



**NORTH CAROLINA
PUBLIC STAFF
UTILITIES COMMISSION**

May 18, 2020

Ms. Kimberley A. Campbell, Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4300

Re: Docket No. E-7, Sub 1229 – Application Pursuant to N.C.G.S. 62-133.8
and Commission Rule R8-67 for Approval of REPS Compliance Report
and REPS Cost Recovery Rider

Dear Ms. Campbell:

In connection with the above-referenced docket, I transmit herewith for filing
on behalf of the Public Staff the following:

1. Testimony of Jay B. Lucas, Utilities Engineer, Electric Division;
2. Notice of Affidavit; and
3. Affidavit of Michelle M. Boswell, Staff Accountant, Accounting
Division.

By copy of this letter, I am forwarding a copy of the redacted version to all
parties of record by electronic delivery. The confidential pages will be provided to
those parties that have entered into a confidentiality agreement.

Sincerely,

/s/ Tim R. Dodge
Staff Attorney
tim.dodge@psncuc.nc.gov

TRD/cla

Attachments

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

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**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-7, SUB 1229**

**TESTIMONY OF JAY B. LUCAS
ON BEHALF OF THE PUBLIC STAFF
NORTH CAROLINA UTILITIES COMMISSION**

May 18, 2020

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

3 A. My name is Jay B. Lucas. My business address is 430 North
4 Salisbury Street, Raleigh, North Carolina.

5 **Q. WHAT IS YOUR POSITION WITH THE PUBLIC STAFF?**

6 A. I am an engineer in the Electric Division of the Public Staff.

7 **Q. WOULD YOU BRIEFLY DISCUSS YOUR EDUCATION AND**
8 **EXPERIENCE?**

9 A. Yes. My education and experience are summarized in Appendix A to
10 my testimony.

11 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

12 A. The purpose of my testimony is to make recommendations to the
13 Commission on the Renewable Energy and Energy Efficiency
14 Portfolio Standard (REPS) Compliance Report and the Application
15 for Approval of the REPS Cost Recovery Rider (REPS Rider) filed by
16 Duke Energy Carolinas, LLC (DEC, or the Company), on February
17 25, 2020. I also provide an overview of the discussions and

1 agreements reached between DEC and the Public Staff regarding
2 the sales prices of certain renewable energy certificates (RECs) sold
3 by DEC, consistent with the Commission's August 15, 2019, *Order*
4 *Approving REPS and REPS EMF Riders and 2018 REPS*
5 *Compliance Report* in Docket. No. E-7, Sub 1191 (*Sub 1191 Order*),
6 which directed DEC and the Public Staff to work together to evaluate
7 the sales prices of animal waste RECs¹ sold by DEC.

8 **REPS Compliance**

9 **Q. IS DEC PROVIDING REPS COMPLIANCE SERVICES TO ANY**
10 **OTHER ELECTRIC POWER SUPPLIERS?**

11 A. Yes. For 2019 REPS compliance, DEC was contractually obligated
12 to acquire RECs and provide reporting services to meet the REPS
13 compliance requirements of the following wholesale customers: Blue
14 Ridge Electric Membership Corporation, Rutherford Electric
15 Membership Corporation, Town of Dallas, Town of Forest City, and
16 Town of Highlands (collectively, Wholesale Customers). DEC
17 maintains separate accounts in the North Carolina Renewable
18 Energy Tracking System (NC-RETS) for itself and for each
19 Wholesale Customer. Commission Rule R8-67(h)(2) requires that all

¹ Animal waste RECs include those RECs generated or purchased by an electric power supplier to comply with the swine waste set-aside and poultry waste set-aside requirements of G.S. § 62-133.8 (e), and (f), respectively.

1 RECs used for REPS compliance in North Carolina be tracked in NC-
2 RETS.

3 The REPS compliance costs for the Wholesale Customers are not
4 included in DEC's requested REPS cost recovery rider.

5 **Q. PLEASE DESCRIBE THE 2019 REPS COMPLIANCE**
6 **REQUIREMENTS FOR DEC AND ITS WHOLESALE CUSTOMERS.**

7 A. For 2019 compliance, DEC needed to pursue retirement of a
8 sufficient number of general RECs,² energy efficiency certificates
9 (EECs), and RECs derived from other eligible sources so that the
10 total equaled 10% of the 2018 North Carolina retail electricity sales
11 of itself and the Wholesale Customers. To meet the solar energy
12 requirement in N.C. Gen. Stat. § 62-133.8(d), DEC needed to pursue
13 retirement of sufficient solar RECs to match 0.2% of retail sales in
14 2018 for itself and the Wholesale Customers.

