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Nov 20 2017

November 20, 2017

**VIA ELECTRONIC FILING**

M. Lynn Jarvis, Chief Clerk  
North Carolina Utilities Commission  
Dobbs Building  
430 North Salisbury Street  
Raleigh, North Carolina 27603

**Re: Docket No. E-22, Sub 544**

Dear Ms. Jarvis:

On behalf of Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina, and the North Carolina Utilities Commission—Public Staff, enclosed for filing in the above-captioned proceeding is their Joint Proposed Order of Dominion Energy North Carolina and the Public Staff.

Please do not hesitate to contact me should you have any questions. Thank you for your assistance with this matter.

Very truly yours,

s/ E. Brett Breitschwerdt

EBB:kjg

Enclosure

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-22, SUB 544

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	)	
Application of Virginia Electric and Power	)	JOINT PROPOSED ORDER OF
Company, d/b/a Dominion Energy North	)	DOMINION ENERGY NORTH
Carolina, for Approval of Renewable Energy	)	CAROLINA AND
and Energy Efficiency Portfolio Standard	)	THE PUBLIC STAFF
Cost Rider Pursuant to G.S. 62-133.8 and	)	
Commission Rule R8-67	)	

**BEFORE:** Commissioner Daniel G. Clodfelter, Presiding; Chairman Edward S. Finley, Jr.; Commissioners Bryan E. Beatty, ToNola D. Brown-Bland, Jerry C. Dockham, James G. Patterson, and Lyons Gray

**HEARD:** Monday, November 6, 2017, in Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

**APPEARANCES:**

For Dominion Energy North Carolina:

E. Brett Breitschwerdt, McGuireWoods LLP, 434 Fayetteville Street, Suite 2600, Raleigh, North Carolina 27601

Horace P. Payne, Jr., Dominion Resources Services, Inc., 120 Tredegar Street, Riverside-2, Richmond, Virginia 23219

For the Using and Consuming Public:

Tim R. Dodge and Robert B. Josey, Staff Attorneys, Public Staff – North Carolina Utilities Commission, 4326 Mail Service Center, Raleigh, North Carolina 27699-4300

**BY THE COMMISSION:** On August 23, 2017, Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina Power (“Dominion Energy North Carolina” or the “Company”), filed its Application for Approval of REPS (“Renewable Energy and Energy Efficiency Portfolio Standard”) Cost Recovery

Rider and 2017 REPS Compliance Report (“Application”). In its Application, filed pursuant to Commission Rule R8-67, the Company sought Commission approval of its proposed prospective REPS rider, Rider RP, designed to recover its projected incremental REPS compliance costs for the calendar year 2018, and its proposed REPS Experience Modification Factor (“EMF”) rider, Rider RPE, designed to true up the recovery of REPS compliance costs for the period from July 1, 2016, through June 30, 2017. Dominion Energy North Carolina also requested Commission approval of its 2017 REPS Compliance Report for calendar year 2016 REPS compliance, filed as Company Exhibit GEH-1 attached to the prefiled direct testimony of Company witness George E. Hitch. Dominion Energy North Carolina Application requested an annual revenue requirement of \$716,429 for the rate period (billing period) of calendar year 2018, to be recovered through updated Rider RP, as well as a REPS EMF revenue requirement of \$469,296 to be recovered through Rider RPE. In support of its Application, the Company filed the direct testimony and exhibits of Company witnesses Hitch, Alan J. Moore, and James D. Merritt.

On August 30, 2017, the Commission issued an *Order Scheduling Hearing, Requiring Filing of Testimony, Establishing Discovery Guidelines, and Requiring Public Notice*. Pursuant to this Order, the Commission established deadlines for the filing of petitions to intervene, intervenor testimony and exhibits, and Company rebuttal testimony and exhibits, and scheduled the hearing to be held in this proceeding on November 6, 2017.

The intervention and participation of the Public Staff in this docket are recognized pursuant to G.S. 62-15(d) and Commission Rule R1-19(e). No other party petitioned to intervene.

On October 23, 2017, the Public Staff filed the affidavits of Sonja R. Johnson and Evan D. Lawrence.

