

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-35, SUB 51

In the Matter of
Application of Western Carolina)
University for an Adjustment of)
Rates and Charges for Electric)
Service in North Carolina)
)

TESTIMONY OF
BENJAMIN P. LOZIER
PUBLIC STAFF – NORTH
CAROLINA UTILITIES
COMMISSION

WESTERN CAROLINA UNIVERSITY

DOCKET NO. E-35 SUB 51

TESTIMONY OF BENJAIN P. LOZIER

ON BEHALF OF THE PUBLIC STAFF

NORTH CAROLINA UTILITIES COMMISSION

August 21, 2020

1 **Q. PLEASE STATE YOUR NAME, POSITION, AND BUSINESS**
2 **ADDRESS FOR THE RECORD.**

3 A. My name is Benjamin P. Lozier and my business address is 430
4 North Salisbury Street, Raleigh, North Carolina, 27603. I am a
5 Financial Analyst in the Economic Research Division of the Public
6 Staff of the North Carolina Public Utilities Commission, representing
7 the using and consuming public.

8 **Q. PLEASE OUTLINE YOUR EDUCATIONAL BACKGROUND AND**
9 **RELEVANT EMPLOYMENT EXPERIENCE**

10 A. I received a Bachelor of Arts degree in Economics from Wake
11 Forest University in 2014, and a Master of Environmental
12 Management (concentration: Energy & Environment) degree from
13 Duke University in 2017. I joined the Public Staff in May of 2020.
14 Prior to joining the Public Staff in 2020, I was a Senior Energy
15 Research Analyst at ScottMadden Inc. for three years. Since joining
16 the Public Staff, I have been involved in the evaluation of electric

1 utility integrated resource plans, the evaluation of electric utility
2 demand-side management and energy efficiency (DSM/EE) cost
3 recovery riders, the evaluation of electric utility renewable energy
4 and energy efficiency portfolio standard (REPS) cost recovery rider,
5 the evaluation of electric utility fuel charge adjustment cost recovery
6 rider, and have conducted rate of return studies in water and
7 wastewater utility rate cases.

8 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
9 **PROCEEDING?**

10 A. The purpose of my testimony is to present to the North Carolina
11 Utilities Commission (NCUC or Commission) the results of my
12 analysis and my recommendations as to the fair rate of return to be
13 used in establishing rates for electric utility service provided by
14 Western Carolina University (WCU or Company). Additionally, I
15 address the Company's proposed weather adjustment to its test
16 year energy sales.

17 **Q. WHAT IS THE CURRENTLY APPROVED COST OF CAPITAL**
18 **FOR WESTERN CAROLINA UNIVERSITY?**

19 A. In the last WCU general rate case, Docket No. E-35, Sub 45, the
20 Commission approved a 6.74% overall rate of return, based on a
21 hypothetical capital structure of 50% debt and 50% equity, a cost of
22 debt of 4.23%, and a cost of equity of 9.25%.

1 **Q. WHAT IS THE COST OF CAPITAL REQUESTED BY WCU IN**
2 **THIS PROCEEDING?**

3 A. WCU has requested a rate of return of 6.69%. This applied for rate
4 of return is based on a hypothetical capital structure of 50.00%
5 long-term debt and 50.00% common equity. WCU has requested a
6 cost rate of long-term debt of 4.37%, and a cost rate for common
7 equity of 9.00%.

8 **Q. HOW DOES WCU WITNESS O'DONNELL DEVELOP HIS**
9 **RECOMMENDATION?**

10 A. WCU witness William R. O'Donnell utilizes one cost of equity
11 method: Comparable Earnings Analysis. O'Donnell conducts the
12 analysis of returns on equity (ROEs) by combining recent ROEs
13 granted across the country with recent ROEs granted by the
14 NCUC.

15 Witness O'Donnell analysis states that in 2019, according to S&P
16 Global, the average ROE granted by utility state regulators was
17 9.65%. Witness O'Donnell analysis uses the Dominion Virginia
18 Power (Dominion) ruling, Docket E-22, Sub 562, in which the
19 NCUC granted Dominion a 9.75%, as the most recent NCUC ROE
20 ruling. Based on these two figures, Witness O'Donnell testifies that
21 a 9.00% ROE is the proper rate of return for use in this proceeding.

1 In his testimony, Witness O'Donnell recommends a hypothetical
2 capital structure that consists of 50% equity and 50% debt.

