indicates where Stipulating Parties agreed.

36. It is appropriate for CWSNC to provide the quarterly and annual reports set forth in the WSIP Statute and WSIP Rule.

Base Case Revenue Requirements

Base Case Operating Revenues

37. The appropriate level of Base Case operating revenues under present rates for use in this proceeding is $44,273,287, consisting of service revenues of $44,295,562 and miscellaneous revenues of $338,437, reduced by uncollectibles of $360,712.

Base Case Rate Base

38. The appropriate level of Base Case rate base used and useful in providing service is $151,198,136 for CWSNC's combined operations, itemized as follows:

Item	Base Case Amount
Plant in service	$268,614,395
Accumulated depreciation	(72,034,354)
Net plant in service	196,580,041
Cash working capital	3,078,822
Contributions in aid of construction	(37,735,269)
Advances in aid of construction	(32,940)
Accumulated deferred income taxes (ADIT)	(6,330,227)
Customer deposits	(370,590)
Inventory	153,531
Gain on sale and flow back taxes	(289,628)
Plant acquisition adjustment	(535,359)
Excess book value	0
Cost-free capital	(261,499)
Average tax accruals	(141,946)
Regulatory liability for excess deferred taxes	(4,991,825)
Deferred charges	2,075,024
Pro forma plant	0
Original cost rate base	$151,198,136

Cash working capital has been adjusted to reflect the impact of the correction of an error related to Miscellaneous Expense embedded in the Stipulation as discovered by the Company and subsequently reviewed and agreed to by the Public Staff as communicated to the Commission in CWSNC's March 24, 2023 filing (Amended) in this docket.

Base Case Maintenance and General Expense

39. The appropriate level of Base Case maintenance expense and general expense for combined operations for use in this proceeding is $10,045,445 and $17,299,737, respectively. This includes a reduction to Miscellaneous expense of ($24,818) to correct an error embedded in the Stipulation as discovered by the Company and subsequently reviewed and agreed to by the Public Staff as communicated to the Commission in CWSNC's March 24, 2023 filing (Amended) in this docket.

Rate Case Expense

40. It is appropriate for CWSNC to recover total rate case expenses of $735,606 related to the current proceeding and $955,238 of the unamortized rate case costs related to the prior proceedings (Docket No. W-354, Subs 356, 360, 364, and 384) amortized over four years.

41. It is appropriate to amortize the total rate case costs for the current and prior proceedings over four years and to include an annual level of costs in the amount of $145,269 related to miscellaneous regulatory matters, resulting in an annual level of rate case expense of $567,979 as agreed to by the Stipulating Parties. As further agreed to by the Stipulating Parties, unamortized rate case expense will not be included in rate base and will not earn a return. Further, it is appropriate for CWSNC to establish a regulatory liability account, with no carrying costs, to record recovery associated with rate case expense over amortization after Year 4.

Base Case Depreciation and Amortization Expense

42. The appropriate level of Base Case depreciation and amortization expense for combined operations for use in this proceeding is $5,740,276.

Base Case Franchise, Property, Payroll, and Other Taxes

43. The appropriate level of Base Case franchise, property, payroll, and other taxes for use in this proceeding is $909,187 for combined operations, consisting of $101,985 for franchise and other taxes, $259,098 for property taxes, and $548,104 for payroll taxes.

Base Case Regulatory Fee and Income Taxes

44. It is reasonable and appropriate to calculate Base Case regulatory fee expense using the regulatory fee rate of 0.14% effective July 1, 2022, pursuant to the Commission's June 30, 2022 Order issued in Docket No. M-100, Sub 142. The appropriate level of Base Case regulatory fee for use in this proceeding is $65,841.

45. It is reasonable and appropriate to use the current North Carolina corporate income tax rate of 2.50% to calculate CWSNC's Base Case revenue requirement. The appropriate level of Base Case state income taxes for use in this proceeding is $236,538.

46. It is reasonable and appropriate to use the federal corporate income tax rate of 21.00% to calculate CWSNC's Base Case revenue requirement. The appropriate level of Base Case federal income taxes for use in this proceeding is $1,937,248.

47. The appropriate level of Base Case deferred income taxes for use in this proceeding is ($120,962).

48. It is appropriate to calculate Base Case income taxes for ratemaking purposes based on the adjusted level of revenues and expenses and the tax rates for utility operations.

Base Case Revenue Requirement

49. CWSNC's Base Case revenue requirements should be changed by amounts which, after all pro forma adjustments, will produce the following increases in service revenues:

Item	Amount
CWSNC Uniform Water	$1,069,807
CWSNC Uniform Sewer	$1,365,102
BF/FH/TC Water	$148,168
BF/FH Sewer	$188,745
Total	$2,771,822

These Base Case increases will allow CWSNC the opportunity to earn a 7.22% overall rate of return, which the Commission has found to be reasonable upon consideration of the findings in this Order.

WSIP Revenue Requirements

Rate Year 1, 2, and 3 Rate Base

50. The appropriate level of Rate Year 1, 2, and 3 rate base forecasted to be used and useful in providing service is $179,181,406 for Rate Year 1, $196,857,585 for Rate Year 2, $216,154,983 for Rate Year 3 for CWSNC's combined operations, itemized as follows:

Item	Rate Year 1	Rate Year 2	Rate Year 3
Plant in service	$300,979,823	$322,741,820	$346,118,040
Accumulated depreciation	(79,392,304)	(85,155,971)	(90,773,310)
Net plant in service	221,587,519	237,585,849	255,344,730
Cash working capital	3,172,171	3,268,302	3,302,435
Contributions in aid of construction	(35,253,609)	(33,686,245)	(32,118,881)
Advances in aid of construction	(32,940)	(32,940)	(32,940)
ADIT	(6,127,991)	(6,056,953)	(5,962,786)
Customer deposits	(370,590)	(370,590)	(370,590)
Inventory	153,531	153,531	153,531
Gain on sale and flow back taxes	(289,628)	(289,628)	(289,628)
Plant acquisition adjustment	(407,522)	(328,180)	(248,928)

Excess book value	0	0	0
Cost-free capital	(261,499)	(261,499)	(261,499)
Average tax accruals	(131,625)	(132,919)	(133,564)
Regulatory liability for excess deferred taxes	(4,946,952)	(4,857,207)	(4,767,461)
Deferred charges	2,090,540	1,866,064	1,540,565
Pro forma plant	0	0	0
Original cost rate base	$179,181,406	$196,857,585	$216,154,983

Cash working capital for Rate Years 1, 2, and 3 has been adjusted to reflect the impact of the correction of an error related to Miscellaneous Expense embedded in the Stipulation as discovered by the Company and subsequently reviewed and agreed to by the Public Staff as communicated to the Commission in CWSNC's March 24, 2023 filing (Amended) in this docket.

Rate Years 1, 2, and 3 Maintenance and General Expense

51. The appropriate level of Rate Year 1 maintenance expense and general expense for combined operations for use in this proceeding is $10,241,814 and $17,850,157, respectively. This includes a reduction of ($25,662) to Miscellaneous Expense to correct an error embedded in the Stipulation discovered by the Company and subsequently reviewed and accepted by the Public Staff as set forth in the Company's March 24, 2023 filing (Amended) in this docket.

52. The appropriate level of Rate Year 2 maintenance expense and general expense for combined operations for use in this proceeding is $10,541,420 and $18,319,599, respectively. This includes a reduction of ($26,278) to Miscellaneous Expense to correct an error embedded in the Stipulation discovered by the Company and subsequently reviewed and accepted by the Public Staff as set forth in the Company's March 24, 2023 filing (Amended) in this docket.

53. The appropriate level of Rate Year 3 maintenance expense and general expense for combined operations for use in this proceeding is $10,332,141 and $18,801,948, respectively. This includes a reduction of ($26,909) to Miscellaneous Expense to correct an error embedded in the Stipulation discovered by the Company and subsequently reviewed and accepted by the Public Staff as set forth in the Company's March 24, 2023 filing (Amended) in this docket.

54. Consistent with Base Case rate case expense above, it is appropriate for CWSNC to recover total rate case expenses of $735,606 related to the current proceeding and $238,809 of annualized rate case expense from the unamortized rate case costs related to the prior proceedings in Docket No. W-354, Subs 356, 360, 364, and 384.

55. Consistent with Base Case rate case expense above, it is appropriate to amortize the total rate case costs for the current and prior proceedings over four years and to include an annual level of costs in the amount of $145,269 related to miscellaneous regulatory matters, resulting in an annual level of rate case expense of $567,979, as agreed to by the Stipulating Parties. As agreed to by the Stipulating Parties, unamortized rate case expense will not be included in rate base and will not earn a return.

Rate Years 1, 2, and 3 Depreciation and Amortization Expense

56. The appropriate level of Rate Year 1 depreciation and amortization expense for combined operations for use in this proceeding is $6,556,996.

57. The appropriate level of Rate Year 2 depreciation and amortization expense for combined operations for use in this proceeding is $7,090,875.

58. The appropriate level of Rate Year 3 depreciation and amortization expense for combined operations for use in this proceeding is $7,687,639.

Rate Years 1, 2, and 3 Franchise, Property, Payroll, and Other Taxes

59. The appropriate level of Rate Year 1 franchise, property, payroll, and other taxes for use in this proceeding is $925,630 for combined operations, consisting of $101,985 for franchise and other taxes, $259,098 for property taxes, and $564,547 for payroll taxes.

60. The appropriate level of Rate Year 2 franchise, property, payroll, and other taxes for use in this proceeding is $942,567 for combined operations, consisting of $101,985 for franchise and other taxes, $259,098 for property taxes, and $581,484 for payroll taxes.

61. The appropriate level of Rate Year 3 franchise, property, payroll, and other taxes for use in this proceeding is $960,011 for combined operations, consisting of $101,985 for franchise and other taxes, $259,098 for property taxes, and $598,928 for payroll taxes.

Rate Years 1, 2, and 3 Regulatory Fee and Income Taxes

62. It is reasonable and appropriate to calculate regulatory fee expense using the regulatory fee rate of 0.14% effective July 1, 2022, pursuant to the Commission's June 30, 2022 Order issued in Docket No. M-100, Sub 142. The appropriate level of regulatory fees for Rate Years 1, 2, and 3 for use in this proceeding are $71,462, $75,465, and $79,056, respectively.

63. It is reasonable and appropriate to use the current North Carolina corporate income tax rate of 2.50% to calculate CWSNC's revenue requirement. The appropriate

level of state income taxes for Rate Years 1, 2, and 3 for use in this proceeding is $281,043, $309,155, and $339,845, respectively.

64. It is reasonable and appropriate to use the federal corporate income tax rate of 21.00% to calculate CWSNC's revenue requirement. The appropriate level of federal income taxes for Rate Years 1, 2, and 3 for use in this proceeding is $2,301,739, $2,531,976, and $2,783,332, respectively.

65. The appropriate level of deferred income taxes for use in this proceeding is ($120,962) for Rate Years 1, 2, and 3, respectively.

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

Rate Years 1, 2, and 3 Revenue Requirement

67. CWSNC's Rate Years 1, 2, and 3 revenue requirements should be changed by amounts which, after all pro forma adjustments, will produce the following increases in service revenues, prior to application of the WSIP Statute's 5% cap on total company rate increases in Rate Years 2 and 3:

Item	Rate Year 1 Increase	Rate Year 2 Increase	Rate Year 3 Increase
CWSNC Uniform Water	$1,599,499	$1,382,080	$541,408
CWSNC Uniform Sewer	1,948,724	593,343	1,910,273
BF/FH/TC Water	309,270	153,406	49,387
BF/FH Sewer	179,714	748,921	78,269
Total	$4,037,207	$2,877,750	$2,579,337

These increases will otherwise allow CWSNC the opportunity to earn a 7.22% overall rate of return, which the Commission has found to be reasonable upon consideration of the findings in this Order.

68. Following application of the WSIP Statute's 5% cap on total company rate increases in Rate Years 2 and 3, CWSNC's Rate Years 1, 2, and 3 tariffs should produce revenues sufficient to generate the following service revenues, reduced from the total revenue requirement as set forth in the preceding paragraph. For purposes of this proceeding, and as discussed hereinbelow, it is appropriate to reduce service revenues for the BF/FH Sewer Rate Division for Rate Year 2 and for the CWSNC Uniform Sewer Rate Division for Rate Year 3 to reflect the application of the 5% cap on CWSNC's total utility operations as a whole for WSIP Rate Years 2 and 3:

Service revenues prior to application of the 5% statutory cap:

Item	Rate Year 1	Rate Year 2	Rate Year 3
Service Revenues			
CWSNC Uniform Water	$24,969,141	$26,351,221	$26,892,629
CWSNC Uniform Sewer	20,786,591	21,379,934	23,290,207
BF/FH/TC Water	2,336,882	2,490,288	2,539,675
BF/FH Sewer	3,011,977	3,760,898	3,839,167
Total Combined	$51,104,591	$53,982,341	$56,561,678
% Increase		5.63%	
Adjustment RY2		($322,520)	
Adjusted Revenues		$53,659,821	
% Increase			5.41%
Adjustment RY3			($218,866)
Adjusted Revenues			$56,342,812

Service revenues after application of the 5% statutory cap:

Service Revenues	Rate Year 1	Rate Year 2	Rate Year 3
CWSNC Uniform Water	$24,969,141	$26,351,221	$26,892,629
CWSNC Uniform Sewer	20,786,591	21,379,934	23,071,341
BF/FH/TC Water	2,336,882	2,490,288	2,539,675
BF/FH Sewer	3,011,977	3,438,378	3,839,167
Total Combined	$51,104,591	$53,659,821	$56,342,812
% Increase		5.00%	5.00%

The reduction in service revenues for BF/FH Sewer Rate Division and CWSNC Uniform Sewer Rate Division in Rate Years 2 and 3, respectively, reflects the application of the 5% statutory cap applied on a combined company basis.

69. It is reasonable to exclude Water Resource Management, Inc.'s Echota and Seven Devils systems in Watauga County from the Company's revenue requirements in this proceeding.

Rate Design

70. It is reasonable and appropriate for CWSNC to use a rate design based on a 40/60 service revenue ratio of base charge to usage charge for water utility service for

its Uniform Water and Bradfield Farms/Fairfield Harbour/Treasure Cove (BF/FH/TC) Water residential customers, and to use a 60/40 service revenue ratio of base charge to usage charge for its Uniform Sewer residential customers, as set out in the Stipulation.

Continuation of Bulk Purchase Pass-Through Mechanisms and Update of Purchased Water and Sewer Rates

71. It is reasonable and appropriate for CWSNC to update its Base Case purchased water and sewer rates as proposed by the Public Staff and as described in the Stipulation. It is reasonable and appropriate for CWSNC to continue to utilize the bulk purchased water and sewer services pass-through mechanism.

Continuation of WSIC and SSIC Mechanisms

72. Consistent with Section 62-133.1B(d), it is reasonable and appropriate for CWSNC, during the term of its WSIP, to suspend the use of the Water System Improvement Charge (WSIC), and the Sewer System Improvement Charge (SSIC). 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. Further, it is reasonable and appropriate for CWSNC to begin using the WSIC and SSIC mechanisms immediately upon termination of the WSIP.

Fee-Free Payment Proposal

73. It is reasonable and appropriate for CWSNC to continue to implement its proposed fee-free payment option for its residential customers, with the cost of service of such reflected in CWSNC’s revenue requirements.

74. It is reasonable and appropriate for CWSNC to report to the Commission and the Public Staff concerning the fee-free payment option twice per year, with such reporting detailing the number of fee-free payments made by customers by month, along with levels of CWSNC uncollectibles expense by month.

Water Efficiency Program

75. It is reasonable and appropriate for CWSNC to continue to be authorized to implement its proposed Water Efficiency Program, under which CWSNC will offer efficient water fixture rebates for its customers. The Water Efficiency Program should continue to be treated as a pilot program and reevaluated in CWSNC’s next rate case.

76. It is reasonable and appropriate that CWSNC be authorized to defer and subsequently recover in a future rate case the water efficiency rebates applied to customer bills in a regulatory asset account, which asset should not earn a return or carrying charges.

77. It is reasonable and appropriate for CWSNC to continue to report to the Commission and the Public Staff about the Water Efficiency Program on an annual basis, with such detailing the dollar amount and number of rebates applied to customer bills, the dollar amount of the regulatory asset, the type of water efficiency measures for which rebates were applied, and estimates or ranges of water efficiency impacts of such measures from an authoritative, third-party source.

Sewer Use Rule

78. It is reasonable and appropriate to modify CWSNC's Sewer Tariff to include a new Sewer Use Rule, as described below, intended to protect its wastewater systems from damaging industrial and nondomestic contaminants.

Other Stipulated Issues

79. It is reasonable and appropriate for CWSNC to apply for funding from the State Revolving Fund for specific projects as agreed by the Stipulating Parties.

80. It is reasonable and appropriate for the Stipulating Parties to work toward resolution of a situation, whereby certain South Carolina customers in CWSNC's Danby service area and plant have historically been included in CWSNC revenues and revenue requirements, and report back to the Commission on a quarterly basis, as necessary, until a resolution has been reached, and such reports shall be filed within 30 days of the end of each calendar quarter, beginning with the quarter ending June 30, 2023.

81. It is reasonable and appropriate for the Public Staff to fully examine all merger-related issues in the context of the merger case between Corix Infrastructure (US) Inc. and SW Merger Acquisition Corp. in Docket No. W-354, Sub 412.

82. It is reasonable and appropriate for CWSNC to use its best efforts to communicate with the Public Staff, the Commission, and other Class A water and sewer utilities regarding scheduling of future rate case filings.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1–4

General Matters

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

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 5–9 AND 25–31

The Stipulation and Acceptance of Stipulation

The evidence supporting these findings of fact is found in the Stipulation, the testimony of CWSNC's and the Public Staff's witnesses, the affidavit of Company witness Schellinger, and Updated Public Staff Settlement Exhibit I.

On November 22, 2022, CWSNC and the Public Staff entered into and filed the Stipulation, which memorializes their agreement on all issues in this proceeding except for the Disputed Issues: (a) ROE to be authorized in this proceeding, and (b) whether the WSIP Statute's 5% cap on annual revenue requirement increases under a WSIP should be applied on a total company basis or on a rate division basis. In addition, the Stipulation does not purport to resolve the question of which specific penalties and incentives are appropriate for the performance-based metrics agreed upon in the Stipulation.

Accompanying the Stipulation is Updated Public Staff Settlement Exhibit 1, which demonstrates the impact of the Stipulating Parties' agreement on the calculation of CWSNC's gross revenue for the Base Case test year ended March 31, 2022, as well as for WSIP Rate Years 1, 2, and 3. The Stipulation is based upon the same Base Case test period as included in the 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 expert witness hearing. The Stipulation is also based upon the same WSIP Rate Years included in the Application, including the use of certain projections and escalation factors. In addition to the Stipulating Parties' agreement on most of the issues in this proceeding (except the Disputed Issues), the Stipulation provides that CWSNC and the Public Staff agree that the Stipulation reflects a give-and-take negotiation, and that the provisions of the Stipulation do not reflect any position asserted by either CWSNC or the Public Staff, but instead reflect compromise and settlement between them. The Stipulation provides that it is binding as between CWSNC and the Public Staff, and that it is conditioned upon the Commission's acceptance of the Stipulation in its entirety. There are no other parties to the Stipulation or to this proceeding.

Section 62-133.1B(a) defines a WSIP as a plan under which the Commission sets water or sewer base rates, revenue requirements through banding of authorized returns, and authorizes annual rate changes for a three-year period based on reasonably known and measurable capital investments and anticipated reasonable and prudent expenses approved under the plan without the need for a base rate proceeding during the plan period.

The key aspects of the Stipulation and the agreed-upon WSIP are as follows:

- ***WSIP*** – The Stipulating Parties agree that:

  - the term for the WSIP should be a three year-period, as follows: (a) WSIP Rate Year 1 will begin on April 1, 2023, and end on March 31, 2024; (b) WSIP Rate Year 2 will begin on April 1, 2024, and end on March 31, 2025; and (c) WSIP Rate Year 3 will begin on April 1, 2025, and end on March 31, 2026.

  - the WSIP may be terminated prior to the end of WSIP Rate Year 3 as permitted by N.C.G.S. § 62-133.1B(f) and Rule R1-17A(f).

  - WSIP Rate Year 3 rates approved herein should remain in place until the effective date of a new base rate case order.

  - the Base Case revenue requirements shown in the Stipulation and Updated Public Staff Settlement Exhibit 1 should be used as the starting point for the revenue requirements for WSIP Rate Years 1, 2, and 3.

  - WSIP Rate Year 1 revenue requirements should be calculated based on the Base Case revenue requirements, escalated by a general escalation factor of 3.40%, except for salaries and wages, pension and other benefits, payroll taxes, and purchased water and sewer treatment.

  - WSIP Rate Year 1 salaries and wages, pension and other benefits, and payroll taxes should be escalated at a rate of 3.00%.

  - WSIP Rate Year 1 purchased water and sewer treatment revenue requirements should remain at Base Case levels, with future expenses to be offset through the pass-through mechanism.

  - Adjustments for WSIP Rate Year 1 plant, rate base, revenues, and costs should be as shown on Updated Public Staff Settlement Exhibit 1 and should be reflected through the end of WSIP Rate Year 1.

  - WSIP Rate Year 2 revenue requirements should be calculated by using the WSIP Rate Year 1 revenue requirements. Escalated by a general escalation factor of 2.40%, except for salaries and wages, pension and other benefits, payroll taxes, and purchased water and sewer treatment.

  - WSIP Rate Year 2 salaries and wages, pension and other benefits, and payroll taxes revenue requirements should be escalated by 3.00%.

  - WSIP Rate Year 2 purchased water and sewer treatment revenue requirements should remain as those stated in the Base Case, with future expenses to be offset through the pass-through mechanism.

- WSIP Rate Year 3 revenue requirements should be calculated by using the Rate Year 2 revenue requirements, escalated by 2.40%, except for salaries and wages, pension and other benefits, payroll taxes, and purchased water and sewer.

- WSIP Rate Year 3 salaries and wages, pension and other benefits, and payroll taxes revenue requirements should be escalated by 3.00%.

- WSIP Rate Year 3 purchased water and sewer treatment revenue requirements should remain as those stated in the Base Case, with future expenses to be offset through the pass-through mechanism.

- Capital improvement plan costs for WSIP Rate Years 1, 2, and 3 should be as projected by CWSNC in its September 19, 2022 update filing, but with project estimates reduced by 10%, and with adjustment for retirements related to The Point secondary interconnect, and inclusive of annual recurring spend net of CIAC.

- Plant in service and accumulated depreciation amounts for WSIP Rate Years 1, 2, and 3 should be calculated using the Public Staff's methodology of assuming that in each WSIP Rate Year, both plant in service and accumulated depreciation for the WSIP Rate Year occurs on Day 1 of such WSIP Rate Year.

- With respect to the banding of authorized ROEs required by N.C.G.S. § 62-133.1B(g), a band of 100 basis points for WSIP Rate Year 1 — 50 basis points above the authorized ROE and 50 basis points below the authorized ROE — should be used.

- For WSIP Rate Years 2 and 3, a band of 50 basis points — 0 basis points above the authorized ROE and 50 basis points below the authorized ROE — should be used.

- With respect to performance-based metrics required by N.C.G.S. § 62-133.1B(a), the following metrics should be adopted for CWSNC in this case.

Description	Measure
1. Safe Drinking Water Compliance	% days in compliance – (sum of all days – sum of all days out of compliance) / sum of all days Sum of all days = No. of systems x 365 days
2. Clean Water Compliance	% days in compliance – (sum of all days – sum of all days out of compliance) / sum of all days
3. Timely Answering of Customer Calls	Telephone service factor – calls answered within 60 seconds / total calls answered (tracked by quarter)
4. Water Service Quality Customer Complaints	Non-bill related customer complaints in specific categories (no water, air in water, discolored water, high/low pressure, mineral amount, taste/odor, and water quality) / (active accounts / 1,000) Underlying data should incorporate subdivision and system name.
5. Water Service Disruptions	Unplanned water service disruption – recorded Lucity water main breaks / 1,000 accounts
6. Sewer Overflows	Number of sanitary sewer overflows (SSOs) – wastewater SSOs / (100 miles of gravity line)
7. Employee Safety	OSHA incident rate – (number of injuries and illnesses *200,000 / 4) / employee hours worked
8. Employee Training	Employee training – hours of employee training / employee
9. Timely Completion of CIP Projects	Percentage of CIP Program projects in the approved WSIP incomplete during the planned rate year on a Company basis
10. Completion of CIP Projects on Budget	Percentage of CIP Program projects that cost in excess of 110% of the estimate in the approved WSIP on a Company basis
11. Expense Efficiency	Operation & Maintenance expense per Equivalent Residential Connection (ERC) on a Company basis, excluding certain accounts outside of management control (Purchased Water / Sewer Treatment, Purchased Power, etc.)
12. Utilization of the SRF Program	Whether the Company applied for SRF funds for certain eligible projects approved in the WSIP.
13. Water Loss	Water produced/purchased – water sold / water produced/purchased
14. Employee Turnover	Number of employees that leave / total number of employees for same time period

- CWSNC should report on its performance on such metrics on an annual basis in accordance with Rule R1-17A(g)(1)(b).[2]

- CWSNC should provide the quarterly and annual reports set forth in the WSIP Statute and WSIP Rules.

