

State of North Carolina
Before the
North Carolina Utilities Commission

In Re: Petition for Rate Increase)
By Western Carolina University) **Docket No. E-35, Sub 51**

Prepared Direct Testimony
of
William R. O'Donnell, CPA

On Behalf of the
Western Carolina University

March 5, 2020

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-35, SUB 51**

DIRECT TESTIMONY OF WILLIAM R. O'DONNELL, CPA

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

3 A. My name William R. O'Donnell. I am Senior Financial Analyst with Nova Energy
4 Consultants, Inc. My business address is 1350 SE Maynard Rd., Suite 101, Cary, North
5 Carolina 27511.

6
7 **Q. ON WHOSE BEHALF ARE YOU PRESENTING TESTIMONY IN THIS**
8 **PROCEEDING?**

9 A. I am testifying on behalf of Western Carolina University (WCU) in regard to its petitions
10 for a change in rates and fees.

11
12 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND**
13 **RELEVANT EMPLOYMENT EXPERIENCE.**

14 A. I have a Bachelor of Science in Accounting from North Carolina State University and a
15 Master of Science in Accounting from the University of Virginia. I earned the
16 designation of Chartered Public Accountant ("CPA") in 2017. I worked in public
17 accounting with Deloitte & Touche, LLP from 2015 – 2020 in both Raleigh, NC and
18 McLean, VA. During my time with Deloitte, I supported integrated audits of international
19 clinical research organizations, aerospace & defense contractors, and manufacturing
20 organizations. Through these audits, I tested the design, implementation and effectiveness
21 of key internal financial control processes for Sarbanes-Oxley compliance. I also
22 performed financial analysis, review, and testing over the reliability of various aspects of
23 the client's financial statements. Subsequent to leaving Deloitte in 2020 I accepted a
24 position with Nova Energy Consultants, Inc. as a Senior Financial Analyst where I will

1 assist with rate of return, cost of capital, capital structure, cost of service, rate design, and
2 other regulatory matters.

3
4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

5 A. The purpose of my testimony in this proceeding is to present to the Commission the
6 current state of WCU's financial position as well as the University's rate proposals in this
7 rate case.

8
9 **Q. PLEASE DESCRIBE WCU'S ELECTRIC RESALE OPERATION.**

10 A. Western Carolina University operates an electric distribution system whose purpose is to
11 provide low-cost and reliable power supplies to residents and small businesses located
12 nearby to the University.
13 WCU's electric resale system is not defined as an electric utility, but its rates are subject
14 to regulation by this Commission.

15
16
17 **Q. PLEASE SUMMARIZE YOUR PRIMARY RECOMMENDATIONS IN THIS
18 CASE.**

19 A. My recommendations in this case are as follows:
20 • WCU needs an immediate rate increase of \$637,500, which equates to an overall
21 rate increase of 14.6%;
22 • the proper rate of return to set in this proceeding is 6.69%, which is based on a
23 capital structure consisting of 50% common equity with a 9.0% return on equity;
24 and 50% long-term debt at a cost rate of 4.37%;

25 the results of the cost-of-service study (COSS) indicate that residential rates will need to
26 increase at a higher rate than commercial rates.

27 **Q. HOW IS YOUR TESTIMONY STRUCTURED?**

28 A. The remainder of my testimony is divided into six sections as follows:

- 29 I. Current WCU Financial Position and Accounting Adjustments
30 II. Economic and Legal Guidelines for Fair Rate of Return
31 III. Cost of Common Equity

- 1 A. Comparable Earnings Analysis
- 2 B. Rate of Return Recommendation
- 3 IV. Overall Cost of Capital
- 4 A. Capital Structure
- 5 B. Cost of Debt
- 6 V. Cost of Service Study and Rate Design
- 7 VI. Summary
- 8
- 9

1 **I. CURRENT WCU FINANCIAL POSITION AND**
2 **ACCOUNTING ADJUSTMENTS**
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4

5 **Q. PLEASE DESCRIBE THE CURRENT WCU FINANCIAL POSITION.**

6 A. At the present time, WCU is not earning the 6.74% overall rate of return approved in its
7 last rate case, the order for which was issued on May 25, 2016. In **Exhibit WRO-1** I have
8 provided the per books results of WCU’s electric resale operations for the 12-months
9 ending June 30, 2019. As can be seen in this exhibit, WCU is currently sustaining a
10 (10.16%) deficit on its investment. This negative rate of return puts the University at-risk
11 for making necessary improvements to the WCU electric resale system and
12 corresponding service to its customers.