3 In his testimony, Witness O'Donnell calculates his recommended
4 cost of long-term debt (4.37%) by averaging the long-term debt
5 rates for three investor-owned utilities: Dominion, Duke Energy
6 Carolinas (DEC), and Duke Energy Progress (DEP). For Dominion,
7 Witness O'Donnell uses a long-term debt cost of 4.442%, which is
8 the rate the Commission approved in Docket No. E-22, Sub 562.
9 For DEC, Witness O'Donnell uses a long-term debt cost of 4.51%,
10 which is what DEC is seeking in its current rate case (Docket No.
11 E-7, Sub 1214). For DEP, Witness O'Donnell uses a long-term debt
12 cost of 4.15%, which is what DEP is seeking in its current rate case
13 (Docket No. E-2, Sub 1219). Witness O'Donnell averages these
14 three costs of long-term debt to calculate his recommended cost of
15 long-term debt (4.37%).

<u>Investor Owned Utility</u>	<u>Docket</u>	<u>Status</u>	<u>Long-Term Debt</u>
Dominion	E-22, Sub 562	Approved	4.442%
DEC	E-7, Sub 1214	Proposed	4.51%
<u>DEP</u>	<u>E-2, Sub 1219</u>	<u>Proposed</u>	<u>4.15%</u>
Average			4.37%

21 Witness O'Donnell recommends an overall cost of capital of 6.69%.

1 **Q. WHAT IS THE OVERALL RATE OF RETURN RECOMMENDED**
2 **BY THE PUBLIC STAFF?**

3 A. The Public Staff recommends an overall rate of return of 6.32%,
4 based on a hypothetical capital structure consisting of 50.00% long-
5 term debt and 50.00% common equity. The recommended overall
6 cost of capital is based on a recommended debt cost rate of 3.64%
7 and a 9.00% cost rate for common equity. Relative to the
8 Company's last rate case, the reduction in the Public Staff's
9 recommended rate of return represents a 42 basis point reduction
10 from the current overall cost of capital of 6.74%.

11 **Q. HOW IS THE REMAINDER OF YOUR TESTIMONY**
12 **STRUCTURED?**

13 A. The remainder of my testimony is presented in the following six
14 sections:

- 15 I. Legal and Economic Guidelines for Fair Rate of Return
- 16 II. Present Financial Market Conditions
- 17 III. Appropriate Capital Structure and Cost of Long-Term Debt
- 18 IV. The Cost of Common Equity Capital
- 19 V. Concern with Company Witness O'Donnell Testimony
- 20 VI. Summary and Recommendations

1 I. LEGAL AND ECONOMIC GUIDELINES FOR
2 FAIR RATE OF RETURN

3 Q. PLEASE BRIEFLY DESCRIBE THE ECONOMIC AND LEGAL
4 FRAMEWORK OF YOUR ANALYSIS.

5 A. Public utilities possess certain characteristics of natural
6 monopolies. For instance, it is more efficient for a single firm to
7 provide a service such as water production and distribution or
8 wastewater collection and treatment than for two or more firms
9 offering the same service in the same area to do so. Therefore,
10 regulatory bodies have assigned franchised territories to public
11 utilities to provide services more efficiently and at a lower cost to
12 consumers.

13 Q. WHAT IS THE ECONOMIC RELATIONSHIP BETWEEN RISK
14 AND THE COST OF CAPITAL?

15 A. The cost of equity capital to a firm is equal to the rate of return
16 investors expect to earn on the firm's securities given the securities'
17 level of risk. An investment with a greater risk will require a higher
18 expected return by investors. In Federal Power Comm'n v. Hope
19 Natural Gas Co., 320 U.S. 591, 603 (1944) (Hope), the United
20 States Supreme Court stated:

21 [T]he return to the equity owner should be
22 commensurate with returns on investments in other
23 enterprises having corresponding risks. That return,
24 moreover, should be sufficient to assure confidence in

1 the financial integrity of the enterprise, so as to
2 maintain its credit and to attract capital.

3 In Bluefield Waterworks & Impr. Co. v. Public Service Comm'n, 262
4 U.S. 679, 692-93 (1923) (Bluefield) the United States Supreme
5 Court stated: A public utility is entitled to such rates as will permit it
6 to earn a return on the value of the property which it employs for
7 the convenience of the public equal to that generally being made at
8 the same time and in the same general part of the country on
9 investments in other business undertakings which are attended by
10 corresponding risks and uncertainties, but it has no constitutional
11 right to profits such as are realized or anticipated in highly profitable
12 enterprises or speculative ventures. The return should be
13 reasonably sufficient to assure confidence in the financial
14 soundness of the utility and should be adequate, under efficient and
15 economical management, to maintain and support its credit and
16 enable it to raise the money necessary for the proper discharge of
17 its public duties. A rate of return may be reasonable at one time and
18 become too high or too low by changes affecting opportunities for
19 investment, the money market, and business conditions.

