

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)	DIRECT TESTIMONY OF DONALD H. DENTON III ON BEHALF OF CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA
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July 1, 2022

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1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Donald H. Denton III, and my business address is 4944
4 Parkway Plaza Boulevard, Suite 375, Charlotte, North Carolina 28217.

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 A. I am Senior Vice President, East Operations for Corix; I oversee the
7 operations of Carolina Water Service, Inc. of North Carolina (“CWSNC” or
8 “Company”), Blue Granite Water Company (“BGWC”) in South Carolina,
9 and Sunshine Water Services in Florida, all of which are subsidiaries of
10 Corix Regulated Utilities (“CRU”). In addition, I serve as President of
11 CWSNC and BGWC.

12 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL**
13 **BACKGROUND.**

14 A. I hold a Bachelor of Aerospace Engineering from The Georgia Institute of
15 Technology as well as an Executive Masters in Business Administration
16 from Queens University in Charlotte, North Carolina. I have worked in the
17 utility sector for over 24 years in multiple capacities ranging from
18 engineering to strategic planning and major project execution.

19 **Q. WHAT ARE YOUR DUTIES AS PRESIDENT OF CAROLINA WATER**
20 **SERVICE, INC. OF NORTH CAROLINA?**

1 A. I am responsible for the Company’s regulated water and sewer operations
2 in North Carolina, including facility operations, finance, business
3 development, safety, compliance, regulatory affairs, and customer service.

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
5 **PROCEEDING?**

6 A. My testimony provides a summary of the Company’s overall case to the
7 North Carolina Utilities Commission (“NCUC” or “Commission”). In this case,
8 CWSNC requests Commission approval of a three-year Water & Sewer
9 Investment Plan (“WSIP”). While much of the information we provide in this
10 application is similar to that which we have provided in previous traditional
11 rate requests, we are presenting an important policy decision for the
12 Commission in this case: whether it is in the public interest to implement a
13 WSIP (i.e., one in which all capital and O&M are recovered for a period of
14 time greater than one year) at this time. We believe it is, and we believe our
15 application provides the basis for the Commission to make the public
16 interest filing contained in the aggregate in N.C. Gen. Stat. (“N.C.G.S.”) §
17 133.1B(b). The WSIP is a key tool that provides benefits for our customers,
18 policymakers, regulators, other stakeholders, and the Company as we
19 move into the future. These benefits are particularly important in light of the
20 persistent need for increasing investment in infrastructure, which drives
21 sequential rate cases on one-to-two year cycles.

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To support our request and inform the Commission’s decision in this matter, my testimony outlines how the Company plans to respond to the needs of our customers, our system, and policymakers over the next three years. I discuss in some detail the industry landscape that is driving changes in our business particularly with respect to the level of investment required. We believe it is important for the Commission and stakeholders to understand our plans and the strategies and considerations behind those plans. We believe understanding our rate request from this perspective confirms that a WSIP is the appropriate ratemaking construct going forward.

More specifically, my testimony addresses the following:

- the Company’s plans to meet our customers’ and stakeholders’ needs for the next three years;
- the evolving business landscape in which we operate;
- the Company’s WSIP proposal; and
- the structure of our case.

My testimony also introduces the other witnesses testifying in support of the Company’s Application.

Q. PLEASE DESCRIBE THE CWSNC SERVICE TERRITORY IN NORTH CAROLINA.

A. CWSNC is a public utility subject to the jurisdiction of the Commission, providing water and sewer utility service to 34,565 water customers and

1 21,469 wastewater customers, located in 38 counties across
2 North Carolina.

3 **Q. WHY DOES CWSNC NEED A RATE INCREASE AT THIS TIME?**

4 A. Our need for rate relief stems primarily from the significant capital
5 investments since the Company's last rate case, which were made to
6 provide reliable and compliant water and sewer services to our customers.
7 Since the last rate case, the Company will have made over \$17.3 million in
8 capital investment in North Carolina that is not yet reflected in rates. These
9 investments were needed to replace and rehabilitate aging infrastructure
10 and to modernize and increase efficiencies in the Company's systems. They
11 are discussed in more detail in Mr. Hill's testimony. The investments
12 include, but are not limited to: various wastewater collection system
13 improvements, lift station replacements in Sapphire Valley, water supply
14 improvements in Stewarts Ridge, Mount Mitchell, and Whispering Pines, as
15 well as leak detection and repair in Fairfield Harbour, Sherwood Forest, and
16 Connestee Falls.

17 Without adequate rate relief, CWSNC's ability to continue to provide
18 safe, reliable, and efficient water and sewer utility services to its customers
19 and to meet its financial obligations will be impaired, which would inevitably
20 adversely affect our service and our customers. In addition, the Company's

1 access to needed capital on reasonable terms could be constrained, which
2 would also redound to the detriment of our customers.

3 More specifically, under present rates, despite recent rate
4 adjustments and with good management, CWSNC is not able to cover its
5 operating costs and earn a reasonable return on its investments in the
6 Company's systems. During the Test Year (the 12 months ended March 31,
7 2022, also referred to sometimes as the "Base Year), CWSNC experienced
8 an overall rate of return per its books for its combined water and sewer
9 operations of 5.59%. The Company's pro forma Test Year overall returns
10 are 5.68% for water operations and 5.50% for wastewater operations.
11 These rates of return are well below CWSNC's currently-authorized overall
12 rate of return on rate base of 7.14%, which is based on an authorized rate
13 of return on common equity of 9.40%, established by the Commission in its
14 2021 Rate Case Order in Docket No. W-354, Sub 384.

15 CWSNC's current balance sheet and income statement are
16 contained in the Company's NCUC Form Application. CWSNC's balance
17 sheet is attached to the NCUC Form Application as Schedule C, and the
18 Company's income statement is attached to the NCUC Form Application as
19 Schedule B. The Company's current rate base and rate of return are shown
20 on Schedule A of the NCUC Form Application.

21 **Q. PLEASE SUMMARIZE THE COMPANY'S RATE REQUEST.**

1 A. CWSNC is proposing a three-year WSIP requesting an average retail rate
2 increase of 19.71% in 2023 (Plan Year 1, assuming rates are suspended),
3 4.99% in 2024 (Plan Year 2), and 4.64% in 2025 (Plan Year 3), when
4 compared to current rates. We base this increase on a revenue deficiency
5 of approximately \$4,069,409 million in the Test Year, a revenue deficiency
6 of approximately \$8,847,255 in Plan Year 1, a revenue deficiency of
7 approximately \$2,682,335 in Plan Year 2, and a revenue deficiency of
8 approximately \$2,620,032 in Plan Year 3. The revenue deficiencies are
9 based on a 10.45% return on equity (“ROE”) during the Base Year and
10 10.70% ROE during the WSIP periods.

