McGuireWoods LLP 501 Fayetteville Street Suite 500 PO Box 27507 (27611) Raleigh, NC 27601 Phone: 919.755.6600 Fax: 919.755.6699 www.mcguirewoods.com

Andrea R. Kells Direct: 919.755.6614 MCGUIREWOODS

akells@mcguirewoods.com

August 11, 2020

VIA ELECTRONIC FILING

Ms. Kimberley A. Campbell, Chief Clerk North Carolina Utilities Commission Dobbs Building 430 North Salisbury Street Raleigh, North Carolina 27603

Re: Application by Virginia Electric and Power Company, d/b/a Dominion

Energy North Carolina, for Approval of Renewable Energy and Energy Efficiency Portfolio Standard Cost Recovery Rider Pursuant to G.S. 62-

133.8 and Commission Rule R8-67

Docket No. E-22, Sub 588

Dear Ms. Campbell:

Pursuant to North Carolina General Statutes ("N.C.G.S.") § 62-133.8 and Rule R8-67(e) of the Rules and Regulations of the North Carolina Utilities Commission ("Commission"), Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina (the "Company"), hereby files its Application for approval to recover the Company's Renewable Energy and Energy Efficiency Portfolio Standard Compliance and Related Costs ("Application"). In support of its Application, the Company is filing the Direct Testimony and Exhibits of George E. Hitch, Elizabeth B. Lecky, and Emilia L. Catron. In accordance with Commission Rule R8-67(c), the Company is also filing its 2020 Renewable Energy and Energy Efficiency Portfolio Standard Compliance Report for calendar year 2019 as Exhibit GEH-1 to the Direct Testimony of Company Witness Hitch.

Portions of the Application contain confidential information related to renewable energy certificate ("REC") contract pricing and other vendor contract information, including Company Exhibit GEH-1, Company Exhibit GEH-2, Schedules 1 and 2, and Company Exhibit EBL-1, Schedules 1 and 2. Information designated by the Company as confidential qualifies as "trade secrets" under N.C.G.S. § 66-152(3). See Order Granting in Part and Denying in Part Motion for Disclosure, Docket No. E-100, Sub 137 (June 3, 2013) (holding "specific information concerning REPS contract prices, REC quantities and prices, and other terms would impair [the Company's] ability to negotiate and transact business on favorable terms" and, therefore, qualifies as trade secret information). Pursuant to N.C.G.S. § 132-1.2, the Company has redacted this

Ms. Kimberley A. Campbell August 11, 2020 Page 2

confidential information from this public version of the Company's Application and is contemporaneously filing these confidential pages under seal. The Company will make this information available to other interested parties pursuant to an appropriate nondisclosure agreement.

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

Very truly yours,

/s/Andrea R. Kells

ARK:asm

Enclosures

cc: Timothy R. Dodge – NC Utilities Commission Public Staff
Dianna Downey – NC Utilities Commission Public Staff



Application, Testimony, and Exhibits of Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina

Before the North Carolina Utilities Commission

In the Matter of Application by Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina, for Approval of Renewable Energy and Energy Efficiency Portfolio Standard Cost Recovery Rider Pursuant to G.S. 62-133.8 and Commission Rule R8-67

Docket No. E-22, Sub 588

Filed: August 11, 2020

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-22, SUB 588

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

)
) APPLICATION FOR APPROVAL
) OF REPS COST RECOVERY RIDER
) AND 2020 REPS COMPLIANCE
) REPORT
)

Pursuant to North Carolina General Statutes ("N.C. Gen. Stat.") § 62-133.8 and Rule R8-67 of the Rules and Regulations of the North Carolina Utilities Commission ("NCUC" or the "Commission"), Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina ("Dominion Energy North Carolina" or the "Company"), by counsel, hereby applies to the Commission for approval of its annual Renewable Energy and Energy Efficiency ("REPS") cost recovery riders, Riders RP and RPE, as further described herein ("Application"). Through this Application, Dominion Energy North Carolina also requests Commission approval of the Company's 2020 REPS Compliance Report for calendar year 2019 REPS compliance, being filed herewith as Company Exhibit GEH-1 attached to the direct testimony of Company Witness George E. Hitch.