20 These two decisions recognize that utilities are competing for the
21 capital of investors and provide legal guidelines as to how the
22 allowed rate of return should be set. The decisions specifically
23 speak to the standards or criteria of capital attraction, financial

1 integrity, and comparable earnings. The Hope decision, in
2 particular, recognizes that the cost of common equity is
3 commensurate with risk relative to investments in other enterprises.
4 In competitive capital markets, the required return on common
5 equity will be the expected return foregone by not investing in
6 alternative stocks of comparable risk. Thus, in order for the utility to
7 attract capital, possess financial integrity, and exhibit comparable
8 earnings, the return allowed on a utility's common equity should be
9 that return required by investors for stocks with comparable risk. As
10 such, the return requirements of debt and equity investors, which is
11 shaped by expected risk and return, is paramount in attracting
12 capital.

13 It is widely recognized that a public utility should be allowed a rate
14 of return on capital, which will allow the utility, under prudent
15 management, to attract capital under the criteria or standards
16 referenced by the Hope and Bluefield decisions. If the allowed rate
17 of return is set too high, consumers are burdened with excessive
18 costs, current investors receive a windfall, and the utility has an
19 incentive to overinvest. Likewise, customers will be charged prices
20 that are greater than the true economic costs of providing these
21 services and consumers will consume too few of these services
22 from a point of view of efficient resource allocation. If the return is
23 set too low, then the utility stockholders will suffer because a

1 declining value of the underlying property will be reflected in a
2 declining value of the utility's equity shares. This could happen
3 because the utility would not be earning enough to maintain and
4 expand its facilities to meet customer demand for service, cover its
5 operating costs, and attract capital on reasonable terms. Lenders
6 will shy away from the company because of the increased risk that
7 the utility will default on its debt obligations. Because a public utility
8 is capital intensive, the cost of capital is a very large part of its
9 overall revenue requirement and is a crucial issue for a company
10 and its ratepayers.

11 The Hope and Bluefield standards are embodied in N.C. Gen. Stat.
12 § 62-133(b)(4), which requires that the allowed rate of return be
13 sufficient to enable a utility by sound management:

14 "...to produce a fair return for its shareholders,
15 considering changing economic conditions and other
16 factors, . . . to maintain its facilities and services in
17 accordance with the reasonable requirements of its
18 customers in the territory covered by its franchise, and
19 to compete in the market for capital funds on terms
20 that are reasonable and are fair to its customers and
21 to its existing investors."

22 N.C. Gen. Stat. § 62-133(b)(4) (2017).

23 On April 12, 2013, the North Carolina Supreme Court decided State
24 ex rel. Utils. Comm'n v. Cooper, 366 N.C. 484, 739 S.E. 2d 541
25 (2013) (Cooper). In that decision, the Supreme Court reversed and
26 remanded the Commission's January 27, 2012 Order in Docket No.

1 E-7, Sub 989, approving a stipulated return on equity of 10.50% for
2 Duke Energy Carolinas, LLC. In its decision, the Supreme Court
3 held: (1) that the 10.50% return on equity was not supported by the
4 Commission's own independent findings and analysis as required
5 by State ex rel. Utils. Comm'n v. Carolina Util. Customers Ass'n,
6 348 N.C. 452, 500 S.E.2d 693 (1998) (CUCA I), in cases involving
7 non-unanimous stipulations, and, (2) that the Commission must
8 make findings of fact regarding the impact of changing economic
9 conditions on consumers when determining the proper return on
10 equity for a public utility. In Cooper, the Court's holding introduced a
11 new factor to be considered by the Commission regardless of
12 whether there is a stipulation.

13 In considering this new element, the Commission is guided by
14 ratemaking principles laid down by statute and interpreted by a
15 body of North Carolina case law developed over many years.
16 According to these principles, the test of a fair rate of return is a
17 return on equity that will provide a utility, by sound management,
18 the opportunity to: (1) produce a fair profit for its shareholders in
19 view of current economic conditions, (2) maintain its facilities and
20 service, and (3) compete in the marketplace for capital. State ex rel.
21 Utils. Comm'n v. General Tel. Co., 281 N.C. 318, 370, 189 S.E.2d
22 705, 738 (1972). Rates should be set as low as reasonably
23 possible consistent with constitutional constraints. State ex rel.