- ***Capital Structure*** – the capital structure appropriate for use in this proceeding is a capital structure consisting of 50.00% common equity and 50.00% long-term debt.

- ***Cost of Debt*** – a cost of long-term debt of 4.64% is appropriate for use in this proceeding.

- ***Rate Case Expense*** – CWSNC's rate case expense should be updated through the end of this proceeding once supporting documentation is provided by CWSNC; such expense shall be amortized over a four-year period without a return or carrying costs; further, CWSNC will establish a regulatory liability account, with no carrying costs, to record recovery associated with rate case expense over the amortization amount after year 4.

- ***Echota and Seven Devils*** – the Echota and Seven Devils systems in Watauga County shall not be included in the Company's revenue requirements in this proceeding.

- ***Tariff Rate Design* and Other Programs** –

  - *Rate Design* – rate design in this case should be based on a 40/60 ratio of fixed/volumetric revenues for the Uniform Water and BF/FH/TC Water residential customers, a 60/40 ratio of fixed/volumetric revenues for the Uniform Sewer residential customers, and BF/FH Sewer residential customers to remain on a flat rate.

  - *Purchased Water and Sewer Services* – the purchased water and sewer rates should be updated as proposed by the Public Staff; CWSNC will continue to utilize the bulk purchased water and sewer services pass-through mechanism.

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[2] The Stipulating Parties also agreed as part of the Stipulation to work together to develop incentives and/or penalties to accompany these performance-based metrics, and to file and request Commission approval of any such adjusted and agreed upon performance-based metrics and incentives and/or penalties with the Commission on or before March 17, 2023. On March 17, 2023, the Stipulating Parties each filed a framework of proposed penalties and incentives which correlated with the agreed-upon metrics. Although they agreed upon many, the parties were not able to agree on specific levels and thresholds for several of the performance-based metrics.

- *Fee-Free Payments* – CWSNC should continue to implement and report on its proposed fee-free payment option for its residential customers and shall continue to report on such program.

- *Water Efficiency Program* – CWSNC should continue to implement its water efficiency program as a pilot program and shall continue to report on such program.

- *Modification of Sewer Tariff* – CWSNC should be authorized to modify its tariff as proposed by the Company to include a new sewer use rule, as outlined in the Stipulation.

- ***Other Provisions***

  - *State Revolving Fund* – CWSNC should apply for state revolving funds for the programs specified in the Stipulation and this Order.

  - *Danby* – the Stipulating Parties should work toward a resolution to address certain South Carolina customers in the Company's service area and plant that have historically been included in CWSNC's revenues and revenue requirements.

  - *Merger Case* – the Public Staff will fully examine all merger-related issues in the context of the merger case between Corix Infrastructure (US) Inc. and SW Merger Acquisition Corp. (Docket No. W-354, Sub 412).

  - *Future Cases* – CWSNC will use its best efforts to communicate with the Public Staff, the Commission and other Class A water and sewer utilities regarding scheduling of future rate case filings in an effort to avoid "pancaked" filings going forward.

Based upon the foregoing and the entire record herein, the Commission finds that the Stipulation was entered into by the Stipulating Parties after full discovery and extensive negotiations, that the Stipulation is the product of give-and-take settlement negotiations between CWSNC and the Public Staff, and that the Stipulation represents a reasonable and appropriate resolution of certain matters in dispute in this proceeding. In making this finding the Commission notes that no party expressed opposition to the provisions of the Stipulation. In addition, when the provisions of the Stipulation are compared to the Application and the recommendations included in the testimony of the Public Staff's witnesses, the Stipulation results in a number of downward adjustments to the expenses sought to be recovered by CWSNC, and resolves and balances the issues, which were of varying importance to each party. Therefore, the Commission also finds that the Stipulation is material evidence to be given appropriate weight in this proceeding, along with all other evidence of record, including that submitted by CWSNC, the Public Staff, and the public witnesses who testified at the hearings.

In addition, the Commission finds that the Stipulation resolves most but not all of the matters in controversy between CWSNC and the Public Staff. The Stipulation leaves the following Disputed Issues to be resolved: (1) the ROE to be authorized in this proceeding; and (2) whether the WSIP Statute's 5% cap on annual revenue requirement increases under a WSIP applies on a company basis or on a rate division basis. In addition, although the parties in their Stipulation agreed upon certain appropriate performance-based metrics, the Stipulation does not resolve the question of which specific penalties and incentives are appropriate for the Stipulation's agreed-upon performance-based metrics.

Section 62-133.1B(b) provides that the Commission may approve a WSIP upon a finding by the Commission that the plan results in rates that are just and reasonable and are in the public interest. It also provides that the Commission must consider whether the proposed application (1) establishes rates that are fair both to the customer and to the water or sewer utility, (2) reasonably ensures the continuation of safe and reliable utility services, (3) will not result in sudden substantial rate increases to customers annually or over the term of the plan, (4) is representative of the utility's operations over the plan term, and (5) is otherwise in the public interest.

The Commission finds that the evidence supports approval of the Stipulation and concludes that the WSIP will result in just and reasonable rates and will be in the public interest. The rates are representative of the Company's expected operations over the term of the plan. The rates are supported by a historical utility plant in service combined with a reasonable capital plan for the three-year plan period. The rates are also supported by historical revenue and expense data combined with reasonable plan period revenue and expense projections using escalation factors based on third-party inflation projections, customer growth projections, and certain specific expense forecasts (such as salaries and wages). The revenue requirements should be sufficient to allow the Company to make needed capital improvements while also covering expected operation and maintenance expenses, thus supporting the continuation of safe and reliable service to customers. The revenue requirements approved upfront in the WSIP, in conjunction with the protection of the WSIP Statute's 5% cap, will limit annual rate increases, avoiding the sudden substantial rate increases a series of traditional base rate cases sometimes produces.

The Commission also finds that public interest will be further served by its approving the Stipulation and the WSIP. On the one hand, the WSIP provides the Company the flexibility to make planned and needed infrastructure investments, along with some protection against inflation and regulatory lag during the term of the plan, without the need for (and cost of) coming in for additional rate cases. On the other hand, the Commission, the Public Staff, and the Company's customers also benefit: they are provided with more information about the Company's plans; the WSIP limits the annual revenue requirements thus imposing risk of cost increases and cost control upon the Company; any earnings above the authorized ROE band will be returned to customers; and Commission oversight is enhanced insofar as approved performance-based metrics will necessarily increase Company transparency and accountability, and, as certain penalties and incentives are added to the metrics, accountability will be further strengthened.

After careful consideration, the Commission concludes that the Stipulation and the WSIP are consistent with Section 62-133.1B and strike a fair balance between the interests of CWSNC on the one hand, allowing it to maintain its financial strength at a level that enables it to attract sufficient capital on reasonable terms, and its customers on the other hand, allowing them to receive safe, adequate, reliable, and affordable water and sewer service at reasonable rates. The Commission concludes that the rates that will result from the Stipulation are just and reasonable to both CWSNC and its customers. In addition, the Commission concludes that the provisions of the Stipulation are just and reasonable to all parties to this proceeding and serve the public interest, and that it is appropriate to approve the Stipulation in its entirety

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 10–17

Customer Concerns and Service

The evidence supporting these findings of fact is found in the testimony of the witnesses appearing at the public witness hearings, Company and Public Staff witnesses, particularly CWSNC witness Denton and Public Staff witness Bhatta, and in the verified responses filed by CWSNC which addressed the customer concerns.

The Company responded to customer concerns by filing verified reports on October 24, 2022 (Raleigh), November 8, 2022 (Virtual and Jacksonville), November 10, 2022 (Boone), November 15, 2022 (Charlotte), and December 19, 2022 (supplemental report for Boone). The Public Staff filed its verified response to CWSNC's reports on November 8 and 21, 2022. Its Raleigh report confirmed that the Company adequately addressed the two hearing witness customers' concerns. The Public Staff also confirmed that following the Boone public hearing CWSNC had reached out to the customer. The Public Staff also confirmed that the Company adequately addressed the concerns voiced in the Charlotte, Virtual, and Jacksonville hearings.

In her direct testimony, Public Staff witness Bhatta stated that her investigation included CWSNC's customers' statements filed in Docket No. W-354, Sub 400CS; the Company's customer complaint log, which was included in CWSNC's response to Public Staff Data Request No. 51; and the Public Staff Consumer Services Division's (Consumer Services) complaint log. In response to Public Staff Data Request No. 51, CWSNC provided the Company's customer complaint log for water quality, which showed approximately 65 water quality-related complaints between April 2022 and September 2022. Of those complaints, 62 concerned cloudy, milky, and/or discolored water, two complaints were related to foul odor, and one complaint regarded low system pressure. Multiple complaints were received for the Sapphire Valley (7), Wood Trace (5), The Point (5), Treasure Cove (4), and Belvedere Plantation (4) service areas. Witness Bhatta indicated the Company took responsive action to address these customers' complaints.

The Company contended in its responses to customer concerns that comparison of CWSNC's rates to the rates of municipal, county, or district systems lacks relevance to the necessary proof of costs to serve in rate cases conducted under the comprehensive regulatory oversight established in General Statutes Chapter 62. The operational costs per customer can be lower for customers of municipalities because of service area density and economies of scale, while larger investor-owned utilities like CWSNC have fragmented service areas spread across the state. Investor-owned utilities are strictly regulated by the Commission. The General Statutes allow a properly managed, Commission-regulated utility the right to recover its operational expenses and the opportunity to earn a reasonable rate of return on its prudent investment. In contrast, government-owned municipal systems are not regulated by the Commission and may subsidize the operating expenses of their utility systems through taxation. While investor-owned utilities fund capital projects through private investors or loans, municipalities and county systems may qualify for grants, low-interest tax-free bonds, and other loans to fund capital projects that may not be as readily available to investor-owned utilities.

The testimony of the named individual witnesses and the responses provided by the Company in its reports verify that CWSNC's overall quality of service is adequate and that the water quality generally meets the standards set forth by the Safe Drinking Water Act and is thus satisfactory.

Based upon the foregoing and after careful consideration of the evidence, including the testimony of Company witness Denton, Public Staff witness Bhatta, and customers at the public hearings, as well as the Company's Reports on customer comments, the Commission concludes that consistent with the statutory requirements of N.C.G.S. § 62-131(b) the overall quality of service provided by CWSNC is adequate, efficient, and reasonable.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 18–19

Capital Structure and Cost of Debt

The evidence supporting these findings of fact and conclusions is contained in the verified Application and the accompanying NCUC Form W-1, the testimony and exhibits of the public witnesses, the direct and rebuttal testimony and exhibits of Company witnesses Schellinger and D'Ascendis, the Company's September 19, 2022 update, the direct testimony and exhibits of Public Staff witness Hinton, the Stipulation, and Updated Public Staff Settlement Exhibit 1.

Capital Structure

CWSNC witnesses Schellinger and D'Ascendis recommended in their direct testimony the use of a capital structure consisting of 50.00% long-term debt and 50.00% common equity as of March 31, 2022, for the Base Case and WSIP Rate Years 1, 2, and 3. The Company's September 19, 2022 update also reflected this 50/50 capital structure.

In his testimony Public Staff witness Hinton agreed with the Company's recommended capital structure. The Stipulation contains a 50.00% long-term debt and 50.00% common equity capital structure for the Base Case and WSIP Rate Years 1, 2, and 3.

Accordingly, the Commission finds that the recommended capital structure of 50.00% long-term debt and 50.00% common equity is just and reasonable to all parties in light of all the evidence presented.

Cost of Debt

In its Application, CWSNC proposed a cost rate for long-term debt of 4.64%, based on its actual embedded cost of debt as of March 31, 2022. The testimony of Company witness D'Ascendis supported the Company's proposed cost of debt of 4.64%, which is the current 13-month average long-term debt cost rate of CWSNC's parent company, Corix, as of March 31, 2022. This cost of debt for Corix is not expected to change over the duration of the WSIP. Public Staff witness Hinton's testimony likewise recommends use of the Company's proposed cost of debt of 4.64%. The Stipulation includes a cost of debt rate of 4.64%.

Therefore, the Commission finds that the use of a debt cost rate of 4.64% is just and reasonable to all parties based upon the evidence presented in this proceeding.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 20–24

Cost of Equity and Overall Rate of Return

The evidence supporting these findings of fact and conclusions is found in the verified Application and Form W-1 of the Company, the testimony and exhibits of the public witnesses, the testimony and exhibits of the expert witnesses, and the entire record of this proceeding.

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 order to reach an appropriate independent conclusion regarding the ROE, the Commission should evaluate the available evidence, particularly that presented by conflicting expert witnesses. *State ex rel. Util's. Comm'n v. 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 was presented by Company witness D'Ascendis and Public Staff witness Hinton.

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.

Law Governing the Commission's Decision on Rate of Return on Equity

In the absence of a unanimous settlement, the law of North Carolina requires the Commission to exercise its independent judgment and arrive at its own independent conclusion as to the proper rate of return on common equity. *See, e.g., State ex rel. Util's. Comm'n v. Carolina Util. Customers Ass'n*, 348 N.C. 452, 466, 500 S.E.2d 693, 707 (1998) (*CUCA I*). In order to reach an appropriate independent conclusion regarding the rate of return on equity, the Commission must evaluate the available evidence, particularly that presented by conflicting expert witnesses. *Cooper I*, 366 N.C. at 491-93, 739 S.E.2d at 546-47.

As this Commission has previously acknowledged, relying upon the decisions of the Supreme Court of the United States in *Bluefield Water Works & 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 [rate of return on equity], 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.

Order Accepting Stipulation, Deciding Contested Issues, and Requiring Revenue Reduction, No. E-7, Sub 1146, 50 (N.C.U.C June 22, 2018); *see also State ex rel. Utils. Comm'n v. General Telephone Co. of the Southeast*, 281 N.C. 318, 370, 189 S.E.2d 705, 738 (1972) *(General Telephone).* As the North Carolina Supreme Court held in *General Telephone*, these factors constitute "the test of a fair rate of return declared" in *Bluefield* and *Hope*. *Id.*

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:

> [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 19-21 (Public Utilities Reports, Inc. 1984), "The term 'cost of capital' may [also] 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.

The North Carolina Supreme Court has long recognized that the Commission's subjective judgment is a necessary part of determining the authorized rate of return on common equity. *See, e.g., State ex rel. Utils Comm'n v. Public Staff-N.C. Util's. Comm'n*, 323 N.C. 481, 490, 374 S.E.2d 361, 369 (1988) (*Public Staff*). Likewise, the Commission has noted that such determination is not made by application of any one simple mathematical formula:

> 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.
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> 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. 382 (notes omitted).

Order Granting General Rate Increase, *Application of Carolina Power & Light Co., d/b/a Progress Energy Carolinas, Inc., for Adjustment of Rates and Charges Applicable to Electric Utility Service in North Carolina*, Docket No. E-2, Sub 1023, at 35-36 (N.C.U.C. May 30, 2013), *aff'd, State ex rel. Utils. Comm'n v. Cooper*, 367 N.C. 444, 761 S.E.2d 640 (2014) (2013 DEP Rate Order).

Moreover, in setting rates the Commission must not only adhere to the dictates of both the United States and North Carolina Constitutions but, as has been held by the North Carolina Supreme Court, it must set rates as low as possible consistent with constitutional law. *Public Staff,* 323 N.C. at 490, 374 S.E.2d at 370. The Commission must also set rates employing the multi-element formula set forth in N.C.G.S. § 62-133. The formula requires consideration of elements beyond just the rate of return on common equity element, and inherently requires the Commission's subjective determinations, in addition to the subjectivity required in order to determine the rate of return on common equity. These subjective decisions can and often do have multiple and varied impacts on other elements of the formula. In other words, the formula elements are intertwined and often interdependent in their impact to the setting of just and reasonable rates.

The fixing of a rate of return on the cost of property used and useful to the provision of service (as determined through the end of the historic 12-month test period prior to the proposed effective date of a requested change in rates and adjusted for proven changes occurring up to the close of the expert witness hearing) is but one of several interdependent elements of the statutory formula to be used in setting just and reasonable rates. *See* N.C.G.S. § 62-133. Section 62-133(b)(4) provides, in pertinent part, that the Commission shall:

> [f]ix such rate of return on the cost of the property . . . as will enable the public utility by sound management [1] to produce a fair return for its shareholders, *considering changing economic conditions and other factors* . . . . [2] to maintain its facilities and services in accordance with the reasonable requirements of its customers in the territory covered by its franchise, and [3] to compete in the market for capital funds on terms that are reasonable and that are fair to its customers and to its existing investors. [Emphasis added.]

The North Carolina Supreme Court has interpreted the above-emphasized language as requiring the Commission to make findings regarding the impact of changing economic conditions on customers when determining the proper rate of return on common equity for a public utility. *Cooper I*, 366 N.C. at 495, 739 S.E.2d at 548. The Commission must exercise its subjective judgment so as to balance two competing rate of return on common equity-related factors — the economic conditions facing the Company's customers and the Company's need to attract equity financing on reasonable terms in order to continue providing safe and reliable service. 2013 DEP Rate Order at 35-36. The Commission's determination in setting rates pursuant to N.C.G.S. § 62-133, which includes the fixing of the rate of return on common equity, must also credit affordability of public utility service to the using and consuming public. The impact of changing economic conditions on customers is embedded in the analyses conducted by the expert witnesses on rate of return on common equity, as the various economic models widely used and accepted in utility regulatory rate-setting proceedings reflect such economic conditions. 2013 DEP Rate Order at 38. Further,

> [t]he 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 common equity when the general body of ratepayers is in a better position to pay than at other times . . . .

Id. at 37. Economic conditions existing during the modified test year, at the time of the public hearings, and at the date of the issuance of the Commission's order setting rates will affect not only the ability of the utility's customers to pay rates but also the ability of the utility to earn the authorized rate of return during the period the new rates will be in effect. However, in setting the rate of return on common equity, just as the Commission must assess the impact of economic conditions on customers' ability to pay for service, it must also assess the effect of regulatory lag[3] on the Company's ability to access capital on reasonable terms. The Commission sets the rate of return on common equity considering both of these impacts taken together in its ultimate decision fixing a utility's rates.

Thus, in summary and in accordance with the applicable law, the Commission's duty under N.C.G.S. § 62-133 is to set rates as low as reasonably possible to the benefit of the customers without impairing the Company's ability to attract the capital needed to provide safe and reliable natural gas service and recover its cost of providing service.

Summary of the Evidence

CWSNC requested a return on equity of 10.45% for the Base Case, and a return on equity of 10.70% during the WSIP. The Company's rate of return on common equity recommendations were supported by the expert testimony of Company witness

[3] Regulatory lag can cause a utility's realized, earned return to be less than its authorized return, negatively affecting the shareholder's return on investment as other expenses and debts owed are paid ahead of investor return.

D'Ascendis, who analyzed the Company's cost of equity using the following three methodologies: Discounted Cash Flow (DCF), Risk Premium Model (RPM), and Capital Asset Pricing Model (CAPM). Witness D'Ascendis explained that his RPM model comprises two risk premium methods, a Predictive Risk Premium Model (PRPM) and a risk premium model using a total market approach. Witness D'Ascendis applied these models to the market data of both a Utility Proxy Group and a Non-Price Regulated Proxy Group. Witness D'Ascendis' initial analyses (data as of May 2022) produced overall ranges of cost of equity for CWSNC for the Base Case and WSIP Rate Years 1, 2, and 3, varying slightly based on changes in expected interest rates during the WSIP, as follows:

Period	**Recommended Range of ROEs**	**Midpoint of Recommended Range**
Base Year	9.95% to 10.95%	10.45%
WSIP Year 1	10.17% to 11.17%	10.67%
WSIP Year 2	10.13% to 11.13%	10.63%
WSIP Year 3	10.24% to 11.24%	10.74%

Witness D'Ascendis' updated rebuttal analyses, using data as of October 2022, eliminated one company from his Utility Proxy Group and produced the following overall ranges of cost of equity for CWSNC for the Base Case and WSIP Rate Years 1, 2, and 3, varying slightly based on changes in expected interest rates during the WSIP:

Period	**Recommended Range of ROEs**	**Midpoint of Recommended Range**
Base Year	10.57% to 11.57%	11.07%
WSIP Year 1	10.70% to 11.70%	11.20%
WSIP Year 2	10.67% to 11.67%	11.17%
WSIP Year 3	10.67% to 11.67%	11.17%

In his rebuttal testimony, witness D'Ascendis testified that his updated analyses used the same methodology as his initial analyses. He concluded that the updated analyses indicated that the investor-required return had increased between the two sets of analyses. He noted that the Company's requested ROEs of 10.45% for the Base Case and 10.70% for the three-year WSIP term are at the bottom of his recommended ranges and are thus conservative. Witness D'Ascendis emphasized that current market conditions are riskier now than during the last few years and during the Company's last four rate cases. In particular, witness D'Ascendis noted that inflation is higher than the Federal Reserve's target average level of 2.00% and will continue to run higher than that target. He stressed that utilities are not immune from inflationary pressures, which lead to increased risk and an increased cost of capital.

Witness D'Ascendis explained that his recommended ranges of ROEs are equal to 50 basis points above and below the midpoint of his four model results (DCF, RPM, and CAPM applied to the Utility Proxy Group, plus market models applied to the Non-Price

Regulated Proxy Group having comparable risk). He also explained that he conducted a relative risk analysis between the Company and the Utility Proxy Group and, as a result of this analysis, he incorporated an upward adjustment of 0.10% to reflect CWSNC's smaller relative size. In analyzing the cost of equity for CWSNC, witness D'Ascendis also presented results from the four models using both current and projected 2023, 2024, and 2025 interest rates. Witness D'Ascendis' testimony summarized the financial theory and regulatory principles relevant to the development of the cost of capital; explained his Utility Proxy Group selection; described the ROE analyses he performed; summarized the ranges of ROEs produced by the models; explained his adjustment to reflect the Company's smaller relative size; and discussed the economic conditions in North Carolina.

Public Staff witness Hinton recommended a cost of equity of 9.45% for CWSNC, based on a Discounted Cash Flow Model and a Risk Premium analysis and before any adjustment for a change in risk due to the impact of a multi-year rate case. He also recommended a 20-basis point downward adjustment if the WSIP is approved, for an ultimate ROE recommendation of 9.25%. He applied those models to a proxy group consisting of six water utilities.

Regarding the DCF model, witness Hinton discussed the components he used; the basis for using the expected stream of dividends over time; how the dividend yield and expected growth rate components was calculated; the inclusion of both historical and future-looking calculations; and other matters. The results yielded a cost of equity range of 8.60% to 9.40% (rounded), as follows:

DCF Method	**Long-Term Growth Rate (g)**	**Dividend Yield Component (D_1/P)**	**Sum Cost of Equity**
Average Historical	7.48%	1.87%	9.35%
Average Forecast	6.73%	1.87%	8.60%
Average Historical and Forecast	7.18%	1.87%	9.05%

Tr. vol. 6, 337-42.

Regarding his RPM, witness Hinton stated that it is designed to determine the difference between the expected return on a common stock and the expected return on a debt security. This difference is the rate of return investors require in order to accept the additional risk involved with investment in a stock, which has more risk, versus a bond, which has less risk. Witness Hinton explained the method he used to calculate the components of the model; the strengths of using allowed equity returns in the model; the average risk premium results; the evaluation of A-rated public utility bonds; the relationship between bond costs and equity costs; and other matters. Witness Hinton's calculations yielded an estimate of the cost of equity of 9.88%. Tr. vol. 6, 343-45.

Witnesses D'Ascendis and Hinton disagreed on the following aspects of estimating the Company's cost of equity: proper application of the DCF and RPM models; witness D'Ascendis' recommended size adjustment; and witness Hinton's WSIP approval adjustment. Witness D'Ascendis also noted the lack of a comparable earnings analysis from witness Hinton.

With respect to witness Hinton's application of the DCF model, witness D'Ascendis criticized witness Hinton's use of dividends per share (DPS) and book value of equity per share (BVPS), in addition to earnings per share or EPS, to calculate expected growth rates, as well as his use of historical growth rates, in addition to forecasted growth rates. Witness D'Ascendis noted that there can be no growth in DPS without growth in EPS. Further, he explained that the use of projected EPS growth rates in a DCF analysis provides a better match between investors' market price appreciation expectations and the growth component of the DCF, because they have a significant influence on market prices and the growth experienced by investors. He also testified that there is support in academic and financial literature for the use of projected EPS growth in a DCF analysis, but there is no such support for use of projected DPS or BVPS. In addition, he noted that investors have widespread access to EPS growth projections but not to DPS or BVPS growth projections, which indicates investors rely on EPS but not DPS or BVPS. Witness D'Ascendis testified that if witness Hinton had relied on EPS growth projections, then witness Hinton's DCF model results would have been 10.00% (mean) and 10.8% (median), indicating that witness Hinton's proposed DCF cost rate of 9.00% is severely understated.

With respect to witness Hinton's application of the RPM, while witness D'Ascendis agreed with witness Hinton's regression analysis methodology, he disagreed with his exclusive use of current interest rates, his use of annual average return data instead of individual rate case data, and his use of a subset of rate case data instead of the entire Regulatory Research Associates (RRA) water rate case database.