In support thereof, the Company respectfully asserts as follows:

1. The Company is a public utility operating in the State of North Carolina as Dominion Energy North Carolina and is engaged in the business of generating, transmitting, distributing, and selling electric power and energy to the public for compensation. As such, the Company's operations in the State are subject to the jurisdiction of the Commission. The Company is also a public utility under the Federal

Power Act, and certain of its operations are subject to the jurisdiction of the Federal Energy Regulatory Commission. The Company is a wholly-owned subsidiary of Dominion Energy, Inc. DENC serves approximately 120,000 customers in North Carolina, with a service territory of about 2,600 square miles in northeastern North Carolina, including Roanoke Rapids, Albemarle, Ahoskie, Elizabeth City, and the Outer Banks. The Company serves major industrial facilities, as well as commercial, governmental, and residential customers. The post office address of DENC is P.O. Box 26666, Richmond, Virginia 23261.

2. The attorneys for the Company are:

Paul E. Pfeffer
Lauren W. Biskie
Dominion Energy Services, Inc.
Legal Department
120 Tredegar Street, RS-2
Richmond, Virginia 23219
(804) 787-5607 (PEP phone)
(804) 819-2396 (LWB phone)
paul.e.pfeffer@dominionenergy.com
lauren.w.biskie@dominionenergy.com

Andrea R. Kells
Nick A. Dantonio
McGuireWoods LLP
501 Fayetteville Street, Suite 500
PO Box 27507 (27611)
Raleigh, North Carolina 27601
(919) 755-6614 (ARK phone)
(919) 755-6605 (NAD phone)
akells@mcguirewoods.com
ndantonio@mcguirewoods.com

Copies of all pleadings, testimony, orders, and correspondence in this proceeding should be served upon the attorneys listed above.

- 3. Session Law 2007-397 ("Senate Bill 3") established annual renewable energy compliance obligations starting in 2010 for all electric power suppliers providing retail service in North Carolina. These obligations are codified in N.C. Gen. Stat. § 62-133.8(b), (c), (d), (e), and (f). N.C. Gen. Stat. § 62-133.8(h)(1) also establishes that electric power suppliers, including DENC, shall be allowed to recover their reasonable and prudent "incremental costs" incurred to comply with their REPS obligations and any similar future federal mandate, as well as to fund research that encourages the development of renewable energy, energy efficiency, and improved air quality, up to \$1,000,000 per year. Subsection (h)(5) of this statute directed the Commission to establish a procedure for the annual assessment of the per-account charges to allow for timely recovery of all reasonable and prudent costs of compliance with the REPS requirements and funding of eligible research. N.C. Gen. Stat. § 62-133.8(h)(5).
- 4. Senate Bill 3 also established a cost containment framework for REPS cost recovery, providing that electric power suppliers shall be allowed to expend and recover all such reasonable and prudent incremental REPS compliance costs and the funding of qualifying research through an annual rider up to the per-account annual charges specified in Subsection (h)(4) of the statute. Specifically, this subsection, as amended by Session Law 2017-192 enacted on July 27, 2017, provides that electric public utilities' incremental REPS costs for 2015 and after shall not exceed the following per-account charges: \$27.000 per Residential account; \$150.00 per Commercial account; and \$1,000.00 per Industrial account.

-

¹ The compliance obligation set forth in N.C. Gen. Stat. § 62-133.8(c) does not apply to DENC. However, the Company has committed to provide REPS compliance for the Town of Windsor, a full requirements customer of the Company, which is subject to the requirements of this subsection.