11 **Q. WHY IS THE COMPANY PROPOSING A WSIP?**

12 A. CWSNC recognizes that in response to customer demands, aging systems,
13 and environmental requirements, the business environment for water and
14 wastewater utilities is changing. We believe that utilities need to be even
15 more responsive to the changing needs of customers as well as meet all
16 regulatory requirements. We believe a multi-year rate plan such as the
17 WSIP is a key tool that allows us to be more efficient and thus more
18 successful in the evolving water and wastewater industry landscape. While
19 some changes in our industry present challenges and require that we adapt,
20 other changes, such as technology advancements, provide the opportunity
21 to make some significant progress – in cleaner water, more resilient

1 systems, and expanded options for our customers. In my testimony, I outline
2 the Company's business plan and goals, discuss the changes in our
3 industry that are informing our plans, and explain the need for an adequate
4 runway to execute our plans, which we believe a multi-year rate plan such
5 as the proposed WSIP affords.

6 I then discuss our three-year WSIP proposal. I outline the key
7 aspects of our request, including the drivers for our proposed rate
8 increases, and explain the ways in which our request complies with the
9 North Carolina WSIP statute and rules and results in just and reasonable
10 rates.

11 **Q. HAS THE COMPANY PROPOSED AN ALTERNATIVE TO ITS THREE-**
12 **YEAR RATE REQUEST?**

13 A. Yes. While we believe a WSIP is the best option for the Company and its
14 customers, CWSNC also proposes an alternative – a traditional base rate
15 case based on the Test Year results.

16 **Q. HAS THE COMPANY TAKEN ANY STEPS TO NARROW THE ISSUES**
17 **IN THIS CASE?**

18 A. Yes. The underlying philosophy we took with structuring our rate request
19 was to avoid litigating issues that have been previously resolved by the
20 Commission in a consistent manner. An example of this includes proposing
21 substantially the same rate design that was agreed to by the Public Staff

1 and approved by the Commission in our last rate case. We are hopeful this
2 approach will allow parties to avoid re-litigating issues.

3 **Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?**

4 A. The remainder of my testimony discusses:

- 5 • how the Company plans to meet customer and stakeholder
6 needs for the next three years;
- 7 • the evolving industry landscape in which all of us are
8 operating, which not only provides challenges but also
9 opportunities for improvements;
- 10 • our proposed WSIP, highlighting the aspects that provide
11 benefits to our customers, other stakeholders, and the
12 Company as we move into the future; and
- 13 • the structure of the case and an introduction of the Company's
14 witnesses.

15 **II. RESPONDING TO CUSTOMER NEEDS AND ENVIRONMENTAL**
16 **REQUIREMENTS**

17 **Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?**

18 A. In this section of my testimony, I provide background information about the
19 Company, describe the primary business strategies and decisions that
20 informed the Company's actions over the last several years, and explain
21 our plan to meet our customers' and other stakeholders' needs and
22 expectations going forward.

1 **Q. WHAT IS THE COMPANY’S PLANNED FOCUS FOR THE NEXT THREE**
2 **YEARS?**

3 A. CWSNC needs to continue to focus on capital investments that address the
4 health of our water and wastewater system assets. However, our customers
5 and policymakers are also focused on important issues that the Company
6 will need to assess. For example, we are closely following the ongoing
7 dialog around per- and polyfluoroalkyl substances (“PFAS”) and
8 perfluorooctanoic acid (“PFOA”) and new federal and/or state thresholds.
9 We are also looking at investments that will enhance customers’
10 experience. Taken together, continued investment in our systems to
11 maintain reliability and environmental compliance and investing to enhance
12 our customers’ experience provide broad benefits to our customers and the
13 state.

14 **Q. CAN YOU PLEASE SUMMARIZE CWSNC’S CORPORATE PURPOSE**
15 **AND VISION?**

16 A. CWSNC’s purpose is to “help people enjoy a better life and communities
17 thrive.” Our vision is to “be the preferred utility delivering solutions our
18 customers want.”

19 **Q. HOW DOES CWSNC PLAN TO ACHIEVE THIS PURPOSE AND**
20 **VISION?**

1 A. We plan to achieve our purpose and vision by accomplishing the following
2 strategic goals:

- 3 • Operational and Service Excellence: Develop our people,
4 strengthen our processes, and invest in our technology to
5 support a high-performance organization and a culture of
6 continuous improvement.
- 7 • Connected Customers and Stakeholders: Communicate and
8 engage with our team members, customers, and communities
9 with relevant and timely billing, service, and operational
10 information to improve stakeholder awareness and
11 collaboration.
- 12 • Strong Financial Performance: Manage and plan business
13 costs, pursue growth, and mitigate enterprise risks in a
14 prudent manner to engender trust and confidence in our
15 financial responsibility and ensure access to needed capital.
- 16 • Engaged People and Culture: Attract and retain top talent to
17 deliver dependable, timely, courteous, and quality services to
18 meet the needs of our customers and communities.

19 **Q. WHAT IS THE BENEFIT OF THESE GOALS?**

20 A. For our customers, these goals help assure safe, reliable, compliant, and
21 affordable utility service while at the same time offering new options. For

1 the Company, our plan charts a path for the near future while maintaining
2 our flexibility to adapt to emerging circumstances. Our plan is intended to
3 position all stakeholders well for the near and long-term changes expected
4 in the water and wastewater industry.

5 **III. THE CHANGING INDUSTRY LANDSCAPE**

6 **Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?**

7 A. In this section of my testimony, I explain the changes that are occurring in
8 the industry and the value of our WSIP in this context.

9 **Q. WHAT IS DRIVING THE INDUSTRY LANDSCAPE TO CHANGE?**

10 A. There are several factors that I will highlight:

- 11 • the need to invest, by replacing aging infrastructure and doing
12 so in a way that meets customer needs and protects against
13 physical and cyber-based threats;
- 14 • changing customer expectations, including expectations of
15 new services, new choices, and greater efficiency in their own
16 water use;
- 17 • the need for industry consolidation; and
- 18 • emerging environmental and health-related policy changes.

19 **Q. HOW IS AGING INFRASTRUCTURE IMPACTING THE WATER AND**
20 **WASTEWATER INDUSTRY?**

1 A. The industry continues to face the consequences of aging infrastructure.
 2 According to the American Society of Civil Engineers 2021 Infrastructure
 3 Report Card, “Nationwide, the drinking water and wastewater pipes in the
 4 ground are on average 45 years old, while some systems have components
 5 more than a century old.”¹ As the nation’s water and wastewater
 6 infrastructure ages, utilities are faced with a need to invest in either
 7 extending the lives of the existing assets or retiring and replacing aging
 8 assets. Additionally, as technology becomes more sophisticated and cyber
 9 security continues to be of paramount concern within the industry, ensuring
 10 that digital technology is up to date is a focus nationwide, across all utilities
 11 sectors.