On October 25, 2017, Dominion Energy North Carolina filed an affidavit of publication indicating that it had provided notice of hearing in newspapers of general circulation as required by the Commission's August 30, 2017 Order.

On October 30, 2017, Dominion Energy North Carolina filed a letter in lieu rebuttal indicating there were no issues in dispute between the Company and the Public Staff based upon the Public Staff's affidavits.

On November 1, 2017, Dominion Energy North Carolina and the Public Staff jointly filed a motion in which they notified the Commission that they were not in disagreement on any issue and had agreed to waive cross-examination of each other's witnesses. They requested that all witnesses be excused from attending the hearing. The Commission granted this motion in its Order dated November 3, 2017.

On November 6, 2017, the Commission held the evidentiary hearing as scheduled. At the hearing, the parties agreed that the Application, the pre-filed direct testimony of the Company's witnesses, and the Public Staff's affidavits should be accepted into the record. All exhibits attached to the parties' testimony and affidavits were received into evidence. No public witnesses appeared at the hearing.

Based upon Dominion Energy North Carolina's Application, the testimony, affidavits, and exhibits received into evidence at the hearing, the records in the North Carolina Renewable Energy Tracking System ("NC-RETS"), and the record as a whole, the Commission makes the following:

### **FINDINGS OF FACT**

1. Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina is a public utility operating in the State of North Carolina as Dominion Energy North Carolina, is engaged in the business of generating, transmitting, distributing, and selling electric power and energy to the public for compensation in North Carolina, and is subject to the jurisdiction of the North Carolina Utilities Commission as a public utility. Dominion Energy North Carolina is lawfully before this Commission based upon its Application filed pursuant to G.S. 62-133.8 and Commission Rule R8-67.

2. Under the State's REPS, G.S. 62-133.8, in 2016 electric power suppliers were required to meet six percent (6%) of their previous year's North Carolina retail electric sales by a combination of renewable energy and energy reductions due to the implementation of energy efficiency ("EE") measures. In addition, electric power suppliers were required to acquire solar energy, or renewable energy certificates ("RECs") for solar energy, by the end of 2016 in an amount equal to at least 0.14% of the previous year's North Carolina retail sales. The 0.14% solar energy requirement is part of the 6% total REPS requirement. The solar energy sources can be a combination of new solar electric facilities and new metered solar thermal energy facilities. The electric power suppliers of North Carolina were initially required by G.S. 62-133.8 to procure a certain portion of

their renewable energy requirements beginning in 2012 from electricity generated by poultry and swine waste. However, by Orders issued November 29, 2012, and March 26, 2014, in Docket No. E-100, Sub 113 (collectively, together with the Orders of November 13, 2014, December 1, 2015, October 17, 2016, and October 16, 2017, the “Delay Orders”), the Commission delayed the initial swine and poultry waste resource requirements until 2014; in an Order issued November 13, 2014, in the same docket, the Commission granted an additional delay of the initial swine waste requirement until 2015 and established an initial aggregate poultry waste resource requirement of 170,000 megawatt-hours (MWh) for 2014; in an Order issued December 1, 2015, the Commission again granted a further delay of the initial swine waste requirement until 2016 and maintained the aggregate poultry waste resource requirement at 170,000 MWh for 2015; in an Order issued October 17, 2016, the Commission further delayed the initial swine waste requirement for one additional year and maintained the 2016 aggregate poultry waste requirement at 170,000 MWh for 2016; and in an Order issued October 16, 2017, the Commission delayed the initial swine waste requirement for one additional year and maintained the aggregate poultry waste requirement at 170,000 MWh for 2017.

3. G.S. 62-133.8(h)(4) provides that an electric power supplier shall be allowed to recover through an annual rider the incremental costs incurred to comply with the REPS.

4. Pursuant to G.S. 62-133.8(b)(2)(e), Dominion Energy North Carolina may use 100% out-of- state RECs to achieve REPS compliance. Under

Commission Rule R8-67(e)(2), the total costs reasonably and prudently incurred during the test period to purchase unbundled RECs constitute incremental costs. The projected costs to purchase such RECs during the billing period constitute forecasted incremental costs.