1 Utils. Comm'n v. Pub. Staff-N. Carolina Utils. Comm'n, 323 N.C.
2 481, 490, 374 S.E.2d 361, 366 (1988). The exercise of subjective
3 judgment is a necessary part of setting an appropriate return on
4 equity. Id. Thus, in a particular case, the Commission must strike a
5 balance that: (1) avoids setting a return so low that it impairs the
6 utility's ability to attract capital, (2) avoids setting a return any
7 higher than needed to raise capital on reasonable terms, and (3)
8 considers the impact of changing economic conditions on
9 consumers.

10 **Q. WHAT IS A FAIR RATE OF RETURN?**

11 A. The fair rate of return is simply a percentage, which, when
12 multiplied by a utility's rate base investment will yield the dollars of
13 net operating income that a utility should reasonably have the
14 opportunity to earn. This dollar amount of net operating income is
15 available to pay the interest cost on a utility's debt capital and a
16 return to the common equity investor. The fair rate of return
17 multiplied by the utility's rate base yields the dollars a utility needs
18 to recover in order to earn the investors' required return on capital.

19 **Q. HOW DID YOU DETERMINE THE FAIR RATE OF RETURN THAT**
20 **YOU RECOMMEND IN THIS PROCEEDING?**

21 A. To determine the fair rate of return, I performed a cost of capital
22 study consisting of three steps. First, I determined the appropriate

1 capital structure for ratemaking purposes, i.e., the proper
2 proportions of each form of capital. Utilities normally finance assets
3 with debt and common equity. Because each of these forms of
4 capital have different costs, especially after income tax
5 considerations, the relative amounts of each form employed to
6 finance the assets can have a significant influence on the overall
7 cost of capital, revenue requirements, and rates. Thus, the
8 determination of the appropriate capital structure for ratemaking
9 purposes is important to the utility and to ratepayers. Second, I
10 determined the cost rate of each form of capital. The individual debt
11 issues have contractual agreements explicitly stating the cost of
12 each issue. The embedded annual cost rate of debt is generally
13 calculated with the annual interest cost divided by the debt
14 outstanding. The cost of common equity is more difficult to
15 determine because it is based on the investor's opportunity cost of
16 capital. Third, by combining the appropriate capital structure ratios
17 for ratemaking purposes with the associated cost rates, I calculate
18 an overall weighted cost of capital or fair rate of return.

19 **II. PRESENT FINANCIAL MARKET CONDITIONS**

20 **Q. CAN YOU BRIEFLY DESCRIBE CURRENT FINANCIAL MARKET**
21 **CONDITIONS?**

1 A. Yes. The cost of financing is much lower today than in the more
2 inflationary period of the 1990s. More recently, the continued low
3 rates of inflation and expectations of future low inflation rates have
4 contributed to even lower interest rates. According to the Bureau of
5 Labor Statistics, the Consumer Price Index for the South of the USA
6 has been relatively stable over the past five years (2015-2019).

7	<u>Year</u>	<u>CPI Annual Growth Rate</u>
8	2015	-0.18%
9	2016	1.11%
10	2017	2.05%
11	2018	2.22%
12	<u>2019</u>	<u>1.45%</u>
13	Average	1.33%

14 In regards to the 2020 COVID pandemic, inflation for the first half of
15 2020 was 0.42% from 2019.

16 According to the July 2020 Mergent Bond Record, Moody's index
17 yields on long-term "A" rated public utility bonds have fallen 86 basis
18 points to 3.07% from 3.93% in May 2016, close to the date the
19 Commission issued its final order in Docket No. E-35, Sub 45, as
20 illustrated in Lozier Exhibit 1.

1 **III. APPROPRIATE CAPITAL STRUCTURE AND**
2 **COST OF LONG-TERM DEBT**

3 **Q. WHY IS THE APPROPRIATE CAPITAL STRUCTURE**
4 **IMPORTANT FOR RATEMAKING PURPOSES?**

5 A. For companies that do not have monopoly power, the price that an
6 individual company charges for its products or services is set in a
7 competitive market, and that price is generally not influenced by the
8 company's capital structure. However, the capital structure that is
9 determined to be appropriate for a regulated public utility has a
10 direct bearing on the fair rate of return, revenue requirement, and
11 therefore, the prices charged to captive ratepayers.