13
14 **Q. PLEASE DESCRIBE THE ACCOUNTING ADJUSTMENTS NOTED IN**
15 **EXHIBIT WRO-1.**

16 A. As shown in **Exhibit WRO-1**, the first accounting adjustment was made was to increase
17 electric resale revenues by \$35,747 to reflect the accrual adjustments made by WCU for
18 the closeout of FY 2018-2019. The resulting electric resale revenues reflect the sum of
19 actual billing registry figures for fiscal year 2018-2019. This adjustment was needed to
20 present the actual test year revenues to match actual test year expenses.

21
22 The second accounting adjustment was used to remove \$5,491 of investment income that
23 was recorded as “per books” income during the test year. This investment income does
24 not reflect utility activity, and was therefore removed from the adjusted income
25 statement.

26
27 For the third accounting adjustment, \$8,333 was added for consulting expenses that
28 incorporates the amortization of legal expense incurred with this rate case over a period
29 of three years.

1 The fourth accounting adjustment is for weather normalization where \$58,748 was
2 deducted from electric sales revenues, and \$42,183 was deducted from purchased power
3 for resale expenses.

4
5 **Q. MR. O'DONNELL, WHAT IS THE UNIVERSITY'S RATE BASE**
6 **INVESTMENT?**

7 A. **Exhibit WRO-2** provides the calculations for WCU's rate base investment.

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9 The rate base investment calculation began with WCU's plant in service value of
10 \$6,937,255. Note that this plant in service value is presented net of WCU's cost free
11 capital as the cost free capital represents refund monies that the University received in the
12 past and that were ultimately used for plant investment. I added supplies and materials
13 inventory for June 30, 2019 of \$313,580 and then subtracted accumulated depreciation to
14 obtain a total net plant in service figure of \$3,385,345. The working capital of \$242,753
15 represents one-eight (1/8) of adjusted test year O&M expenses less purchased power
16 expenses. Lastly, I deducted customer deposits of \$225,289 to come to a total rate base
17 investment of \$3,402,808.

18
19 **Q. WHAT IS THE TOTAL REVENUE REQUIREMENT THAT WCU IS SEEKING**
20 **IN THIS RATE CASE?**

21 A. To earn a 6.69% overall rate of return on its rate base investment and recover all its
22 operating expenses as noted in **Exhibit WRO-1**, WCU must be allowed a total revenue
23 requirement of \$5,073,005 which, when adjusted for weather of (\$58,748), amounts to an
24 revenue requirement of \$5,014,257. The calculations supporting this revenue requirement
25 can be seen in **Exhibit WRO-3**.

26 .
27 **Q. DOES THE ABOVE REVENUE REQUIREMENT INCLUDE TAX PAYMENTS?**

28 A. Yes, it does.

29

1 **Q. WHAT HAS CHANGED SINCE THE LAST WCU RATE CASE TO CAUSE WCU**
2 **ELECTRIC RESALE TO PAY INCOME TAXES?**

3 A. The university has recently been informed by its outside auditor that it must pay unrelated
4 business income taxes (UBIT) on business activities that are not related to the core
5 mission of the university. Since the auditor deemed that electric resale was not a core
6 business activity of WCU, the University must now pay electric resale UBIT at the
7 federal and state tax rates.