5. Dominion Energy North Carolina has agreed to provide REPS compliance services, including the procurement of RECs, to the Town of Windsor pursuant to G.S. 62-133.8(c)(2)(e). The Town of Windsor's 2016 REPS compliance status is included in Dominion Energy North Carolina's 2017 compliance report.

6. Taking into account the Commission's Delay Orders that relieved Dominion Energy North Carolina and other electric power suppliers of the swine waste requirements, Dominion Energy North Carolina, on its own behalf and on behalf of the Town of Windsor, has complied with its 2016 REPS obligations. Dominion Energy North Carolina's 2017 REPS compliance report for compliance year 2016 should be approved.

7. For purposes of Dominion Energy North Carolina's annual rider pursuant to G.S. 62-133.8(h), the rate period is the 12-month period from January 1, 2018, through December 31, 2018, and the test period is the 12-month period July 1, 2016, through June 30, 2017.

8. Dominion Energy North Carolina's micro-grid research project costs are renewable energy research costs recoverable pursuant to G.S. 62-133.8(h)(1)(b). Dominion Energy North Carolina's research costs are within the statute's \$1,000,000 annual limit. Dominion Energy North Carolina provided the

Commission, in connection with its REPS compliance reports, a final status report on the micro-grid research project, whose demonstration period (2015-2017) ended this year.

9. Dominion Energy North Carolina's approach of managing its retail REPS costs separately from the REPS costs for its wholesale customer, the Town of Windsor, is reasonable.

10. For purposes of establishing the REPS EMF charge ("Rider RPE") in this proceeding, Dominion Energy North Carolina's actually incurred incremental costs of REPS compliance, during the REPS test period, were \$839,144. Dominion Energy North Carolina's Rider RP revenues were \$369,848. Dominion Energy North Carolina's under-recovery of test-period compliance costs was \$469,296.

11. For purposes of establishing the forecasted REPS charge ("Rider RP") in this proceeding, Dominion Energy North Carolina's incremental costs of REPS compliance and NC Microgrid costs projected to be incurred during the rate period are \$716,429.

12. Dominion Energy North Carolina's total adjusted number of customer accounts is 120,449, including 102,840 in the residential class, 17,548 in the commercial class, and 61 in the industrial class.

13. The appropriate monthly amount of the REPS EMF charge (Rider RPE) to be collected during the billing period, per customer account, including the regulatory fee, is \$0.19 for residential accounts, \$1.07 for commercial accounts, and \$7.17 for industrial accounts.



14. The appropriate monthly amount of the forecasted REPS charge to be collected during the billing period (Rider RP), per customer account, including the regulatory fee, is \$0.30 for residential accounts, \$1.64 for commercial accounts, and \$10.95 for industrial accounts. The combined monthly REPS (Rider RP) and REPS EMF (Rider RPE) charges to be collected during the billing period, per customer account, including the regulatory fee, are \$0.49 for residential accounts, \$2.71 for commercial accounts, and \$18.12 for industrial accounts.

15. Dominion Energy North Carolina's combined REPS riders to be charged to each customer account for the billing period are within the annual cost caps established in G.S. 62-133.8(h)(4).

#### **EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1-5**

These findings of fact are essentially informational, jurisdictional, and procedural in nature and are not contested.

G.S. 62-133.8(b)(1) and (c)(1) establish a REPS requirement for all electric power suppliers in the State. These provisions require each electric power supplier to provide a certain percentage of its North Carolina sales from various renewable energy or EE resources. Authorized methods of compliance with the REPS requirement for electric public utilities are listed in G.S. 62-133.8(b)(2) as follows: (a) generate electric power at a new renewable energy facility; (b) use a renewable energy resource to generate electric power at a generating facility other than the generation of electric power from waste heat derived from the combustion of fossil fuel; (c) reduce energy consumption through the implementation of an EE measure; (d) purchase electric power from a new renewable energy facility; (e) purchase RECs derived from in-state or out-of-state new renewable energy

facilities; (f) use electric power that is supplied by a new renewable energy facility or energy saved due to the implementation of an EE measure that exceeds the requirements of this section for any calendar year as a credit towards the requirements of this section in the following calendar year; or (g) electricity demand reduction. In 2015, the electric public utilities were required to meet six percent (6%) of their previous year's North Carolina retail electric sales by a combination of the measures authorized by G.S. 62-133.8(b). Each of these compliance methods is subject to certain additional limitations and conditions.