12 **Q. IS THE COMPANY’S EXPERIENCE SIMILAR?**

13 A. Yes. While not as old as the national average, CWSNC’s systems are
 14 experiencing the impacts of age. Table 1 illustrates this, as shown below.

15 **Table 1**

Asset Type	Average Age (Yrs)
Gravity Mains	37.5
Pressure Mains	31
Manholes	38
Lift Stations	30
Water Main	32
Water Tanks	31.5
Water Hydrants	32.5
Water System Valves	37.5
Water Specialty Valves	38

1 <https://infrastructurereportcard.org/wp-content/uploads/2020/12/Wastewater-2021.pdf>.

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In addition, as part of a modernization strategy, the Company is digitizing many of its systems to achieve operational improvements and gain efficiencies. New Supervisory Control and Data Acquisition (“SCADA”) technologies are being deployed across our systems as well as new Advanced Metering Infrastructure (“AMI”). These technologies will increase safety, provide for more efficient and reliable operations, and provide customers with more options such as alerts and more information about their consumption.

Q. THE NEXT FACTOR YOU IDENTIFIED IS CHANGING CUSTOMER EXPECTATIONS. WHAT IS HAPPENING AT AN INDUSTRY LEVEL?

A. Customer expectations are evolving rapidly in all areas involving utility services and products. The following are becoming important considerations for our customers:

- Emerging technologies – rapidly evolving technologies such as AMI are drawing customer interest.
- Efficiency – customer interest in more efficient water and wastewater appliances and equipment continues to grow.
- Improved communications – as other service provider-oriented industries present enhanced customer service experiences, consumers expect improved virtual services and tools from utilities.

1 Customer sentiments towards their water and wastewater utilities are
2 changing and utilities must evolve to meet these expectations. Customer
3 feedback indicates a desire for more personalized service with multiple
4 options. Customer engagement efforts have been enhanced through the
5 development and implementation of very intentional community outreach
6 efforts. To enrich our customers' experiences, we implemented multiple
7 communication channels including Facebook, Twitter, Instagram, and
8 LinkedIn social platforms as well as bill inserts, phone calls, and face-to-
9 face meetings. The Company designed and now maintains 14 community-
10 specific WordPress sites (i.e., free web pages) that provide our customers
11 updates on projects, water saving tips, storm preparedness, frozen pipes
12 prevention tips, and drought information. In addition, the Company
13 maintains our customer portal application called MyUtilityConnect for our
14 customers. Using this online tool, customers can: (1) pay their bills on the
15 go; (2) elect to receive service notifications through the application via text,
16 phone, and/or email; (3) monitor their water usage through the application:
17 and (4) stop and start service. The Company uses social media outlets to
18 inform customers and Homeowner Associations ("HOAs") about this tool
19 and provides information via bill inserts. To initially access the application,
20 customers can visit our website or search for MyUtilityConnect in the Apple
21 App Store or Google Play.

1 **Q. HOW IS THE COMPANY RESPONDING TO CHANGING CUSTOMER**
2 **EXPECTATIONS?**

3 A. CWSNC continues to evaluate and expand our products and services to
4 meet growing customer expectations. For example, in our last case, we
5 introduced the concept of a rebate program to incentivize conservation. We
6 seek to continue that program in this case.

7 **Q. HOW WOULD CONSOLIDATION IN THE INDUSTRY BE BENEFICIAL?**

8 A. According to the North Carolina Department of Environmental Quality
9 (“NCDEQ”) there are more than 5,200 regulated public water systems in
10 North Carolina². Rising cost of regulatory compliance, aging infrastructure,
11 unequal allocation of federal and state resources between private and
12 municipal systems, along with the need for economies of scale, has left
13 many water and wastewater system owners unable to efficiently operate
14 and maintain their systems. Consolidation provides multiple benefits,
15 including:

- 16 • Lower overheads/greater economies of scale
- 17 • Access to a broader talent pool
- 18 • Greater financial stability
- 19 • Increased operational efficiencies
- 20 • Greater collective expertise across the Company.
- 21

² <https://deq.nc.gov/about/divisions/water-resources/about-water-resources>.

1 **Q. YOU SPEAK OF CHANGING ENVIRONMENTAL POLICIES. WHAT**
2 **SPECIFIC ENVIRONMENTAL POLICIES ARE IMPACTING THE**
3 **INDUSTRY?**

4 A. The industry faces multiple emerging policies in the health and
5 environmental areas. The two most recent and impactful policy shifts
6 include the Revised Lead and Copper Rule and PFAS standards.

7 **Q. HOW DO THESE POLICY SHIFTS IMPACT CWSNC?**

8 A. Lead and Copper Rule

9 The Company has focused much attention on the new Lead and
10 Copper requirements. The new requirements will impact all facets of the
11 Company from communications and finance to operations and compliance.

12 The Company is currently utilizing its asset management system to
13 maintain and build out the existing service line inventory to include the
14 customer owned portion of the line. The Company has also developed a
15 plan to inventory the customer service lines in compliance with the Lead
16 and Copper Rule Revisions and in preparation for the October 2024
17 Compliance date. This includes a newly developed customer survey, input
18 from operations team members, and review of available data, both internal
19 and external to the Company, to aid in updating the database. The
20 Company is also in the process of developing Lead Service Line
21 replacement communication plans to customers and stakeholders.

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PFAS Standards

The most recent development for per- and polyfluoroalkyl substances (PFAS) per the U.S. Environmental Protection Agency’s (“EPA”) reduction of the Health Advisory Limit (“HAL”) will require the Company to review its current process. Starting more than a year ago, the Company voluntarily sampled every entry point for two specific PFAS compounds, benchmarking the results of those tests against EPA’s established 70 ppt HAL. Using that HAL, CWSNC encountered only one entry point that had detections above the 70 ppt threshold. The Company was able to shut off the entry point and run the system with a secondary supply source that met the 70 ppt HAL.

CWSNC will continue to closely monitor new developments and guidance from state regulators and EPA on this issue.

IV. THE VALUE OF A MULTI-YEAR RATE PLAN/WSIP

Q. HOW IS YOUR PRIOR DISCUSSION RELATED TO THE COMPANY’S RATE REQUEST?

A. As the industry changes, cost recovery requirements and opportunities change, and ratemaking should change with it. Over the past decades, North Carolina has made numerous modifications to our regulated utilities’ cost recovery mechanisms and methodologies. These have come in recognition of changes in technologies, environmental and health

1 considerations, markets, and usage patterns. We believe that our proposed
2 three-year WSIP is the appropriate ratemaking construct in this
3 environment.