With respect to the use of current interest rates, witness D'Ascendis testified that because the cost of capital and ratemaking are prospective in nature, and cost of equity is tied to investors' expectations about future capital markets, witness Hinton should also make use of projected interest rate data in his RPM analyses. Witness D'Ascendis noted that whether the projected interest rate data is accurate or reliable is irrelevant; he argues that FERC has stated that the cost of equity depends on what the market expects, not what actually happens. Tr. vol 6, 183-84. Further, witness D'Ascendis argued that current interest rates are not accurate predictors of future interest rates. Id. at 184.

With respect to witness Hinton's use of annual authorized returns and interest rate data in his RPM, witness D'Ascendis stated that it is preferable to use the authorized returns and bond yields on a case-by-case basis. He supported this position by noting that some years have more rate case data, other years have less, and using average annual returns will result in those years with less data garnering unnecessary weight. In addition, he noted that interest rates and market conditions change during the year, and using average annual returns and rates ignores those fluctuations between interest rates and equity premiums.

Witness D'Ascendis also took issue with witness Hinton's use of 2009-2022 authorized returns when rate case data going back to 2006 is available. He noted that the arbitrary selection of historical periods is highly suspect and unlikely to be representative of long-term market data trends. Accordingly, he concluded that witness Hinton should have used the entire RRA dataset.

Witness D'Ascendis calculated the range of Hinton's RPM results using prospective bond yields and individual rate case data, testifying that the results range from 9.88% (using current interest rates) to 10.12% (using forecasted interest rates).

Witness D'Ascendis testified that witness Hinton has in past cases performed a comparable earnings analysis but did not in this case. Witness Hinton testified on cross-examination that he has previously conducted a comparable earnings analysis as a check on his other cost of equity analyses, such as in his recent Piedmont Natural Gas Company, Inc. (Piedmont) rate case testimony (Docket No. G-9, Sub 781). However, in this case, witness Hinton testified that he did not have the time, due to his workload in other pending cases. Tr. vol 6., 445-46; Hinton Cross Ex. No. 1. Using witness Hinton's data sets, witness D'Ascendis performed a similar comparable earnings analysis for this proceeding. On cross-examination, witness Hinton confirmed that witness D'Ascendis' replicated comparable earnings analysis used the same source witness Hinton used in his Piedmont rate case testimony (Value Line), the same time frame witness Hinton used in Piedmont (six most recent years) and used the same proxy group witness Hinton applied in his direct testimony (six water companies covered by Value Line), with no calculation errors. Tr. vol. 6, 450-52.

Witness D'Ascendis' comparable earnings analysis produced an average ROE of 10.01% (median of 10.00%) based on historical returns, and an average ROE of 9.81% (median of 10.25%) based on projected returns. Witness D'Ascendis testified that using this as a check against other results, as witness Hinton has done in the past, indicates that witness Hinton's DCF result of 9.00% and his overall ROE recommendation of 9.45% is inadequate. Tr. vol 6, 188. Witness Hinton, on cross-examination, conceded that a Comparable Earnings Model analysis that is 100 basis points from his ROE — as is the case with his 9.00% DCF result and 10.00% check — would cause him hesitation. *Id.* at 449. However, witness Hinton also testified that using the most recent three full years available, would have indicated a 9.60% to 9.70% ROE. *Id.* at 450.

With respect to a size adjustment for the Company, witness Hinton testified that CWSNC's requested 10-basis point adjustment for its smaller size relative to the utility proxy group was unwarranted. Witness Hinton noted CWSNC's parent companies — Corix and BCIMC — have significant control over CWSNC's balances of common equity, long-term debt, and the payment of dividends. Witness Hinton further testified ratepayers should not be required to pay a higher rate if they are served by a utility of a size that is arbitrarily considered to be small. He also argued that if such adjustments were allowed, large existing utilities would be incentivized to form multiple subsidiaries to obtain higher allowed returns, such as the previous CWS Systems, Inc. that offered water and wastewater service along with the larger CWSNC. Additionally, he noted that CWSNC operates in a franchise environment that insulates it from competition, which distinguishes it from entities where investors would add a risk factor to small firms that operate with relatively limited capital resources in competitive markets. Expensive bottled water is the only alternative to utility water service and CWSNC's inherent protections from competition and ability to recover capital costs offset risk concerns of investors. Witness Hinton testified that the Commission has declined to make size adjustments in other proceedings. He also noted and discussed some literature which concluded that size premiums were not attributable to utilities due to their regulated nature. Tr. vol. 6, 348-51.

Witness D'Ascendis, however, testified about an empirical study indicating that size of a company is one of the most important risk elements to consider when developing cost of equity estimates, because size has been shown to be a predictor of equity returns. Using this empirical methodology, witness D'Ascendis calculated a size adjustment from 1.31% to 3.42% — far greater than his recommended size adjustment of 10 basis points. Witness D'Ascendis also cited and discussed other studies rebutting witness Hinton's position that a size adjustment is not appropriate for regulated utilities.

With respect to witness Hinton's proposed 20 basis point downward adjustment to reflect the reduced regulatory lag associated with a WSIP, witness D'Ascendis pointed out that North Carolina's WSIP mechanism is not unique relative to the proxy group — that is, cost of equity estimates involve comparisons between various companies, and if the proxy companies have similar mechanisms in place to address regulatory lag, the comparative risk is zero. Witness D'Ascendis cited several examples of similar mechanisms in place for proxy group utilities to address regulatory lag — for example, multi-year rate plans in California, as well as fully forecast test years in Iowa, Tennessee, Virginia, Pennsylvania, and New York. He stated that such mechanisms are in place for all members of the proxy group except one. Thus, any risk reduction attributable to a multi-year rate plan would be already reflected in their market data and a further reduction to CWSNC's return on equity would double-count that risk reduction. Witness D'Ascendis further noted that no rating agency has upgraded a utility's credit rating based upon approval of a multi-year rate plan.

Application of the Governing Principles to the Rate of Return Decision

The Commission has carefully evaluated the testimony of CWSNC witness D'Ascendis and Public Staff witness Hinton. Before accounting for the new paradigm of multi-year rates, or in what CWSNC refers to as the Base Case, the rates of return on equity recommended by the expert witnesses are 9.45% for witness Hinton, and 10.45% for witness D'Ascendis. Underlying witness Hinton's recommendation are model results ranging from 9.00% to 9.88%. Tr. vol. 6, 345-6. Witness D'Ascendis originally based his recommendation on model results that ranged from 9.37% to 11.32%. *Id.* at 82. Those same models, when recalculated using updated data from October 2022, resulted in outputs ranging from 10.12% to 11.81%. *Id.* at 163. In both cases, witness D'Ascendis also recommends an upward size adjustment of 0.10%.

Such a wide range of estimates by expert witnesses is not atypical in proceedings before the Commission with respect to the rate of return on common equity issue. Neither is the debate and differences in judgment among expert witnesses on the virtues of one model or method versus another and how to best determine and measure the required inputs of each model in representing the interests of the party on whose behalf they are testifying. Nonetheless, the Commission is uniquely situated, qualified, and required to use its impartial judgment to determine the rate of return on common equity based on the testimony and evidence in this proceeding in accordance with the legal guidelines discussed above.

The Commission concludes that because CWSNC is not publicly traded, it is appropriate to look to a proxy group to use in modeling appropriate rates of return. The Commission notes that the utility proxy group used by witness D'Ascendis in his rebuttal testimony is the same proxy group used by witness Hinton in his testimony. The Commission finds the use of the utility proxy group and the composition of same proposed by the witnesses is warranted and appropriate.

The Commission has also considered witness D'Ascendis' testimony in support of a proxy group composed of non-utility companies. While the Commission is cognizant of the shrinking size of the water utility proxy group utilized by the expert witnesses, the Commission is unpersuaded by the comparative use of this non-utility proxy group because of the differences between the components of the unregulated proxy group and CWSNC. The Company is a regulated monopoly which provides a vital and essential service, and a proxy group comprising similar companies is preferable given the unique business risks faced by such companies. Further, the results discussed by witness D'Ascendis in his direct testimony ranged from 11.22% to 11.53% and in rebuttal testimony from 11.83% to 12.08%. These are all above the ROE requested by the Company and the Commission finds that these results are outliers, especially when compared to recent ROE awards by the Commission. Accordingly, the Commission gives these results no weight. The Commission concludes instead that the utility proxy group is a more reliable proxy for determining the return on equity for CWSNC.

In this proceeding, both ROE witnesses presented multiple valuation models, including the DCF and an RPM approach from each witness. Witness D'Ascendis also presented a CAPM, and calculated witness Hinton's Comparable Earnings Model (CEM), which witness Hinton has used as a check in previous cases.

While there is disagreement between the witnesses as to the correct approach with respect to the DCF, the Commission does not find it necessary to resolve each of these disputes. By presenting three methods of considering growth inputs in calculating the DCF, witness Hinton has demonstrated that they form a relatively tight band of results. Additionally, the Commission is persuaded that investors and analysts consider historical growth when projecting future growth and, as such, they likely place weight on each, even as the former informs estimates of the latter. Regarding witness D'Ascendis' decision to drop the DCF result of Middlesex Water Company, the Commission is persuaded by witness D'Ascendis' explanation that a result indicating equity investors would provide equity capital at a lower rate of return than the return on A-rated utility bonds is sufficient to exclude it from the calculation. Inasmuch as the Commission prefers the use of multiple models in arriving at an allowed ROE, multiple approaches to the same model can be, and is, informative in setting the rate of return on equity in this case. The results of these models, 10.12% for witness D'Ascendis, and 9.00% for witness Hinton, are also consistent with recently granted rates of return on equity, and the Commission finds them credible, probative, and entitled to substantial weight.

The Commission turns next to the Risk Premium Models presented by each witness. Witness Hinton testified that his RPM produced a result of 9.88%. Witness D'Ascendis took issue with portions of witness Hinton's approach and recalculated the model in his rebuttal testimony. With respect to witness D'Ascendis' approach to using individual rate case data instead of annual averages, as well as the full RRA database, the Commission appreciates the added rigor of his approach. When using current interest rates — which the Commission prefers to the use of projected interest rates — witness D'Ascendis stated that his version of witness Hinton's model resulted in an estimate of required ROE of 9.88%. As such, the Commission gives substantial weight to witness Hinton's RPM result.

With respect to witness D'Ascendis' RPM approach, the Commission concludes that the Value Line projections of three-to-five-year annual total market return of 16.03% and 16.66% upwardly bias the model's results for the Total Market Approach. Relative to the historic risk premiums used, and even the Bloomberg projections, these forecasts result in outliers in terms of equity market risk premiums. These inputs provide a third of the basis for a beta-adjusted equity risk premium of 7.34%, which is significantly higher than witness D'Ascendis' other approach to calculating equity risk premium. That estimate, based on a study using the holding period returns of public utilities with A2 rated bonds, is 5.18%. The Commission notes that had witness D'Ascendis utilized an equity risk premium of 5.18% instead of 6.26% (the average of 7.34% and 5.18%), his Total Market RPM using current interest rates would have been 10.23%, rather than the 11.31% figure which informs his RPM model outcome.

Similarly, upward bias is present in witness D'Ascendis' PRPM approach. The median result of 11.12% is nearly a full percentage point lower than the mean result, which skews higher due to the inclusion of an indicated ROE for Essential Utilities of 15.48%, which is an outlier. Had witness D'Ascendis elected to exclude Essential from that calculation, as he did with American Water Works, the mean would have been nearly the same as the median. As a result, and due to its disagreement with these input decisions, the Commission gives no weight to the mean value of witness D'Ascendis' PRPM approach. The median, which is a measure of central tendency that is not as drastically skewed by a single outlier, is due some weight, although it is also considerably higher than other recent Commission-approved ROEs for its water utilities. Overall, the Commission gives little weight to witness D'Ascendis' RPM results.

Witness D'Ascendis' CAPM approach utilizes the same inputs for estimating the equity risk premium as his Total Market RPM approach. Due to this previously mentioned upward bias, the Commission gives witness D'Ascendis' CAPM results little weight.

The Commission accepts the CEM, as calculated by witness D'Ascendis as a check for reasonableness. While witness Hinton offered that the result of the CEM would have been 9.6% or 9.7% if calculated during one period, witness D'Ascendis testified that his operation of the model, using various assumptions, resulted in ROEs ranging from 9.81% to 10.25%, as presented in his exhibit DWD-4R. As these results are in a relatively narrow range despite the different time frames used, they provide a helpful check on the reasonableness of the Commission's approved ROE, which falls within this range.

Size Adjustment

The Commission next addresses CWSNC's argument that its smaller size relative to the utility proxy group to which it compares itself justifies a 10-basis point increase in its rate of return on common equity. The Commission rejects this argument for each of the following five separate, and independent, reasons.

First, the Commission has previously considered and rejected CWSNC's request for a 40-basis point size adjustment increase. *See* Order Granting Partial Rate Increase and Requiring Customer Notice, *Application by Carolina Water Service, Inc. of North Carolina, for Authority to Adjust and Increase Rates for Water and Sewer Utility Service*, No. W-354, Sub 364, 75 (N.C.U.C. March 31, 2020) (Sub 364 Order). The Commission finds that CWSNC has not demonstrated a change in facts warranting a different conclusion in this proceeding.

Second, the Commission finds, similar to its conclusion in the Sub 364 Order, that a size adjustment is not warranted where a regulated utility has substantial operations that span the state. The record contains evidence that CWSNC has operations along the coast, in the Piedmont, and in the mountains. A size adjustment could be appropriate where a small utility is strictly confined to an area of the state that creates specific geographic risks (e*.g.,* a hurricane-prone coastal area). But those are not the facts here.

Third, if utilities were rewarded with increased rates of return on common equity simply because they are "smaller" than some arbitrarily set comparison, public policy and public interest would be harmed. Utilities would have an incentive to form small subsidiaries to claim the size adjustment increase. Ratepayers would pay more simply because their utility had chosen to create numerous subsidiaries to claim the size adjustment increase. Where, as here, a utility is backed by a large parent, the size adjustment is not warranted.

Fourth, the Commission finds conflicting evidence as to whether a utility the size of CWSNC is entitled to any size-related risk adjustment. Witness D'Ascendis and witness Hinton disagreed, as did the scholarly articles they cited. This conclusion is bolstered by the fact that witness D'Ascendis' calculations in rebuttal testimony purported to show a

131 to 342 basis point adjustment was warranted. This result is so large as to cast doubt on the entire proposition. Witness D'Ascendis' testimony that an indicated increase of 131 to 342 basis points is appropriate per calculations is so far removed from the requested 10-basis point increase as to render the request unsupported.

Fifth, the Commission finds that risk factors warranting the size increase are simply not present here. Witness D'Ascendis described risks facing smaller companies: being less able to cope with significant events that affect sales, revenues, and earnings; and more exposure to business cycles. CWSNC is a monopoly selling a necessary product. It is inappropriate to completely disregard the fact CWSNC is part of a large conglomerate. Moreover, were there to be a significant event (*e.g.,* a hurricane), CWSNC could call on its parent company for assistance. Further, no evidence supports the claim that CWSNC faces the risk of a loss of revenue from a few large customers. Accordingly, for each of these reasons the Commission is not persuaded by CWSNC's argument that its smaller size relative to the utility proxy group to which it compares itself justifies a 10-basis point increase in its rate of return on common equity.

Return on Equity During Rate Years 1-3

Witness D'Ascendis utilizes model results that incorporate projected interest rates to support a recommended ROE of 10.70% during each year for the term of the MYRP. The Commission declines to utilize this approach, and instead sets rates using a single allowed rate of return on equity for calculating all rates ordered herein. The Commission observes that the projected interest rates utilized by witness D'Ascendis do not reflect any market prices or invested funds. In contrast, forward interest rates, which are calculated based upon observable market prices and term structures could present a reasonable basis for setting allowed rates of return on equity in a multi-year context. However, in this docket there is no evidence supporting the use of forward interest rates for this purpose. As it has determined in prior cases, the Commission prefers using market data to predictions from mere market commentators or analysts. On that basis, the Commission determines it would be inappropriate to implement different rates of return on equity for different points in time based on the evidence in this proceeding.

MYRP Adjustment

Regarding witness Hinton's proposed 20-basis point downward adjustment to reflect the reduced regulatory lag associated with a WSIP, the Commission is persuaded that this type of mechanism is prevalent across the country and within the proxy group. Although a WSIP is intended to reduce regulatory lag, the existence of similar mechanisms across the country and in the states where the proxy group utilities operate indicates that the comparative risk reduction associated with a WSIP for CWSNC in this case is zero. While there is not sufficient evidence in this docket to justify a discrete adjustment to the authorized rate of return on equity due to WSIP framework, the

Commission has considered this testimony in the context of determining the appropriate authorized rate of return on equity.

Witness Hinton also discusses benefits to customers as a justification for his 20-basis point MYRP adjustment. Tr. vol. 6, 426, 480. The Commission notes that the stipulated ROE bands, which in Rate Years 2 and 3 are capped at the allowed rate of return on equity, are much more favorable to the consumer than the Company's proposed ROE bands, which extend 100 basis points above the requested rate of return on equity. The Commission determines that, in this regard, the stipulation provides the meaningful benefit to customers intended by witness Hinton's MYRP adjustment.

Conclusion

The Commission concludes that witness Hinton's DCF result of 9.00%, witness D'Ascendis' DCF result of 10.12%, and witness Hinton's RPM result of 9.88%, which was corroborated using slightly different inputs by witness D'Ascendis are credible, probative and entitled to substantial weight. As a check method, the Commission accepts the results of witness Hinton's CEM model, which ranges from 9.81% to 10.25% according to witness D'Ascendis' calculations but might be as low as 9.6% given different assumptions advocated by witness Hinton.

The Commission gives little weight to witness D'Ascendis' RPM and CAPM models for the reasons set forth above and gives no weight to his model results utilizing projected interest rates and a non-utility proxy group.

The Commission notes that in Sub 384, witness Hinton's recommended cost of equity capital was 8.95%, a full 50 basis points below his recommendation in this rate case. Further, the Commission is mindful that the increase in Treasury yields since CWSNC's prior rate case is significant, and as such, is a data point supporting the notion that the cost of capital in the economy has increased generally since that time.

In consideration of the foregoing, the Commission concludes that rates should be set in this proceeding utilizing an allowed rate of return on common equity for CWSNC of 9.80% for the term of its MYRP. These determinations are supported by the substantial weight of the evidence in this proceeding. However, to meet its obligation in accord with the holding in *Cooper I*, the Commission will next address the impact of changing economic conditions on customers.

All parties in this proceeding 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 is entitled to substantial weight, addresses changing economic conditions. Witness D'Ascendis testified that 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.

Witness D'Ascendis testified that, prior to April 2020, the rate of unemployment had fallen substantially in North Carolina and the U.S. since the 2008/2009 financial crisis. But as the COVID-19 pandemic hit, unemployment in North Carolina and across the U.S. spiked in April/May 2020 as many communities closed nonessential businesses to contain the spread of the COVID-19 virus. Notably, North Carolina's unemployment rate has fared better than the overall U.S., even as both fell considerably by the beginning of 2021. Similarly, the unemployment rate in counties served by the Company spiked in April 2020 at 14.43% but by February 2022 it had fallen substantially to 3.69%, slightly below the rate statewide of 3.70% in North Carolina and below the overall rate of 4.10% in the U.S. Witness D'Ascendis testified that for real GDP growth, there also has been a relatively strong correlation between North Carolina and the national economy (approximately 86%). While the national rate of growth at times outpaced North Carolina's rate of growth between 2010 and 2014, since the first quarter of 2015, however, North Carolina's economic growth has been relatively consistent U.S. economic growth. Moreover, North Carolina's real GDP grew faster than the overall U.S. in the first three quarters of 2021.

As to median household income, witness D'Ascendis testified that the correlation between North Carolina and the U.S. is relatively strong (approximately 95% from 2005 through 2020). Since 2009, the years subsequent to the financial crisis, nominal median household income in North Carolina has grown at a slightly faster pace than the national median income (3.36% vs. 2.81%, respectively). Witness D'Ascendis summarized his testimony on economic indicators as follows: unemployment, at both the state and county level remains highly correlated with national rates of unemployment and North Carolina's unemployment rate and the rate in the counties served by the Company have fallen significantly since spiking in April 2020; the state's real GDP remains highly correlated with the national GDP; and median household income has grown in North Carolina and has grown at a rate slightly faster than the national average; the overall cost of living in North Carolina also is below the national average; and at the national level, income has generally been increasing since the financial crisis.

Witness Hinton testified that the economy is experiencing annual inflation rates that have not been observed for the last 30 years, and that the September 2022 annual inflation rate as measured by the CPI-U was 8.2%, and excluding food and energy was 6.6%. However, witness Hinton testified that that it is reasonable to believe the increases in utility bond yields are reflective of expected future inflation rates, and that such expectations are greater in the near term than the longer term, which as of September 1, 2022, were estimated by the Federal Reserve Bank of Cleveland to be 2.35% over the next ten years.

Based upon the general state of the economy and the continuing affordability of water and wastewater utility service, and after weighing and balancing factors affected by the changing economic conditions in making the subjective decisions required, the Commission concludes that an allowed rate of return on common equity of 9.80% will not cause undue hardship to customers as a whole, even though some customers will struggle to pay the increased rates resulting from this decision.

The Commission 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 rate of return on common equity approved by the Commission in this proceeding appropriately balances the benefits received by CWSNC's customers 'rom 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 notes further that its approval of a rate of return on common equity at any level is not a guarantee to the Company that it will earn a rate of return on common equity at that level. Rather, as North Carolina law requires, setting the rate of return on common 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 common 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.

Overall Rate of Return

Based upon the foregoing, the Commission concludes that an overall authorized rate of return on capital of 7.22% is just and reasonable to all parties based upon the evidence presented in this proceeding.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 32–33

5% Revenue Cap in WSIP Rate Years 2 and 3

The evidence supporting these findings of fact is found in the verified Application, the direct testimony of Company witnesses Denton, Schellinger, and DeStefano, the Joint WSIP Testimony of Public Staff witnesses Hinton, Junis, Sun, and Zhang, rebuttal testimony of Company witness DeStefano, the Stipulation, the Corrected and Settlement Testimony of Public Staff witnesses Brown, Zhang, and Junis, and the Settlement Testimony of Company witnesses Denton and Schellinger.

In its Application, CWSNC sought authority to increase rates and charges for water and sewer utility service in all four of its rate divisions: CWSNC Uniform Water; CWSNC Uniform Sewer; BF/FH/TC Water; and BF/FH Sewer (collectively, Rate Divisions).

CWSNC also proposed a three-year Water and Sewer Investment Plan (WSIP) for its North Carolina service areas.

In direct testimony, Company witness Denton explained that, under the WSIP Statute and rules, rate adjustments allowed under a WSIP may not exceed 5% of the preceding year's retail jurisdictional gross revenues in Rate Years 2 and 3. He described the 5% annual limitation on rate increases as one of the important safeguards for customers contained in the WSIP Statute. He explained that the 5% limit on revenue increases for Rate Years 2 and 3 will help ensure that the Company will not over-collect or over-earn during the WSIP, while, at the same time, providing the Company with flexibility to manage its business and capital plans.

In direct testimony, Company witness Schellinger stated that the full revenue requirement generated as a result of the Company's capital improvement plan and expense increase assumptions included in its Application would result in a greater than 5% revenue increase in WSIP Rate Year 2. As a result, witness Schellinger stated that the Company has reduced the requested revenue requirement in WSIP Rate Year 2. CWSNC applied the 5% statutory limit on revenue increases for Rate Years 2 and 3 on the total company level as opposed to an individual rate division level.

In their Joint WSIP Testimony, Public Staff witnesses Sun and Zhang stated the magnitude of the rate adjustments proposed by the Company in Rate Years 2 and 3 of the WSIP would not fall below the 5% cap. Witnesses Sun and Zhang testified that neither the WSIP Statute nor Commission rules specify whether the 5% revenue cap for the "utility" in Rate Years 2 and 3 applies to each rate division or the total company.

Witnesses Sun and Zhang stated that the Public Staff construes the statutory language to refer to rate divisions, of which the Company has four. They explain that this interpretation effectuates the consumer protections limiting the size of rate increases in the later plan years. The Public Staff witnesses contend that this interpretation is in the best interests of ratepayers, because if only one rate division falls below the low-end range of the band established by the Commission, then the utility can file a general rate case for that rate division pursuant to Section 62-133.1B(g)(2) and Rule R1-17A. In their view, treating the rate divisions separately for earnings purposes ensures the Company could not shield a significant cost increase in one rate division by netting it against the costs of another rate division. Such cost shifting, in the Public Staff's view, would run contrary to the intent and spirit of the WSIP Statute. The Public Staff witnesses maintain that customers in each rate division should receive the benefit of the 5% revenue increase cap in Rate Years 2 and 3. Therefore, Public Staff's recommended rate adjustments for Rate Years 2 and 3 fall below the 5% revenue cap for each rate division.

In rebuttal testimony, Company witness DeStefano disagreed with the Public Staff's interpretation that the 5% cap should be applied to rate divisions rather than to the Company's total revenue requirement. Witness DeStefano rebutted the Public Staff's position on the meaning of the word "utility" in the context of the 5% cap's applicability. First, he highlighted use of the phrase "utility's North Carolina retail jurisdictional gross revenues" in other North Carolina statutes, including in Chapter 62, none of which are applied at the rate division level but rather to utility entities as a whole. Witness DeStefano next referred to Commission Rule R1-17A(b)(4), which defines the word "utility" as "a water, sewer, or water and sewer public utility" as opposed to a rate division thereof. He contended that a rate division does not appropriately fit within the definition of utility as set forth in N.C.G.S. § 62-3(23). Witness DeStefano also stated that in Public Staff Joint WSIP Testimony, witnesses Sun and Zhang interchangeably used the terms "utility" and "Company."