G.S. 62-133.8(c) has similar requirements for EMCs and municipal electric systems.

G.S. 62-133.8(d) requires a certain percentage of the total electric power sold to retail electric customers in the State, or an equivalent amount of energy, to be supplied by a combination of new solar electric facilities and new metered solar thermal energy facilities. The percentage requirement for solar resources is 0.14% for the years 2015 through 2017, increasing thereafter.

G.S. 62-133.8(e) requires a certain percentage of the total electric power sold to retail electric customers in the State to be supplied, or contracted for supply in each year, by swine waste resources. The General Assembly established an initial aggregate 0.07% swine waste resources requirement in 2012, increasing thereafter. G.S. 62-133.8(f) requires a specific amount of electric power sold to retail electric customers in the State, or an equivalent amount of energy, to be supplied, or contracted for supply in each year, by poultry waste resources. The General Assembly established an initial aggregate poultry waste resources

requirement of 170,000 megawatt-hours (MWh) in 2012, increasing thereafter. Pursuant to the Commission's *Order on Pro-Rata Allocation of Aggregate Swine and Poultry Waste Set-Aside Requirements and Motion for Clarification* issued on March 31, 2010, in Docket No. E-100, Sub 113, Dominion Energy North Carolina's share of the aggregate State set-aside requirements for energy from poultry waste resources is based on the ratio of its North Carolina retail kilowatt-hour (kWh) sales from the previous year divided by the previous year's total North Carolina retail kWh sales for all electric power suppliers. Pursuant to the Commission's *Order Establishing Method of Allocating the Aggregate Poultry Waste Resources Set-Aside Requirement* issued April 18, 2016, in Docket No. E-100, Sub 113, starting with compliance year 2016, the aggregate poultry waste set-aside obligation shall be allocated among the electric power suppliers by averaging three years of historical retail sales, with the resulting allocation being held constant for three years.

At the joint request of the State's electric power suppliers, including Dominion Energy North Carolina, the Commission issued the Delay Orders in Docket No. E-100, Sub 113, pursuant to specific authority provided to the Commission by the General Assembly to modify the REPS requirements under G.S. 62-133.8(i)(2).

Specifically, the Commission's November 29, 2012 *Order Modifying the Poultry and Swine Waste Set-Aside Requirements and Granting Other Relief* directed that the swine waste resource set-aside requirement for 2012 be eliminated and that the poultry waste resource requirements for 2012 and

subsequent years be delayed for a year. On March 26, 2014, the Commission issued a *Final Order Modifying the Poultry and Swine Waste Set-Aside Requirements and Providing Other Relief*, approving another one-year delay for both the swine waste resource and poultry waste resource requirements and requiring certain additional reporting by all electric power suppliers, including Dominion Energy North Carolina. On November 13, 2014, the Commission issued an *Order Delaying Swine Set-Aside and Providing Other Relief*, delaying Dominion Energy North Carolina's and other electric power suppliers' swine waste resource requirement for one year and establishing an initial aggregate poultry waste resource requirement of 170,000 MWh for 2014, to be divided amongst the electric power suppliers. On December 1, 2015, the Commission issued an *Order Delaying Swine Set-Aside and Providing Other Relief*, granting a further delay of the initial swine waste requirement until 2016, modifying the 2015 poultry waste set-aside requirement to remain at the same level as the 2014 aggregate requirement of 170,000 MWh, and delaying by one year the scheduled increases in the requirement (the requirement was scheduled to increase to 700,000 MWh in the aggregate for all electric power suppliers). On October 16, 2016, the Commission issued an *Order Modifying the Swine Waste Set-Aside Requirement and Providing Other Relief*, which delayed for one additional year the commencement of the swine waste set-aside requirement. The Commission also modified the 2016 poultry waste set-aside requirement to remain at the same level as the 2014 and 2015 aggregate requirement of 170,000 MWh, and delayed by one additional year the scheduled increases in the requirement (increasing to