4 **Q. WHY IS A WSIP A BETTER NEXT STEP FOR RATEMAKING IN NORTH**
5 **CAROLINA THAN FILING FOR MORE FREQUENT RATE INCREASES?**

6 A. The Company appreciates that filing for a rate increase on an annual or
7 every other year basis is a model that can work. However, annual rate cases
8 are time-consuming and expensive for all involved and are an inefficient and
9 disruptive way to address sharp increases in infrastructure investment that
10 are known with a high degree of certainty and that are occurring year over
11 year, without cessation. More importantly, the Company believes a WSIP
12 provides the rate certainty to implement our business plan in a way that
13 benefits customers.

14 **Q. DOES A WSIP PROVIDE FOR SUFFICIENT REGULATION AND**
15 **OVERSIGHT OF THE COMPANY?**

16 A. Yes. A WSIP provides regulators and stakeholders with more insight into
17 our business planning and thus a different but arguably more in-depth and
18 engaged type of regulation and oversight than standard rate cases do, with
19 their line-item reviews of historical investments.

20 We note the Commission also always has the ability to monitor the
21 impacts of a WSIP on all stakeholders and to judge whether the utility

1 continues to meet key goals and is earning a reasonable, but not excessive,
2 return. Notably, the WSIP statute and rules contain important safeguards
3 for customers, such as the 5% annual limit on rate increases, the earnings
4 review process, and potential refunds resulting from the earnings review
5 process.

6 **Q. HOW CAN CUSTOMERS AND OTHER STAKEHOLDERS BENEFIT**
7 **FROM THIS APPROACH?**

8 A. A multi-year rate plan can:

- 9 • Provide predictability and moderate the pace of rate
10 increases. A WSIP provides customers with predictable rate
11 increases during the plan period while providing the utility with
12 a strong incentive to manage its business within the level of
13 revenues provided.
- 14 • Provide a longer-term view of costs and investments for
15 customers, regulators, and stakeholders. A WSIP allows
16 customers and regulators a longer-term view of a utility's
17 investment and management plans and therefore encourages
18 a discussion about the utility's investment plans. We believe
19 this is of value when significant investments are on the short
20 and long-term horizon, as is the case with our aging
21 infrastructure. By comparison, a single test year model sets

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rates for only the test year; the focus is on representative expenditures and costs which limits insight into investment cycles that span several years.

- Facilitate investments that support state policy goals. A WSIP encourages investments consistent with the priorities of regulators, policymakers, and customers. When a utility outlines an investment plan consistent with the expectations of regulators, policymakers, and customers, the utility should receive stable and predictable rate recovery and earn its authorized return so that it can execute the plan.
- Preserve the basic regulatory bargain between utilities, regulators, and customers. A WSIP still allows for a full review of the reasonableness of the utility’s proposed rates, with safeguards such as those I previously mentioned.

V. THE COMPANY’S PROPOSED THREE-YEAR WSIP

A. Overview

Q. PLEASE SUMMARIZE THE COMPANY’S THREE-YEAR WSIP REQUEST IN THIS PROCEEDING.

A. The Company requests approval of a three-year WSIP, with a test year consisting of the 12 months ended March 31, 2022 (the “Test Year” or “Base

1 Year”) and plan years of the 12 months ending March 31 of 2024, 2025,
2 and 2026 (“Plan Year 1,” “Plan Year 2,” and “Plan Year 3,” respectively).

3 **Q. WHAT IS THE FINANCIAL IMPACT OF THE COMPANY’S THREE-YEAR**
4 **REQUEST?**

5 A. The Company is requesting rate increases of \$8,847,255 million in 2023,
6 \$2,682,335 million in 2024, and \$2,620,032 million in 2025. Mr. Drennan
7 provides the revenue requirement schedules supporting this request.

8 **Q. CAN YOU SUMMARIZE THE TEST YEAR FINANCIAL DRIVERS?**

9 A. Yes. Mr. Drennan discusses the key drivers behind the Test Year revenue
10 deficiency and, collectively, they are represented in Figure 4 below. Capital
11 investment needs and increased operating costs are the primary drivers
12 contributing to the Company’s revenue deficiency. CWSNC plans to invest
13 over \$95 million through the WSIP period to replace and upgrade capital
14 infrastructure, which will increase the rate base by \$63.5 million (44.2%).
15 During this same period, Maintenance and General expenses are expected
16 to increase over \$5.5 million which is a 22% increase from the levels
17 recovered in Sub 384.

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Figure 4
Test Year Revenue Deficiency Drivers

Rate Base	Base Case	WISP Year 1	WISP Year 2	WISP Year 3
Rate Base, Sub 400	153,516,370	175,956,742	192,830,044	207,218,331
Rate Base Approved in Sub 384	143,656,896	143,656,896	143,656,896	143,656,896
Recovery Deficit	(9,859,474)	(32,299,846)	(49,173,148)	(63,561,435)
%	-6.9%	-22.5%	-34.2%	-44.2%

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Maintenance & General Expenses	Base Case	WISP Year 1	WISP Year 2	WISP Year 3
Maintenance & General Expenses, Sub 400	27,425,023	29,187,990	29,974,920	30,579,011
Maint. & Gen. Exp. Approved in Sub 384	25,070,999	25,070,999	25,070,999	25,070,999
Recovery Deficit	(2,354,024)	(4,116,991)	(4,903,921)	(5,508,012)
%	-9.4%	-16.4%	-19.6%	-22.0%

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Q. WHAT ARE THE KEY FINANCIAL DRIVERS OF THE TEST YEAR DEFICIENCY?

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A. While Mr. Drennan presents a detailed discussion of the Test Year revenue deficiency drivers, the primary significant drivers include:

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- Investments to keep our systems operating reliably and in compliance with environmental requirements. Mr. Hill discusses our need to address certain aging infrastructure and to do so in a way that not only ensures reliable and compliant service for our customers but does so in a manner that meets customers' and policymakers' needs and expectations going forward.

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- Investments in our information technology systems. We have a need for increased investment in our information technology infrastructure and assets to address the security, data, and technology needs of the organization and our customers.
- Increased costs of business. We continue to experience increased costs across our business. Some of those costs relate in part to investments, such as property tax increases. Others are for providing the compensation and benefits needed to attract and retain the employees that provide our customers with safe and reliable service; and, others relate to inflation generally.

Q. DO THE PLAN YEARS HAVE THE SAME REVENUE DEFICIENCY DRIVERS AS THE TEST YEAR?

A. Yes. Plan Years 1, 2, and 3 revenue deficiencies are heavily driven by capital investments, replacing aging infrastructure, and addressing our information technology needs. Mr. Drennan provides a schedule showing the drivers for these years.