Witness DeStefano explained why application of the 5% cap to rate divisions as recommended by the Public Staff would not be practical. He stated that the Commission has indicated it is favorable to tariff consolidation, including tariff consolidation of some of CWSNC's predecessor entities into the Company's four rate divisions. However, should the 5% cap be applied to a rate division level, Witness DeStefano explained future consolidation of rate divisions would be practically impossible because limits on the ability to increase one or all rate divisions could undermine any progress to be made by the Company's consolidating rates. Further, witness DeStefano stated that while bringing rate cases by rate division is possible, to do so would be counterproductive and costly, and conflict with CWSNC's primary goal of rate consolidation.

Moreover, witness DeStefano stated that Public Staff's concern about shielding rate divisions from the costs of other rate divisions is not relevant, as the Company has separate revenue requirements set based on the stand-alone cost of service for each rate division. Witness DeStefano testified the Company has not proposed or reflected in its WSIP a sharing of costs across rate divisions that diverts from the stand-alone cost of service, and therefore any earnings test in the WSIP on resulting stand-alone revenue requirements.

Discussion and Conclusions

Section § 62-133.1B(c) provides, in pertinent part, that "[a]ny rate adjustment allowed under a Water and Sewer Investment Plan approved pursuant to this section shall not, on an annual basis for years two and three of the plan, exceed five percent (5%) of the utility's North Carolina retail jurisdictional gross revenues for the preceding plan year." CWSNC and the Public Staff interpret this language differently.

CWSNC argues that the word "utility" should be interpreted as written and consistent with other existing statutes and rules, whereby the 5% cap applies to the whole utility and does not limit any increase to its separate rate divisions. In its proposed order, CWSNC maintains that the primary purpose of statutory interpretation is to give effect to the intent of the legislature; CWSNC argues that the language of the statute is clear and unambiguous and, therefore, there is no room for judicial construction. CWSNC also argues that where the words of a statute are not defined it is presumed that the legislature intended to give them their ordinary meaning.

CWSNC explains that Section 62-133.1B(c) refers to "the utility's North Carolina retail jurisdictional gross revenues" and notes that similar phrases are used in many other, related statutes, including N.C.G.S. § 62-133.2 (capping certain fuel and fuel-related cost adjustment increases of an "electric public utility's total North Carolina retail jurisdictional gross revenues for the preceding calendar year") and N.C.G.S. § 62-110.8 (capping the annual increase of costs of the procurement of renewable energy at 1% of the "electric public utility's total North Carolina retail jurisdictional gross revenues for the preceding calendar year"). CWSNC states that in both of these other statutes the context relates to legislature's capping the amount of an increase based on the entire utility's gross revenues for the preceding calendar year, and not on a more granular level such as rate divisions.

In contrast, the Public Staff argues that because CWSNC's four rate divisions provide water or sewer service to service areas under separate rates, albeit under the wider umbrella of CWSNC's total water and sewer company, these rate divisions clearly function as de facto "utilities" and should be considered as such. The Public Staff further maintains that because the four rate divisions have separate rates, revenue requirements, and rate bases, these divisions should be considered stand-alone de facto "utilities" for the purpose of the WSIP. The Public Staff argues that it is clear from the evidence, or lack thereof, that CWSNC will not be significantly harmed if the four rate divisions are each deemed "utilities" for purposes of the WSIP.

The Public Staff also states that the plain language of the statute limits the annual permissible adjustments in years two and three of a WSIP by its use of the word "rate". The Public Staff explains that while retail jurisdictional gross revenue is used to establish the rates paid by each customer, it is in and of itself not a rate. The Public Staff argues that by using the phrase "rate adjustment" the legislature clearly intended that no customer would experience a rate increase exceeding 5% in years two and three of any approved WSIP.

Alternatively, the Public Staff argues that regardless of the plain meaning of the word "utility," the Commission only has the statutory authority to approve WSIP adjustments that are in the public interest. In particular, and pursuant to Section 62-133.1B(b), the Public Staff states that the Commission may impose any conditions in the implementation of a WSIP that the Commission considers necessary to ensure that the utility complies with the plan, and to ensure that the WSIP and its associated rates are just, reasonable, and in the public interest. The Public Staff maintains that although the statute specifically states that gross jurisdictional revenues should be considered, it does not preclude the Commission from capping the increase at the rate division level. The Public Staff argues that it is not appropriate to deny some customers the benefit of the 5% cap simply because of the differences across individual systems within the utility.

Finally, the Public Staff compares the WSIP to the WSIC/SSIC mechanism available pursuant to N.C.G.S. § 62-133.12 (WSIC/SSIC Statute), which authorizes the Commission to approve a rate adjustment mechanism based on investment in repair, improvement, and replacement of water and sewer facilities. The Public Staff states that the WSIC/SSIC Statute prescribes processes and procedures similar to the WSIP

Statute. In particular, the Public Staff notes that there is a percentage cap on the amount of charges that a utility may recover, which "may not exceed seven and one-half percent (7.5%) of the total annual service revenues approved by the Commission in the water or sewer utility's last general rate case." The Public Staff further notes that it has been the practice of the utilities and the Public Staff to apply this statutory cap to the utility's individual rate divisions and that, historically, this practice has been approved by the Commission.

After careful consideration, the Commission concludes that although the word "utility" is not expressly defined within the WSIP Statute, by its clear and unambiguous language the WSIP Statute does not restrict the allowable rate adjustment in plan years two and three to the rate division level. Put simply, the Commission is constrained to read the statutory 5% cap to apply to the "utility" as a whole, not to its individual rate divisions.

It is well-settled that in matters of statutory construction

> "the language of the act, the spirit of the act and what the act seeks to accomplish" are the greatest indicia of [legislative] intent. However, when, as here, the language of a statute is clear and unambiguous, there is no room for judicial construction, and [the reviewing agency must] give the statute its plain and definitive meaning.

Lee v. Gore, 365 N.C. 227, 230, 717 S.E.2d 356, 358 (2011) (citations omitted); *accord Lunsford v. Mills*, 367 N.C. 618, 623, 766 S.E.2d 297, 301 (2014); *Carolina Power & Light Co. v. City of Asheville*, 358 N.C. 512, 518, 597 S.E.2d 717, 722 (2004). In doing so, the Commission is "without power to interpolate, or superimpose, provisions and limitations not contained therein," *Union Carbide Corp. v. Offerman*, 351 N.C. 310, 315, 526 S.E.2d 167, 170 (2000), must "give effect to the words actually used in a statute[,] and should neither delete words used nor insert words not used in the relevant statutory language . . . ." *Midrex Techs., Inc., v. N.C. Dep't of Revenue*, 369 N.C. 250, 258, 794 S.E.2d 785, 792 (2016).

Use of the word "utility" in Chapter 62 rationally means "public utility," which is a defined term in N.C.G.S. § 62-3(23) listing many examples of public utilities. None of these examples are reconcilable to the level of a water or sewer rate division. For example, N.C.G.S. § 62-3(23)(b) refers to a public utility as "any person producing, generating, or furnishing any of the foregoing services to another person for distribution to or for the public for compensation." The use of "person" is directly applicable to CWSNC within many other contexts found in Chapter 62 or Commission Rules; in contrast, "person" is not interchangeable with a segregated rate division in most, if not all, of these other contexts. In fact, the term "rate division" — let alone the term "rate division" as a substitute for the term "utility — does not appear at all in Chapter 62.

Similarly, the Commission's WSIP Rule specifically defines the word "utility" to encompass either a water, sewer, or water and sewer public utility. *See* Commission Rule R1-17A(b)(4). The Commission has contemplated that a single utility might be considered to encompass the provision of both water *and* sewer services under the same corporate umbrella. The Public Staff itself in its own testimony has interchangeably used the terms “utility” and “Company,” consistent with normal parlance and the ordinary use of the term. Although recognition in the Commission’s WSIP Rule is not conclusive to the matter of legislative intent, the Commission concludes that it would be incongruous for the legislature to intend the WSIP Statute’s 5% revenue cap provision to deviate from the application of similar words and phrases in similar contexts throughout Chapter 62, without the legislature’s having used additional, distinct statutory language to make clear its intent. As a result, the Commission is unable to read the more restrictive term “rate division” — which, when applied, would be a further limitation upon a water or sewer utility’s ability to recover its investments during a plan term — into the plain meaning of the term “utility” as used in Section 62-133.1B(c).

It is important to note that the Public Staff’s desired interpretation turns not on the word “utility” but upon its focus on the term “rate” in “rate adjustment.” The Public Staff contends that the WSIP Statute not only allows but requires the Commission to limit any rate increase in years two or three of the WSIP to no more than five percent of any specific rate division customer’s previous year’s rate, not the entire “utility’s North Carolina retail jurisdictional gross revenues,” as the statutory language instead provides. Settled principles of statutory construction require the Commission to follow a statute’s plain language and avoid interpretations that “interpolate, or superimpose, provisions and limitations” not clearly provided by our legislature. *Offerman*, 351 N.C. at 315, 526 S.E.2d at 170. Of course, the legislature could have stated that no customer, customer class, or customer rate division shall see an increase in its rates of more than five percent for plan years two and three; but it did not. *See Birchard v. Blue Cross & Blue Shield of N.C., Inc.*, 283 N.C. App. 329, 333, 873 S.E.2d 635, 638 (2022) (in matters of statutory construction, “it is presumed the legislature acted with full knowledge of prior and existing law, and with care and deliberation.”). Without more, the Commission cannot read this additional restriction into the statute.

Alternatively, the Public Staff argues that the Commission has the discretion under N.C.G.S. § 62-133.1B(b) to impose a 5% cap upon the Company at the rate division level and should do so because it is necessary to ensure that CWSNC complies with the plan and to further ensure that the WSIP’s associated rates are just, reasonable, and in the public interest. The Commission agrees with the Public Staff that under N.C.G.S. § 62-133.1B(b) the Commission maintains the discretion to impose this and other reasonable conditions especially where, among other things, the WSIP as proposed may “result in sudden substantial rate increases to customers annually or over the term of the plan.” However, the Commission is not persuaded to do so in this case. No evidence was presented that the Company is shielding a significant cost increase in one division by netting it against the costs of another rate division. To the contrary, CWSNC has separate revenue requirements set based on the stand-alone cost of service for each division. Further, the Commission acknowledges that the quarterly reporting requirements under Commission Rule R1-17A(j)(1)-(2) will set forth by rate division an earnings report and a status report on capital investment projects approved in the WSIP, respectively, which will allow the Public Staff and the Commission to track the financial status of the utility and its progress on capital investment projects during the period of the approved WSIP.

The Commission also notes, as Company witness DeStefano highlights, that it has previously indicated the desirability for uniform rate structures and has consolidated separate stand-alone tariffs in past Commission proceedings when it was appropriate to do so. In Docket No. W-354, Sub 356, a general rate case proceeding, the Commission concluded that it was reasonable for CWSNC to establish its present four rate divisions, as requested by the Company and stipulated to by the Public Staff, noting that CWSNC's ultimate goal in future rate cases is to move BF/FH Rate Divisions into the CWSNC Uniform Water and Sewer Rate Divisions. Should the 5% cap be applied at the rate division level, the potential for future rate division consolidation could be significantly impacted, as any statutory limitation on the ability to increase one or all rate divisions with a goal toward uniform rates could limit the utility's ability and desire to make progress toward rate consolidation.

To this end, the Commission finds support in one of the legislative purposes behind the WSIP Statute — to provide the Company with the flexibility to manage its business and capital plans within the parameters of various safeguards for customer protections established in the WSIP Statute and under Commission Rules. Moving to a uniform rate structure can operate as an "insurance umbrella" to benefit and protect all customers, especially those of the smaller and more isolated systems, from rate shock that could otherwise occur in the event of repairs necessitated by natural disaster or a massive system failure or upgrade. However, when a Company like CWSNC acquires systems that have, for a variety of reasons, significantly lower rates than its uniform rates, any gradualism to bring the acquired systems' rates to parity will necessarily result in a disparate impact if the percentage of the increase is the only measure or matter considered.

Moreover, in declining the Public Staff's request that the Commission discretionarily impose a 5% cap at the rate division level in this case, the Commission finds further support in a primary legislative purpose of the WSIP Statute. The WSIP mechanism is designed to allow a water/sewer utility to implement annual rate changes for a three-year period without the need for a base rate case proceeding during that period, facilitating more efficient rate recovery of reasonable and prudent capital investments and operating expenses than previously allowed under traditional proceedings. By design it avoids the "pancaking" of general rate case filings — i.e., the stacking on top of one another frequent and consecutive rate filings over a short duration of time that would otherwise be allowed under N.C.G.S. § 62-133 — and instead streamlines the regulatory processes to allow the utility to file a single rate case application (rather than many) that allows the Commission to adjust rates for a three-year period. Yet applying the 5% cap to each rate division, as recommended by the Public Staff, would result in less efficient use of the WSIP mechanism and the potential for more frequent general rate case proceedings as the Company continues to make prudent capital expenditures, defeating this legislative purpose behind the WSIP Statute. To this same end, the Commission notes the testimony of witness DeStefano explaining that while rate cases by individual rate division could be filed, doing so would be counterproductive and costly to ratepayers.

The Commission must also balance the goal of incenting the utility to timely proceed with the capital investments scheduled during the WSIP period that are required to maintain adequate service quality and reliability with the rate impact on customers over the same period. The WSIP mechanism will not eliminate all regulatory lag for these necessary capital projects but utilizing the WSIP mechanism in the manner intended by the legislature to provide for moderate, gradual rate increases over the term of the WSIP benefits customers. The Commission has historically found that it is more favorable to customers for the utility to limit rate increases to smaller, more smoothly timed increases as opposed to larger increases spread out over longer periods of time. In particular, the Commission has previously explained that

> [w]ith respect to the timing of cost recovery of infrastructure improvements, the Commission believes that, to the extent that necessary investments would result in rate increases at some point in time irrespective of the mechanism, customers will benefit from the rate-smoothing effects of more gradual increases made possible by recovery through a WSIC/SSIC surcharge. Furthermore, if the ability to increase rates to recover certain costs between general rate cases actually results in fewer or less frequent rate cases as claimed by the Company, ratepayers would benefit from lower rates because the Company's recoverable expenses would be reduced by the elimination of the substantial costs associated with the preparation and litigation of a general rate case.

Order Granting Partial Rate Increase, Approving Rate Adjustment Mechanism, and Requiring Customer Notice, *Application by Aqua North Carolina, Inc., for Authority to Adjust and Increase Rates*, No. W-218, Sub 363, 79 (N.C.U.C. May 2, 2014). this same conclusion is applicable to the WSIP mechanism. Also, unlike the WSIC/SSIC mechanism, the gradualism impacts for the WSIP relate to both additional capital structure improvements and increases in operating expenses over the WSIP period.

Finally, the Commission is also not persuaded by the Public Staff's argument that the WSIP revenue cap must necessarily be established in the same manner as the WSIC/SSIC revenue cap. The WSIC/SSIC and the WSIP are separate mechanisms, established for different purposes, and are authorized by separate legislation. The WSIP is different from the WSIC/SSIC mechanism in that the WSIC/SSIC is a legislative tool to recover specific types of capital investments between general rate case filings under N.C.G.S. § 62-133, subject to a statutory revenue cap. The Commission observes that the wording of N.C.G.S. § 62-133.12(g) is different from the WSIP Statute's language regarding the revenue cap and states as follows:

> Cumulative system improvement charges for a water or sewer utility pursuant to a rate adjustment mechanism approved by the Commission under this section may not exceed seven and one-half percent (7.5%) of the total annual service revenues approved by the Commission in the water or sewer utility's last general rate case.

Importantly, the Commission's approving the use of rate divisions versus total company for establishing the cap on the WSIC/SSIC revenue requirement resulted from the agreed-upon use of this method by the utilities and the Public Staff. This practice was not opposed by any party in historical WSIC/SSIC proceedings, and the issue was not contested before the Commission. As such, the comparison has limited persuasive value in this proceeding.

For each of these reasons, the Commission concludes that the 5% cap set forth in Section 62-133.1B(c) applies to CWSNC's utility operations as a whole, not to its individual rate divisions. As such, the rate adjustment allowed under the WSIP approved in this proceeding should not, on an annual basis for WSIP Rate Year 2 and WSIP Rate Year 3, exceed 5% of CWSNC's North Carolina retail jurisdictional gross revenues for the preceding year.

Although neither CWSNC nor the Public Staff specifically raised or argued this point in their respective testimony, the Commission notes that CWSNC applies the 5% cap to total operating revenues to calculate the amount of excess revenues in Rate Years 2 and 3; in contrast, the Public Staff utilizes service revenues in its calculation. The Commission finds that the Public Staff's calculation is more appropriate. Subsection (c) of the WSIP Statute refers to "any rate adjustment" when establishing the parameters for the 5% cap. Service revenues is the component of the revenue requirement which specifically relates to the establishment of customers' rates. Thus, the Commission concludes that it would not be appropriate to apply the 5% cap to CWSNC's miscellaneous revenues, which includes such revenues as forfeited discounts and sale of utility property.

Turning now to a separate issue that is related to the 5% cap determination, the Commission notes that use of the rate of return on common equity of 9.80% found reasonable by the Commission for use in this proceeding as discussed elsewhere in this Order, results in the total annual revenue increase for Rate Years 2 and 3 of the WSIP exceeding 5% of CWSNC's North Carolina retail jurisdictional gross revenues for the respective preceding year. This is not permitted by the WSIP Statute. Therefore, the Commission determines that it is necessary to adjust the annual revenue increases for one or more of CWSNC's four rate divisions such that the total annual Commission-approved revenue increase on a total company basis does not exceed the 5% statutory cap for WSIP Rate Years 2 and 3.

To determine the appropriate adjustment, the Commission has examined the individual annual revenue increases for each of CWSNC's four rate divisions and notes that the annual increase in service revenues for the BF/FH Sewer Rate Division based on its cost of service for Rate Year 2 would be 24.9%. The Commission considers the increase to these specific customers to implicate the concerns set forth in N.C.G.S. § 62-133.1B(b)(iii) — which provides among other things that the Commission shall consider whether the Company's Application, as proposed, will result "in sudden substantial rates increases to customers annually or over the term of the plan," and allows the Commission to impose any conditions in the implementation of the WSIP that the Commission considers necessary to ensure that the associated rates are just, reasonable, and in the public interest. Because there is not a "bright-line" rule for employing gradualism with respect to rate increases, the Commission is permitted to and must determine on a case-by-case basis, based on the evidence presented, the appropriate level of gradualism to use with the WSIP such that, consistent with subsection (b)(iii) of the WSIP Statute, the approved rate increase will not result in sudden substantial rate increases to customers annually or over the term of the plan. *See generally State ex. Rel. Utilities Comm'n v. Carolina Utility Customers Ass'n, Inc.*, 314 N.C. 171, 195-96, 333 S.E.2d 259, 274-75 (1985). The Commission also considers that as additional significant capital improvements are made and increased operating expenses are reflected within a separate rate division, customer rates in the separate rate division are driven closer to parity with CWSNC's uniform rate customers.

As a result, the Commission concludes in its discretion that, in administering the statutory 5% cap and balancing the goal of incenting the utility to timely proceed with the capital investments scheduled during the WSIP period that are required to maintain adequate service quality and reliability with the rate impact on customers over the same period, it is appropriate for CWSNC's total combined service revenue requirement amount of ($322,520) that would exceed the 5% cap for Rate Year 2 to be deducted from the BF/FH Sewer Rate Division annual service revenue increase. This adjustment would result in a 14.2% annual increase for the BF/FH Sewer Rate Division in Rate Year 2, helping alleviate the concerns set forth in N.C.G.S. § 62-133.1B(b)(iii). This adjustment will bring the total annual service revenue increase for CWSNC for Rate Year 2 to the 5% statutory cap, will recognize the significant capital improvements and cost of service for the BF/FH Sewer Rate Division for this time period, and will also gradually increase customer rates for the BF/FH Sewer Rate Division to reflect the necessary capital investments and operating expenses to maintain adequate service and reliability.

With respect to Rate Year 3, the Commission has examined the individual annual revenue increases for each of CWSNC's four rate divisions and notes that based on their respective cost of service, the annual service revenue increase compared to Rate Year 2 for the CWSNC Uniform Sewer Rate Division is 8.9% and 11.7% for the BF/FH Sewer Rate Division. The Commission concludes in its discretion that CWSNC's total annual service revenue requirement amount of ($218,866) over the 5% cap for Rate Year 3 should be deducted entirely from the CWSNC Uniform Sewer Rate Division annual service revenue increase. This adjustment would result in a 7.9% annual revenue increase for the CWSNC Uniform Sewer Rate Division. With respect to the magnitude of the 11.7% revenue increase in Rate Year 3 for the BF/FH Sewer Rate Division, the Commission determines that based upon the significant capital improvements and cost of service projected for the BF/FH Sewer Rate Division in Rate Year 2, and the previously discussed adjustment to this Rate Division's Rate Year 2 revenues, it is appropriate that no revenue adjustment is made for BF/FH Sewer Rate Division in Rate Year 3. As a result, over the three-year term of the WSIP, and in particular over Rate Years 2 and 3, customers' rates will gradually increase for the BF/FH Sewer Rate Division to appropriately reflect the cost of service for this Rate Division while moderating the impact of the significant capital improvements projected in Rate Year 2.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 34-36

Performance-Based Metrics and Penalties and Incentives

The evidence supporting these findings of fact is found in the direct testimony and exhibit of Company witness Denton, the Joint WSIP Testimony of Public Staff witnesses Hinton, Junis, Sun, and Zhang, rebuttal testimony of Company witness Denton, the Stipulation, the Corrected and Settlement Testimony of Public Staff witnesses Brown, Zhang, and Junis, and the Settlement Testimony of Company witnesses Denton and Schellinger.

Among other things, the WSIP Statute provides that any WSIP "shall include performance-based metrics that benefit customers and ensure the provision of safe, reliable, and cost-effective service by the water or sewer utility," N.C.G.S. § 62-133.1B(a) and requires the Commission to adopt rules that "require reporting on an annual basis of performance-based metrics and evaluation of those metrics' results to ensure the utility continues to perform in a safe, reliable, and cost-effective manner." N.C.G.S. § 62-133.1B(i)(2).

The Commission's WSIP Rule defines "performance-based metrics" to mean

> standards to measure utility operations and management, including the management of capital investment projects, intended to benefit customers by ensuring the provision of safe, reliable, and cost-effective service by the utility. Metrics may also be standards that are intended to drive utility performance or support Commission policy goals provided that they benefit customers by ensuring the provision of safe, reliable, and cost-effective service. In establishing performance-based metrics, the Commission may consider, at a minimum, operational compliance, customer service, service reliability, and workplace health and safety. Performance-based metrics shall be clearly defined, measurable, and easily verified by stakeholders.

Rule 1-17A(b)(1). The Rule provides that "[t]he Commission may approve penalties or incentives based on the results of approved metrics" and allows that "[s]ome metrics may be tracking metrics with or without targets or benchmarks to measure utility achievement." *Id.* The Rule also requires the WSIP to be subject to annual review to include review "of the performance-based metrics established by the Commission, and the calculation of any applicable incentives or penalties." *Id.* at (g)(1)(b).

In testimony accompanying its Application, the Company first proposed basic performance-based metrics in the areas of operational compliance, customer service, service reliability, and workplace health and safety, as outlined in witness Denton's Exhibit DHD-1. Tr. vol. 7, 91. The Company did not initially propose any financial penalties or incentives tied to the performance-based metrics. *Id.* at 93. The Company instead proposed putting the measures in place, monitoring, and learning from the experience so that future WSIPs could better design and implement financial incentives or penalties, if desired. *Id.*

In its joint testimony, the Public Staff highlighted and was concerned that the Company did not propose any benchmarks, targets, penalties, or incentives. Tr. vol. 6, 56. Among other things, the Public Staff explained that data existing in a vacuum is not a meaningful tool and that because it did not appear that the Company was collecting or measuring certain information the Public Staff was concerned whether the Company could effectively measure its performance or identify issues that need attention. *Id.* at 57. As a result, the Public Staff made several recommendations as to appropriate benchmarks, requested that the Company develop a plan to improve data collection and analysis, and offered a series of additional appropriate performance-based metrics (Public Staff WSIP Exhibit 5). *Id.* at 57-60. The Public Staff also identified several recommended penalties and incentives that would impact the Company's approved ROE band — with a possible cumulative total annual decrease of 54 basis points and increase of 14 basis points — and that performance would be reviewed as part of the quarterly reporting process with adjustments made to the earnings test of the appropriate Rate Year. *Id.* at 61. The Public Staff stated that its recommended penalties and incentives appropriately encouraged good business practices to control costs, responsiveness to customers, and swift corrective action were performance to deteriorate.