1 **II. ECONOMIC AND REGULATORY POLICY GUIDELINES**
2 **FOR A FAIR RATE OF RETURN**

3
4 **Q. PLEASE BRIEFLY DESCRIBE THE ECONOMIC AND REGULATORY**
5 **POLICY CONSIDERATIONS YOU HAVE TAKEN INTO ACCOUNT IN**
6 **DEVELOPING YOUR RECOMMENDATION CONCERNING THE FAIR RATE**
7 **OF RETURN THAT WCU SHOULD BE ALLOWED THE OPPORTUNITY TO**
8 **EARN.**

9 **A.** The theory of utility regulation assumes that public utilities are natural monopolies.
10 Historically, it was believed or assumed that it was more efficient for a single firm to
11 provide a particular utility service than multiple firms. Even though deregulation for the
12 procurement of natural gas and electric utility supplies is rapidly spreading, the delivery
13 of these products to end-use customers will continue to be considered a natural monopoly
14 for the foreseeable future. When it is deemed that a perceived natural monopoly does in
15 fact exist, regulatory authorities regulate the service areas in which regulated utilities
16 provide service, e.g. by assigning exclusive franchised territories to public utilities or by
17 determining territorial boundaries where disputes arise (as in Florida), in order for these
18 utilities to provide services more efficiently and at the lowest possible cost. In exchange
19 for the protection of its monopoly service area, the utility is obligated to provide adequate
20 service at a fair, regulated price.

21
22 This naturally raises the question - what constitutes a fair price? The generally accepted
23 answer is that a prudently managed utility should be allowed to charge prices that allow
24 the utility the opportunity to recover the reasonable and prudent costs of providing utility
25 service and the opportunity to earn a fair rate of return on invested capital. This fair rate
26 of return on capital should allow the utility, under prudent management, to provide
27 adequate service and attract capital to meet future expansion needs in its service area.
28 Obviously, since public utilities are capital-intensive businesses, the cost of capital is a
29 crucial issue for utility companies, their customers, and regulators. If the allowed rate of

1 return is set too high, then consumers are burdened with excessive costs, current investors
2 receive a windfall, and the utility has an incentive to overinvest. If the return is set too
3 low, adequate service is jeopardized because the utility will not be able to raise new
4 capital on reasonable terms.

5
6 Since every equity investor faces a risk-return tradeoff, the issue of risk is an important
7 element in determining the fair rate of return for a utility.

8
9 Regulatory law and policy recognize that utilities compete with other forms in the market
10 for investor capital. In the case of Federal Power Commission v. Hope Natural Gas
11 Company, 320 U.S. 591 (1944), the U.S. Supreme Court recognized that utilities compete
12 with other firms in the market for investor capital. Historically, this case has provided
13 legal and policy guidance concerning the return which public utilities should be allowed
14 to earn:

15
16 In that case, the U.S. Supreme Court specifically stated that:

17 "...the return to the equity owner should be commensurate with returns
18 on investments in other enterprises having corresponding risks. That
19 return, moreover, should be sufficient to assure confidence in the
20 financial integrity of the enterprise so as to maintain credit and attract
21 capital." (320 U.S. at 603)

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III. COST OF COMMON EQUITY

Q. PLEASE EXPLAIN HOW THE ISSUE OF DETERMINING AN APPROPRIATE RETURN ON A UTILITY'S COMMON EQUITY INVESTMENT FITS INTO A REGULATORY AUTHORITY'S DETERMINATION OF FAIR, JUST, AND REASONABLE RATES FOR THE UTILITY.

A. In North Carolina and in all regulatory jurisdictions, a utility's rates must be "fair, just, and reasonable." As noted above, regulation recognizes that utilities are entitled to an opportunity to recover the reasonable and prudent costs of providing service, and the opportunity to earn a fair rate of return on the capital invested in the utility's facilities, such as power plants, transmission lines, distribution lines, buildings, vehicles, and similar long-lived capital assets. Utilities obtain capital funding through a combination of borrowing (debt financing) and issuing stock. The allowed return on equity (ROE) is the amount that is appropriate for the utility's common stockholders to earn a fair return on the capital that they contribute to the utility when they buy its stock. If the regulatory authority sets the ROE too low, the stockholders will not have the opportunity to earn a fair return; if the regulatory authority sets the ROE too high, the customers will pay too much, and the resulting rates will be unfair and unreasonable