12 **Q. PLEASE EXPLAIN THE TERM CAPITAL STRUCTURE AND**
13 **HOW THE CAPITAL STRUCTURE APPROVED FOR**
14 **RATEMAKING PURPOSES AFFECTS RATES.**

15 A. The capital structure is simply a representation of how a utility's
16 assets are financed. It is the relative proportions or ratios of debt
17 and common equity to the total of these forms of capital, which
18 have different costs. Common equity is far more expensive than
19 debt for ratemaking purposes for two reasons. First, as mentioned
20 earlier, there are income tax considerations. Interest on debt is
21 deductible for purposes of calculating income taxes. The cost of
22 common equity, on the other hand, must be "grossed up" to allow
23 the utility sufficient revenue to pay income taxes and to earn its cost

1 of common equity on a net or after-tax basis. Therefore, the amount
2 of revenue the utility must collect from ratepayers to meet income
3 tax obligations is directly related to both the common equity ratio in
4 the capital structure and the cost of common equity. A second
5 reason for this cost difference is that the cost of common equity
6 must be set at a marginal or current cost rate. Conversely, the cost
7 of debt is set at an embedded rate because the utility is incurring
8 costs that are previously established in contracts with security
9 holders.

10 Because the Commission has the duty to promote economic utility
11 service, it must decide whether or not a utility's requested capital
12 structure is appropriate for ratemaking purposes. An example of the
13 cost difference can be seen in the Company's filing. Based upon
14 the Company's requested capital cost rates, each dollar of its
15 common equity and long-term debt supporting the retail rate base
16 has the following approximate annual costs (including income tax
17 and regulatory fee) to ratepayers:

- 18 (1) Each \$1 of common equity costs a ratepayer
19 approximately 9 cents per year.
- 20 (2) Each \$1 of long-term debt costs a ratepayer
21 approximately 4 cents per year.

1 **Q. WHAT CAPITAL STRUCTURE HAS THE COMPANY**
2 **REQUESTED IN THIS CASE?**

3 A. The Company's application requests to use a hypothetical capital
4 structure of 50.00% long-term debt and 50.00% common equity.

5 **Q. DO YOU SUPPORT THE CAPITAL STRUCTURE PROPOSED BY**
6 **THE COMPANY IN THIS CASE?**

7 A. Yes. The Company's proposed capital structure is reasonable.
8 Given that the WCU electric utility service has no assigned debt, I
9 believe that the proposed hypothetical capital structure comprised
10 of 50% common equity and 50% long-term debt is reasonable and
11 appropriate for ratemaking. The recommended capital structure
12 ratios are appropriate given WCU electric utility's relatively low
13 financial and business risks. Furthermore, because WCU's electric
14 utility operations have no assigned long-term debt, the use of a
15 hypothetical capital structure is reasonable.

16 **Q. WHAT IS YOUR RECOMMENDED COST OF LONG-TERM**
17 **DEBT?**

18 A. I recommend the use of the cost of debt of 3.64%. WCU provided
19 the Public Staff with the yield to maturity for the four 30-year
20 municipal (tax-exempt) bonds, as shown below. In addition, WCU's
21 debt is rated "Aa3" by Moody's Investors Service, which contributes
22 to the lower cost of debt financing available to the university.

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WESTERN CAROLINA UNIVERSITY

	<u>Yield to Maturity</u>
Series 2015A	4.27%
Series 2018	3.76%
Series 2020	3.08%
<u>Series 2020B</u>	<u>3.46%</u>
Average	3.64%

8 The average for these four long-term bonds is 3.64%. The above
9 cost of debt represents tax-exempt financing. Witness O'Donnell
10 recommends using an investor-owned utility (IOU) cost of debt. The
11 Public Staff believes that the use of municipal bond yields is a
12 better proxy for the cost of debt for WCU, as compared to the
13 embedded debt cost of DEC, DEP, and Dominion. My
14 recommended capital structure and cost of debt is as follows:

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WESTERN CAROLINA UNIVERSITY
as of June 30, 2020

	<u>Ratio</u>	<u>Cost Rate</u>
Long-Term Debt	50.00%	3.64%
<u>Common Equity</u>	<u>50.00%</u>	
Total	100.00%	

21

IV. THE COST OF COMMON EQUITY CAPITAL

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Q. HOW DO YOU DEFINE THE COST OF COMMON EQUITY?