In his rebuttal testimony, Company witness Denton stated that CWSNC was agreeable to some of Public Staff's additional metrics but found each problematic as proposed for a variety of reasons — including, e.g., for (1) timely completion of CIP projects: scheduling contingencies are difficult to predict and plan for; (2) completion of CIP projects on budget: budgets may need to be adjusted once a project is underway for a variety of reasons, in some cases the additional benefits may outweigh the increased cost, and the best approach is a portfolio-level of planned expenditures rather than at the individual project level because the Company can be nimble in project planning and needs; (3) expense efficiency: a fairer metric would be one adjusted for inflation and including only the O&M costs that are largely in control of the Company; and (4) the State Revolving Fund (SRF) Program: the requirement to apply for *all* eligible projects would ignore the incremental costs (e.g., additional headcount, legal costs, engineering costs, and other professional service costs) that are not currently budgeted and may weigh against the application's benefit. *See* Tr. vol. 7, 107-13. The Company also disputed the usefulness of "benchmarking" insofar as it seeks to compare to other peer companies rather than internal performance. The Company also was not agreeable to including penalties and incentives tied to the performance-based metrics insofar as the WSIP already included a comprehensive incentive/penalty structure through its earnings band and excess earnings test. *Id.* at 114-15.

As noted in greater detail above, the parties in their Stipulation agreed upon certain performance-based metrics for the Company. *See also id.* at 118-19. In its March 17, 2023 filing, the Public Staff identified three additional tracking metrics for which it sought ongoing reporting, specifically Routine Flushing, Customer Call Abandonment Rate, and Injury Severity.

The Commission concludes that it is reasonable to require the additional tracking metrics sought by the Public Staff which were not enumerated in the Stipulation, specifically metrics for Routine Flushing, Customer Call Abandonment Rate, and Injury Severity, as outlined in the Public Staff's March 17, 2023 filing. The Public Staff's March 17, 2023 filing also outlined additional edits agreed to by the parties. The Commission finds that tracking these additional metrics may lead to information relevant to consider in a future proceeding and that these edits are helpful to clarify what information is to be tracked and reported. In addition, the Commission expects that future reporting of the Customer Call Abandonment Rate metric will explain in greater detail how this metric is being measured.

Pursuant to N.C.G.S. § 62-133.1B(a), and consistent with acceptance of the Stipulation as discussed above, the Commission concludes that it is appropriate to adopt for CWSNC the following performance-based metrics:

Description	Measure
1. Safe Drinking Water Act Compliance	% days in compliance – (sum of all days – sum of all days out of compliance) / sum of all days Sum of all days = No. of systems x 365 days
2. Clean Water Act Compliance	% days in compliance – (sum of all days – sum of all days out of compliance) / sum of all days Sum of all days = No. of systems x 365 days
3. Timely Answering of Customer Calls	Telephone service factor – calls answered within 60 seconds / total calls answered (tracked by quarter)
4. Water Service Quality Customer Complaints	Technical service complaints in specific categories (no water, air in water, discolored water, high/low pressure, mineral amount, taste/odor, and water quality) / (active accounts / 1,000) Underlying data should incorporate subdivision and system name.
5. Water Service Disruptions	Unplanned water service disruption – recorded Lucity water main breaks / 1,000 accounts
6. Sewer Overflows	Number of sanitary sewer overflows (SSOs) – wastewater SSOs / (100 miles of gravity line)
7. Employee Safety	OSHA incident rate – (number of injuries and illnesses *200,000 / 4) / employee hours worked
8. Field Employee Safety Training	Field employee safety training – hours of field employee safety training / field employee Field employee means employee with job title listed below or the equivalent: Field Tech I Field Tech II Field Tech III Water-Wastewater Operator I Water-Wastewater Operator II Water-Wastewater Operator III Lead Water-Wastewater Operator

	Area Manager Director, State Operations Training means structured, organized training (not peer-to-peer training)
9. Timely Completion of CIP Projects	Percentage of CIP Program projects in the approved WSIP incomplete during the planned rate year on a Company basis
10. Completion of CIP Projects on Budget	Percentage of CIP Program projects that cost in excess of 110% of the estimate in the approved WSIP on a Company basis
11. Expense Efficiency	Operation & Maintenance expense per Equivalent Residential Connection (ERC) on a Company basis, excluding certain accounts outside of management control (Purchased Water / Sewer Treatment, Purchased Power, etc.)
12. Utilization of the SRF Program	Whether the Company applied for SRF funds for certain eligible projects approved in the WSIP.
13. Water Loss	Water produced/purchased – water sold / water produced/purchased
14. Employee Turnover	Number of North Carolina employees that leave / total number of North Carolina employees for same time period, excluding transfers and/or promotions within Corix or an affiliate
15. Routine Flushing	Percent of systems means number of systems flushed / total number of systems during the WSIP rate year
16. Customer Call Abandonment Rate	Percentage of calls abandoned by customers during the WSIP rate year
17. Injury Severity	OSHA DART Rate – (number of OSHA Recordable Injuries and Illnesses that resulted in Days Away, Restricted Duty, or a Transfer of Duties)

The Commission also concludes that these metrics will benefit customers and help ensure the provision of safe, reliable, and cost-effective utility service. The Commission further concludes that it is appropriate for CWSNC to report on its performance on such metrics on an annual basis in accordance with Rule R1-17A(g)(1)(b).

The Stipulating Parties also agreed as part of the Stipulation to work together to develop incentives and/or penalties to accompany these performance-based metrics, and to file and request Commission approval of any such adjusted and agreed upon performance-based metrics and incentives and/or penalties with the Commission on or before March 17, 2023. The Company also noted at the hearing the parties' ongoing discussions about penalties and incentives specifically and their mutual intent to file proposals with the Commission. *See* Tr. vol. 7, 131-36, 138-40, 214-15. In their March 17, 2023 filings, the Stipulating Parties agreed on a framework for penalties and incentives with regard to the above performance-based metrics. The parties were unable to agree, however, on specific levels and thresholds for several of the performance-based metrics — specifically with respect to metrics 1, 2, 3, 9, and 10, discussed further below. Also, the Public Staff's tracking measure related to water loss — metric 13 — differs slightly from CWSNC's proposed calculation for that metric.

After careful consideration, as to these additional matters, the Commission concludes as follows:

Performance-Based Metrics 1 & 2: Safe Drinking Water and Clean Water Act Compliance

In these two areas, the parties' positions deviate in two ways. The Public Staff offers no incentive for improvement but requests that penalties be imposed if the Company falls below the three-year average. In other words, there would be a penalty for even slightly below average performance. The Company, on the other hand, requests to impose neither an incentive nor penalty for performance within a standard deviation of the average and requests an incentive symmetrical to the penalty it faces for underperformance, if it reaches or exceeds that upper bound.

The Commission emphasizes that 100% compliance with federal law is already expected and required — full compliance is to be the floor rather than the ceiling — but that for a variety of reasons 100% compliance might not be achieved or maintained. In performance-based ratemaking what is being incented is not simply compliance with the law (that is already expected and required) but improvement upon historical performance. To this end, the Commission finds that the Company's framework is just and reasonable and would appropriately incent the Company to achieve and continue to improve upon its historical performance in these areas, as measured by the two stipulated performance-based metrics. To date, the three-year average performance underlying both parties' proposed benchmarks reflects adequate service by the Company. Continued improvement of this performance, with reasonable amounts of year-to-year variance is the standard to which the Company should be held. To the extent there is a meaningful deterioration in performance during the WSIP period, the Commission's WSIP Rule allows a penalty to be assessed, and the Commission determines that the 10-basis point reduction in the top of the ROE band, as agreed by the Stipulating Parties, is a reasonable level of penalty. On the other hand, the Commission concludes that a corresponding incentive for meaningful improvement is also warranted and finds that it is just and reasonable for the incentive to be equal in magnitude to the penalty, at 10 basis points as proposed by the Company. However, the Commission makes it clear that as the Company improves its performance the Commission expects that such improved performance will become the new baseline for establishing future upper and lower thresholds — to the extent possible. The Commission recognizes that regarding the Safe Drinking Water Compliance metric, the Company would need to achieve perfect performance to receive any corresponding incentive.

Performance-Based Metric 3: Timely Answering of Customer Calls

As with performance-based metrics 1 and 2, the Commission finds that a lower bound equal to the historical average is not an appropriate benchmark. Instead, the Commission concludes that a benchmark equal to a standard deviation below the benchmark, as recommended by the Company is appropriate for assessing any penalty. However, the Commission does not conclude that an incentive is warranted for merely reaching the upper bound of the three-year standard deviation. To the contrary, unlike performance-based metrics 1 and 2, a historical average of 80.70% leaves considerable room for improvement in this area. As such, in order to warrant an incentive for improvement the Company must improve to 90.00% of calls timely answered. Achievement either of the incentive or imposition of the penalty is to be based on performance over the full rate year.

In its discretion, the Commission determines that a just and reasonable level of incentive or penalty on an annual basis for timely answering of customer calls is four basis points over each full rate year period. Additionally, the Commission understands that the parties are in agreement with the performance-based metric as set forth in the Stipulation. The Commission expects, however, that future reporting of this data will explain in greater detail how this metric is being measured.

Performance Metric 9: Timely Completion of Projects

The parties have agreed to a penalty only structure for this performance-based metric, and they have agreed to the level of the penalty. The Commission appreciates this level of cooperation, and believes these outcomes are just and reasonable, as they give significant importance to the fundamental requirement that the Company place into service the capital improvements that underly this MYRP. Implementation of the capital plan during the MYRP period is a baseline expectation of the Commission.

In its filing, the Public Staff recommends cumulative benchmarks of 15%, 25% and 35% incomplete projects in Rate Years 1, 2 and 3 respectively as triggering a penalty (a 10-basis point reduction to the high end of the ROE band). The Company recommends somewhat stricter benchmarks of 10%, 20%, and 30%, but with the caveat that the benchmarks are applied to “net movement” in the number of projects placed in-service in a Rate Year. The Commission agrees with the Company’s approach. The Commission recognizes that over the course of the MYRP, the relative priority of projects is likely to change, leading some to be accelerated with others delayed relative to the plan as approved. Allowing the Company the flexibility to efficiently manage its business and provide adequate and reasonable quality of service, without incurring a penalty on an individual project basis, is a reasonable accommodation to the inherent uncertainty of creating capital plans. By offering more stringent achievement targets, the Company provides assurance that ratepayers will get the benefit of invested capital.

Performance Metric 10: Completion of Projects on Budget

The Public Staff recommends a penalty if the percentage of CIP projects placed into service that are completed more than 10% over budget exceeds certain thresholds per rate year. The Commission declines to adopt this penalty.

The Commission recognizes that the Company has every incentive to maintain budget discipline with respect to the projects being placed into service. It will have to fund costs of any overages without the opportunity to incrementally adjust rates until its next rate case, much as it does under traditional ratemaking. During that rate case, all of the capital the Company has invested will be subject to review for prudency and possible disallowance. The Commission concludes that this incentive and check are sufficient to incentivize budget discipline and, as such, the Commission declines to add another. To the extent costs rise and budget predictions turn out to be low, such a penalty mechanism could create a perverse incentive for the Company to eliminate prudent costs, which would ultimately be to the detriment of ratepayers.

Performance Metric 13: Water Loss

Both CWSNC and the Public Staff recommend a tracking measure related to water loss. CWSNC proposes a performance measure calculated as a percentage of water loss on a company-wide basis. CWSNC calculates its water loss metric as follows: water produced/purchased – water sold / water produced/purchased. The Public Staff, on the other hand, recommends that the performance metric related to water loss pertain only to purchased water. Therefore, the Public Staff calculates its water loss metric as follows: water purchased – water sold/water purchased.

The Commission acknowledges that the water loss metric reviewed by the Public Staff in past CWSNC general rate case proceedings has related specifically to water loss in purchased water systems. In particular, the Public Staff has examined the water loss percentage in each specific system that has its source of water provided entirely from purchased water and then recommends to the Commission an adjustment to total purchased water expense to reflect an acceptable level of water loss. For performance-based metrics for CWSNC's MYRP, the Commission finds that it would be useful to track both company-wide water loss as recommended by CWSNC and the water loss from only CWSNC's purchased water systems as recommended by the Public Staff. Since the Company's proposed calculation already includes all inputs necessary to also calculate both metrics, the Commission concludes that CWSNC's water loss metric should provide: (1) water loss on a company-wide basis; (2) water loss for the purchased water systems; and (3) water loss for the well-produced systems.

Summary of Penalties and Incentives

In its discretion and consistent with the above discussion, the Commission concludes that the following set of penalties and incentives are just and reasonable for purposes of the WSIP's Statute's and Rule's framework. All penalties and incentives apply as an adjustment to the upper end of the WSIP ROE band.

	Lower Bound	Upper Bound	Penalty for falling to or below the lower bound	Incentive for meeting or exceeding upper bound
1	97.49%	100.00%	10 basis points	10 basis points
2	93.73%	98.78%	10 basis points	10 basis points
3	77.98%	90.00%	4 basis points	4 basis points
4*	N/A	N/A	Tracking metric only	
5*	N/A	N/A	Tracking metric only	

6*	N/A	N/A	Tracking metric only	
7*	N/A	N/A	Tracking metric only	
8*	N/A	N/A	Tracking metric only	
9	Penalty only: 10 basis point reduction if net movement results in 10% fewer projects being completed in Rate Year 1, 20% fewer projects in Rate Year 2, and 30% fewer projects in Rate Year 3.			
10	N/A	N/A	Tracking metric only	
11*	N/A	N/A	Penalty as stipulated in March 17 filings	Incentive as stipulated in March 17 filings
12*	N/A	N/A	None	Incentive as stipulated in March 17 filings
13*	N/A	N/A	Tracking metric only	
14*	N/A	N/A	Tracking metric only	
15	N/A	N/A	Tracking metric only as proposed by Public Staff in its March 17, 2023 filing	
16	N/A	N/A	Tracking metric only as proposed by Public Staff in its March 17, 2023 filing	
17	N/A	N/A	Tracking metric only as proposed by Public Staff in its March 17, 2023 filing	

*Indicates where the parties agreed

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 37

Base Case Revenue Requirements

Base Case Operating Revenues

The evidence supporting this finding of fact is found in the testimony of Public Staff witnesses Darden, Brown, and Feasel, the testimony of Company witnesses Schellinger, DeStefano, and Denton, the Company's September 19, 2022 update, the Stipulation, Updated Public Staff Settlement Exhibit 1, and the Company's March 24, 2023 filing (Amended). The following table summarizes the differences between the Company's level of Base Case operating revenues under present rates from its Application (as updated September 19, 2022), the amounts recommended by the Public Staff under present rates in the Joint Testimony of Brown and Feasel filed on October 26, 2022, and the amounts reflected in the Stipulation and Updated Public Staff Settlement Exhibit 1, which reflect the Stipulation adjustments to present operating revenues agreed to by the Stipulating Parties:

Item	Company per Application (Updated)	Amount per Public Staff	Amount per Stipulation
Base Case Operating Revenues:			
Service revenues	$44,890,892	$43,785,784	$44,295,562
Miscellaneous revenues	$184,267	$337,069	$338,437
Uncollectible accounts	($465,338)	($293,602)	($360,712)
Total operating revenues	$44,609,820	$43,829,251	$44,273,287

Based on the Stipulation and the evidence presented in Updated Public Staff Settlement Exhibit 1, the following adjustments should be made to Base Case operating revenues under present rates:

Item	Amount
Reflect pro forma level of service revenues	($595,330)
Adjustment to Miscellaneous Revenues	154,171
Adjustment to uncollectible accounts	104,626
Total	($336,533)

The Commission has found that the adjustments listed above are appropriate adjustments to be made to Base Case operating revenues under present rates in this proceeding.

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

Item	Amount
Service revenues	44,295,562
Miscellaneous revenues	338,437
Uncollectible accounts	($360,712)
Total operating revenues	$44,273,287

The appropriate level of Base Case operating revenues under approved rates for combined operations for use in this proceeding is as follows:

Item	Amount at 9.80% ROE
Service revenues	47,067,384
Miscellaneous revenues	346,053
Uncollectible accounts	($383,622)
Total operating revenues	$47,029,815

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 38

Base Case Rate Base

The evidence supporting this finding of fact is found in the verified Application and the accompanying NCUC Form W-1, the testimony of Company witness Schellinger, the Company's September 19, 2022 update, the Joint Testimony of Public Staff witnesses Brown and Feasel filed on October 26, 2022, the Corrected and Settlement Testimony of Public Staff witnesses Brown, Zhang, and Junis, Updated Public Staff Settlement Exhibit 1, and the Stipulation.

The following table summarizes the differences between the Company's level of Base Case rate base from its Application (as updated September 19, 2022), the amounts recommended by the Public Staff in the Joint Testimony of Brown and Feasel filed on October 26, 2022, and the amounts agreed to in the Stipulation, updated for current rate case expenses, and reflecting the Company's correction filing (Amended) on March 24, 2023, related to the agreed-upon adjustment to Miscellaneous Expense:

Item	Company per Application (Updated)	Amount per Public Staff	Amount per Stipulation
Plant in service	$270,954,330	$268,614,395	$268,614,395
Accumulated depreciation	(72,363,347)	(71,639,168)	(72,034,354)
Net plant in service	198,590,984	196,975,227	196,580,041
Cash working capital	3,129,927	3,013,167	3,078,822
Contributions in aid of construction	(37,648,386)	(37,735,269)	(37,735,269)
Advances in aid of construction	(32,940)	(32,940)	(32,940)
ADIT	(6,145,961)	(6,252,404)	(6,330,227)
Customer deposits	(370,590)	(370,590)	(370,590)
Inventory	153,531	153,531	153,531
Gain on sale and flow back taxes	(289,628)	(289,628)	(289,628)
Plant acquisition adjustment	(557,769)	(532,837)	(535,359)
Excess book value	0	0	0
Cost-free capital	(261,499)	(261,499)	(261,499)
Average tax accruals	142,461	(141,822)	(141,946)

Item	Company per Application (Updated)	Amount per Public Staff	Amount per Stipulation
Regulatory liability for excess deferred income taxes (EDIT)	(4,991,825)	(4,991,825)	(4,991,825)
Deferred charges	2,211,764	2,075,024	2,075,024
Pro forma plant	0	0	0
Original cost rate base	$153,930,068	$151,608,135	$151,198,136

On the basis of the Stipulation and the evidence included in Updated Public Staff Settlement Exhibit 1, the Company and the Public Staff are in agreement concerning all components of Base Case rate base, as updated for most recent rate case expenses and fallout adjustments associated with determined return on equity. Further, the Company and the Public Staff are in agreement with the Company's correction filing on March 24, 2023, related to the adjustment to Miscellaneous Expense. Therefore, the Commission finds that the amounts of Base Case rate base reflected in the Stipulation, the Updated Public Staff Settlement Exhibit 1, and the Company's March 24, 2023 filing (Amended) are appropriate for use in this proceeding. The Commission concludes that the appropriate level of Base Case rate base for combined operations for use in this proceeding is as follows:

Item	Amount
Plant in service	$268,614,395
Accumulated depreciation	(72,034,354)
Net plant in service	196,580,041
Cash working capital	3,078,822
Contributions in aid of construction	(37,735,269)
Advances in aid of construction	(32,940)
ADIT	(6,330,227)
Customer deposits	(370,590)
Inventory	153,531
Gain on sale and flow back taxes	(289,628)
Plant acquisition adjustment	(535,359)
Excess book value	0
Cost-free capital	(261,499)
Average tax accruals	(141,946)
Regulatory liability for excess deferred taxes	(4,991,825)
Deferred charges	2,075,024
Pro forma plant	0
Original cost rate base	$151,198,136

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 39

Base Case Maintenance and General Expense

The evidence for this finding of fact is found in the verified Application and the accompanying NCUC Form W-1, the Joint Testimony of Public Staff witnesses Brown and Feasel filed on October 26, 2022, the testimony of Company witnesses Schellinger, the Company's September 19, 2022 update, the Stipulation, Updated Public Staff Settlement Exhibit 1, and the Company's March 24, 2023 filing (Amended).

The following table summarizes the differences between the Company's requested level of Base Case maintenance and general expenses (as updated September 19, 2022), the amounts recommended by the Public Staff, and the amounts agreed to in the Stipulation, updated for rate case expenses and the Company's March 24, 2023 filing (Amended):

Item	Company per Application (Updated)	Amount per Public Staff	Amount per Stipulation
Base Case Maintenance Expenses:			
Purchased power	$2,131,598	$2,107,049	$2,116,148
Purchased water & sewer	2,714,606	2,714,606	2,714,606
Maintenance and repair	3,295,089	3,339,827	3,416,406
Maintenance testing	535,320	535,320	535,320
Meter reading	281,004	274,280	274,280
Chemicals	1,136,619	1,055,615	1,086,757
Transportation	526,072	531,561	531,561
Operating expenses charged to plant	(852,466)	(865,085)	(860,353)
Outside services – other	248,652	230,721	230,721
Total maintenance expenses	10,016,495	9,923,894	10,045,445
General Expenses:			
Salaries and wages	7,266,829	7,123,539	7,123,539
Office supplies and other office expense	582,718	582,718	582,718
Rate case expense	739,432	237,078	567,979
Pension and other benefits	1,795,862	1,722,821	1,722,821
Rent	389,645	389,645	389,645
Insurance	1,314,312	1,383,680	1,481,296
Office utilities	322,665	322,665	322,665
Miscellaneous	5,326,063	5,133,892	5,109,074
Total general expenses	17,737,526	16,896,038	17,299,737

On the basis of the Stipulation and the evidence included in Updated Public Staff Settlement Exhibit 1, the Company and the Public Staff are in agreement concerning all components of Base Case maintenance and general expense. Therefore, the Commission finds that the amounts of Base Case maintenance and general expense reflected in the Stipulation and Updated Public Staff Settlement Exhibit 1 are appropriate for use in this proceeding, as updated for rate case expenses. Further, the Commission finds it is appropriate to reflect the Company's correction filed on March 24, 2023, to the amount of Miscellaneous Expense embedded in the Stipulation. Therefore, the Commission concludes that the appropriate level of Base Case maintenance and general expense for combined operations for use in this proceeding is as follows:

Item	Amount
Base Case Maintenance Expenses:	
Purchased power	$2,116,148
Purchased water & sewer	2,714,606
Maintenance and repair	3,416,406
Maintenance testing	535,320
Meter reading	274,280
Chemicals	1,086,757
Transportation	531,561
Operating expenses charged to plant	(860,353)
Outside services – other	230,721
Total maintenance expenses	$10,045,445
General Expenses:	
Salaries and wages	$7,123,539
Office supplies and other office expense	582,718
Rate case expense	567,979
Pension and other benefits	1,722,821
Rent	389,645
Insurance	1,481,296
Office utilities	322,665
Miscellaneous	5,109,074
Total general expenses	$17,299,737

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 40–41

Base Case Rate Case Expense

The evidence for these findings of fact is found in the Affidavit of Company witness Schellinger, the Stipulation, and Updated Public Staff Settlement Exhibit 1.

In his February 2, 2023 Affidavit, Company witness Schellinger provided an amount of $735,606 for the actual costs incurred to date and the estimated expense to be incurred in conjunction with this proceeding. Witness Schellinger requested that the Commission approve total rate case costs of $1,690,844 to be amortized over four years. He stated that the $1,690,844 includes $955,238 for unamortized rate case expense from prior proceedings plus $735,606 related to this proceeding. Witness Schellinger requested that the annual amortization expense for rate case costs for this proceeding total $422,711 ($1,690,844 amortized over four years).

The Public Staff stated that it has reviewed the invoices and other supporting documents along with the rate case expense spreadsheet provided by CWSNC and concludes that the types of rate case expense in this rate case match the nature of the expense in prior rate cases. Of the total $735,606 rate case expense provided by the Company, the Public Staff reviewed and verified that $661,162 expense in the current proceeding were actual expenses incurred and $74,444 were estimated. The Public Staff stated that it found both amounts to be appropriate and reasonable to include in this rate case, with the condition that the Company will refund any over-estimated rate case expenses to rate payers through a regulatory liability account.

Therefore, the Commission concludes that it is appropriate and reasonable to amortize the sum of the total rate case costs of $735,606 for the current proceeding and the unamortized rate case cost balance of $955,238 from the prior rate cases over four years, resulting in an annual level of rate case expense of $422,711 plus $145,269 in miscellaneous regulatory matters for a total annual rate case expense of $567,979 to be recovered in this proceeding. The Commission also finds that based on the Stipulation and Public Staff Settlement Exhibit 1, witness Schellinger's Affidavit, and Updated Public Staff Settlement Exhibit 1, the Company and the Public Staff are in agreement concerning the rate case expense discussed above, to be amortized and recovered over a four-year period, with no return or carrying costs.