700,000 MWh for 2017, and 900,000 MWh for 2018 and each year thereafter). Most recently, on October 16, 2017, the Commission issued an *Order Modifying the swine Waste Set-Aside Requirement and Providing Other Relief*, which delayed for one additional year the initial compliance requirement under the swine waste set-aside. The Commission also modified the 2017 poultry waste set-aside requirement to remain at the same level as the 2014 and 2015 aggregate requirement of 170,000 MWh, and delayed by one additional year the scheduled increases in the requirement (increasing to 700,000 MWh for 2018, and 900,000 MWh for 2019 and each year thereafter). Through its Delay Orders, the Commission has established that the aggregate statewide poultry waste resource requirement for the State's electric power suppliers, including Dominion Energy North Carolina, is 170,000 MWh for 2016 and 2017, and delayed the initial swine waste requirement until 2018.

G.S. 62-133.8(b)(2)(e) provides that an electric power supplier shall achieve no more than 25% of its annual REPS compliance obligations using RECs from out-of-state new renewable energy facilities. However, paragraph (b)(2)(e) specifically exempts any electric public utility with less than 150,000 North Carolina retail jurisdictional customers as of December 31, 2006. The Commission held in its *Order on Dominion's Motion for Further Clarification*, issued September 22, 2009, in Docket No. E-100, Sub 113, that this exemption applies to Dominion Energy North Carolina for purposes of both its general REPS obligation and individual set-aside requirements pursuant to G.S. 62-133.8(d)-(f). Dominion

Energy North Carolina may, therefore, achieve 100% of its REPS compliance using RECs generated by out-of-state new renewable energy facilities.

G.S. 62-133.8(b)(2)(c) provides that an electric power supplier may use energy efficiency certificates (“EECs”) to meet no more than 25% of its total requirement. This limitation on the use of EECs to meet the total requirement does not apply to municipal suppliers such as the Town of Windsor.

G.S. 62-133.8(h)(4) requires the Commission to allow an electric power supplier to recover all of its incremental costs incurred to comply with G.S. 62-133.8 through an annual rider. G.S. 62-133.8(h)(1) provides that “incremental costs” means all reasonable and prudent costs incurred by an electric power supplier to comply with the REPS requirements that are in excess of the electric power supplier’s avoided costs, other than those costs recovered pursuant to G.S. 62-133.9. The term “avoided costs” includes both avoided energy costs and avoided capacity costs. Commission Rule R8-67(e)(2) provides that the reasonable and prudently-incurred costs of unbundled RECs are incremental costs and have no avoided cost component.

Commission Rule R8-67(e)(5) provides that “[t]he REPS EMF will reflect the difference between reasonable and prudently incurred incremental costs and the revenues that were actually realized during the test period under the REPS rider then in effect.”

Dominion Energy North Carolina’s 2017 REPS compliance report for compliance year 2016 stated that pursuant to G.S. 62-133.8(c)(2)(e) the Company

provided renewable energy resources and compliance reporting services for the Town of Windsor.

#### **EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 6**

The evidence supporting this finding of fact appears in Dominion Energy North Carolina's 2017 REPS compliance report for compliance year 2016 and in the testimony and exhibits of Company witness Hitch and the affidavit of Public Staff witness Lawrence. In addition, the Commission takes judicial notice of information contained in NC-RETS.

Dominion Energy North Carolina's 2017 REPS compliance report was admitted into evidence as Company Exhibit No. GEH-1. This report provided the information required by Commission Rule R8-67(c) for Dominion Energy North Carolina and the Town of Windsor. Public Staff witness Lawrence stated in his affidavit that he reviewed Dominion Energy North Carolina's 2017 REPS compliance report and recommended that it be approved.