15 The Commission's December 16, 2019, *Order Modifying the Swine*
16 *and Poultry Waste Set-Aside Requirements and Providing Other*
17 *Relief* in Docket No. E-100, Sub 113, modified the requirements in
18 N.C. Gen. Stat. § 62-133.8(e) and (f) for swine and poultry waste
19 energy, respectively, as described below. To meet the swine waste

² General RECs include all RECs other than those used to meet the solar, swine waste, and poultry waste set-asides. Unlike RECs used for the set-asides, general RECs and EECs are interchangeable for REPS compliance purposes, with the exception that EECs are limited to 25 percent of the total compliance requirement for the investor-owned utilities.

1 set-aside requirement, DEC needed to pursue retirement of sufficient
2 swine waste-derived RECs to match 0.04% of retail sales in 2018.
3 To meet the poultry waste set-aside requirement, DEC needed to
4 pursue retirement of sufficient poultry waste-derived RECs to match
5 its pro-rata share of the poultry waste set-aside of 500,000 MWh or
6 the thermal equivalent.

7 **Q. HAVE YOU REVIEWED THE REPS COMPLIANCE REPORT?**

8 A. Yes. DEC's REPS Compliance Report is included as Exhibit 1 to the
9 direct testimony of DEC witness Megan Jennings. Based on our
10 review, the Public Staff believes that DEC's REPS Compliance
11 Report meets the requirements of N.C. Gen. Stat. § 62-133.8 and
12 Commission Rule R8-67(c) for both DEC and the Wholesale
13 Customers. Accordingly, the Public Staff recommends that the
14 Commission approve DEC's 2019 REPS Compliance Report.

15 **Research Costs**

16 **Q. PLEASE DISCUSS THE RESEARCH COSTS DEC HAS**
17 **INCLUDED FOR COST RECOVERY.**

18 A. On pages 31 through 39 of her direct testimony, DEC witness Megan
19 Jennings summarizes the results of the 20 research expenditures for
20 which DEC is seeking cost recovery in this proceeding. The
21 anticipated research costs total \$822,933 in the test period, which is
22 below the \$1,000,000 maximum annual amount allowed, as

1 specified in N.C. Gen. Stat. § 62-133.8(h)(1)(b). The included
2 projects generally deal with operation of distributed energy resources
3 (DERs) and advancing the understanding of optimal ways to
4 integrate DERs into the power grid. Also included are fees for
5 membership in research organizations.

6 **Q. DO YOU BELIEVE THAT ALL OF THE COSTS DEC HAS**
7 **INCLUDED QUALIFY AS RESEARCH “THAT ENCOURAGES**
8 **THE DEVELOPMENT OF RENEWABLE ENERGY, ENERGY**
9 **EFFICIENCY, OR IMPROVED AIR QUALITY,” CONSISTENT**
10 **WITH N.C. GEN. STAT. § 62-133.8(h)(1)(b)?**

11 A. Yes.

12 **Competitive Procurement of Renewable Energy (CPRE)**

13 **Program Costs**

14 **Q. HAS DEC REQUESTED TO RECOVER ANY COSTS RELATED TO**
15 **THE CPRE PROGRAM IN THIS PROCEEDING?**

16 A. No, DEC has not included any costs related to the CPRE Program,
17 enacted in Session Law 2017-192 as part of North Carolina House
18 Bill 589 (HB 589), in this proceeding. DEC witness Jennings on page
19 14 of her direct testimony states that since DEC will use the RECs
20 acquired through CPRE for REPS compliance, DEC believes that
21 CPRE Program implementation costs could be recovered through
22 the REPS Rider. She states, however, that DEC has elected to

1 recover the reasonable and prudent costs incurred to implement the
2 CPRE Program through the CPRE Rider and included those costs in
3 its CPRE Program Rider filing in Docket No. E-7, Sub 1231, as
4 contemplated under Commission Rule R8-71(j).