Based upon the foregoing, the Commission concludes that the appropriate level of rate case expense to be recovered by CWSNC over a four-year period beginning with the effective date of this Order is $1,690,844. Further, consistent with the Stipulation, once these rate case expenses have been fully amortized at the end of the four-year period, CWSNC shall establish a regulatory liability account, with no carrying costs, to record recovery associated with rate case expense over the amortization amount after Year 4.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 42

Base Case Depreciation and Amortization Expense

The evidence supporting this finding of fact is found in the verified Application and the accompanying NCUC Form W-1, the Public Staff Joint Testimony of Brown and Feasel filed on October 26, 2022, the testimony of Company witness Schellinger, the Company's September 19, 2022 update, the Corrected and Settlement Testimony of Public Staff witnesses Brown, Zhang, and Junis, and Updated Public Staff Settlement Exhibit 1. The following table summarizes the differences between the Company's level of Base Case depreciation and amortization expenses from its Application (as updated in its September 19, 2022 filing), the amounts recommended by the Public Staff, and the amounts reflected in the Stipulation:

Item	Company per Application (Updated)	Amount per Public Staff	Amount per Stipulation
Depreciation expense	$8,175,589	$6,991,850	$7,387,036
Amortization exp. – CIAC	(1,567,364)	(1,567,364)	(1,567,364)
Amortization exp. – PAA	(75,087)	(78,397)	(78,877)
Amortization of investment tax credit (ITC)	(519)	(519)	(519)
Total	$6,532,619	$5,345,570	$5,740,276

With respect to CWSNC's depreciation expense, in light of the agreement reached in the Stipulation and recommended by the Public Staff in its testimony and reflected in the Updated Public Staff Settlement Exhibit 1, the Commission concludes that the adjustments to depreciation expense included in the Stipulation, which are not contested, are appropriate adjustments to be made to Base Case depreciation and amortization expense in this proceeding.

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

Item	Amount
Depreciation expense	$7,387,036
Amortization expense – CIAC	(1,567,364)
Amortization expense – PAA	(78,877)
Amortization of ITC	(519)
Total	$5,740,276

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 43

Base Case Franchise, Property, Payroll and Other Taxes

The evidence supporting this finding of fact is found in the verified Application and the accompanying NCUC Form W-1, the Public Staff Joint Testimony of Brown and Feasel filed on October 26, 2022, the testimony of Company witness Schellinger, the Company's September 19, 2022 update, the Corrected and Settlement Testimony of Public Staff witnesses Brown, Zhang, and Junis, and Updated Public Staff Settlement Exhibit 1. The following table summarizes the differences between the Company's level of Base Case franchise, property, payroll, and other taxes from its Application (as updated September 19, 2022), the amounts recommended by the Public Staff, and the amounts reflected in the Stipulation:

Item	Company Application (Updated)	Amount per Public Staff	Amount per Stipulation
Franchise and other taxes	$101,985	$101,985	$101,985
Property taxes	259,098	259,098	259,098
Payroll taxes	560,025	548,104	548,104
Total	$921,108	$909,187	$909,187

Based on the Stipulation and amounts included in Updated Public Staff Settlement Exhibit 1, the Commission concludes that the amounts reflected in the Stipulation for Base Case franchise and other taxes and payroll taxes, are appropriate adjustments to be made to Base Case operating revenue deductions in this proceeding.

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

Item	Amount
Franchise and other taxes	$101,985
Property tax	259,098
Payroll taxes	548,104
Total	$909,187

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 44–48

Base Case Regulatory Fee and Income Taxes

The evidence supporting these findings of fact is found in the verified Application and the accompanying NCUC Form W-1, the Public Staff Joint Testimony of Brown and Feasel filed on October 26, 2022, the testimony of Company witness Schellinger, the Company's September 19, 2022 update, the Corrected and Settlement Testimony of Public Staff witnesses Brown, Zhang, and Junis, and Updated Public Staff Settlement Exhibit 1. The following table summarizes the differences between the Company's level of Base Case regulatory fee and income taxes from its Application (as updated September 19, 2022), the amounts recommended by the Public Staff, and the Stipulation, as adjusted for the Commission-approved ROE of 9.80%:

Item	Company per Application	Amount per Public Staff	Amount per Stipulation at 9.80% ROE
Regulatory fee	$64,562	$64,115	$65,841
State income taxes	$261,035	228,579	236,538
Federal income taxes	$2,137,873	1,872,062	1,937,248
Deferred income taxes	0	(120,962)	(120,962)
Total	$2,463,469	$2,043,794	$2,118,665

Base Case Regulatory Fee

Based on conclusions reached elsewhere in this Order regarding the levels of revenues, the Commission concludes that the appropriate level of Base Case regulatory fee for use in this proceeding is $65,841.

Base Case State Income Taxes

Based on the conclusions reached elsewhere in the Order regarding the levels of revenues and expenses, the Commission concludes that the appropriate level of Base Case state income taxes for use in this proceeding, based on the current state corporate income tax rate of 2.50%, is $236,538.

Base Case Federal Income Taxes

Based on the conclusions reached elsewhere in the Order regarding the levels of revenues and expenses, the Commission concludes that the appropriate level of Base Case federal income taxes for use in this proceeding, based on the current federal corporate income tax rate of 21.00%, is $1,937,248.

Based on the conclusions reached elsewhere in the Order regarding the levels of revenues and expenses, the Commission concludes that the appropriate level of Base Case deferred income taxes for use in this proceeding is ($120,962) which reflects the amortization of the federal protected EDIT and state EDIT.

Based on the foregoing, the Commission concludes that the appropriate level of Base Case regulatory fee and income taxes for use in this proceeding is as follows:

Item	Amount
Regulatory fee	$65,841
State income taxes	236,538
Federal income taxes	1,937,248
Deferred income taxes	(120,962)
Total	$2,118,665

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 49

Base Case Revenue Requirement

The evidence supporting this finding of fact is found in the verified Application and the accompanying NCUC Form W-1, the testimony of Company witnesses Denton, Konsul, and Schellinger, the Company’s September 19, 2022 update, the testimony of Public Staff witnesses Brown, Feasel, Lucas, Hinton, Junis, Sun, and Zhang, Updated Public Staff Settlement Exhibit 1, and the Stipulation, with amounts adjusted for the Commission’s authorized 9.80% ROE.

The Commission concludes that CWSNC's Base Case revenue requirements should be changed by amounts which, after all pro forma adjustments, will produce the following increases in service revenues:

Item	Amount
CWSNC Uniform Water	$1,069,807
CWSNC Uniform Sewer	$1,365,102
BF/FH/TC Water	$148,168
BF/FH Sewer	$188,745
Total	$2,771,822

These Base Case increases will allow CWSNC the opportunity to earn a 7.22% overall rate of return, which the Commission has found to be reasonable upon consideration of the findings in this Order.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 50

WSIP Rate Years 1, 2, and 3 Rate Base

The evidence supporting this finding of fact is found in the verified Application and the accompanying NCUC Form W-1, the testimony of Company witnesses Denton, Konsul, and Schellinger, the Company's September 19, 2022 update, the testimony of Public Staff witnesses Brown, Feasel, Lucas, Hinton, Junis, Sun, and Zhang, Updated Public Staff Settlement Exhibit 1, and the Stipulation.

On the basis of the Stipulation and the evidence included in Updated Public Staff Settlement Exhibit 1, the Company and the Public Staff are in agreement concerning all components of WSIP Rate Years 1, 2, and 3 rate base. The Commission finds that the amounts of WSIP Rate Years 1, 2, and 3 rate base reflected in the Stipulation and Updated Public Staff Settlement Exhibit 1, as adjusted for rate case expenses and 9.80% return on equity are appropriate for use in this proceeding. Further, the Commission finds that it is appropriate to adjust cash working capital to reflect the impact of the Company's correction filing on March 24, 2023, related to Miscellaneous Expense embedded in the Stipulation. Therefore, the Commission concludes that the appropriate level of WSIP Rate Years 1, 2, and 3 rate base for combined operations for use in this proceeding is as follows:

Item	Rate Year 1	Rate Year 2	Rate Year 3
Plant in service	$300,979,823	$322,741,820	$346,118,040
Accumulated depreciation	(79,392,304)	(85,155,971)	(90,773,310)
Net plant in service	221,587,519	237,585,849	255,344,730
Cash working capital	3,172,171	3,268,302	3,302,435
Contributions in aid of construction	(35,253,609)	(33,686,245)	(32,118,881)
Advances in aid of construction	(32,940)	(32,940)	(32,940)
ADIT	(6,127,991)	(6,056,953)	(5,962,786)
Customer deposits	(370,590)	(370,590)	(370,590)
Inventory	153,531	153,531	153,531
Gain on sale and flow back taxes	(289,628)	(289,628)	(289,628)
Plant acquisition adjustment	(407,522)	(328,180)	(248,928)
Excess book value	0	0	0
Cost-free capital	(261,499)	(261,499)	(261,499)
Average tax accruals	(131,625)	(132,919)	(133,564)
Regulatory liability for excess deferred taxes	(4,946,952)	(4,857,207)	(4,767,461)
Deferred charges	2,090,540	1,866,064	1,540,565
Pro forma plant	0	0	0
Original cost rate base	$179,181,406	$196,857,585	$216,154,938

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 51–55

WSIP Rate Years 1, 2, and 3 Maintenance and General Expense

The evidence supporting this finding of fact is found in the verified Application and the accompanying NCUC Form W-1, the testimony of Company witness Schellinger, the Company's September 19, 2022 update, the testimony of Public Staff witnesses Bhatta, Brown, Franklin, and Houser, Updated Public Staff Settlement Exhibit 1, the Stipulation, and the Company's March 24, 2023 filing (Amended).

On the basis of the Stipulation and the evidence included in Updated Public Staff Settlement Exhibit 1, the Company and the Public Staff are in agreement concerning all components of WSIP Rate Years 1, 2, and 3 maintenance and general expense. Further, Miscellaneous expense has been reduced to correct an error embedded in the Stipulation as discovered by the Company and subsequently reviewed and agreed to by the Public Staff as communicated to the Commission in CWSNC's March 24, 2023 filing (Amended). Specifically, miscellaneous expense was reduced on a combined operations basis as follows for Rate Year 1, Rate Year 2, and Rate Year 3, respectively: $25,662, $26,278, and $26,909. Therefore, the Commission concludes that the amounts of WSIP Rate Years 1, 2, and 3 maintenance and general expense reflected in the Stipulation and Updated Public Staff Settlement Exhibit 1, as updated for rate case expenses and the Company's March 24, 2023 filing (Amended), and reflecting the Commission's decision on ROE of 9.80% are appropriate for use in this proceeding. Therefore, the Commission concludes that the appropriate level of WSIP Rate Years 1, 2, and 3 maintenance and general expense for combined operations for use in this proceeding is as follows:

Item	Rate Year 1	Rate Year 2	Rate Year 3
Maintenance Expenses:			
Purchased power	$2,203,993	$2,272,142	$2,342,930
Purchased water / sewer	2,714,606	2,714,606	2,714,606
Maintenance and repair	3,471,542	3,669,103	3,354,917
Maintenance testing	553,521	566,806	580,409
Meter reading	283,605	290,412	297,381
Chemicals	1,130,584	1,165,248	1,200,313
Transportation	531,561	531,561	531,561
Operating expenses charged to plant	(886,164)	(912,748)	(940,131)
Outside services - other	238,566	244,291	250,154
Total maintenance expenses	$10,241,814	$10,541,420	$10,332,141
General Expenses:			
Salaries and wages	$7,337,245	$7,557,362	$7,784,083
Office supplies and other office expense	602,530	616,991	631,799
Rate case expense	567,979	567,980	567,980
Pension and other benefits	1,774,505	1,827,741	1,882,573
Rent	402,893	412,562	422,464
Insurance	1,548,586	1,585,751	1,623,809
Office utilities	333,636	341,643	349,842
Miscellaneous	5,282,783	5,409,569	5,539,399
Total general expenses	$17,850,157	$18,319,599	$18,801,948

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 56–58

WSIP Rate Years 1, 2, and 3 Depreciation and Amortization Expense

The evidence supporting this finding of fact is found in the verified Application and the accompanying NCUC Form W-1, the testimony of Company witnesses Schellinger, the Company's September 19, 2022 update, the testimony of Public Staff witnesses Brown, Zhang, and Junis, Updated Public Staff Settlement Exhibit 1, and the Stipulation.

On the basis of the Stipulation and the evidence included in Updated Public Staff Settlement Exhibit 1, the Company and the Public Staff are in agreement concerning all components of WSIP Rate Years 1, 2, and 3 depreciation and amortization expense. Therefore, the Commission concludes that the amounts of WSIP Rate Years 1, 2, and 3 depreciation and amortization expense reflected in the Stipulation and Updated Public Staff

Settlement Exhibit 1 are appropriate for use in this proceeding. Therefore, the Commission concludes that the appropriate level of WSIP Rate Years 1, 2, and 3 depreciation and amortization expense for combined operations for use in this proceeding is as follows:

Item	Rate Year 1	Rate Year 2	Rate Year 3
Depreciation expense	$8,205,618	$8,738,100	$9,334,774
Amortization of CIAC	(1,567,364)	(1,567,364)	(1,567,364)
Amortization of PAA	(80,739)	(79,342)	(79,252)
Amortization of ITC	(519)	(519)	(519)

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 59–61

WSIP Rate Years 1, 2, and 3 Franchise, Property, Payroll and Other Taxes

The evidence supporting this finding of fact is found in the verified Application and the accompanying NCUC Form W-1, the testimony of Company witness Schellinger, the Company's September 19, 2022 update, the testimony of Public Staff witnesses Brown, Zhang, and Junis, Updated Public Staff Settlement Exhibit 1, and the Stipulation.

On the basis of the Stipulation and the evidence included in Updated Public Staff Settlement Exhibit 1, the Company and the Public Staff are in agreement concerning all components of WSIP Rate Years 1, 2, and 3 franchise, property, payroll, and other tax expense. Therefore, the Commission finds that the amounts of WSIP Rate Years 1, 2, and 3 franchise, property, payroll, and other tax expense reflected in the Stipulation and Updated Public Staff Settlement Exhibit 1 are appropriate for use in this proceeding. Therefore, the Commission concludes that the appropriate level of WSIP Rate Years 1, 2, and 3 franchise, property, payroll, and other tax expense for combined operations for use in this proceeding is as follows:

Item	Rate Year 1	Rate Year 2	Rate Year 3
Franchise and other taxes	$101,985	$101,985	$101,985
Property taxes	259,098	259,098	259,098
Payroll taxes	564,547	581,484	598,928

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 62–66

WSIP Rate Years 1, 2, and 3 Regulatory Fee and Income Taxes

The evidence supporting these findings of fact is found in the testimony of Public Staff witnesses Brown, Zhang, and Junis, the testimony of Company witness Schellinger, the Company's September 19, 2022 update, the Stipulation, and Updated Public Staff Settlement Exhibit 1.

On the basis of the Stipulation and the evidence included in Updated Public Staff Settlement Exhibit 1, the Company and the Public Staff are in agreement concerning all components of the regulatory fee and income taxes for WSIP Rate Years 1, 2, and 3. Therefore, the Commission concludes that the appropriate level of regulatory fee and income taxes for use in WSIP Rate Years 1, 2, and 3, using the rate of return on equity of 9.80%, is as follows:

Item	Rate Year 1	Rate Year 2	Rate Year 3
Regulatory fee	$71,462	$75,465	$79,056
Deferred income taxes	(120,962)	(120,962)	(120,962)
State income taxes	281,043	309,155	339,845
Federal income taxes	2,301,739	2,531,976	2,783,332
Total	$2,533,282	$2,795,634	$3,081,271

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 67–69

WSIP Rate Years 1, 2, and 3 Revenue Requirements

WSIP Rate Years 1, 2, and 3 Operating Revenues

The evidence supporting these findings of fact is found in the testimony of Public Staff witnesses Darden, Brown, Feasel, Hinton, Junis, Sun, and Zhang, the testimony of Company witnesses Schellinger, DeStefano, and Denton, the Company's September 19, 2022 update, the Stipulation, and Updated Public Staff Settlement Exhibit 1. The following table summarizes the WSIP Rate Years 1, 2, and 3 operating revenue amounts recommended by the Public Staff, and the amounts reflected in the Stipulation, Updated Public Staff Settlement Exhibit 1, updated rate case expenses, the Company's March 24, 2023 filing (Amended), and reflecting the Commission-approved ROE of 9.80%, prior to the application of the 5% statutory cap on total combined service revenues in Rate Years 2 and 3:

Item	Base Year	Rate Year 1 Adjustments	Rate Year 1 Amount
Operating Revenues:			
Service revenues	$47,067,384	$4,037,207	$51,104,591
Miscellaneous revenues	346,053	11,111	357,164
Uncollectible accounts	(383,622)	(33,360)	(416,982)
Total operating revenues	$47,029,815	$4,014,958	$51,044,773

Item	Rate Year 1	Rate Year 2 Adjustments	Rate Year 2 Amount
Operating Revenues:			
Service revenues	$51,104,591	$2,877,750	$53,982,341
Miscellaneous revenues	357,164	7,951	365,115
Uncollectible accounts	(416,982)	(27,268)	(444,250)
Total operating revenues	$51,044,773	$2,858,433	$53,903,206

Item	Rate Year 2	Rate Year 3 Adjustments	Rate Year 3 Amount
Operating Revenues:			
Service revenues	$53,982,341	$2,579,337	$56,561,678
Miscellaneous revenues	365,115	7,003	372,118
Uncollectible accounts	(444,250)	(20,149)	(464,399)
Total operating revenues	$53,903,206	$2,566,190	$56,469,397

Based on the Stipulation and the evidence presented in Updated Public Staff Settlement Exhibit 1, the Company's March 24, 2023 filing (Amended), and as adjusted for the Commission-approved ROE of 9.80%, the following adjustments should be made to WSIP Rate Years 1, 2, and 3 operating revenues. The first column entitled "RY 1 Adjustments" in the table below reflects the increase or decrease between the levels of service revenues, miscellaneous revenues, uncollectibles, and total operating revenues from the Base Case to Rate Year 1. Each subsequent column of the table shows the increases or decreases from the previous Rate Year.

Item	RY 1 Adjustments from the Base Case	RY 2 Adjustments from RY 1	RY 3 Adjustments from RY 2
Reflect pro forma level of service revenues	$4,037,207	$2,877,750	$2,579,337
Adjustment to Miscellaneous Revenues	11,111	7,951	7,003
Adjustment to uncollectible accounts	(33,360)	(27,268)	(20,149)
Total Operating Revenues	$4,014,958	$2,858,433	$2,566,190

The Commission finds that the adjustments listed above are appropriate adjustments to be made to WSIP Rate Years 1, 2, and 3 operating revenues in this proceeding prior to the application of the 5% statutory cap.

Based on the foregoing, the Commission concludes that the appropriate level of WSIP Rate Years 1, 2, and 3 operating revenues for combined operations for use in this proceeding, prior to the application of the 5% statutory cap, is as follows:

Item	Rate Year 1	Rate Year 2	Rate Year 3
Service revenues	$51,104,591	$53,982,341	$56,561,678
Miscellaneous revenues	357,164	365,115	372,118
Uncollectible accounts	(416,982)	(444,250)	(464,399)
Total operating revenues	$51,044,773	$53,903,206	$56,469,397

With respect to the application of the 5% statutory cap, as previously discussed herein, for Rate Year 2, it is appropriate for CWSNC's total combined service revenue requirement amount of ($322,520) that would exceed the 5% cap for Rate Year 2 to be deducted from the BF/FH Sewer Rate Division annual revenue increase and the total annual service revenue requirement amount of ($218,866) over the 5% cap for Rate Year 3 to be deducted entirely from the CWSNC Uniform Sewer Rate Division annual revenue increase. Final rates to be charged to CWSNC's customers for Rate Years 2 and 3 for the BF/FH Sewer Rate Division and CWSNC Uniform Sewer Rate Division should reflect the aforementioned adjustments to service revenues.

Base Case and WSIP Rate Years 1, 2, and 3 Revenue Requirements

The following schedules summarize the gross revenue and overall rate of return that the Company should have the reasonable opportunity to achieve in WSIP Rate Years 1, 2, and 3, based on the increases in revenues reflected in the Stipulation and approved in this Order for each rate division. These schedules, illustrating the Company's gross revenue requirements, incorporating the adjustments reflected in the Stipulation and the Company's March 24, 2023 filing (Amended), and reflecting a rate of return on equity of 9.80%, are found to be appropriate by the Commission in this Order.

SCHEDULE I

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Net Operating Income for a Return
For the Twelve Months Ended March 31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
CWSNC Combined Operations

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Service revenues	$47,067,384	$51,104,591	$53,982,341	$56,561,678
Miscellaneous revenues	346,053	357,164	365,115	372,118
Uncollectible accounts	(383,622)	(416,982)	(444,250)	(464,399)
Total operating revenues	47,029,815	51,044,773	53,903,206	56,469,397
Maintenance Expenses:				
Purchased power	2,116,148	2,203,993	2,272,142	2,342,930
Purchased water	2,714,606	2,714,606	2,714,606	2,714,606
Maintenance and repair	3,416,406	3,471,542	3,669,103	3,354,917
Maintenance testing	535,320	553,521	566,806	580,409
Meter reading	274,280	283,605	290,412	297,381
Chemicals	1,086,757	1,130,584	1,165,248	1,200,313
Transportation	531,561	531,561	531,561	531,561
Operating expenses charged to plant	(860,353)	(886,164)	(912,748)	(940,131)
Outside services - other	230,721	238,566	244,291	250,154
Total maintenance expenses	10,045,445	10,241,814	10,541,420	10,332,141
General Expenses:				
Salaries and wages	7,123,539	7,337,245	7,557,362	7,784,083
Office supplies and other office expense	582,718	602,530	616,991	631,799
Rate case expense	567,979	567,979	567,980	567,980
Pension and other benefits	1,722,821	1,774,505	1,827,741	1,882,573
Rent	389,645	402,893	412,562	422,464
Insurance	1,481,296	1,548,586	1,585,751	1,623,809
Office utilities	322,665	333,636	341,643	349,842
Miscellaneous	5,109,074	5,282,783	5,409,569	5,539,399
Total general expenses	17,299,737	17,850,157	18,319,599	18,801,948

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Depreciation and Taxes:				
Depreciation expense	$7,387,036	$8,205,618	$8,738,100	$9,334,774
Amortization of CIAC	(1,567,364)	(1,567,364)	(1,567,364)	(1,567,364)
Amortization of PAA	(78,877)	(80,739)	(79,342)	(79,252)
Amortization of ITC	(519)	(519)	(519)	(519)
Franchise and other taxes	101,985	101,985	101,985	101,985
Property taxes	259,098	259,098	259,098	259,098
Payroll taxes	548,104	564,547	581,484	598,928
Regulatory fee	65,841	71,462	75,465	79,056
Deferred Income Tax	(120,962)	(120,962)	(120,962)	(120,962)
State income tax	236,538	281,043	309,155	339,845
Federal income tax	1,937,248	2,301,739	2,531,976	2,783,332
Total depreciation and taxes	8,768,128	10,015,908	10,829,076	11,728,921
Total operating revenue deductions	36,113,310	38,107,879	39,690,094	40,863,010
Net operating income for a return	$10,916,505	$12,936,897	$14,213,118	$15,606,390

SCHEDULE II

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Original Cost Rate Base
For the Twelve Months Ended March 31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
CWSNC Combined Operations

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Plant in service	268,614,395	300,979,823	322,741,820	346,118,040
Accumulated depreciation	(72,034,354)	(79,392,304)	(85,155,971)	(90,773,310)
Net plant in service	196,580,041	221,587,519	237,585,849	255,344,730
Cash working capital	3,078,822	3,172,171	3,268,302	3,302,435
Contributions in aid of construction	(37,735,269)	(35,253,609)	(33,686,245)	(32,118,881)
Advances in aid of construction	(32,940)	(32,940)	(32,940)	(32,940)
Accumulated deferred income taxes	(6,330,227)	(6,127,991)	(6,056,953)	(5,962,786)
Customer deposits	(370,590)	(370,590)	(370,590)	(370,590)
Inventory	153,531	153,531	153,531	153,531
Gain on sale and flow back taxes	(289,628)	(289,628)	(289,628)	(289,628)
Plant acquisition adjustment	(535,359)	(407,522)	(328,180)	(248,928)
Excess book value	0	0	0	0
Cost-free capital	(261,499)	(261,499)	(261,499)	(261,499)
Average tax accruals	(141,946)	(131,625)	(132,919)	(133,564)
Regulatory liability for excess deferred taxes	(4,991,825)	(4,946,952)	(4,857,207)	(4,767,461)
Deferred charges	2,075,024	2,090,540	1,866,064	1,540,565
Pro forma plant	0	0	0	0
Original cost rate base	$151,198,136	$179,181,406	$196,857,585	$216,154,983

Rates of return:

Present	5.82%
Approved	7.22%

SCHEDULE III

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Statement of Capitalization and Related Costs
For the Twelve Months Ended March 31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
CWSNC Combined Operations

	Capitalization Ratio	Original Cost Rate Base	Embedded Cost	Net Operating Income
Present Rates:				
Debt	50.00%	$75,599,068	4.64%	$3,507,797
Equity	50.00%	75,599,068	6.99%	5,288,463
Total	100.00%	$151,198,136		$8,796,260
Base Case Revenue Requirement:				
Debt	50.00%	$75,599,068	4.64%	$3,507,797
Equity	50.00%	75,599,068	9.80%	7,408,708
Total	100.00%	$151,198,136		$10,916,505
Rate Year 1 Revenue Requirement:				
Debt	50.00%	$89,590,703	4.64%	$4,157,009
Equity	50.00%	89,590,703	9.80%	8,779,889
Total	100.00%	$179,181,406		$12,936,897
Rate Year 2 Revenue Requirement:				
Debt	50.00%	$98,428,792	4.64%	$4,567,096
Equity	50.00%	98,428,793	9.80%	9,646,022
Total	100.00%	$196,857,585		$14,213,118
Rate Year 3 Revenue Requirement:				
Debt	50.00%	$108,077,492	4.64%	$5,014,796
Equity	50.00%	108,077,491	9.80%	10,591,594
Total	100.00%	$216,154,983		$15,606,390