Dominion Energy North Carolina's 2017 REPS compliance report stated that the Company's 2015 retail electric sales were 4,377,561 MWh and the Town of Windsor's were 50,704 MWh. Dominion Energy North Carolina's 6% 2016 total REPS obligation amounted to 262,654 RECs, including 250,897 general obligation RECs, 6,129 solar RECs (0.14% of 4,377,561), 5,628 poultry waste RECs, and 15,105 EECs from its portfolio of in-state EE programs approved pursuant to G.S. 62-133.9. The Town of Windsor's 6% 2016 total REPS obligation amounted to 3,042 RECs, including 2,908 general RECs, 71 solar RECs (0.14% of 50,704) and 65 poultry waste RECs. The Town of Windsor did not use any EECs for compliance. Public Staff witness Lawrence stated in his affidavit that

these numbers of RECs met the REPS requirements that 6% of 2015 retail sales must be matched with an equivalent number of RECs in 2016, including 0.14% of 2015 retail sales that must be matched with an equivalent number of RECs derived from solar energy. Witness Lawrence confirmed that Dominion Energy North Carolina had placed these numbers of RECs in its own and the Town of Windsor's NC-RETS compliance sub-accounts. Company witness Hitch testified that out-of-state RECs may be used for 100% of Dominion Energy North Carolina's REPS compliance, but may not be used to meet more than 25% of Windsor's REPS requirements. Dominion Energy North Carolina complied with these limitations. NC-RETS further indicates that Dominion Energy North Carolina complied with the provisions of G.S. 62-133.8(b)(2)(e) and (c)(2)(d).

Public Staff witness Lawrence testified that Dominion Energy North Carolina indicated in response to Public Staff data requests in previous years, that it determines the service life of an energy efficiency measure for REPS compliance purposes based on the measure lives the Company uses when filing for approval of a DSM program. As an example, the Company noted its most recent Application for Approval of the Small Business Improvement Program, as filed on July 29, 2016, in Docket No. E-22, Sub 538, which presents measure lives of 14 years.

No party disputed that Dominion Energy North Carolina and the Town of Windsor complied with their 2016 REPS requirements, and Company witness Hitch and Public Staff witness Lawrence both stated that Dominion Energy North Carolina and the Town of Windsor met the 2016 REPS requirements.



Based on the foregoing and all the evidence of record, the Commission finds that Dominion Energy North Carolina and its wholesale customer, the Town of Windsor, for which Dominion Energy North Carolina is providing REPS compliance services, have fully complied with the requirements of the REPS for 2016, and that Dominion Energy North Carolina's 2017 REPS compliance report for compliance year 2016 should be approved.

#### **EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 7**

The evidence supporting this finding of fact appears in Dominion Energy North Carolina's Application, the testimony of Dominion Energy North Carolina witnesses Hitch and Moore, and the affidavits of Public Staff witnesses Johnson and Lawrence.

Commission Rule R8-67(e)(3) provides that the test period for REPS rider proceedings shall be the same as that used by the utility in its annual fuel charge adjustment proceedings, which is specified in Rule R8-55(c) for Dominion Energy North Carolina to be the 12-month period ending each June 30. Therefore, the test period to be used for purposes of this proceeding is the period July 1, 2016, through June 30, 2017.

Regarding the rate period, Rule R8-67(e)(4) provides that the REPS and REPS EMF riders shall be in effect for a fixed period that "shall coincide, to the extent practical, with the recovery period for the cost of fuel and fuel-related cost rider established pursuant to Rule R8-55." For Dominion Energy North Carolina, this is the calendar year. In its current fuel proceeding, Docket No. E-22, Sub 546, and in this proceeding, Dominion Energy North Carolina has proposed that its rate

adjustments take effect on January 1, 2018, and remain in effect for a 12-month period.

Dominion Energy North Carolina's test period and rate period were not challenged by any party. Therefore, the Commission finds that the test period and rate period proposed by Dominion Energy North Carolina are appropriate for use in this proceeding.

### **EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 8**

The evidence supporting this finding of fact appears in the testimony and exhibits of Dominion Energy North Carolina witnesses Hitch and Moore and the affidavits of Public Staff witnesses Lawrence and Johnson.