A. The cost of equity capital for a firm is the expected rate of return on common equity that investors require in order to induce them to

1 purchase shares of the firm’s common stock. The investor-required
2 rate of return is expected, given the forward-looking nature of equity
3 investing. An investor only buys a share of a firm’s common stock
4 when they expect their returns to be equal to, or greater than, the
5 return required to accept the risk that stock investment.

6 **Q. WHAT EVIDENCE DID YOU CONSIDER IN YOUR ASSESSMENT**
7 **OF THE REASONABLENESS OF YOUR RECOMMENDED**
8 **RETURN?**

9 A. Based on my investigation of financial and economic data, as well
10 as a review of DCF analyses of electric utilities, I believe that the
11 rate proposed by Witness O’Donnell is reasonable. As stated by
12 Witness O’Donnell, RRA data shows that on average electric
13 utilities received a ROE of 9.65% in 2019, and after confirming the
14 average authorized ROE for 2019, the Public Staff believes that
15 9.00% cost of common equity is reasonable for WCU. The Public
16 Staff notes that WCU is significantly less risky from a traditional
17 electric utility. Unlike the typical investor-owned utility, WCU is a
18 small self-contained distribution system with no generation or
19 transmission systems to support, and is owned by the State of
20 North Carolina. According to Regulatory Research Associates, a
21 group within S&P Global Market Intelligence: “the annual average
22 authorized ROEs in vertically integrated cases typically are about
23 30 to 65 basis points higher than in delivery-only cases, arguably

1 reflecting the increased risk associated with ownership and
2 operation of generation assets.” According to RRA, the industry
3 average ROE, in 2019, for vertically integrated electric utilities was
4 9.73%. According to RRA, the industry average ROE, in 2019, for
5 electric distribution-only utilities, was 9.37%. These are in
6 comparison to the average authorized ROE in electric rate cases of
7 9.65%, observed in 2019. The recommended rate of 9.00% is
8 appropriate given WCU’s relatively low financial and business risks.

9 **Q. TO WHAT EXTENT DOES YOUR RECOMMENDED RATE OF**
10 **RETURN ON EQUITY TAKE INTO CONSIDERATION THE**
11 **IMPACT OF CHANGING ECONOMIC CONDITIONS ON WCU’S**
12 **CUSTOMERS?**

13 A. I am aware of no clear numerical basis for quantifying the impact of
14 changing economic conditions on customers in determining an
15 appropriate return on equity in setting rates for a public utility.
16 Rather, the impact of changing economic conditions nationwide is
17 inherent in the methods and data used in my study to determine the
18 cost of equity for utilities that are comparable to WCU. I have
19 reviewed certain information on the economic conditions in Jackson
20 County and Cullowhee, specifically, the 2013 through 2018 data on
21 total personal income from the Bureau of Economic Analysis (BEA)
22 and the Development Tier Designations published by the North

1 Carolina Department of Commerce for Jackson County in which
2 WCU's system is located.

3 The BEA data indicates that from 2013 to 2018, total personal
4 income in Jackson County grew at a compound annual growth rate
5 (CAGR) of 4.1%, which is slightly higher than the rate of 3.8% for
6 the whole state.

7 The North Carolina Department of Commerce annually ranks the
8 state's 100 counties based on economic well-being and assigns
9 each a Tier designation. The most distressed counties are rated a
10 "1" and the most prosperous counties are rated a "3." The rankings
11 examine several economic measures such as household income,
12 poverty rates, unemployment rates, population growth, and per
13 capita property tax base. The 40 most distressed counties are
14 designated as Tier 1, the next 40 as Tier 2, and the 20 least
15 distressed as Tier 3. This yields an average county Tier ranking of
16 1.8 for the state. Jackson County is designated a Tier 2 ranking,
17 higher than the state average. Both these economic measures
18 indicate that WCU's service areas has experienced stable
19 economic conditions until the recent coronavirus pandemic.

20 **Q. WHAT HAS BEEN THE IMPACT OF THE CORONAVIRUS**
21 **PANDEMIC ON THE UNEMPLOYMENT RATES IN JACKSON**
22 **COUNTY, WHERE WCU SERVICE TERRITORY IS LOCATED?**

1 A. While it is too early to tell its full impacts, the coronavirus pandemic
2 has led to an increase in unemployment throughout the state of
3 North Carolina. Unemployment numbers have improved in recent
4 months, receding from a high point of unemployment of 12.7% for
5 the state, and 14.6% for Jackson County in May 2020. The North
6 Carolina Department of Commerce issued a press release on July
7 29, 2020, which stated that the unemployment rate decreased in all
8 100 of the state's 100 counties during June 2020. The release
9 indicated that the statewide unemployment rate for June 2020 was
10 7.9%. The June 2020 unemployment rate for Jackson County was
11 slightly higher than the state's unemployment rate at 8.1%.