5 **Q. DO YOU AGREE THAT DEC SHOULD RECOVER CPRE COSTS**
6 **THROUGH THE REPS RIDER?**

7 A. For the same reasons discussed in the testimony of Public Staff
8 witness Evan Lawrence in the 2019 DEC REPS Rider Proceeding in
9 Docket No. E-7, Sub 1191, I do not agree that DEC should recover
10 CPRE implementation costs through the REPS Rider. I agree,
11 however, that it is difficult to definitively make such a conclusion
12 before this Commission has fully considered CPRE costs in CPRE
13 Program Rider filings or other proceedings.

14 **Q. HAS DEC DISCUSSED THE RECOVERY OF CPRE COSTS IN**
15 **THE REPS RIDER IN OTHER PROCEEDINGS?**

16 A. Yes. In Docket No. E-100, Sub 150, DEC and Duke Energy Progress,
17 LLC (DEP), jointly filed their Reply Comments and Amended
18 Proposed Rule to Implement N.C. Gen. Stat. § 62-110.8 on
19 September 8, 2017. On page 13 of those comments, DEC and DEP
20 state:

21 Specific to the interrelationship with REPS, the
22 Companies do not anticipate any CPRE Program costs
23 being recovered through the REPS rider because N.C.
24 Gen. Stat. § 62-110.8(b)(2) caps CPRE Program PPA

1 purchases, including the cost of RECs, at or below the
2 Companies' avoided cost. Therefore, the full cost of
3 bundled CPRE Program RECs would be recovered
4 through the CPRE Program rider mechanism. Similar
5 to the approach used today for energy efficiency
6 credits applied towards REPS compliance, the cost of
7 RECs associated with renewable energy resources
8 procured under the CPRE Program would simply be
9 assigned \$0 cost for REPS compliance.

10 **Q. WHAT IS THE PUBLIC STAFF'S RECOMMENDATION WITH**
11 **REGARD TO THE RECOVERY OF CPRE COSTS IN THE REPS**
12 **RIDER?**

13 A. The Public Staff maintains its position that it is appropriate for CPRE
14 Program implementation costs to be recovered in a CPRE Program
15 Rider filing pursuant to Commission Rule R8-71(j).

16 **Sale of RECs**

17 **Q. PLEASE DESCRIBE THE DISCUSSIONS PERTAINING TO REC**
18 **SALES IN THE PRIOR DEC REPS PROCEEDING.**

19 A. In Docket No. E-7, Sub 1191, Public Staff witness Michelle Boswell
20 raised the issue of the pricing of animal waste set-aside RECs sold
21 by DEC in her direct testimony and recommended that DEC and the
22 Public Staff work together over the next year to review and evaluate
23 the sale price of set-aside RECs sold by DEC. In its Sub 1191 Order,
24 the Commission directed DEC and the Public Staff to work together
25 to determine what, if any, adjustments should be made to the current
26 calculation of sales prices of RECs sold by DEC to other electric

1 power suppliers for the purpose of those suppliers meeting their
2 animal waste set-aside requirements.

3 **Q. WHAT ASPECT OF THE SALE OF RECS ARE YOU DISCUSSING**
4 **IN YOUR TESTIMONY?**

5 A. One component of determining the sale price of RECs is to
6 determine the price at which DEC has purchased the RECs from
7 REC suppliers. I discuss my recommendation on the purchase costs
8 more fully below. My recommendation is in addition to those made in
9 the affidavit of Public Staff witness Michelle Boswell in this
10 proceeding.

11 **Q. WHAT HAS OCCURRED THAT REQUIRED AN INVESTIGATION**
12 **ON THE SALE OF RECS BY DEC?**

13 A. Over the past four years, DEC has periodically sold set-aside RECs
14 to other electric power suppliers in order to assist with their REPS
15 compliance. The sale price of these RECs was determined using a

16 **[BEGIN CONFIDENTIAL]** [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED] [END
5 CONFIDENTIAL].

6 Q. WHAT IS YOUR RECOMMENDATION REGARDING THE
7 PURCHASE PRICE OF RECS THAT DEC RESELLS?

8 A. DEC and the Public Staff have had productive discussions on the
9 purchase price of these RECs and reached an agreement. As
10 discussed in the supplemental testimony of DEC witness Megan
11 Jennings filed on May 15, 2020, DEC will calculate the sale price of
12 any animal waste set-aside RECs based on a weighted average
13 price of RECs from all contracted and operational facilities in DEC's
14 and DEP's combined portfolio for each respective set-aside. The
15 Public Staff agrees with this proposal.