Q. HOW DO REGULATORY AUTHORITIES GO ABOUT DETERMINING WHAT IS A FAIR RATE OF RETURN ON EQUITY?

A. Regulatory commissions and boards, as well as financial industry analysts, institutional investors, and individual investors, use different analytical models and methodologies to estimate/calculate reasonable rates of return on equity. Among the measures used are "Discounted Cash Flow" or "DCF" analysis and "Comparable Earnings Analysis." Sometimes a technique called the "Capital Asset Pricing Model" or "CAPM" method is used. Given the very small size of

1 WCU electric system, I chose to use only the Comparable Earnings Analysis in
2 this case.

3
4 **A. Comparable Earnings Analysis**

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6 **Q. MR. O'DONNELL, WOULD YOU PLEASE EXPLAIN WHY YOU
7 PERFORMED A COMPARABLE EARNINGS ANALYSIS.**

8 A. Yes. WCU is unlike other electric systems in North Carolina. WCU's rate base
9 investment is very small and is financed entirely by equity. WCU has no
10 generation or transmission assets. Instead, WCU's investment is made up entirely
11 of its distribution investment. As a result, WCU's operational risk and its
12 financial risk is less than larger utilities, such as Duke, that are vertically
13 integrated with generation, transmission, and distribution assets. Given the
14 uniqueness of the WCU, I believe that only an analysis of ROEs granted across
15 the country combined with an analysis of recent ROEs granted by the NCUC is
16 required to determine a fair rate of return in this case.

17
18 **Q. WOULD YOU PLEASE EXPLAIN HOW YOU PERFORMED THE
19 COMPARABLE EARNINGS ANALYSIS?**

20 A. I examined allowed returns on equity granted by utility state regulators from
21 around the country over the past year. In 2019, the average allowed ROE was
22 9.65%.¹ I also examined the most recently allowed ROE granted by the NC
23 Utilities Commission in the general rate case of Dominion Virginia Power in
24 Docket No. E-22, Sub 562. In that case, the NCUC granted Dominion a 9.75%
25 ROE.

26
27 **Q. WHAT CONCLUSIONS DO YOU DRAW FROM THE COMPARABLE
28 EARNINGS ANALYSIS?**

¹ S&P Global, Rate Case History, available at snl.com (data retrieved January 21, 2020).

1 A. State regulatory orders in 2019 have granted vertically integrated electric utilities
2 returns on equity of approximately 9.65%. On Feb. 24, 2020, Dominion Virginia
3 Power was allowed a 9.75% ROE in the most recent electric rate case heard by
4 the Commission. Based on these findings, I believe the proper rate of return for
5 use in this proceeding is 9.0%. This rate of return is lower than the 9.65%
6 allowed rate of return granted by state regulators across the country in 2019 and is
7 significantly below the 9.75% ROE allowed by this Commission for Dominion
8 Virginia Power. I am recommending this lower ROE in recognition of the
9 strength in the stock market since 2019 that has driven returns down as equity
10 prices have risen.

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III. OVERALL COST OF CAPITAL

A. Capital Structure

Q. WHAT CAPITAL STRUCTURE DOES WCU CURRENTLY MAINTAIN?

A. WCU has no debt. It is 100% financed with investor capital.

Q. ARE YOU RECOMMENDING A 100% EQUITY RATIO IN THE CAPITAL STRUCTURE?

A. No. Common equity has a higher cost of capital than debt. As a result, a capital structure composed entirely of common equity would be unfair to WCU's consumers.

Q. WHAT IS YOUR RECOMMENDED CAPITAL STRUCTURE IN THIS PROCEEDING?

A. I am recommending a capital structure that consists of 50% equity and 50% debt.

B. Cost of Long-Term Debt

Q. SINCE WCU HAS NO DEBT, HOW DO YOU DETERMINE THE PROPER COST OF DEBT TO USE IN THE WCU REQUESTED CAPITAL STRUCTURE?

A. Since WCU has no debt, I cannot look at the balance sheet of the university resale system and calculate a cost of debt. I can, however, examine other debt cost rates granted by this Commission as well as the current debt cost rate in the utility industry.