Q. IS THE COMPANY PROPOSING ANY SIGNIFICANT RATE DESIGN CHANGES AS PART OF ITS REQUEST?

A. No.

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B. Basic Structure of the WSIP Request

Q. BEFORE EXPLAINING THE STRUCTURE OF THE COMPANY’S WSIP, PLEASE DESCRIBE YOUR UNDERSTANDING OF THE NORTH CAROLINA WSIP STATUTE AND RULES.

A. The WSIP Statute, N.C.G.S. § 62-133.1B, authorizes the Commission to approve three-year WSIPs, with annual rate changes, based on reasonably known and measurable capital investments and anticipated reasonable and prudent expenses, provided the Commission finds the WSIP results in rates that are just and reasonable and in the public interest. In reviewing a WSIP application under N.C.G.S. § 62-133.1(B), the Commission must consider whether the water or sewer utility’s application, as proposed: (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. Rate adjustments under a WSIP may not exceed 5% of the preceding year’s retail jurisdictional gross revenues in plan years two and three. Rate adjustment mechanisms authorized under N.C.G.S. §§ 62-133.12 or 62-133.12A³ must be discontinued during the term of the WSIP. The Commission must

³ Water and Sewer System Improvement Charges and customer usage tracking rate adjustments, respectively.

1 implement banding of authorized ROEs, any “overearnings” above the top
2 end of the ROE band must be returned to customers via bill credits, and the
3 utility must submit annual earnings filings to the Commission.

4 After the WSIP statute was passed into law, the Commission
5 undertook an investigation to develop the terms, conditions, and procedures
6 for multi-year rate plans (Docket No. W-100, Sub 63). At the conclusion of
7 that investigation, the Commission issued its January 7, 2022 WSIP Order,
8 which set out detailed filing requirements – specifically in new Rule R1-
9 17A(c) – and found, among other things:

- 10 • The utility must propose at least one performance metric in
11 each of the following areas: (1) operational compliance, (2)
12 customer service, (3) service reliability, and (4) workplace
13 health and safety.
- 14 • The utility must file quarterly earnings reports.
- 15 • The utility must file quarterly capital investment project status
16 reports.
- 17 • The utility must file quarterly reports on the number of
18 customers disconnected for nonpayment.
- 19 • The utility must file annual reports addressing earnings,
20 refunds/credits, performance metrics, rate base, etc.

1 **Q. WHEN THE COMPANY DEVELOPED ITS CURRENT REQUEST, DID IT**
2 **CONSIDER BOTH THE NC WSIP STATUTE AND THE COMMISSION'S**
3 **1/7/2022 WSIP ORDER, INCLUDING THE RULE CHANGES?**

4 A. Yes. Our rate request incorporates direction from both the WSIP statute and
5 the Commission's January 7, 2022 Order.

6 **Q. PLEASE DESCRIBE THE COMPANY'S OVERALL APPROACH AND**
7 **THE STRUCTURE OF ITS WSIP REQUEST.**

8 A. Our WSIP request utilizes a traditional test year format for the Test Year
9 and then incorporates planned capital investments for the Plan Years and
10 uses escalation factors (or forecasted costs) to project Operation &
11 Maintenance ("O&M") expenses for the Test Year Plan Years. Mr. Hill's
12 testimony discusses our capital plans for the Test Year and the Plan Years
13 in greater detail, and Mr. Drennan's testimony discusses our Test Year and
14 projected Plan Years O&M costs in greater detail.

15 **C. Walk Through of WSIP Request**

16 1. Test Year

17 **Q. HOW HAS THE COMPANY STRUCTURED THE TEST YEAR PORTION**
18 **OF ITS WSIP REQUEST?**

19 A. As Mr. Drennan discusses in detail, for the Test Year (the 12 months ended
20 March 31, 2022), we are using a traditional test year approach to rate
21 setting. This means we are relying on our actual test period results, adjusted

1 for known and measurable changes, to achieve representative Test Year
2 operations. This portion of our case is similar to past cases we have filed.

3 Additionally, as I previously noted, the Company is trying to avoid re-
4 litigating issues recently decided by the Commission or consistently decided
5 in the same manner by the Commission. Our intent with taking this
6 approach was to create an opportunity to have a focused constructive
7 dialogue regarding our WSIP proposal.

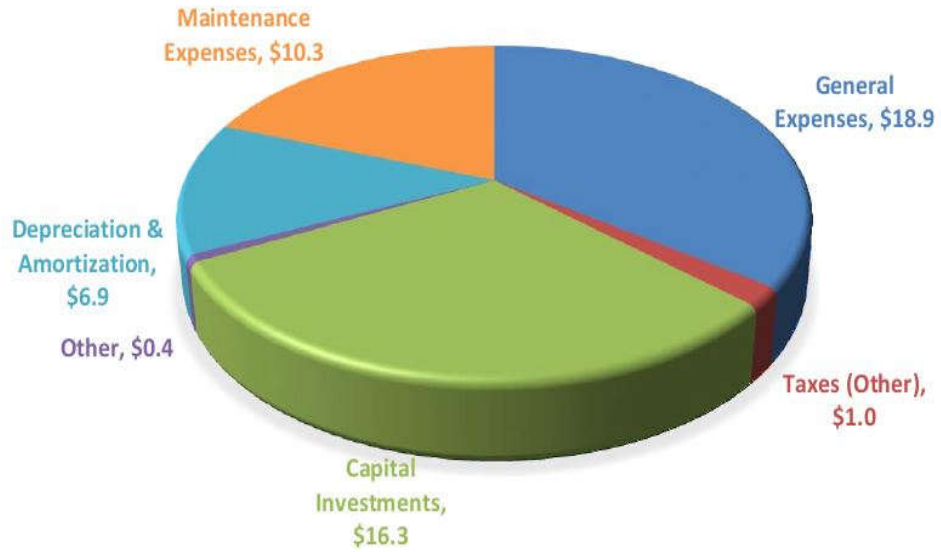
8 **Q. TURNING TO PLAN YEARS 1, 2, AND 3 (12 MONTHS ENDING MARCH**
9 **31 OF 2024, 2025, AND 2026), WHAT ARE THE MAIN DRIVERS FOR**
10 **REVENUE REQUIREMENTS IN THOSE YEARS?**

11 A. The key drivers for Plan Years 1, 2, and 3 are discussed by Mr. Drennan
12 and, collectively, are represented below in Figure 5.