SCHEDULE I-A

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Net Operating Income for a Return
For the Twelve Months Ended March 31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
CWSNC Uniform Water Operations

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Operating Revenues:				
Service revenues	$23,369,642	$24,969,141	$26,351,221	$26,892,629
Miscellaneous revenues	175,046	179,582	183,502	185,038
Uncollectible accounts	(175,272)	(187,269)	(197,634)	(201,695)
Total operating revenues	23,369,416	24,961,455	26,337,089	26,875,972
Maintenance Expenses:				
Purchased power	1,071,097	1,118,810	1,156,431	1,195,554
Purchased water	1,665,457	1,665,457	1,665,457	1,665,457
Maintenance and repair	1,195,626	1,194,919	1,391,835	1,271,432
Maintenance testing	195,388	202,031	206,880	211,845
Meter reading	222,612	230,181	235,706	241,363
Chemicals	336,625	351,620	363,444	375,739
Transportation	287,092	287,092	287,092	287,092
Operating expenses charged to plant	(455,145)	(468,799)	(482,863)	(497,349)
Outside services - other	113,158	117,005	119,813	122,689
Total maintenance expenses	4,631,909	4,698,317	4,943,795	4,873,821
General Expenses:				
Salaries and wages	3,872,044	3,988,205	4,107,851	4,231,087
Office supplies and other office expense	319,242	330,097	338,019	346,131
Rate case expense	307,232	307,231	307,232	307,232
Pension and other benefits	936,450	964,543	993,480	1,023,284
Rent	211,794	218,995	224,251	229,633
Insurance	805,169	841,743	861,944	882,631
Office utilities	180,673	186,816	191,299	195,891
Miscellaneous	2,774,737	2,869,078	2,937,936	3,008,446
Total general expenses	9,407,341	9,706,709	9,962,012	10,224,335

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Depreciation and Taxes:				
Depreciation expense	$3,581,487	$3,949,676	$4,173,576	$4,311,568
Amortization of CIAC	(733,560)	(733,560)	(733,560)	(733,560)
Amortization of PAA	(121,579)	(122,002)	(120,313)	(119,891)
Amortization of ITC	(265)	(265)	(265)	(265)
Franchise and other taxes	56,486	56,486	56,486	56,486
Property taxes	135,969	135,969	135,969	135,969
Payroll taxes	297,925	306,863	316,069	325,551
Regulatory fee	32,717	34,946	36,872	37,626
Deferred Income Tax	(64,882)	(64,882)	(64,882)	(64,882)
State income tax	110,836	126,358	138,048	141,673
Federal income tax	907,746	1,034,875	1,130,616	1,160,305
Total depreciation and taxes	4,202,880	4,724,464	5,068,616	5,250,581
Total operating revenue deductions	18,242,130	19,129,489	19,974,423	20,348,737
Net operating income for a return	$5,127,286	$5,831,968	$6,362,669	$6,527,237

SCHEDULE II-A

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Original Cost Rate Base
For the Twelve Months Ended March 31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
CWSNC Uniform Water Operations

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Plant in service	$129,344,696	$141,496,775	$151,401,401	$156,493,683
Accumulated depreciation	(36,574,610)	(40,664,413)	(44,167,703)	(47,994,499)
Net plant in service	92,770,087	100,832,362	107,233,698	108,499,185
Cash working capital	1,546,724	1,592,446	1,655,044	1,679,087
Contributions in aid of construction	(16,560,422)	(15,398,953)	(14,665,393)	(13,931,833)
Advances in aid of construction	(20,631)	(20,631)	(20,631)	(20,631)
Accumulated deferred income taxes	(2,809,176)	(2,617,023)	(2,597,680)	(2,359,836)
Customer deposits	(208,631)	(208,631)	(208,631)	(208,631)
Inventory	91,908	91,908	91,908	91,908
Gain on sale and flow back taxes	(196,947)	(196,947)	(196,947)	(196,947)
Plant acquisition adjustment	(1,722,935)	(1,529,766)	(1,409,453)	(1,289,562)
Excess book value	0	0	0	0
Cost-free capital	(121,791)	(121,791)	(121,791)	(121,791)
Average tax accruals	(74,230)	(74,685)	(75,289)	(75,606)
Regulatory liability for excess deferred taxes	(2,667,246)	(2,643,418)	(2,595,763)	(2,548,107)
Deferred charges	988,322	1,070,304	1,036,537	887,711
Pro forma plant	0	0	0	
Original cost rate base	$71,015,031	$80,775,176	$88,125,609	$90,404,947

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SCHEDULE III-A

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Statement of Capitalization and Related Costs
For the Twelve Months Ended March 31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
CWSNC Uniform Water Operations

	Capitalization Ratio	Original Cost Rate Base	Embedded Cost	Net Operating Income
Present Rates:				
Debt	50.00%	$35,507,516	4.64%	$1,647,549
Equity	50.00%	35,507,515	7.49%	2,660,708
Total	100.00%	$71,015,031		$4,308,257
Base Case Revenue Requirement:				
Debt	50.00%	$35,507,516	4.64%	$1,647,549
Equity	50.00%	35,507,515	9.80%	3,479,737
Total	100.00%	$71,015,031		$5,127,286
Rate Year 1 Revenue Requirement:				
Debt	50.00%	$40,387,588	4.64%	$1,873,984
Equity	50.00%	40,387,588	9.80%	3,957,984
Total	100.00%	$80,775,176		$5,831,968
Rate Year 2 Revenue Requirement:				
Debt	50.00%	$44,062,805	4.64%	$2,044,514
Equity	50.00%	44,062,804	9.80%	4,318,155
Total	100.00%	$88,125,609		$6,362,669
Rate Year 3 Revenue Requirement:				
Debt	50.00%	$45,202,474	4.64%	$2,097,395
Equity	50.00%	45,202,473	9.80%	4,429,842
Total	100.00%	$90,404,947		$6,527,237

SCHEDULE I-B

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Net Operating Income for a Return
For the Twelve Months Ended March 31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
CWSNC Uniform Sewer Operations

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Operating Revenues:				
Service revenues	$18,837,867	$20,786,591	$21,379,934	$23,290,207
Miscellaneous revenues	134,977	140,199	141,788	146,907
Uncollectible accounts	(141,284	(155,899)	(160,350)	(174,677)
Total operating revenues	18,831,560	20,770,890	21,361,373	23,262,437
Maintenance Expenses:				
Purchased power	825,016	856,735	880,894	905,914
Purchased sewer	1,048,540	1,048,540	1,048,540	1,048,540
Maintenance and repair	1,805,769	1,827,764	1,819,104	1,615,985
Maintenance testing	305,558	315,947	323,529	331,294
Meter reading	3,024	3,127	3,202	3,279
Chemicals	601,228	624,343	641,949	660,182
Transportation	171,280	171,280	171,280	171,280
Operating expenses charged to plant	(271,543)	(279,689)	(288,080)	(296,722)
Outside services - other	67,510	69,805	71,480	73,196
Total maintenance expenses	4,556,383	4,637,852	4,671,898	4,512,948
General Expenses:				
Salaries and wages	2,310,084	2,379,387	2,450,768	2,524,291
Office supplies and other office expense	190,462	196,938	201,664	206,504
Rate case expense	183,298	183,298	183,298	183,298
Pension and other benefits	558,692	575,453	592,716	610,498
Rent	126,358	130,654	133,790	137,001
Insurance	480,368	502,188	514,242	526,583
Office utilities	106,857	110,490	113,142	115,857
Miscellaneous	1,675,307	1,732,267	1,773,842	1,816,414
Total general expenses	5,631,426	5,810,674	5,963,462	6,120,446

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Depreciation and Taxes:				
Depreciation expense	$3,178,919	$3,557,702	$3,692,147	$4,133,288
Amortization of CIAC	(625,462)	(625,462)	(625,462)	(625,462)
Amortization of PAA	(17,621)	(17,244)	(17,182)	(17,056)
Amortization of ITC	(254)	(254)	(254)	(254)
Franchise and other taxes	48,172	48,172	48,172	48,172
Property taxes	105,629	105,629	105,629	105,629
Payroll taxes	177,744	183,076	188,569	194,226
Regulatory fee	26,364	29,079	29,906	32,567
Deferred Income Tax	(38,709)	(38,709)	(38,709)	(38,709)
State income tax	105,004	128,662	133,476	160,102
Federal income tax	859,985	1,053,740	1,093,172	1,311,239
Total depreciation and taxes	3,819,771	4,424,391	4,609,465	5,303,742
Total operating revenue deductions	14,007,580	14,872,917	15,244,825	15,937,136
Net operating income for a return	$4,823,981	$5,897,975	$6,116,550	$7,325,303

SCHEDULE II-B

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Original Cost Rate Base
For the Twelve Months Ended March—31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
CWSNC Uniform Sewer Operations

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Plant in service	$115,426,078	$131,854,547	$136,923,554	$154,238,372
Accumulated depreciation	(29,504,301)	(32,006,400)	(34,822,102)	(35,729,071)
Net plant in service	85,921,777	99,848,147	102,101,451	118,509,301
Cash working capital	1,142,409	1,174,998	1,198,353	1,198,107
Contributions in aid of construction	(16,455,816)	(15,465,500)	(14,840,038)	(14,214,576)
Advances in aid of construction	(12,309)	(12,309)	(12,309)	(12,309)
Accumulated deferred income taxes	(3,115,198)	(3,091,024)	(2,883,696)	(3,104,721)
Customer deposits	(124,471)	(124,471)	(124,471)	(124,471)
Inventory	54,833	54,833	54,833	54,833
Gain on sale and flow back taxes	(92,681)	(92,681)	(92,681)	(92,681)
Plant acquisition adjustment	393,121	420,424	437,606	454,662
Excess book value	0	0	0	0
Cost-free capital	(139,708)	(139,708)	(139,708)	(139,708)
Average tax accruals	(57,707)	(58,201)	(58,817)	(59,174)
Regulatory liability for excess deferred taxes	(1,591,295)	(1,577,079)	(1,548,647)	(1,520,216)
Deferred charges	891,194	751,987	624,881	509,438
Pro forma plant				
Original cost rate base	$66,814,149	$81,689,417	$84,716,757	$101,458,487

Rates of Return:

Present	5.66%
Approved	7.22%

SCHEDULE III-B

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Statement of Capitalization and Related Costs
For the Twelve Months Ended March 31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
CWSNC Uniform Sewer Operations

	Capitalization Ratio	Original Cost Rate Base	Embedded Cost	Net Operating Income
Present Rates:				
Debt	50.00%	$33,407,075	4.64%	$1,550,088
Equity	50.00%	33,407,074	6.67%	2,228,955
Total	100.00%	$66,814,149		$3,779,043
Base Case Revenue Requirement:				
Debt	50.00%	$33,407,075	4.64%	$1,550,088
Equity	50.00%	33,407,074	9.80%	3,273,893
Total	100.00%	$66,814,149		$4,823,981
Rate Year 1 Revenue Requirement:				
Debt	50.00%	$40,844,708	4.64%	$1,895,194
Equity	50.00%	40,844,709	9.80%	4,002,781
Total	100.00%	$81,689,417		$5,897,975
Rate Year 2 Revenue Requirement:				
Debt	50.00%	$42,358,379	4.64%	$1,965,429
Equity	50.00%	42,358,378	9.80%	4,151,121
Total	100.00%	$84,716,757		$6,116,550
Rate Year 3 Revenue Requirement:				
Debt	50.00%	$50,729,243	4.64%	$2,353,837
Equity	50.00%	50,729,244	9.80%	4,971,466
Total	100.00%	$101,458,487		$7,325,303

SCHEDULE I-C

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Net Operating Income for a Return
For the Twelve Months Ended March 31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
BF/FH/TC Water Operations

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Operating Revenues:				
Service revenues	$2,027,612	$2,336,882	$2,490,288	$2,539,675
Miscellaneous revenues	14,749	15,619	16,051	16,190
Uncollectible accounts	(27,981)	(32,249)	(34,366)	(35,048)
Total operating revenues	2,014,380	2,320,252	2,471,973	2,520,817
Maintenance Expenses:				
Purchased power	70,432	73,154	75,224	77,369
Purchased water	609	609	609	609
Maintenance and repair	207,957	214,735	219,227	223,636
Maintenance testing	10,196	10,543	10,796	11,055
Meter reading	47,602	49,220	50,402	51,611
Chemicals	86,200	89,532	92,965	95,615
Transportation	36,167	36,167	36,167	36,167
Operating expenses charged to plant	(66,053)	(68,035)	(70,076)	(72,178)
Outside—services - other	24,735	25,576	26,190	26,818
Total maintenance expenses	417,844	431,501	441,503	450,701
General Expenses:				
Salaries and wages	465,216	479,172	493,547	508,354
Office supplies and other office expense	36,081	37,308	38,203	39,120
Rate case expense	38,275	38,275	38,275	38,275
Pension and other benefits	112,512	115,887	119,364	122,945
Rent	25,446	26,311	26,943	27,589
Insurance	96,738	101,133	103,562	106,046
Office utilities	17,363	17,953	18,384	18,825
Miscellaneous	325,689	336,762	344,844	353,121
Total general expenses	1,117,319	1,152,802	1,183,123	1,214,275

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Depreciation and Taxes:				
Depreciation expense	$176,608	$232,672	$261,522	$268,698
Amortization of CIAC	(57,707)	(57,707)	(57,707)	(57,707)
Amortization of PAA	14,457	14,153	14,639	14,518
Amortization of ITC	0	0	0	0
Franchise and other taxes	(1,321)	(1,321)	(1,321)	(1,321)
Property taxes	7,746	7,746	7,746	7,746
Payroll taxes	35,795	36,869	37,975	39,114
Regulatory fee	2,820	3,248	3,461	3,529
Deferred Income Tax	(8,585)	(8,585)	(8,585)	(8,585)
State income tax	5,436	9,090	10,570	10,574
Federal income tax	44,523	74,451	86,565	86,600
Total depreciation and taxes	219,772	310,616	354,865	363,165
Total operating revenue deductions	1,754,935	1,894,919	1,979,490	2,028,142
Net operating income for a return	$259,444	$425,332	$492,483	$492,675

SCHEDULE II-C

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Original Cost Rate Base
For the Twelve Months Ended March 31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
BF/FH/TC Water Operations

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Plant in service	$7,340,417	$9,875,256	$10,793,178	$11,149,059
Accumulated depreciation	(2,526,057)	(2,794,167)	(2,821,567)	(3,227,938)
Net plant in service	4,814,360	7,081,089	7,971,611	7,921,120
Cash working capital	191,819	197,962	203,002	208,046
Contributions in aid of construction	(1,081,963)	(990,594)	(932,887)	(875,180)
Advances in aid of construction	0	0	0	0
Accumulated deferred income taxes	(36,166)	(87,681)	(72,912)	(47,111)
Customer deposits	(18,525)	(18,525)	(18,525)	(18,525)
Inventory	3,355	3,355	3,355	3,355
Gain on sale and flow back taxes	0	0	0	0
Plant acquisition adjustment	(29,293)	(51,703)	(66,342)	(80,859)
Excess book value	0	0	0	0
Cost-free capital	0	0	0	0
Average tax accruals	(4,396)	(4,462)	(4,571)	(4,612)
Regulatory liability for excess deferred taxes	(362,366)	(358,991)	(352,242)	(345,492)
Deferred charges	116,582	120,567	90,605	63,013
Pro forma plant	0			
Original cost rate base	$3,593,407	$5,891,017	$6,821,094	$6,823,755

Rates of Return:

Present	4.05%
Approved	7.22%

SCHEDULE III-C

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Statement of Capitalization and Related Costs
For the Twelve Months Ended March 31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
BF/FH/TC Water Operations

	Capitalization Ratio	Original Cost Rate Base	Embedded Cost	Net Operating Income
Present Rates:				
Debt	50.00%	$1,796,704	4.64%	$83,367
Equity	50.00%	1,796,703	3.53%	63,363
Total	100.00%	$3,593,407		$146,730
Base Case Revenue Requirement:				
Debt	50.00%	$1,796,704	4.64%	$83,367
Equity	50.00%	1,796,703	9.80%	176,077
Total	100.00%	$3,593,407		$259,444
Rate Year 1 Revenue Requirement:				
Debt	50.00%	$2,945,509	4.64%	$136,672
Equity	50.00%	2,945,508	9.80%	288,660
Total	100.00%	$5,891,017		$425,332
Rate Year 2 Revenue Requirement:				
Debt	50.00%	$3,410,547	4.64%	$158,249
Equity	50.00%	3,410,547	9.80%	334,234
Total	100.00%	$6,821,094		$492,483
Rate Year 3 Revenue Requirement:				
Debt	50.00%	$3,411,877	4.64%	$158,311
Equity	50.00%	3,411,878	9.80%	334,364
Total	100.00%	$6,823,755		$492,675

SCHEDULE I-D

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Net Operating Income for a Return
For the Twelve Months Ended March 31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
BF/FH Sewer Operations

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Operating Revenues:				
Service revenues	$2,832,263	$3,011,977	$3,760,898	$3,839,167
Miscellaneous revenues	21,281	21,764	23,773	23,984
Uncollectible accounts	(39,085)	(41,565)	(51,900)	(52,981)
Total operating revenues	2,814,459	2,992,175	3,732,771	3,810,170
Maintenance Expenses:				
Purchased power	149,604	155,294	159,593	164,094
Purchased water	0	0	0	0
Maintenance and repair	207,054	234,125	238,937	243,864
Maintenance testing	24,179	25,001	25,601	26,215
Meter reading	1,041	1,076	1,102	1,129
Chemicals	62,704	65,088	66,890	68,777
Transportation	37,022	37,022	37,022	37,022
Operating expenses charged to plant	(67,612)	(69,640)	(71,730)	(73,881)
Outside services - other	25,319	26,179	26,808	27,451
Total maintenance expenses	439,310	474,145	484,224	494,670
General Expenses:				
Salaries and wages	476,195	490,481	505,195	520,351
Office supplies and other office expense	36,933	38,188	39,105	40,043
Rate case expense	39,175	39,175	39,175	39,175
Pension and other benefits	115,167	118,622	122,181	125,846
Rent	26,047	26,933	27,579	28,241
Insurance	99,021	103,522	106,003	108,549
Office utilities	17,772	18,376	18,817	19,269
Miscellaneous	333,342	344,672	352,947	361,418
Total general expenses	1,143,651	1,179,972	1,211,002	1,242,892

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Depreciation and Taxes:				
Depreciation expense	$450,022	$465,568	$610,855	$621,220
Amortization of CIAC	(150,635)	(150,635)	(150,635)	(150,635)
Amortization of PAA	45,866	44,354	43,514	43,178
Amortization of ITC	0	0	0	0
Franchise and other taxes	(1,352)	(1,352)	(1,352)	(1,352)
Property taxes	9,754	9,754	9,754	9,754
Payroll taxes	36,640	37,739	38,871	40,038
Regulatory fee	3,940	4,189	5,226	5,480
Deferred Income Tax	(8,786)	(8,786)	(8,786)	(8,786)
State income tax	15,262	16,932	27,060	30,047
Federal income tax	124,994	138,674	221,623	246,086
Total depreciation and taxes	525,704	556,436	796,130	835,029
Total operating revenue deductions	2,108,664	2,210,553	2,491,356	2,574,390
Net operating income for a return	$705,795	$781,622	$1,241,416	$1,261,175

SCHEDULE II-D

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Original Cost Rate Base
For the Twelve Months Ended March 31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
BF/FH Sewer Operations

Item	Base Case	Rate Year 1	Rate Year 2	Rate Year 3
Plant in service	$16,503,204	$17,753,246	$23,623,687	$24,236,926
Accumulated depreciation	(3,429,386)	(3,927,324)	(3,344,599)	(3,821,802)
Net plant in service	13,073,818	13,825,921	20,279,088	20,415,124
Cash working capital	197,870	206,765	211,903	217,196
Contributions in aid of construction	(3,637,068)	(3,398,562)	(3,247,927)	(3,097,292)
Advances in aid of construction	0	0	0	0
Accumulated deferred income taxes	(369,688)	(332,263)	(502,665)	(451,119)
Customer deposits	(18,963)	(18,963)	(18,963)	(18,963)
Inventory	3,434	3,434	3,434	3,434
Gain on sale and flow back taxes	0	0	0	0
Plant acquisition adjustment	823,750	753,522	710,008	666,830
Excess book value	0	0	0	0
Cost-free capital	0	0	0	0
Average tax accruals	(5,613)	5,723	5,758	5,828
Regulatory liability for excess deferred taxes	(370,918)	(367,464)	(360,555)	(353,646)
Deferred charges	78,925	147,682	114,042	80,402
Pro forma plant				
Original cost rate base	$9,775,548	$10,825,796	$17,194,124	$17,467,795

Rates of Return:

Present	5.75%
Approved	7.22%

SCHEDULE III-D

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 400
Statement of Capitalization and Related Costs
For the Twelve Months Ended March 31, 2022 - Base Case / March 31, 2024 - Rate Year 1 / March 31, 2025 - Rate Year 2 / March 31, 2026 - Rate Year 3
BF/FH Sewer Operations

	Capitalization Ratio	Original Cost Rate Base	Embedded Cost	Net Operating Income
Present Rates:				
Debt	50.00%	$4,887,774	4.64%	$226,793
Equity	50.00%	4,887,774	6.86%	335,438
Total	100.00%	$9,775,548		$562,231
Base Case Revenue Requirement:				
Debt	50.00%	$4,887,774	4.64%	$226,793
Equity	50.00%	4,887,774	9.80%	479,002
Total	100.00%	$9,775,548		$705,795
Rate Year 1 Revenue Requirement:				
Debt	50.00%	$5,412,898	4.64%	$251,158
Equity	50.00%	5,412,898	9.80%	530,464
Total	100.00%	$10,825,796		$781,622
Rate Year 2 Revenue Requirement:				
Debt	50.00%	$8,597,067	4.64%	$398,904
Equity	50.00%	8,597,067	9.80%	842,512
Total	100.00%	$17,194,124		$1,241,416
Rate Year 3 Revenue Requirement:				
Debt	50.00%	$8,733,897	4.64%	$405,253
Equity	50.00%	8,733,898	9.80%	855,922
Total	100.00%	$17,467,795		$1,261,175

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 70

Rate Design

The evidence supporting these findings of fact is found in the verified Application and the accompanying NCUC Form W-1, the Stipulation, and the testimony and exhibits of Public Staff witness Darden and CWSNC witness Schellinger.

The water rates proposed by CWSNC in its Application for its CWSNC Uniform Water and BF/FH/TC Water residential customers were based on a 40/60 fixed-to-variable service revenue ratio where 40% of the service revenues are recovered through the fixed charge or base facility charge and 60% of the service revenues are recovered through the variable or usage charge. CWSNC Uniform Sewer residential rates were based on a 60/40 fixed-to-variable service revenue ratio where 60% of the service revenues are recovered through the fixed charge or base facility charge and 40% of the service revenues are recovered through the variable or usage charge. This rate design is the same as that agreed to by the parties and approved by the Commission in Sub 384, effective in April 2022. This rate design has been in effect for approximately one year.

Public Staff witness Darden testified that the Public Staff recommended a service revenue ratio of 30/70 (base facilities charge to usage charge) for Uniform Water and BF/FH/TC Water residential customers. Witness Darden recommended a 40/60 ratio for CWSNC Uniform Sewer residential customers. She noted that the BF/FH Sewer residential customers are on a flat rate.

In the Stipulation, the Stipulating Parties agreed to continue to use a rate design for water utility service for its Uniform Water and BF/FH/TC Water residential customers based on a 40/60 service revenue ratio of base charge to usage charge, and to continue to use a 60/40 service revenue ratio of base charge to usage charge for CWSNC's Uniform Sewer residential customers.

Based upon the foregoing and the entire record, the Commission concludes that it is appropriate to utilize a 40/60 service revenue ratio of base charge to usage charge in this proceeding for CWSNC's Uniform Water and BF/FH/TC Water residential customers and a 60/40 service revenue ratio of base charge to usage charge for CWSNC's Uniform Sewer residential customers, as agreed to by the Company and the Public Staff and set forth in the Stipulation. The Commission notes that the BF/FH Sewer residential customers remain on a flat rate. The Commission concludes that such rate design is fair and reasonable to both CWSNC and its customers.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 71

Continuation of Bulk Purchase Pass-Through Mechanisms and Update of Purchased Water and Sewer Rates

The evidence supporting this finding of fact is found in the verified Application and the accompanying NCUC Form W-1, the Stipulation, and the testimony and exhibits of Public Staff witness Franklin and Company witness Schellinger. The Commission finds that, consistent with CWSNC's proposal and the Stipulation, as well as N.C.G.S. § 62-133.11, the Company should continue to utilize the bulk purchased water and sewer pass-through mechanisms and the Company's purchased water and sewer rates should be updated as proposed by the Public Staff.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 72

Suspension of WSIC and SSIC Mechanisms

The evidence supporting these findings of fact is found in the testimony of Public Staff witness Darden and CWSNC witnesses Denton and Schellinger, the Stipulation, and the WSIP Statute.