1 **Q. WHAT DEBT COST RATES HAVE RECENTLY BEEN APPROVED BY**
2 **THIS COMMISSION? AND THE PREVAILING DEBT COST RATES IN**
3 **THE INDUSTRY.**

4 A. In the above-stated Dominion Virginia Power rate case, the Commission granted
5 Dominion a long-term cost of debt of 4.442%.² In the general rate case filing of
6 Duke Energy Carolinas (DEC), the Company is seeking a long-term debt cost of
7 4.51%³ while Duke Energy Progress (DEP) in its ongoing rate case filing is
8 seeking a cost of debt of 4.15%.⁴ The average cost rate between those two values
9 is approximately 4.37%.

10
11 **Q. WHAT IS YOUR RECOMMENDED COST OF DEBT IN THIS CASE?**

12 A. In recognition of my recommended capital structure of 50% equity and 50% debt,
13 it is important to assume that, with this capital structure, WCU would have issued
14 long-term debt throughout its long history. If it had done so, its embedded cost of
15 debt would be similar to the figures as cited above. As a result, given what this
16 Commission has allowed in the Dominion Virginia Power case and what DEC
17 and DEP are requesting in their current cases, I recommend the Commission grant
18 WCU a 4.37% cost of debt to be combined with the assumed 50% debt
19 component in the capital structure.

20
21 **C. Overall Cost of Capital Recommendation**

22
23 **Q. WHAT IS YOUR RECOMMENDATION FOR THE RETURN ON**
24 **EQUITY AND OVERALL RATE OF RETURN THE COMMISSION**
25 **SHOULD USE IN THIS PROCEEDING?**

26 A. My recommended overall cost of capital is in Table 3 below.
27

² NCUC Final Order

³ Prefiled testimony of Jane McManeus, Docket No. E-7, Sub 1214, Exhibit 1

⁴ Prefiled testimony of Kim Smith, Docket No. E-2, Sub 1219, Exhibit 1

1 The most recent fiscal year for which data is available for WCU is the 12-months
2 ending June 30, 2019, so this year was chosen as the test year for the analysis.

3
4 In analyzing the proper amount of revenues to use in this analysis, Nova
5 examined the historical records from the University for the fiscal year 2018-2019.
6 Specific customer class data was used in order to determine energy and demand
7 allocation factors necessary to allocate expenses.

8
9 The next step was to populate the COSS with expenses that we obtained from the
10 adjusted WCU financial statements, as that can be found in **Exhibit WRO-1** and
11 WCU's application in this case. To allocate WCU's expenses, I used various
12 utility accounts from university records to determine allocation factors that were
13 based on data such as annual energy usage, demand usage, number of customers,
14 revenues, etc.

15
16 The allocation of operating expense items requires careful consideration as to how
17 these expenses and investments are incurred and utilized and how best to spread
18 these costs. It is very important that the analyst allocate the given expense and
19 plant investment by the way such cost is incurred or in the manner in which these
20 expense items are utilized. For example, the vast majority of postage expenses is
21 incurred in sending monthly bills to consumers. Since each consumer gets a bill in
22 the mail, it makes sense to allocated postage expenses by the various number of
23 customers in each rate class. Similarly, the energy portion of the resale system's
24 wholesale power costs are directly linked to the energy consumption of within
25 each customer class. As a result, it makes logical sense to allocate wholesale
26 energy costs by the kWh consumption exhibited by each customer class.

27

1 Rate base items are allocated in the same manner in which operating expenses are
2 allocated. Each rate base investment made by the University must be allocated
3 based on logical reasoning as to why WCU is purchasing the asset.

4

5 Once the various allocations of operating expenses and rate base items are
6 completed, the resulting figures represent the net income of the customer class
7 and the corresponding rate base investment required to serve that customer class.
8 The ratio of net income to rate base investment represents the rate of return for
9 service to that class.