12 As discussed above, it is the Commission's duty to set rates as low
13 as reasonably possible consistent within constitutional constraints.
14 This duty exists regardless of the customers' ability to pay.
15 Moreover, the rate of return on common equity is only one
16 component of the rate established by the Commission. N.C. Gen.
17 Stat. § 62-133 sets out an intricate formula for the Commission to
18 follow in determining a utility's overall revenue requirement. It is the
19 combination of rate base, expenses, capital structure, cost rates for
20 debt and equity capital, and capital structure that determines how
21 much customers pay for utility service and how much investors
22 receive in return for their investment. The Commission must
23 exercise its best judgment in balancing the interests of both groups.

1 My analysis indicates that my recommended rate of return on
2 equity will allow the Company to properly maintain its facilities,
3 provide adequate service to its customers, attract capital on terms
4 that are fair and reasonable to its customers and investors, and will
5 result in rates that are just and reasonable.

6 **V. CONCERNS WITH COMPANY WITNESS O'DONNELL**
7 **TESTIMONY**

8 **Q. DO YOU HAVE CONCERNS ABOUT COMPANY WITNESS**
9 **O'DONNELL'S TESTIMONY?**

10 A. Yes. As previously noted, I have concerns with the use of 4.37%
11 cost of long-term debt obtained by averaging the long-term debt
12 rates for three investor-owned utilities (Dominion, DEC, and DEP.)
13 Second, I have a concern with the proposed weather normalization
14 of kWh sales for the test year set forth in Witness O'Donnell's
15 testimony.

16 **Weather Normalization**

17 For this proceeding, the Public Staff accepts the Company's
18 proposed use of regression analysis for the weather normalization
19 calculation. Data from the Cullowhee, NC, weather station should
20 be used to reflect weather conditions in WCU's service area. It is
21 appropriate that the basis for determining normal weather be
22 calculated by using weather conditions from the appropriate

1 weather station(s) with 30 years of data, that has been customarily
2 applied by Dominion, DEC, and DEP.

3 In calculating his weather normalization, Witness O'Donnell uses a
4 103-year normal (1909-2012), rather than the typical use of a 30-
5 year normal. Using 30-year (1981-2010) normal data from the
6 National Oceanic and Atmospheric Administration, the Public Staff
7 completed a review of heating degree days and cooling degree
8 days for the Cullowhee weather station. The results of the Public
9 Staff's review indicated that the warm weather was approximately
10 13.8% milder than normal during the test year. The results of the
11 review also indicated that the cooler weather was approximately
12 53.2% warmer than normal during the test year. It was determined
13 that if weather had been normal, residential energy sales would
14 have increased by 231,534 kWh and commercial sales would have
15 decreased by 107,812 kWh.

16 **VI. SUMMARY AND RECOMMENDATIONS**

17 **Q. WOULD YOU PLEASE SUMMARIZE YOUR**
18 **RECOMMENDATIONS CONCERNING THE COST OF CAPITAL**
19 **AND WEATHER NORMALIZATION?**

20 **A.** Based upon the results of this study, it is my recommendation that
21 the appropriate capital structure to employ for ratemaking purposes
22 in this proceeding consists of 50.00% long-term debt and 50.00%

1 common equity. The appropriate embedded cost of long-term debt
2 associated with this capital structure is 3.64% and the
3 recommended cost of common equity of 9.00%. My recommended
4 overall weighted cost of capital produced is 6.32%, as shown in
5 Lozier Exhibit 2.