Pursuant to G.S. 62-133.8(h)(1), "incremental costs" include, among other things, "all reasonable and prudent costs incurred by an electric power supplier to . . . (b) [f]und research that encourages the development of renewable energy, energy efficiency, or improved air quality, provided those costs do not exceed one million dollars (\$1,000,000) per year." Whether specific test period or forecasted rate period expenditures to fund research are eligible for cost recovery through an annual rider pursuant to this provision is determined by the Commission on a case-by-case basis.

Dominion Energy North Carolina witnesses Hitch and Moore described the status of the Company's micro-grid project, which the Commission approved in the Company's 2013 REPS rider proceeding, Docket No. E-22, Sub 503, as a research project qualifying for REPS rider cost recovery pursuant to G.S. 62-133.8(h)(1). Dominion Energy North Carolina's micro-grid project was constructed at the

Company's Kitty Hawk district office beginning in February 2014, and was commissioned and placed in service for operation as a micro-grid on July 22, 2014.

Dominion Energy North Carolina agreed to file annual reports on the micro-grid during its three-year demonstration period (2015 through 2017), and the last of these reports was attached as Appendix C to the Company's 2017 REPS compliance report. As originally constructed, the micro-grid integrated a behind-the-meter on-site diesel generator; a utility feed; one five-kilowatt (kW) horizontal-axis and three vertical-axis wind turbines (3-kW, 4-kW and 1.2-kW); a lithium ion battery with a 75-kWh storage capacity and 25-kW discharge rate; a 6-kW ground-mounted solar array; protective relays, inverters, proprietary control software, metering, and circuit breakers; and round-the-clock system monitoring. Dominion Energy North Carolina reported that the original 5-kW turbine failed to perform in a satisfactory manner, and it has been replaced by the vendor, at no cost to the Company, with a 6-kW turbine from a different manufacturer. On July 27, 2015, the Company integrated into the micro-grid two 1.5-kW fuel cells sized for residential and small commercial customer applications. The confidential exhibits of Company witness Moore set forth the costs of the micro-grid project incurred during the test period and projected for the billing period.

Public Staff witness Lawrence stated in his affidavit that the Public Staff reviewed Dominion Energy North Carolina's micro-grid research costs as part of its investigation into Dominion Energy North Carolina's Application. He did not take issue with Dominion Energy North Carolina's testimony concerning the nature

and costs of its micro-grid research activity, or with the reasonableness of the micro-grid costs included for recovery.

The Commission concludes that the research activities proposed by Dominion Energy North Carolina to be funded during the rate period are eligible research costs recoverable under G.S. 62-133.8(h)(1)(b), and that such research costs are within the annual limit allowed by statute. The Commission also finds and concludes that Dominion Energy North Carolina has complied with its commitments to provide the Commission status reports on the micro-grid research project and that no additional reporting shall be required.

#### **EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 9**

The evidence supporting this finding of fact is found in the testimony and exhibits of Dominion Energy North Carolina witness Hitch. Company witness Hitch testified that the Company purchases RECs for use by the Town of Windsor, its wholesale customer, to meet its REPS obligations. However, 75% of the Town of Windsor's RECs must be obtained from in-state sources, whereas Dominion Energy North Carolina, pursuant to G.S. 62-133.8(b)(2)(e), is exempt from this requirement and may obtain all of its RECs from outside North Carolina. Because of this difference in requirements, Dominion Energy North Carolina has directly assigned to the Town of Windsor the costs of RECs used for its REPS compliance, and has excluded them from the REPS costs the Company is seeking to recover in this proceeding. Similarly, Company witness Hitch testified, other incremental REPS compliance costs reasonably attributable to the Town of Windsor are excluded from the costs that Dominion Energy North Carolina is seeking to recover. The Public Staff made no objection to the manner in which the Company

separates its own REPS compliance costs from those incurred on behalf of the Town of Windsor. Accordingly, the Commission finds that Dominion Energy North Carolina's approach of managing its retail REPS costs separately from the REPS costs for the Town of Windsor is reasonable.

#### **EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 10-15**

The evidence supporting these findings of fact appears in the testimony and exhibits of Dominion Energy North Carolina witnesses Moore and Merritt and the affidavits of Public Staff witnesses Lawrence and Johnson.