16 REPS Rates

17 Q. WHAT RATES HAS DEC REQUESTED FOR ITS EMF AND REPS
18 RIDERS?

19 A. In its Application, DEC requested the following monthly charges for
20 the Billing and Experience Modification Factor (EMF) components of
21 the total REPS rate, excluding the regulatory fee:

DEC's Rider Request Filed on February 25, 2020			
Customer Class	Billing Period Rate	EMF Rate	Total REPS Rate
Residential	\$0.79	\$(0.01)	\$0.78
General	\$3.99	\$(0.15)	\$3.84
Industrial	\$16.67	\$1.84	\$18.51

1 **Q. WHAT RATES DOES THE PUBLIC STAFF RECOMMEND FOR**
2 **THE EMF AND REPS RIDERS?**

3 A. The Public Staff agrees with the rates in the supplemental testimony
4 filed by DEC witness Veronica Williams on May 15, 2020. The Public
5 Staff recommends the following Billing and EMF components of the
6 total REPS rate, excluding the regulatory fee:

Public Staff's Recommended Rates			
Customer Class	Billing Period Rate	EMF Rate	Total REPS Rate
Residential	\$0.80	\$(0.02)	\$0.78
General	\$3.99	\$(0.18)	\$3.81
Industrial	\$16.18	\$1.37	\$17.55

7 These monthly rates are below the cost caps set forth in N.C. Gen.
8 Stat. § 62-133.8(h)(4). With these recommended rates, the

1 residential customer class is the closest to the cost cap at
2 approximately 35% of the annual per account charges allowed. The
3 general service and industrial classes are at approximately 30% and
4 21% of their cost caps, respectively.

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

6 A. Yes, it does.

QUALIFICATIONS AND EXPERIENCE

JAY B. LUCAS

I graduated from the Virginia Military Institute in 1985, earning a Bachelor of Science Degree in Civil Engineering. Afterwards, I served for four years as an engineer in the Air Force performing many civil and environmental engineering tasks. I left the Air Force in 1989 and attended the Virginia Polytechnic Institute and State University (Virginia Tech), earning a Master of Science degree in Environmental Engineering. After completing my graduate degree, I worked for an engineering consulting firm and worked for the North Carolina Department of Environmental Quality in its water quality programs. Since joining the Public Staff in January 2000, I have worked on utility cost recovery, renewable energy program management, customer complaints, and other aspects of utility regulation. I am a licensed Professional Engineer in North Carolina.

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-7, SUB 1229

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of
Application of Duke Energy Carolinas, LLC, for)
Approval of Renewable Energy and Energy)
Efficiency Portfolio Standard Cost Recovery) NOTICE OF AFFIDAVIT
Rider Pursuant to N.C.G.S. § 62-133.8 and)
Commission Rule R8-67)

NOW COMES THE PUBLIC STAFF - North Carolina Utilities Commission,
by and through its Executive Director, Christopher J. Ayers, as constituted by
N.C. Gen. Stat. § 62-15, and gives notice that the Affidavit of:

Michelle M. Boswell, Staff Accountant, Accounting Division
Public Staff - North Carolina Utilities Commission
430 North Salisbury Street - Dobbs Building
4326 Mail Service Center
Raleigh, North Carolina 27699-4300

will be used in evidence at the hearing in this docket scheduled for June 9, 2020,
pursuant to N.C. Gen. Stat. § 62-68. The affiant will not be called to testify orally
and will not be subject to cross-examination unless an opposing party or the
Commission demands the right of cross-examination by notice mailed or delivered
to the proponent at least five days prior to the hearing, pursuant to N.C. Gen. Stat.
§ 62-68.

THEREFORE, the Public Staff moves that the Affidavit of Michelle M.
Boswell be admitted into evidence in the absence of notice pursuant to N.C. Gen.
Stat. § 62-68.

Respectfully submitted this the 18th day of May, 2020.