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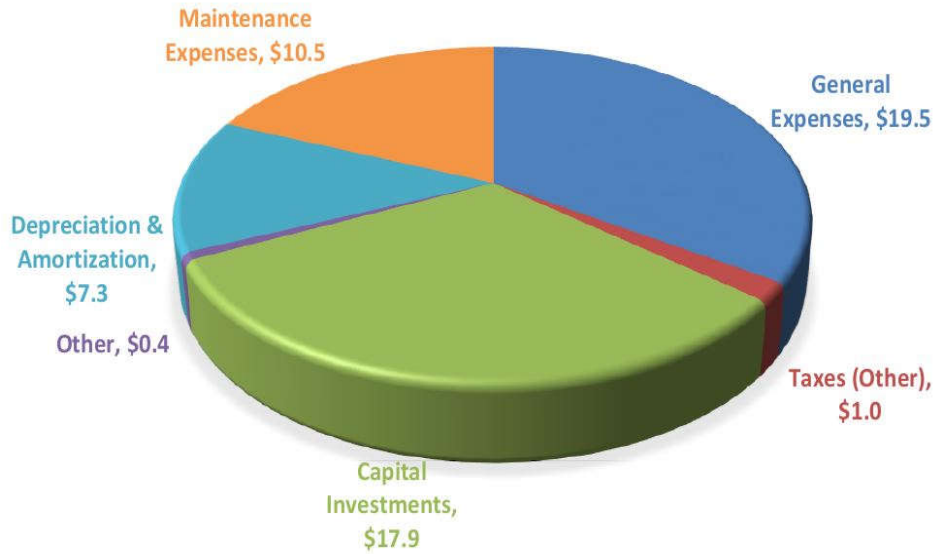
Figure 5
Plan Year 1, 2, and 3 Revenue Requirement Drivers

WSIP YEAR 1 REVENUE (\$53.7 MM)



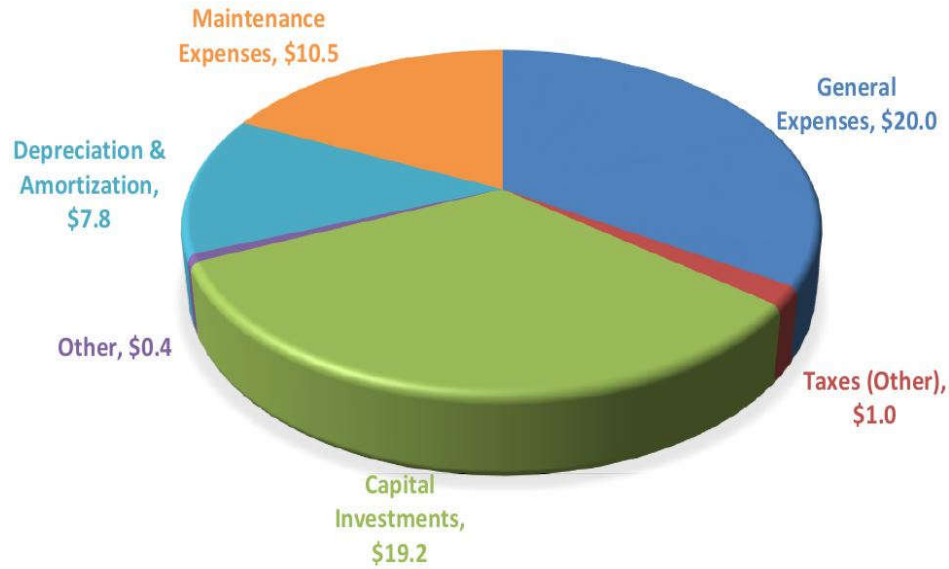
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WSIP YEAR 2 REVENUE (\$56.6 MM)



4

WSIP YEAR 3 REVENUE (\$59.0 MM)



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2 **Q. HOW HAS THE COMPANY STRUCTURED ITS REQUESTS FOR PLAN**
3 **YEARS 1, 2, AND 3?**

4 A. For Plan Years 1, 2, and 3, the Company considered the revenue
5 requirements associated with its full cost of service, including capital
6 expenditures and O&M expense. Mr. Drennan further discusses the
7 Company's approach, including the mechanics for constructing the revenue
8 requirements of the three Plan Years. In my testimony below, I support the
9 structure of the Plan Years from a policy perspective and further explain that
10 the Company has met its burden to demonstrate that our WSIP proposal
11 results in just and reasonable rates.

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a. Capital Investments

Q. HOW HAS THE COMPANY REFLECTED ITS EXPECTED CAPITAL INVESTMENTS IN THE THREE-YEAR WSIP PLAN YEARS?

A. We used our capital forecasts for the Plan Years to develop the capital cost of service for the Plan Years. CWSNC has included its Capital Investment Plan in Appendix 11 of rate filing application. CWSNC expects to place over \$95 million of capital projects into service through the end of the WSIP plan years.

Q. WHY IS THIS A REASONABLE APPROACH?

A. We believe it is a reasonable approach for several reasons. First, the WSIP statute contemplates recovery in rates of reasonably known and measurable capital investments. A capital project plan, such as that included in this case, identifies reasonably known and measurable capital investments.

Second, the Company’s capital project planning process is iterative, rigorous, and leads to capital plans that reasonably represent the Company’s investments during the forecasted period.

Third, while the Company acknowledges that not every forecasted capital project will play out exactly as we currently envision, CWSNC will pursue projects to accomplish the goals of the plan during the WSIP period.

1 **Q. HOW CAN THE COMMISSION BE ASSURED THAT THE COMPANY**
2 **WILL NOT OVER-COLLECT FOR ITS CAPITAL INVESTMENTS DURING**
3 **THE WSIP?**

4 A. The safeguards contained in the WSIP Rules – specifically the rate base
5 and earnings reporting, the refunds for “overearnings,” the 5% limit on
6 revenue increases for Plan Years 2 and 3, and the Commission’s ability to
7 modify the WSIP if necessary – will ensure that the Company will not over-
8 collect or over-earn during the WSIP. At the same time, the WSIP will
9 provide the Company with flexibility to manage its business and its capital
10 plans.

11 *b. Passage of Time*

12 **Q. DOES THE COMPANY’S THREE-YEAR WSIP PROPOSAL**
13 **INCORPORATE THE IMPACTS OF THE PASSAGE OF TIME?**

14 A. Yes. We developed our three-year WSIP request by using a full cost of
15 service model for the Plan Years. By using a full cost of service for the Plan
16 Years, we have captured all changes in plant balances, depreciation
17 expense, and accumulated depreciation during the Plan Years, and as a
18 result, the revenue requirement impacts of the passage of time.

