

## DOCKET NO. E-7, SUB 1162

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Application of Duke Energy Carolinas LLC, for	)	<u>AFFIDAVIT</u>
Approval of Renewable Energy and Energy Efficiency	)	<u>OF</u>
Portfolio Standard Cost Recovery Rider Pursuant to	)	<u>JAY B. LUCAS</u>
G.S. 62-133.8 and Commission Rule R8-67	)	

STATE OF NORTH CAROLINA

COUNTY OF WAKE

I, Jay B. Lucas, first being duly sworn, do depose and say:

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

The purpose of my affidavit is to make recommendations to the Commission on the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) Compliance Report filed by Duke Energy Carolinas, LLC (DEC or the Company), on March 7, 2018, and on the proposed REPS Cost Recovery Rider filed by the Company on the same day, as modified in its Supplemental Testimony filed on March 28, 2018 and Additional Supplemental Testimony filed on May 21, 2018. These recommendations are based on a review of DEC's application, DEC's filed testimony and REPS Compliance Report, DEC's newly signed renewable energy contracts, DEC responses to Public Staff data requests, reports generated from within the North Carolina Renewable Energy

Tracking System (NC-RETS), and the affidavit of Public Staff witness Sonja Johnson.

### **REPS COMPLIANCE REPORT**

DEC is legally obligated to acquire renewable energy certificates (RECs) in accordance with G.S. 62-133.8, and contractually required to provide REPS compliance services, including reporting services, for the following wholesale customers: Blue Ridge Electric Membership Corporation (EMC), Rutherford EMC, the Town of Dallas, the Town of Forest City, the City of Concord, the Town of Highlands, and the City of Kings Mountain (collectively, the Wholesale Customers). The filings by DEC in this docket include the REPS requirements of these Wholesale Customers. DEC will no longer provide REPS compliance services or reporting services for the City of Concord and the City of Kings Mountain after December 2018.

For 2017 compliance, DEC needed to obtain a sufficient number of general RECs,<sup>1</sup> energy efficiency certificates (EECs), and RECs derived from other eligible sources so that the total equaled 6% of the 2016 North Carolina retail electricity sales of itself and the Wholesale Customers. As part of the 6%, DEC needed to pursue retirement of sufficient solar RECs to match 0.14% of retail sales in 2016 for itself and the Wholesale Customers, and sufficient poultry waste RECs to match their pro-rata share of the 170,000 poultry waste RECs required by G.S. 62-133.8(f). This total number of poultry waste RECs was

---

<sup>1</sup> 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.

determined by the Commission in its October 16, 2017, *Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief* in Docket No. E-100, Sub 113 (October 16 Order). The October 16 Order also delayed the swine waste REC requirement under G.S. 62-133.8(e).

Based on its review, the Public Staff has determined that DEC's REPS Compliance Report meets the requirements of G.S. 62-133.8 and Commission Rule R8-67(c) for both DEC and the Wholesale Customers. Accordingly, the Public Staff recommends that the Commission approve DEC's 2017 REPS Compliance Report.

#### **EXCHANGE OF RECS**

On pages 18 through 21 of her testimony, DEC witness Megan Jennings describes a proposed exchange of RECs between DEC and the North Carolina Electric Membership Corporation (NCEMC). DEC has accumulated many RECs from its own hydroelectric facilities that have a capacity of 10 megawatts or less. These facilities are not considered "new renewable energy facilities" per G.S. 62-133.8(a)(5)c since they were placed into service before January 1, 2007, and do not deliver electricity to DEC. In its *Order on Public Staff's Motion For Clarification* in Docket No. E-100 Sub, 113, dated June 17, 2009, the Commission determined that DEC cannot deliver electricity to itself, and therefore, cannot use these RECs for its own REPS compliance. DEC must achieve REPS compliance by using RECs from "new renewable energy facilities" per G.S. 62-133.8(b)(2)a. NCEMC, on the other hand, does not have this restriction and has accumulated general RECs from new renewable energy



facilities that are exchangeable with other parties. In this case, DEC proposes to exchange its hydroelectric RECs for NCEMC's general RECs from new renewable energy facilities at no cost to either party and no harm to either party's customers.

In support of its position, DEC states that G.S. 62-133.8(c)(2)(d) allows an EMC to meet its REPS obligations through the purchase of RECs derived from renewable, as opposed to new renewable, energy facilities. DEC also believes that G.S. 62-133.8(c)(2)(c) does not limit an EMC's ability to use RECs from renewable energy facilities as opposed to new renewable energy facilities. G.S. 62-133.8(c)(2)(c) states that an EMC can "[p]urchase electric power from a renewable energy facility or a hydroelectric power facility, provided that no more than thirty percent (30%) of the requirements of this section may be met with hydroelectric power, including allocations made by the Southeastern Power Administration." DEC contends that the 30% cap expressly applies to meeting REPS requirements through the use of or purchase of electric power and does not limit an EMC's ability to purchase unbundled in-state RECs to comply with its REPS requirements. The Public Staff does not object to DEC's interpretation of G.S. 62-133.8 and recommends that the Commission allow the exchange of the RECs between DEC and NCEMC as the transaction would be mutually beneficial to both parties and not harm the customers of either electric power supplier.