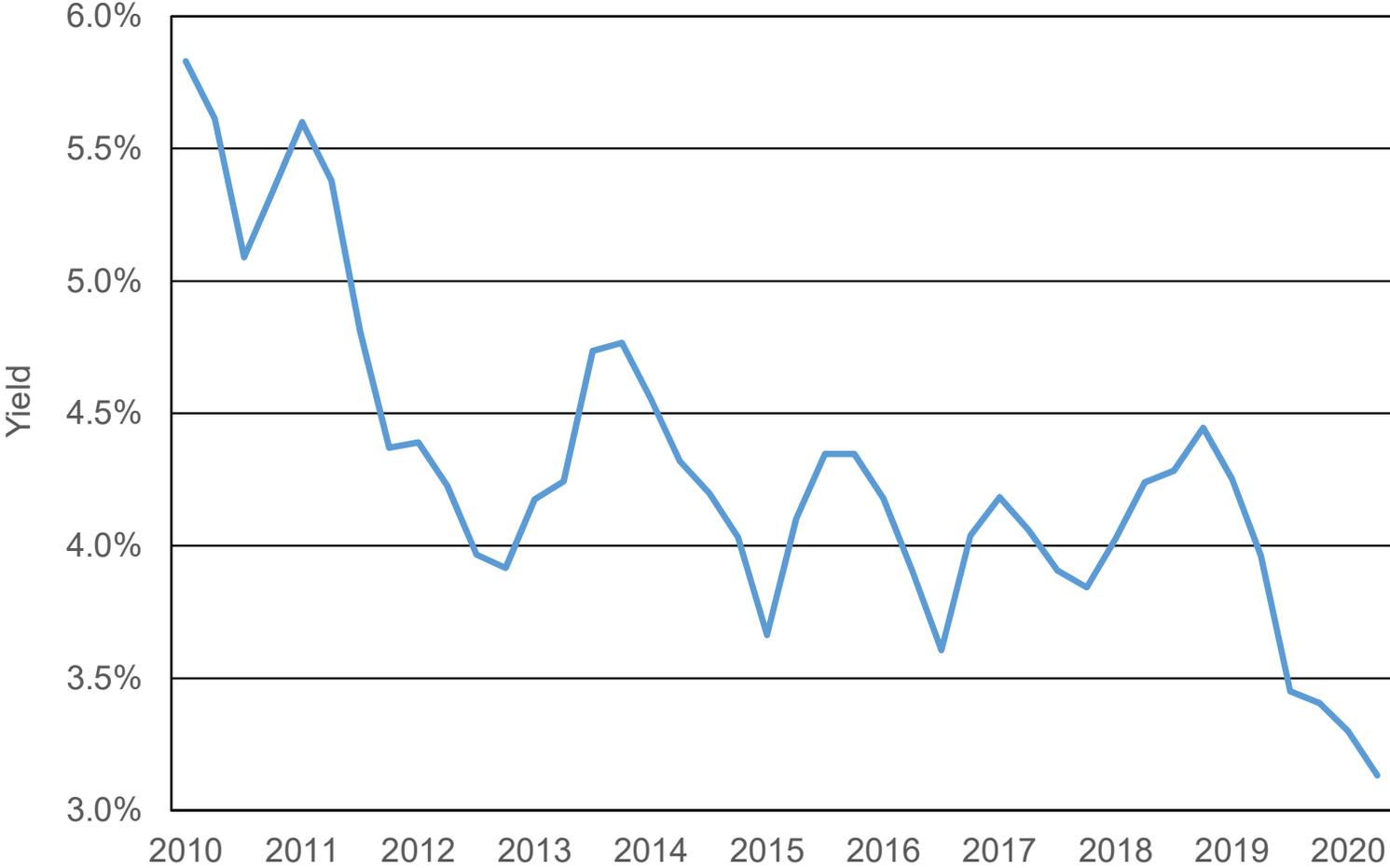
6 For weather normalization, I have recommended that the Public
7 Staff accountant Johnson increase the test year residential kWh
8 sales by 536,748 kWh, and the test year commercial kWh sales by
9 64,287 kWh, as shown in Lozier Exhibit 3.

10 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

11 **A. Yes.**

Moody's A-Rated Utility Bond Yields

(averaged over a quarter)



Western Carolina University
Cost of Capital as of June 30, 2020

Item	Ratios	Cost Rate	Weighted Cost Rate	Pre-Tax Cost ofCapital
Long-Term Debt	50.00%	3.64%	1.82%	1.82%
Common Equity	50.00%	9.00%	4.50%	4.50%
Total	100.00%		6.32%	9.92%

Western Carolina University
Weather Normalization

Normal Time Period	Total HDD*	Total CDD**	Residential (kWh)	Commerical (kWh)	Total (kWh)
103-Year	4,059	858	(305,214)	(172,099)	(477,313)
30-Year	4,301	814	231,534	(107,812)	123,722
Difference	242	(44)	536,748	64,287	601,035

* Heating Degree Days

** Cooling Degree Days