10

11 **Q. DID YOU MAKE ANY ADJUSTMENTS TO THE CUSTOMER CLASSES**
12 **IN THE COST OF SERVICE STUDY?**

13 A. No.

14

15 **Q. WHAT ARE THE RESULTS OF YOUR COSS FOR WESTERN**
16 **CAROLINA UNIVERSITY IN THIS PROCEEDING?**

17 A. The table below shows the rate of return per customer class at existing rates.

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Table 3: Before Rate Increase COSS Results

	Total System	Residential	Commercial	Area Lighting
Rate of Return	-9.54%	-19.49%	18.56%	26.78%

Based on the results as stated above, the residential rate must realize a rate increase greater than the commercial rate. The full COSS to support the above results can be seen in **Exhibit WRO-4**.

Q. HOW ARE YOU PROPOSING TO CHANGE RATES AS PART OF THIS RATE PROCEEDING?

A. The results of the cost of service study show that a flat across-the-board rate increase for all classes is inappropriate. My recommendation is to increase residential at a higher rate than the increase for commercial customers. Specifically, I am recommending a 16.8% increase for residential consumers and a 1.0% increase for commercial consumers.

Table 4: Current Rates vs. Proposed Rates

	Existing Rates	Proposed Rates
Residential		
Customers Energy	\$8.89	\$12.00
1st 750 kWhs	\$0.10279	\$0.11729
All over 750 kWhs	\$0.09279	\$0.10729
Commercial		
Customers	\$10.00	\$12.00

Demand	\$4.40	\$5.20
Energy		
1st 750 kWhs	\$0.10279	\$0.11729
Next 750 kWhs	\$0.09279	\$0.10729
All Over 1500 kWhs	\$0.07501	\$0.07016
Area Lights	\$8.85	\$10.00

1 Embedded in current rates is the current purchased power factor of \$.06785 per
 2 kWh that WCU proposes to remain in the current case. The calculations to
 3 support the requested revenue levels in this case can be seen in **Exhibit WRO-5**.
 4 The overall increase for the total WCU system is 14.6%.

5
 6 The above requested rates reflect only base rates. At about the same time the
 7 Commission issues its final order in this rate case application, WCU will file its
 8 annual purchased power application with new rates to be effective in February
 9 2021.

10
 11 **Q. WHAT CHANGE IS WCU SEEKING FOR AREA LIGHTS?**

12 A. The current area light charge for WCU is \$8.85 per month. WCU proposes to
 13 increase this charge to \$10.00 per month.

14
 15 **Q. WHAT ARE THE RESULTS OF THE COSS ONCE AFTER THE RATE
 16 INCREASE IS IMPLEMENTED?**

17 A. Table 5 below shows the results of the COSS once the proposed rates are
 18 implemented.

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Table 5: After Rate Increase COSS Results

	Total System	Residential	Commercial	Area Lighting
Rate of Return	6.69%	3.17%	16.10%	32.01%

The results above show that the customer class rates of return are not yet close to parity. However, we are recommending gradualism in this case and believe that no further increase in residential consumers is warranted at this time.

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V. SUMMARY

Q. MR. O'DONNELL, PLEASE SUMMARIZE YOUR TESTIMONY IN THIS PROCEEDING.

A. My analysis shows that WCU is currently not earning its allowed rate of return. In fact, WCU's earnings are negative and in need of immediate improvement.

Given the small size of the WCU electric resale system, I performed my cost of equity analysis using only the comparable earnings model to arrive at a recommended return on equity of 9.0%. WCU has no debt nor does the University have any generation assets. As a result, I am recommending a capital structure that consists of 50% equity and 50% debt with a debt cost rate of 4.37%. The overall rate of return I am recommending in this case is 6.69%.

The results of the cost of service study shows that the residential and small commercial rates need to increase and large commercial rates should decrease. To be specific, I am recommending the following rate changes per customer class: 16.8% increase for the residential class; 1.0% increase for the small commercial class; and an increase in area lights from \$8.85 per month to \$10.00 per month (13%). The overall rate increase sought by WCU in this proceeding is 6.69%.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes, it does.

APPENDIX A