19 *c. Operations and Maintenance*

20 **Q. HOW HAS THE COMPANY ADDRESSED O&M EXPENSES IN THE**
21 **PLAN YEARS?**

1 A. Our request to recover Plan Year O&M expenses was developed primarily
2 from price index factors provided by the Bureau of Labor Statistics. For
3 certain expense types, we have used our budgeted O&M expenses when
4 that is a more appropriate methodology. Mr. Drennan's testimony discusses
5 this in greater detail.

6 *d. Revenues and Margins*

7 **Q. DID THE COMPANY INCORPORATE ANY OFFSETTING REVENUES**
8 **THAT LOWER THE PLAN YEAR REVENUE REQUIREMENTS?**

9 A. Yes. By developing our Plan Year revenue requirements using a full cost of
10 service approach, we attempted to capture the full array of issues that
11 impact those revenue requirements – both items that increase and
12 decrease revenue requirements. Mr. Drennan discusses this further in his
13 testimony.

14 *e. Rate of Return*

15 **Q. DOES THE WSIP STATUTE ADDRESS TREATMENT OF A UTILITY'S**
16 **COST OF CAPITAL DURING THE TERM OF ITS PLAN?**

17 A. Yes. The WSIP statute specifically provides that the Commission must
18 establish a banding of authorized ROEs, with rates set at a midpoint within
19 that band. CWSNC is proposing a banding of 100 basis points above and
20 100 basis points below the authorized ROE.

1 **Q. IS THE COMPANY PROPOSING AN ADJUSTMENT TO ITS**
2 **REQUESTED 10.70 PERCENT ROE FOR THE PLAN YEARS?**

3 A. No. We are not proposing any adjustments to the requested 10.70% ROE
4 for each Plan Year. Our intent by proposing a fixed ROE for each Plan Year
5 is to limit the number of potentially contested issues in this proceeding.

6 *f. Rate Design*

7 **Q. DOES THE COMPANY PROPOSE ANY SIGNIFICANT RATE DESIGN**
8 **CHANGES FOR THE PLAN YEARS?**

9 A. No. Mr. Drennan discusses the Company's overall approach to rate design,
10 including our approach to the Plan Years, in his testimony.

11 **D. Other WSIP Request Features**

12 1. Performance Metrics

13 **Q. IS THE COMPANY PROPOSING PERFORMANCE MEASURES TO BE**
14 **PUT IN PLACE DURING THE TERM OF THE WSIP?**

15 A. Yes. The WSIP rules call for the utility to propose at least one performance
16 metric in each of the following areas: (1) operational compliance, (2)
17 customer service, (3) service reliability, and (4) workplace health and safety.
18 Consistent with this direction, we are proposing performance measures
19 addressing each of these areas, as follows:

- 20 • Operational Compliance
 - 21 ○ Wastewater Compliance Rate %
 - 22 ○ Water Compliance Rate %

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- Customer Service
 - Telephone Service Factor (TSF) % by quarter
 - Customer Service Complaints (non-bill related complaints / 1000 accounts)
- Service Reliability
 - Unplanned Water Service Disruptions (unplanned outages/1000 accounts)
 - # Sanitary Sewer Overflows / 100 Miles of gravity line
- Workforce Health and Safety
 - OSHA Incident Rate = (Number of injuries and illnesses x 200,000)/ Employee hours worked
 - Hours of Employee Training / employee

Exhibit DHD-1 defines these proposed metrics and explains how they are calculated. Exhibit DHD-1 also shows how CWSNC is currently performing on these metrics.

Q. WHY DO YOU BELIEVE THESE PERFORMANCE METRICS ARE APPROPRIATE?

A. Gen. Stat. § 62-133.1B(a) requires as a core component of a WSIP the inclusion of "...performance-based metrics that benefit customers and ensure the provision of safe, reliable and cost-effective service by the water or sewer utility." CWSNC proposes, in this filing, performance metrics that

1 are consistent with the statutory and rule-based WSIP requirements and
2 that focus on the most important issues for our stakeholders, including safe,
3 reliable, environmentally compliant, high quality customer service. We also
4 include measures focused on ensuring a safe workplace environment for
5 our employees.

6 **Q. DOES THE COMPANY PROPOSE TO TIE ANY FINANCIAL**
7 **INCENTIVES OR PENALTIES TO THESE MEASURES?**

8 A. Not at this time. This is one of the first three-year WSIPs the Commission
9 will consider. The Company proposes putting these performance measures
10 in place, monitoring our performance under them, and learning from this
11 experience. Future WSIPs can then learn from this case to better design
12 and implement financial incentives or penalties, if such measures are
13 desired.

14 2. Compliance Filings/Status Reports

15 **Q. WHAT DOES THE WSIP STATUTE AND ORDER CONTEMPLATE**
16 **REGARDING COMMISSION REVIEW DURING THE TERM OF AN WSIP**
17 **AND WHAT DOES THE COMPANY PROPOSE IN THIS REGARD?**

18 A. The WSIP rules provide for various quarterly and annual reports –
19 specifically: quarterly earnings reports; quarterly capital investment project
20 status reports; quarterly reports on the number of customers disconnected
21 for nonpayment; and annual reports addressing earnings, refunds/credits,
22 performance metrics, rate base, etc. Mr. Drennan’s testimony describes the

1 compliance filings the Company proposes to make and a proposed
2 schedule for review of those filings. These filings will provide the
3 Commission and parties a substantial amount of information on which to
4 assess how the WSIP is working.

5 3. Refund Commitments

6 **Q. WHAT DO THE WSIP STATUTE AND RULES STATE WITH RESPECT**
7 **TO POTENTIAL REFUNDS TO CUSTOMERS DURING THE TERM OF A**
8 **WSIP?**

9 A. The WSIP statute and rules require refunds to customers if, in a plan year,
10 the utility earns above the top of its banded ROE range.

11 4. Commitment to Not File During Term of Plan

12 **Q. THE WSIP STATUTE AND RULES ALSO STATE THAT A UTILITY MAY**
13 **NOT FILE A NEW RATE CASE DURING THE TERM OF AN APPROVED**
14 **WSIP, UNLESS THE UTILITY IS EARNING BELOW THE BOTTOM OF**
15 **THE ROE RANGE. DOES THE COMPANY AGREE?**

16 A. Yes, with the caveat that a utility can petition the Commission for unplanned
17 emergency capital investments in certain limited circumstances. One of the
18 benefits of a just and reasonable WSIP is that it can provide stable and
19 predictable rates for a period of time and avoid the need for serial rate case
20 filings.