Consistent with Rules R7-39(k) and R10-26(k) and the Stipulation, the Commission's previously approved WSIC and SSIC rate adjustment mechanism has been reset to zero in this rate case. Consistent with Section § 62-133.1B(d), during the term of the WSIP, the WSIC and SSIC mechanisms shall be suspended; however, immediately upon the termination of the WSIP, CWSNC shall be authorized to reinitiate implementation of the WSIC and SSIC mechanisms.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 73–74

Fee-Free Payment Proposal

The evidence supporting these findings of fact is found in the verified Application, the testimony of Company witnesses Denton and Schellinger, the testimony of Public Staff witness Darden, the Stipulation, and Updated Public Staff Settlement Exhibit I.

In the Sub 384 proceeding, the Company and Public Staff agreed, and the Commission authorized, CWSNC to implement a fee-free payment option for its residential customers, with the cost of service of such to be reflected in CWSNC's revenue requirements. The Parties also agreed in Sub 384 that CWSNC should biannually report to the Commission and the Public Staff, with such reporting detailing among other things the number of fee-free payments made by customers by month, along with levels of CWSNC uncollectibles expense by month.

In this proceeding, CWSNC proposed to continue this fee-free payment program, noting that the program has been in place for less than a year. In the Stipulation, the

Stipulating Parties agreed that the program should be continued, and that CWSNC should continue with the biannual reporting approved in the Sub 384 case.

Based upon the foregoing, the Commission concludes that it is appropriate and reasonable for the Company to continue the implementation of its fee-free payment option for its residential customers, with the cost of service of such to be reflected in CWSNC's revenue requirements. Additionally, the Commission concludes that it is reasonable and appropriate for CWSNC to continue to report to the Commission and the Public Staff concerning the fee-free payment option twice per year, with such reporting detailing the number of fee-free payments made by customers by month, along with levels of CWSNC uncollectibles expense by month, as set out in the Stipulation.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 75–77

Water Efficiency Program

The evidence supporting these findings of fact is found in the verified Application, the testimony of Company witnesses Denton and Schellinger, the testimony of Public Staff witness Darden, the Stipulation, and Updated Public Staff Settlement Exhibit 1.

In the Sub 384 proceeding, the Company and Public Staff agreed, and the Commission authorized, that CWSNC implement a Water Efficiency Program as a pilot program to be reevaluated in CWSNC's next rate case — under which the Company would offer efficient water fixture rebates for its customers. CWSNC was also authorized to defer and subsequently recover in a future rate case the water efficiency rebates applied to customer bills in a regulatory asset account, which asset would not earn a return or carrying charges, and to include the administrative expenses estimated for this program in the Company's revenue requirement. CWSNC was directed to report to the Commission and the Public Staff about the Water Efficiency Program on an annual basis, with such detailing the dollar amount and number of rebates applied to customer bills, the dollar amount of the regulatory asset, the type of water efficiency measures for which rebates were applied, and estimates or ranges of water efficiency impacts of such measures from an authoritative, third-party source.

In this case, CWSNC proposed to continue this Water Efficiency Program, noting that the program has been in place for less than a year. In the Stipulation, the Stipulating Parties agreed that the program should be continued on a pilot basis, to be reevaluated in CWSNC's next rate case. The Stipulating Parties also agreed that CWSNC should be authorized to continue deferring the associated rebates without a return or carrying costs, and CWSNC should continue with the annual reporting approved in the Sub 384 case.

Based upon the foregoing, the Commission concludes that it is appropriate and reasonable for the Company to continue to implement its proposed Water Efficiency Program as a pilot program for reevaluation in its next general rate case. CWSNC is authorized to defer and subsequently recover in a future rate case the water efficiency rebates applied to customer bills in a regulatory asset account, which asset will not earn a return or carrying charges, with administrative expenses for the program included in its revenue requirement. Additionally, CWSNC shall continue to report to the Commission and the Public Staff concerning the Water Efficiency Program on an annual basis, with such report detailing the dollar amount and number of rebates applied to customer bills, the dollar amount of the regulatory asset, the type of water efficiency measures for which rebates were applied, and estimates or ranges of water efficiency impacts of such measures from an authoritative, third-party source, as set out in the Stipulation.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 78

Modification of Sewer Tariff

The evidence supporting this finding of fact is found in the verified Application, the testimony of Company witnesses Hill and Konsul, the testimony of Public Staff witness Darden, the Stipulation, and Updated Public Staff Settlement Exhibit 1.

In this case, CWSNC proposed to modify its Sewer Tariff to include a new Sewer Use Rule, intended to protect its wastewater systems from damaging industrial and nondomestic contaminants. In the Stipulation, the Stipulating Parties agreed that the Company's Sewer Tariff should be modified to include the following:

> All nondomestic and industrial waste is subject to the Sewer Use Rule. The Sewer Use Rule can be accessed at https://www.myutility.us/docs/default-source/carolinawater/sewer-use-tariff.pdf and is also available upon request. The Sewer Use Rule requires Users (utility customers) to provide advance notice of any nondomestic or industrial waste discharge into the Utility's sanitary sewer systems, and to meet certain effluent limitations and pretreatment requirements. Violations of the Sewer Use Rule may result in disconnection. Reconnection will require reimbursement of the Utility's actual costs incurred as a result of the violation. Repeat violations may result in permanent disconnection.
>
> As part of the Sewer Use Rule, the Utility may require installation and/or proper operation of grease traps or other pre-treatment devices on grease producing commercial facilities. Failure to properly operate grease traps will result in disconnection of service pursuant to Commission Rule R10-16.

Based upon the foregoing, the Commission concludes that it is appropriate and reasonable for the Company to modify its Sewer Tariff to include a new Sewer Use Rule, as described above and set forth in the Stipulation.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 79

State Revolving Fund

The evidence supporting these findings of fact is found in the verified Application, the testimony of the Public Staff panel consisting of witnesses Hinton, Sun, Junis and Zhang, the testimony of Company witness Denton, the Stipulation, and Updated Public Staff Settlement Exhibit 1.

In this case, the Public Staff originally proposed a performance-based metric that the Company be required to apply for funding from the State Revolving Fund (SRF) for all eligible capital projects. On rebuttal, CWSNC witness Denton proposed that the Public Staff's recommended metric be removed but agreed that the Company would continue to evaluate and look for opportunities to apply for SRF funds when possible and where feasible. In the Stipulation, the Stipulating Parties agreed that CWSNC should apply for SRF funding for the following proposed projects:

- 2023017 - NC - 2023 - High Meadows - Replace all of Tree Top and other sections of the distribution system main and valves
- 2024010 - NC - 2024 - Elk River - Drill New Well
- 2024022 - NC - 2024 - Ski Mountain - Drill new well - Property acquisition, engineering, test well house, etc.
- 2022023 - NC - 2022 - Pinnacle Shores - Water Main Relocation - DOT road widening
- 2025025 - NC - 2025 - Whispering Pines - Water Main Replacement (Thagards Lake)
- 2023029 - NC - 2023 - Whispering Pines - Water Main Replacement 10,600 Linear Feet (Pine Lake and Country Club)
- AMI Meter Projects in WSIP Rate Years 2 and 3

The Company's application for SRF funding for these projects is also a part of the agreed-upon performance-based metrics in the Stipulation. To the extent one or more of these projects is eligible for and is successful in obtaining funding from the state, the Company's customers will benefit.

Further, the Commission notes that CWSNC does not intend to limit itself to apply for funds solely for the projects identified in the Stipulation. Witness Denton testified that the Company would evaluate each and every project that it identifies as applicable and cost-effective for the pursual of SRF funding. Tr. vol. 7, 137-8.

Based upon the foregoing, the Commission concludes that it is appropriate and reasonable for the Company to apply for SRF funding for the proposed projects described above, consistent with the Stipulation. In addition, the Commission directs CWSNC to apply for SRF funding for any other projects as the Company deems reasonable and appropriate.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 80

Danby Service Area

The evidence supporting this finding of fact is found in the verified Application, the testimony of Public Staff witness Darden, the testimony of Company witness Denton, the Stipulation, and Updated Public Staff Settlement Exhibit 1.

In this proceeding the Public Staff proposed that certain CWSNC plant and customers located in South Carolina be removed from the Company's revenues and revenue requirements. In the Stipulation, the Stipulating Parties agreed to work toward resolution of the situation whereby certain South Carolina customers and plant located in CWSNC's Danby service area have historically been included in CWSNC revenues and revenue requirements.

Based upon the foregoing, the Commission concludes that it is appropriate and reasonable for the Company and the Public Staff to work toward a resolution of this situation and report back to the Commission on a quarterly basis, as necessary, until a resolution has been reached, and such reports shall be filed within 30 days of the end of each calendar quarter, beginning with the quarter ending June 30, 2023.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 81

Merger-Related Issues

The evidence supporting this finding of fact is found in the testimony of the Public Staff witness panel of Hinton, Sun, Junis and Zhang, the testimony of Company witness Denton, the Stipulation, and Updated Public Staff Settlement Exhibit 1.

The Public Staff proposed that certain commitments be included in this proceeding, as a result of a merger approval case recently filed by the Company. In the Stipulation, the Stipulating Parties recognized that the Public Staff intends to fully examine all merger-related issues in the context of the merger case between Corix Infrastructure (US) Inc. and SW Merger Acquisition Corp. in Docket No. W-354, Sub 412.

Based upon the foregoing, the Commission concludes that it is appropriate and reasonable to address such issues in Docket No. W-354, Sub 412.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 82

Future CWSNC Rate Cases

The evidence supporting this finding of fact is found in the testimony of the Public Staff panel of witnesses Hinton, Sun, Junis and Zhang, the testimony of Company witness Denton, the Stipulation, and Updated Public Staff Settlement Exhibit 1.

In this proceeding the Public Staff raised issues related to the “pancaking” of several WSIP rate cases in the same overall timeframe. In the Stipulation, the Stipulating Parties agreed that CWSNC should use its best efforts to communicate with the Public Staff, Commission and other Class A water and sewer utilities regarding scheduling of future rate case filings in an effort to avoid pancaked filings going forward.

Based upon the foregoing, the Commission concludes that it is appropriate and reasonable for the Company to use its best efforts to communicate regarding future rate cases in an effort to avoid pancaked filings in the future.

IT IS, THEREFORE, ORDERED as follows:

1. That the affidavit of CWSNC’s Regional Director of Financial Planning and Analysis, Matthew Schellinger filed on February 2, 2023, in this docket is hereby entered into evidence;

2. That Updated Public Staff Settlement Exhibit 1, filed on February 3, 2023, the Company’s and the Public Staff’s March 17, 2023 filings, and the Company’s correction filing (Amended), filed on March 24, 2023, in this docket are hereby entered into evidence;

3. That the Stipulation is incorporated herein by reference and is hereby approved in its entirety. The Stipulation and the parts of this Order pertaining to the contents of the Stipulation shall not be treated as precedent in future proceedings;

4. That the WSIP Statute’s provision of an annual 5% gross revenue cap, which caps gross revenue increases for Rate Years 2 and 3 by 5% from the preceding plan year, shall be applied to service revenues and shall be implemented based on total combined operations of CWSNC rather than on a per rate division basis;

5. That CWSNC’s rates during the Base Case and WSIP period shall reflect a capital structure consisting of 50.00% long-term debt and 50.00% common equity, a cost of long-term debt of 4.64%, an authorized rate of return on equity of 9.80%, and an authorized overall rate of return of 7.22%;

6. That consistent with the Stipulation and this Order, CWSNC is hereby authorized to implement a three-year WSIP. WSIP Rate Year 1 shall begin on April 1, 2023, and end on March 31, 2024; WSIP Rate Year 2 shall begin on April 1, 2024, and end on March 31, 2025; and WSIP Rate Year 3 shall begin on April 1, 2025, and end on March 31, 2026;

7. That CWSNC and the Public Staff shall jointly file with the Commission within five business days of the issuance date of this Order the Base Case Schedules of Rates, labeled as Appendices A-1 and A-2, and the Schedules of Connection Fees for Uniform Water and Uniform Sewer, labeled as Appendices B-1 and B-2. Upon approval by further order of the Commission, the Base Case Schedule of Rates shall be effective

for service rendered on and after January 31, 2023 (the effective date of CWSNC's partial, temporary rates), through March 31, 2023;

8. That CWSNC and the Public Staff shall jointly file with the Commission within five business days of the issuance date of this Order the WSIP Rate Year 1 Schedules of Rates, labeled as Appendices C-1 and C-2, and the Schedules of Connection Fees for Uniform Water and Uniform Sewer, labeled as Appendices B-1 and B-2, for approval by the Commission. CWSNC and the Public Staff shall also file the applicable Notice to Customers for each of CWSNC's four rate divisions. Upon approval by further order of the Commission, the WSIP Rate Year 1 Schedules of Rates shall be effective for service rendered on and after the date of this Order through March 31, 2024;

9. That CWSNC and the Public Staff shall jointly file with the Commission within five business days of the issuance date of this Order the WSIP Rate Year 2 Schedules of Rates, labeled as Appendices D-1 and D-2, and the Schedules of Connection Fees for Uniform Water and Uniform Sewer, labeled as Appendices B-1 and B-2, for approval by the Commission. CWSNC and the Public Staff shall also file the applicable Notice to Customers for each of CWSNC's four rate divisions. Upon approval by further order of the Commission, the WSIP Rate Year 2 Schedules of Rates shall become effective for service rendered on and after April 1, 2024, through March 31, 2025;

10. That CWSNC and the Public Staff shall jointly file with the Commission within five business days of the issuance date of this Order the WSIP Rate Year 3 Schedules of Rates, labeled as Appendices E-1 and E-2, and the Schedules of Connection Fees for Uniform Water and Uniform Sewer, labeled as Appendices B-1 and B-2, for approval by the Commission. CWSNC and the Public Staff shall also file the applicable Notice to Customers for each of CWSNC's four rate divisions. Upon approval by further order of the Commission, the WSIP Rate Year 3 Schedules of Rates shall become effective for service rendered on and after April 1, 2025, and shall remain in effect until new rates are authorized by the Commission;

11. That CWSNC shall refund all partial, temporary rates and charges in excess of the approved rates and charges found to be appropriate by the Commission, if any, in any of its four rate divisions with interest at 10% compounded annually. For the period January 31, 2023, through March 31, 2023, the Base Case Schedule of Rates shall be applicable and for the period April 1, 2023, through the issuance date of this Order the Rate Year 1 Schedule of Rates shall be applicable for calculating the excess amounts, if any, charged through CWSNC's implementation of partial, temporary rates;

12. That CWSNC shall file a refund plan for the excess partial, temporary rates and charges collected from the customers, if any, in any of its four rate divisions within 30 days of the date of this Order and the Public Staff shall file a response to said refund plan no later than 60 days from the date of this Order;

13. That, consistent with the WSIP Statute, the Stipulation, and this Order, a banding of authorized returns shall be established and used to credit customers with earnings above the high end of the applicable Rate Year band;

14. That, consistent with the WSIP Statute, the Stipulation, and the Commission's decisions in this Order, CWSNC shall adopt the performance-based metrics set forth in finding of fact no. 34, above;

15. That consistent with the Stipulation and this Order, CWSNC shall monitor and report its performance with respect to the performance-based metrics described above;

16. That CWSNC shall provide the quarterly and annual reports required by the WSIP Statute and Commission Rule R1-17A;

17. That the incentives and/or penalties set forth in finding of fact no. 35, above, shall be retroactive to April 1, 2023, the beginning of WSIP Rate Year 1;

18. At least 30 days prior to implementation of rates effective for Rate Years 2 and 3, CWSNC shall provide notice to customers of the rates to be implemented as of those respective effective dates;

19. That CWSNC is authorized to continue to use its bulk purchased water and sewer pass-through mechanisms;

20. That CWSNC shall suspend its use of its approved WSIC and SSIC mechanisms during the pendency of the WSIP;

21. That CWSNC is authorized to continue to implement its proposed fee-free payment option for residential customers; in connection with this option, CWSNC shall report to the Commission and Public Staff, every six months on May 31 and November 30 each year with the next report to be filed on or before May 31, 2023, for the six months ending March 31, 2023, on the implementation of this option, detailing the number of fee-free payments made by customers by month, along with levels of CWSNC uncollectibles expense by month;

22. That CWSNC is authorized to continue to implement its proposed Water Efficiency Program, as a pilot program, to be re-evaluated in CWSNC's next rate case; in connection with this program, CWSNC shall file an annual report with the Commission and the Public Staff detailing the implementation of this program, the dollar amount and number of rebates applied to customer bills, the dollar amount of the regulatory asset, the type of water efficiency measures for which rebates were applied, and estimates or ranges of water efficiency impacts of such measures from a third-party authoritative source;

23. That, consistent with CWSNC's proposal and the Stipulation, CWSNC is authorized to defer in a regulatory asset account and subsequently recover in a future rate case the water efficiency rebates applied to customer bills. The regulatory asset account shall not earn a return or carrying charges;

24. That, consistent with the Stipulation and this Order, CWSNC is authorized to modify its Sewer Tariff, to include a new Sewer Use Rule, as described above and set forth in the Stipulation;

25. That, consistent with the Stipulation and this Order, CWSNC shall apply for funding from the State Revolving Fund for the specific list of projects as described above;

26. That CWSNC shall also pursue funding from the State Revolving Fund for any other projects, outside of the specific list of projects agreed by the Stipulating Parties, that CWSNC deems appropriate and cost-effective to pursue such funding;

27. That, consistent with the Stipulation and this Order, CWSNC and the Public Staff shall work toward a resolution of the situation involving customers and plant located in South Carolina of the Danby service area; CWSNC and the Public Staff shall provide progress reports to the Commission on a quarterly basis, as necessary, until a resolution has been reached, and such reports shall be filed within 30 days of the end of each calendar quarter, beginning with the quarter ending June 30, 2023; and

28. That the Chief Clerk shall establish Docket No. W-354, Sub 400A, as the single docket to be used for all future filings, orders, and reporting requirements regarding the WSIP mechanism and for any other matters previously filed in Docket No. W-354, Sub 384A, and shall close Docket No. W-354, Sub 384A.

ISSUED BY ORDER OF THE COMMISSION.

This the 26th day of April, 2023.

NORTH CAROLINA UTILITIES COMMISSION

A. Shonta Dunston

A. Shonta Dunston, Chief Clerk

Chair Charlotte A. Mitchell did not participate in this decision.

Commissioners Jeffrey A. Hughes and Floyd B. McKissick, Jr., dissent in part.

DOCKET NO. W-354, SUB 400

Commissioner Jeffrey A. Hughes, joined by Commissioner Floyd B. McKissick, Jr., dissenting in part:

I am in agreement with most of the majority's conclusions in this case. I agree that the Stipulation should be accepted in its entirety for the reasons cited in the Order. I also agree that implementing a multi-year rate plan (MYRP) or Water and Sewer Investment Plan (WSIP) is generally in the public interest. That said, I have concerns whether customers will receive benefits from the implementation of this new approach commensurate with the benefits that will accrue to the Company's investors. Absent a demonstratable downward adjustment to the rate of return on equity (ROE) specifically attributed to the reduced financial risk that obviously flows from the new rate setting framework, I do not believe customers have received a sufficiently fair share of the benefit of any WSIP.

Put simply, the majority's approved ROE of 9.80% for the WSIP Rate Years fails to sufficiently consider and quantify the reduced risk to shareholders that necessarily flows from the transition from a historic test year to a multi-year forward looking approach. When considering the same, a specific 15- to 20-basis point reduction as proposed by Public Staff witness Hinton is more than appropriate. This reduction would demonstrate at least some financial benefit to customers due to this transition. A 15-basis point adjustment on this basis to an ROE of 9.65% for the WSIP Rate Years would show that the change in rate setting approaches could be linked to a meaningful reduction in the amount customers are being asked to pay — $175,653 in Rate Year 1, $184,436 in Rate Year 2, and $193,657 in Rate Year 3 based on Commission Staff estimates as shown by the table below.

	Base Year	Rate Year 1	Rate Year 2	Rate Year 3
ROE 9.80%	$47,067,384	$51,104,591	$53,659,821	$56,342,812
ROE 9.65%	$46,919,167	$50,928,938	$53,475,385	$56,149,154
Difference	$148,217	$175,653	$184,436	$193,657

These demonstratable customer savings, alongside potential reduced rate case expenses and rate leveling benefits (reduced rate shock) of a MYRP, would constitute a more reasonable customer benefit to justify implementing an MYRP.

Section 62-133.1B provides water and sewer utilities in North Carolina with a new rate setting paradigm. Prior to its enactment, revenue requirements and rates for water and sewer utilities were determined based on a historic test year with limited adjustments for known and measurable changes through the date of the expert witness hearing. It is often argued that the historic test year approach contributes to regulatory lag as, in a typical environment where costs are rising and the utility is making significant capital investments to replace and rehabilitate aging infrastructure, by the time rates are determined and become effective, the revenue from the rates is often insufficient to achieve a utility's authorized return. CWSNC identifies regulatory lag as a significant detriment to shareholders and has supported a move away from historic test year to more future facing forecasting of expenditures to mitigate this lag. CWSNC requested the Commission to exercise this new statutory authority when it filed this general rate case, which strongly suggests it has determined that the WSIP would be in its best financial interest. Rather than solely relying upon historic costs, this is the first time a regulated water and sewer utility in North Carolina has requested, and will receive approval of, rates based on projected operating expenses and capital costs over a three-year period.

The first step in utilizing the WSIP ratemaking mechanism is to set base rates, a process which closely resembles the historic rate year approach used in the past. Comparing the revenue that CWSNC would collect using the traditional approach with what it is authorized to collect under the new WSIP mechanism it is evident that the transition from historic test to forward-looking rate years will generate significant additional revenue for the utility due to its inclusion of projected capital investments and upwardly adjusted operating expenses. For example, in CWSNC's rate case application, under its WSIP proposal, the Company requests additional service revenues on a company-wide basis for Rate Year 1 of $8,847,255, an increase of 19.7% over present authorized service revenues compared to an increase of $4,069,409 in service revenues, or 9.07% in the event the Commission does not approve a WSIP for CWSNC. The new approach not only reduces regulatory lag in out years, but also produces a significant increase in revenue for the company just by including projected capital investments and operating costs in revenue requirements.

Company witness D'Ascendis testified that North Carolina's WSIP mechanism is not unique relative to the proxy group, and he cited several examples of similar mechanisms in place for proxy group utilities to address regulatory lag — for example, multi-year rate plans in California, as well as fully forecasted test years in Iowa, Tennessee, Virginia, Pennsylvania, and New York. As a result, witness D'Ascendis believes that any risk reduction attributable to a multi-year rate plan is already reflected in those utilities' market data and a further reduction to CWSNC's rate of return on equity would double-count that risk reduction. I am not persuaded by this testimony. In my view, if a utility asks the Commission to apply the WSIP mechanism, the burden falls upon the utility to quantify the extent to which that reduces its risk profile for its investors, and thus to explain how it contributes to the calculation of the appropriate ROE, as part of its burden of proof to demonstrate that utilizing the WSIP mechanism results in rates that are just and reasonable and are in the public interest as required by N.C.G.S. § 62-133.1B(b).

The majority accepted witness D'Ascendis' explanation and rejected any application of a specific adjustment to the ROE that would consider the impact of a shift from historic single year rate paradigm to a forward looking MYRP. The majority apparently accepts that the models that led to the ranges of ROE under different approaches already internalize any impact of a more favorable rate setting process because many utilities included in the proxy group already had rate setting options similar to North Carolina's new approach.

I interpret this consideration a bit differently. To me the inability of the models to test for the specific impact of extremely different rate setting approaches is a limitation in the modeling, making it very difficult to rely on its outputs alone when considering the impact this momentous transition warrants. As such, I believe that an adjustment outside the models is appropriate. I note that the Company embraces out-of-model adjustments where witness D'Ascendis advocates for the application of a somewhat similar adjustment to address the impact of the size of the utility on the appropriate ROE.

The evidence presented in this docket relied on a range of modeling approaches to provide information to guide the selection of an appropriate ROE. As the Order reaffirms, the different approaches lead to a wide band of possible ROE requiring the Commission to take additional steps to calculate a single proposed ROE. The fact that the Commission, the Company, and the Public Staff all used assumptions to calculate different appropriate ROEs shows the impact assumptions and interpretations have on the ultimate ROE selection. Choosing a discrete number when presented with analysis that produces a range of potential ROE is challenging. I do not disagree with the logic the majority used to narrow down the ROE to 9.80% as a first step, but I view this estimate as an amalgam of two very different rate setting approaches. Since there was no second step taken to account for the specific impact of the reduced risk inherent in the Commission's approving a WSIP, I find that landing on an ROE of 9.80% for the WSIP is problematic. Indeed, the models would seem to arrive at the same ROE under the old paradigm as it does under the new paradigm even though revenue risk has been reduced.

For the foregoing reasons, I believe that the majority has not sufficiently considered the reduced risk to shareholders due to the reduction in regulatory lag. After determining 9.80% ROE as a starting point, I would take the additional step and adjust this starting point ROE to account for the reduction in risk, providing an appropriate benefit to customers to support transition to use of the WSIP mechanism. I find the Public Staff's proposed 15- to 20-basis point downward adjustment to be reasonable, and in this case conclude that a downward adjustment of at least 15 basis points, and an ROE of 9.65% for WSIP Rate Years 1, 2, and 3, is fair and just to both the utility, its investors, and its customers.