PUBLIC STAFF
Christopher J. Ayers
Executive Director

David T. Drooz
Chief Counsel

Electronically submitted
/s/ Tim R. Dodge
Staff Attorney
tim.dodge@psncuc.nc.gov

430 North Salisbury Street - Dobbs Building
4326 Mail Service Center
Raleigh, North Carolina 27699-4300
Telephone: (919) 733-6110

CERTIFICATE OF SERVICE

I certify I have this day served a copy of the foregoing Notice of Affidavit and Affidavit on each of the parties of record in this proceeding or their attorneys of record by causing a copy to be deposited in the United States Mail, postage prepaid, properly addressed to each or by electronic delivery upon agreement from the parties.

This the 18th day of May, 2020.

Electronically submitted
/s/ Tim R. Dodge
Staff Attorney

DOCKET NO. E-7, SUB 1229

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of
Application of Duke Energy Carolinas, LLC, for)
Approval of Renewable Energy and Energy Efficiency)
Portfolio Standard Cost Recovery Rider Pursuant to) AFFIDAVIT
N.C.G.S. 62-133.8 and Commission Rule R8-67) OF
) MICHELLE BOSWELL

STATE OF NORTH CAROLINA

COUNTY OF WAKE

I, Michelle Boswell, first being duly sworn, do depose and say:

I am an accountant in the Accounting Division of the Public Staff - North Carolina Utilities Commission. A summary of my education and experience is attached to this affidavit as Appendix A.

N. C. Gen. Stat. § 62-133.8(h) provides that the State's electric power suppliers may recover their reasonable and prudently incurred incremental costs of compliance with the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) through an annual rider charge. Pursuant to Commission Rule R8-67, the REPS rider will be recovered over the same period as the utility's fuel and fuel-related cost rider. Commission Rule R8-67 also provides for a REPS experience modification factor (REPS EMF) rider, which is utilized to "true-up" the recovery of reasonable and prudently incurred incremental REPS compliance costs incurred during the test period established for each annual rider proceeding.

The purpose of my affidavit is to present the results of the Public Staff's investigation of the REPS EMF rider proposed by Duke Energy Carolinas, LLC (DEC or the Company), in its application filed in this proceeding on February 25, 2020, based on incremental REPS compliance costs incurred and revenues recorded from January 2019 through December 2019 (REPS EMF period or test period).

On May 15 2020, DEC filed the Supplemental Testimony and Revised Exhibits of Megan W. Jennings and Veronica I. Williams. The purpose of DEC's Supplemental Testimony and the revised exhibits was to: 1) correct an error in the calculation of a line item in the incremental costs affecting the EMF period; 2) correct an error in the calculation of the solar rebate amortization cost affecting the EMF period; 3) update the percentage of EE RECs supplied by class to be more precise, as has been done in previous cases; 4) modify the proposal for the calculation of animal waste REC sales prices to reflect the agreement reached between the Company and Public Staff; and 5) include the proposed treatment for the amount related to the sales price of RECs held in abeyance from the Company's last REPS proceeding in Docket No. E-7, Sub 1191 (Sub 1191 proceeding). The proposed annual EMF decrement riders (excluding the regulatory fee) requested in the Company's Supplemental Testimony for the residential and general customers are, respectively, \$(0.19) and \$(2.12) per retail customer account, and the EMF increment rider (excluding the regulatory fee) requested for the industrial customers is \$16.41 per retail customer account. These rates are calculated by dividing the "Total EMF Costs/Credits" amount, as

shown on Revised Williams Exhibit No. 4 for each customer class, by the “Total Projected Number of Accounts – Duke Retail” for that class. The proposed monthly EMF decrement riders for residential and general customers are \$(0.02) and \$(0.18), respectively, per retail customer account, and the EMF increment rider for industrial customers is \$1.37 per retail customer account, all excluding the regulatory fee.

The Public Staff’s investigation included procedures intended to evaluate whether the Company properly determined its per books incremental compliance costs and revenues, as well as the annual revenue cap for REPS requirements, during the test period. These procedures included a review of the Company’s filings and other Company data provided to the Public Staff. Additionally, the procedures included a review of certain specific types of expenditures impacting the Company’s costs, including labor costs and research and development costs. Performing the Public Staff’s investigation required the review of numerous responses to written and verbal data requests, as well as discussions with the Company.