#### **PROPOSED REPS RIDER CHARGES**

The proposed REPS rider is based on the projected costs and projected number of accounts subject to a REPS charge in the billing period (September 1,

2018 through August 31, 2019). The original Experience Modification Factor (EMF) was based on the incremental costs in calendar year 2017 and the average number of accounts subject to a REPS charge in the billing period. The EMF is also discussed in the affidavit of Public Staff witness Sonja Johnson. To collect the utility regulatory fee established by G.S. 62-302, the total REPS charge (including the prospective charge and the EMF) must be multiplied by the regulatory fee factor of 1.001402.

In its filing on March 7, 2018, DEC requested the following monthly charges for the REPS and EMF billing components of its REPS rider for the billing period.

<b>Customer Class</b>	<b>REPS Rider</b>	<b>EMF</b>	<b>Total</b>	<b>Total Including Regulatory Fee</b>
Residential	\$ 0.74	(\$ 0.53)	\$ 0.21	\$ 0.21
General Service	\$ 3.82	(\$ 2.25)	\$ 1.57	\$ 1.57
Industrial	\$ 12.61	(\$ 15.84)	(\$ 3.23)	(\$ 3.23)

On March 28, 2018, DEC filed Supplemental Testimony to reflect a change necessary to correct a calculation error. Accordingly, in its Supplemental Testimony, DEC requested the following changes to its monthly charges for the EMF period for General Service customers. The billing period components did

not change from the March 7, 2018 filing and are shown in the table below for clarity.

<b>Customer Class</b>	<b>REPS Rider</b>	<b>EMF</b>	<b>Total</b>	<b>Total Including Regulatory Fee</b>
Residential	\$ 0.74	(\$ 0.53)	\$ 0.21	\$ 0.21
General Service	\$ 3.82	(\$ 2.24)	\$ 1.58	\$ 1.58
Industrial	\$ 12.61	(\$ 15.84)	(\$ 3.23)	(\$ 3.23)

On May 21, 2018, DEC filed Additional Supplemental Testimony in which it made a minor modification to Jennings Exhibit No. 3 that had no net effect on rates. However, DEC also modified Williams Exhibit Nos. 1, 2, 4, and 5 that changed DEC's requested EMF. DEC witness Veronica Williams requested in her Additional Supplemental Testimony that the Commission allow the EMF to be extended four additional months beyond the original ending of December 31, 2017. DEC's new requested EMF period is January 1, 2017, to April 30, 2018 (Updated EMF Period). Witness Williams stated the primary reason for the request is that DEC had significantly lower actual poultry waste REC purchases than were originally estimated and incorporated into the REPS riders billed, and the resulting revenues collected, during the Updated EMF Period. The 2<sup>nd</sup> Revised Williams Exhibit No. 1, Page 1, includes an additional \$7,251,518 of total costs from January 1, 2018, through April 30, 2018. Witness Williams'



comparison of 2<sup>nd</sup> Revised Williams Exhibit No. 2, page 3, to the version of this same exhibit filed on March 28, 2018, reveals that incremental costs for NC retail customers increased by \$6,640,325, but revenues from NC retail customers increased by \$10,869,923, or a net gain of \$4,229,598. This over-collection has been mitigated in DEC's tariff calculations in the 2<sup>nd</sup> Revised Williams Exhibit Nos. 4 and 5. These changes to its monthly charges for the Updated EMF Period are shown in the table below. The billing period components did not change from the March 7 or March 28, 2018, filings and are shown in the table below for clarity.

<b>Customer Class</b>	<b>REPS Rider</b>	<b>EMF</b>	<b>Total</b>	<b>Total Including Regulatory Fee</b>
Residential	\$ 0.74	(\$ 0.67)	\$ 0.07	\$ 0.07
General Service	\$ 3.82	(\$ 2.79)	\$ 1.03	\$ 1.03
Industrial	\$ 12.61	(\$ 19.04)	(\$ 6.43)	(\$ 6.44)


The Public Staff has reviewed the costs that produce the above proposed rates and takes no issue with them. Accordingly, the Public Staff recommends approval of DEC's proposed REPS rider for residential, general service, and industrial customers as filed on May 21, 2018. However, the Public Staff has not been able to fully audit the additional expenses and revenues in the Updated EMF period. Therefore, the Public Staff recommends that the test period for

DEC's REPS cost recovery rider filed in 2019 remain as January 1, 2018, through December 31, 2018, to allow for a complete review of revenues and expenses for the entire test period, including those incurred during the first four months of 2018.

For comparison, the table below provides the monthly EMF and REPS billing components of the current DEC REPS rider approved in Docket No. E-7, Sub 1131. The regulatory fee factor for that docket was 1.001402.

Customer Class	REPS Rider	EMF	Total	Total Including Regulatory Fee
Residential	\$ 0.93	(\$ 0.10)	\$ 0.83	\$ 0.83
General Service	\$ 4.28	(\$ 0.58)	\$ 3.70	\$ 3.71
Industrial	\$ 17.52	(\$ 2.39)	\$ 15.13	\$ 15.15

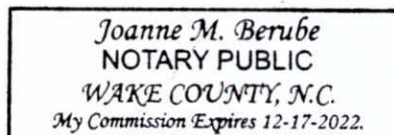
This completes my affidavit.

  
Jay B. Lucas

Sworn to and subscribed before me  
this the 23<sup>rd</sup> day of May, 2018.

  
Notary Public

JOANNE M. BERUBE  
Printed Name



My Commission Expires: 12/17/2022



## Appendix A

### 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 officer in the U. S. 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.