5. Rates at the Conclusion of the Plan

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2 **Q. THE WSIP RULES REQUIRE A UTILITY'S PLAN YEAR 3 RATES TO**
3 **REMAIN IN EFFECT BEYOND THE TERM OF THE WSIP UNTIL A NEW**
4 **RATE CASE ORDER IS IN EFFECT. WHAT DOES THE COMPANY**
5 **PROPOSE IN THIS REGARD?**

6 A. Rates during the final year of the WSIP would remain in effect at the
7 conclusion of the term of the WSIP, unless and until the Company has a
8 new base rate order in effect. However, we would plan to restart our WSIC
9 and SSIC mechanisms at the end of the three-year WSIP period.

10 **E. Final Summary**

11 **Q. HOW CAN THE COMMISSION HAVE CONFIDENCE THAT THE**
12 **COMPANY'S RATES WILL BE JUST AND REASONABLE UNDER THE**
13 **WSIP PROPOSAL?**

14 A. The Commission may approve a Water and Sewer Investment Plan
15 proposed by a water or sewer utility **only** upon a finding that the plan results
16 in rates that are just and reasonable and are in the public interest. See G.S.
17 62-133.1B(b). CWSNC's Application demonstrates a heightened level of
18 planning integrity, efficiency, expertise, and understanding of the WSIP and
19 other aspects of the ratemaking rules and our obligations. We show our
20 commitment to and a plan for continuing to provide safe and reliable service,
21 along with an understanding of the imperative of maintaining just and
22 reasonable rates. Our three-year WSIP is built on a full cost of service

1 approach. For the capital-related portions of this request, the WSIP relies
2 on our capital project plans, which are established through a rigorous
3 process. Our witnesses and supporting documentation also provide
4 significant discussion of the main capital drivers over the three-year term of
5 the Plan. By utilizing the full cost of service approach, we have also fully
6 captured the impact of the passage of time throughout the WSIP period.

7 For expense items, we have employed a hybrid approach that utilizes
8 well-accepted index factors, where applicable. For items where such factors
9 were not available or appropriate, we have utilized our budgets and
10 forecast, as appropriate.

11 Given our full cost of service approach, we also have incorporated
12 revenue or other offsets that reduce our revenue requirements in the Plan
13 Years. This approach has resulted in modest and stable rate requests for
14 the Plan Years that should assure the affordability of our utility services over
15 the term of the plan. Finally, the Commission will receive a wealth of
16 information, in the form of compliance filings, by which it can review the
17 impact on customers as well as our performance and our financial results.
18 Collectively, this package provides assurance that our rates will be just and
19 reasonable throughout the term of our plan and that our customers can
20 continue to be provided safe and reliable service. Additionally, the
21 Company's proposal establishes rates that are fair to both the customer and

1 the utility, will not result in sudden substantial rate increases to customers
2 annually or over the term of the plan, and is representative of the utility's
3 operations over the plan term.

4 **VI. FRAMEWORK OF FILING AND INTRODUCTION OF WITNESSES**

5 **Q. PLEASE IDENTIFY THE COMPANY'S CASE-IN-CHIEF WITNESSES**
6 **AND THE TOPICS ADDRESSED IN THEIR TESTIMONY.**

7 A. In addition to my policy testimony, the following witnesses support the
8 Company's Application:

- 9 • Phil Drennan, provides testimony to support the overall Test
10 Year and Plan Year revenue requirements for the WSIP. Mr.
11 Drennan also addresses the schedules supporting our income
12 statement, rate base, revenue deficiency, and jurisdictional
13 allocations. These schedules incorporate and reflect the
14 recommendations of a number of our witnesses, including the
15 cost of capital.
- 16 • Matt Schellinger, provides testimony to address the
17 Company's pro forma revenues and billing analysis; the
18 Company's revenue requirements for the Water Sewer
19 Investment Plan years; Growth and Consumption
20 assumptions through the WSIP period; and the Company's
21 proposed rate design for water and sewer.

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- Dana Hill provides an overview of the operations of CWSNC, the significant capital investments made since the Company’s last rate case, as well as the capital investment plan element of the Water and Sewer Investment Plan (“WSIP”). Mr. Hill will also discuss new technology, the continued efforts to address non-revenue water, and will introduce a proposed pretreatment, or “sewer use” tariff.
- Dylan D’Ascendis of ScottMadden, who testifies on the ROE and rate of return, including capital structure and the cost of debt.

VII. CONCLUSION

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

Operational Compliance

Metric 1: Water Compliance Rate %

Calculation: % Days in Compliance = (Sum of all Days - Sum of all Days out of Compliance) / Sum of all Days

"Sum of all Days" = # of Systems x 365

Metric Results	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
	99.06%	99.69%	99.07%	97.85%	97.50%	97.52%	96.29%	99.07%	99.38%	99.99%	100.00%	99.08%

Metric 2: Wastewater Compliance Rate %

Calculation: % Days in Compliance = (Sum of all Days - Sum of all Days out of Compliance) / Sum of all Days

"Sum of all Days" = # of Systems x 365

Metric Results	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
	92.70%	89.47%	94.21%	94.40%	94.91%	90.47%	95.50%	96.05%	94.42%	97.58%	96.13%	99.04%

Customer Service

Metric 1: Telephone Service Factory (TSF) %

Calculation: Calls Answered within 60 seconds / Total Calls Answered

Metric Results	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
	82.40%	69.57%	73.19%	63.60%	97.20%	89.20%	82.40%	79.20%	83.50%	72.90%	76.40%	77.20%

Metric 2: Non-bill Related Customer Service Complaints (Complaints / 1000 Accounts)

Calculation: Non-bill Customer Complaints / (Active accounts / 1000)

Metric Results	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
	23.36	24.36	20.00	19.28	23.14	31.97	26.72	26.45	31.08	32.91	23.50	20.04

Service Reliability

Metric 1: Unplanned Water Service Disruptions (Unplanned Outages / 1000 Accounts)

Calculation: Recorded Lucity Water Main Breaks / (Customer Accounts / 1000)

Metric Results	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
	-	0.15	0.15	0.53	1.00	1.03	0.09	0.70	0.09	0.23	0.17	1.19

Metric 2: Number of Sanitary Sewer Overflows / 100 Miles of Gravity Line

Calculation: Wastewater SSOs / (100 Miles of Gravity Line)

Metric Results	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
	-	0.36	-	0.36	-	0.71	1.78	-	-	2.14	-	2.49

Workforce Health and Safety

Metric 1: OSHA Incident Rate

Calculation: (Number of Injuries and Illnesses * 200000/4) / Employee Hours Worked

Metric Results	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
	0.78	0	0.87	0	0.78	1.35	0	1.14	0	0	0	0

Metric 2: Employee Training

Calculation: Hours of Employee Training / Employee

Metric Results	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
	0:00:00	0:00:00	0:31:03	1:03:51	1:01:06	2:14:41	1:57:17	2:37:43	0:52:02	1:24:39	3:28:23	7:52:17