Since the Company filed direct testimony in this docket, the Company and the Public Staff have worked together to evaluate the sales prices of set-aside RECs, as directed by the Commission in its August 15, 2019 *Order Approving REPS and REPS EMF Riders and 2018 REPS Compliance Report* in the Sub 1191 proceeding. Through these discussions, the Company and the Public Staff have come to an agreement on a proposed REC sale price calculation that will be used when the Company sells animal waste RECs to other electric suppliers

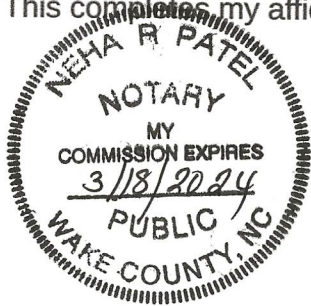
to help those suppliers comply with N.C. Gen. Stat. §§ 62-133.8(e) and (f). The calculation of the sale price in the agreement is reflected in the Supplemental Testimony of Company witnesses Jennings and Williams, and includes (1) the calculation of the purchase price of the animal waste RECs, as discussed in Public Staff witness Lucas's testimony, (2) the calculation of an overhead adder, and (3) the calculation of an interest adder.

I reviewed the Company's proposal, as revised in its Supplemental Testimony, regarding the calculation of the overhead and interest adders included in the sale price of animal waste RECs to third parties, and believe the proposed calculation (a) appropriately accounts for and balances the costs associated with the sales and (b) addresses the concerns raised by the Public Staff in the Sub 1191 proceeding. The Public Staff recommends the calculation continue to be reviewed on an annual basis to verify that it is working as designed. Furthermore, with regard to the Company's proposed ratemaking treatment of a component of the REC sales proceeds that were held in abeyance in the Sub 1191 proceeding, the Public Staff recommends that the Commission approve the Company's proposal as described in the Supplemental Testimony of DEC witness Williams.

Based upon the Public Staff's investigation, including information received from the Company, the Company's Supplemental Testimony, and the recommendation of Public Staff witness Lucas, I recommend that DEC's proposed annual and monthly REPS EMF decrement riders for the residential and general customer classes, and the EMF increment rider for the industrial

customer class, be approved. These amounts produce annual REPS EMF decrement riders of \$(0.19) and \$(2.12), respectively, for residential and general customers, an annual increment rider of \$16.41 for industrial customers, monthly REPS EMF decrement riders of \$(0.02) and \$(0.18) for residential and general customers, respectively, and a monthly increment rider of \$1.37 for industrial customers, per customer account, all excluding the regulatory fee.

This completes my affidavit.



Michelle Boswell
Michelle Boswell

Sworn to and subscribed before me
this the 18th day of May, 2020.

Neha R Patel
Notary Public

My Commission Expires: 3/18/2024

APPENDIX A

MICHELLE BOSWELL

Qualifications and Experience

I graduated from North Carolina State University in 2000 with a Bachelor of Science degree in Accounting. I am a Certified Public Accountant.

I joined the Public Staff in September 2000. I have performed numerous audits and/or presented testimony and exhibits before the Commission addressing a wide range of electric, natural gas, and water topics. I have performed audits and/or presented testimony in DEC's 2010, 2015, 2017, and 2019 REPS Cost Recovery Rider; DEP's 2014, 2015, 2017, 2018, and 2019 REPS Cost Recovery Rider; the 2014 REPS Cost Recovery Rider for Dominion North Carolina Power (DNCP); the 2008 REPS Compliance Reports for North Carolina Municipal Power Agency 1, North Carolina Eastern Municipal Power Agency, GreenCo Solutions, Inc., and EnergyUnited Electric Membership Corporation; four recent Piedmont Natural Gas (Piedmont) rate cases; the 2016 rate case of Public Service Company of North Carolina (PSNC); the 2012 and 2019 rate case for Dominion Energy North Carolina (DENC, formerly Dominion North Carolina Power); the 2013, 2017, and 2019 DEP rate cases; , the 2017 and 2019 DEC rate case; the 2018 fuel rider for DENC; , several Piedmont, NUI Utilities, Inc. (NUI), and Toccoa annual gas cost reviews; the merger of Piedmont and NUI; and the merger of Piedmont and North Carolina Natural Gas (NCNG).

Additionally, I have filed testimony and exhibits in numerous water rate cases and performed investigations addressing a wide range of topics and issues related to the water, electric, and telephone industries.