As shown in witness Moore's Exhibit AJM-1, Dominion Energy North Carolina's incremental REPS compliance costs for the test period amounted to \$839,144, while its test-period Rider RP revenues totaled \$369,848, resulting in an under-recovery of \$469,296, to be recovered through Rider RPE. The under-recovery for each customer class is set forth on Company Exhibit No. JDM-1, Schedule 2, as follows: \$239,162 for the residential class, \$224,893 for the commercial class, and \$5,241 for the industrial class.<sup>1</sup> These under-recoveries are divided by the total adjusted number of accounts, which are 102,840, 17,548, and 61 for the residential, commercial, and industrial classes, respectively, and further divided by 12 months to determine the monthly per-account charge. The projected incremental costs for the billing period, which are recovered through Rider RP, amount to \$716,429. These costs are set forth on Company Exhibit No. JDM-1, Schedule 4, and are broken down by customer class as follows: \$363,784 for the residential class, \$344,644 for the commercial class, and \$8,002 for the

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<sup>1</sup> These figures can be found by combining lines 1 and 5, lines 2 and 6, and lines 3 and 7, in the next-to-last column of Company Exhibit No. JDM-1, Schedule 2.

industrial class.<sup>2</sup> These incremental costs are divided by the total adjusted number of accounts for each class, and further divided by 12 months to determine the monthly per-account charge.

In his testimony, Company witness Merritt determined that the appropriate monthly rates for Riders RP and RPE, including the regulatory fee, are as follows:

<b>Customer Class</b>	<b>Forecast Rate (Rider RP)</b>	<b>EMF Rate (Rider RPE)</b>	<b>Total REPS Rate</b>
Residential	\$0.30	\$0.19	\$0.49
Commercial	\$1.64	\$1.07	\$2.71
Industrial	\$10.95	\$7.17	\$18.12

Public Staff witnesses Lawrence and Johnson described the Public Staff's audit of Dominion Energy North Carolina's REPS costs and recommended approval of Dominion Energy North Carolina's proposed Rider RP and RPE rates. The Commission therefore finds the Company's proposed rates to be reasonable.

IT IS, THEREFORE, ORDERED as follows:

1. That Dominion Energy North Carolina shall establish a REPS Rider RP as described herein, in the amounts approved herein, and that this rider shall remain in effect for a 12-month period beginning January 1, 2018, and expiring December 31, 2018;

2. That Dominion Energy North Carolina shall establish a REPS EMF Rider RPE as described herein, and that this rider shall remain in effect for a 12-month period beginning January 1, 2018, and expiring December 31, 2018;

3. That Dominion Energy North Carolina shall work with the Public Staff to prepare a joint notice to customers of the rate changes ordered by the

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<sup>2</sup> 2 These figures can be found by combining lines 1 and 5, lines 2 and 6, and lines 3 and 7, in the next-to-last column of Company Exhibit No. JDM-1, Schedule 4.

Commission in this docket, as well as in Docket No. E-22, Subs 545 and 546, and the Company shall file such notice for Commission approval as soon as practicable, but not later than three (3) working days after the Commission issues orders in all of the above-referenced dockets;

4. That Dominion Energy North Carolina shall file appropriate rate schedules and riders with the Commission to implement the provisions of this Order as soon as practicable;

5. That Dominion Energy North Carolina's 2017 REPS compliance report is hereby approved, and the RECs and EECs in the Company's and the Town of Windsor's 2016 compliance sub- accounts in NC-RETS shall be retired.

6. Dominion Energy North Carolina has met its commitment to provide the Commission a final status report on the micro-grid research project and no additional reporting shall be required in future annual REPS compliance reports.

ISSUED BY ORDER OF THE COMMISSION.

This the \_\_\_\_\_ day of \_\_\_\_\_, 2017.

NORTH CAROLINA UTILITIES COMMISSION

Chief Clerk

## CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Joint Proposed Order of Dominion Energy North Carolina and the Public Staff as filed in Docket No. E-22, Sub 544 was served electronically or via U.S. mail, first-class, postage prepaid, upon all parties of record.

This, the 20<sup>th</sup> day of November, 2017.

/s/ E. Brett Breitschwerdt

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