- 5. Commission Rule R8-67 was adopted in February 2008² to implement the legislature's mandate that the Company and the other electric power suppliers achieve compliance with the annual REPS requirements and to provide for timely recovery of the incremental costs incurred by the respective utilities to achieve such compliance up to the per-account cost caps. The Commission also established annual reporting requirements for the electric power suppliers to annually verify REPS compliance for the prior annual compliance period and to inform the Commission on their future REPS compliance planning. *See* Commission Rule R8-67(c) and (b), respectively.
- 6. Rule R8-67(c) and (e) provide for the Commission to conduct an annual proceeding for each electric public utility to review the utility's costs to comply with N.C. Gen. Stat. § 62-133.8 and to establish the electric public utility's annual rider to recover such costs in a timely manner. The Commission shall also establish an experience modification factor ("EMF") to collect the difference between the electric public utility's actual reasonable and prudent incremental REPS costs incurred and the actual revenues received during the annual test period. Rule R8-67(c) further provides that the Commission shall consider each electric public utility's REPS compliance report at the hearing provided for in Rule R8-67(e) and shall determine whether the electric public utility has complied with N.C. Gen. Stat. § 62-133.8(b), (d), (e) and (f).
- 7. According to Rules R8-67(c) and (e), the electric public utility is to file its application for recovery of its REPS costs, as well as it REPS compliance report, at the same time it files the information required by Rule R8-55, and the Commission is to conduct an annual rider hearing as soon as practicable after the hearing required by Rule

² In the Matter of Rulemaking Proceeding to Implement Session Law 2007-397, Order Adopting Final Rules, Docket No. E-100, Sub 113 (Feb. 28, 2013).

- R8-55. Rule R8-67 also provides that the electric public utility shall annually use the same test period as used in its annual R8-55 fuel proceeding (unless otherwise ordered by the Commission), and shall also recover its REPS costs through a fixed cost recovery period. Rule R8-67(e)(3)-(4). For DENC, the annual Rule R8-55 historical EMF test period is the preceding July 1 to June 30 period, and the rate period is the future twelvemonth period from February 1 to January 31 annually (the "Rate Period").
- 8. Pursuant to the provisions of N.C. Gen. Stat. § 62-133.8 and Rule R8-67(e), the Company requests approval of its updated REPS Rider, Rider RP, to recover its reasonable and prudent incremental REPS costs projected to be incurred during Rate Period, \$614,851, as well as its updated EMF Rider, Rider RPE, to recover all of the Company's reasonable and prudently-incurred REPS compliance costs during the EMF test period, (\$255,874). Combined, Rider RP and the EMF rider, Rider RPE, are intended to allow the Company to recover \$358,977 million of incremental REPS costs during the Rate Period.
- 9. Pursuant to N.C. Gen. Stat. § 62-133.8 and Rule R8-67(e), the Company requests Commission approval of annual Rider RP billing adjustments of \$0.25 per month for Residential Customers; \$1.40 per month for Commercial Customers; and \$9.36 per month for Industrial Customers. The Company also requests Commission approval of annual Rider RPE billing adjustments of (\$0.11) per month for the Residential Customers, (\$0.58) per month for Commercial Customers, and (\$4.01) per month for Industrial Customers. In total, the Company requests Commission approval of annual REPS billing adjustments of \$0.14 per month for Residential Customers, \$0.82 per month

for Commercial Customers, and \$5.35 per month for Industrial Customers. Rider RP and Rider RPE are proposed to become effective February 1, 2021.

10. Pursuant to Rule R8-67(e)(8) and Rule R8-27, the Company requests approval to defer prudently-incurred costs to FERC Account 182.3, "Other Regulatory Assets," until recovered. This includes the deferral of the difference between actual reasonable and prudently-incurred incremental costs and the related revenues realized under rates in effect.

11. In support of the requested change in rates, the Company has attached hereto, as required by Rule R8-67(c)(2) and (e), the direct testimony and exhibits of George E. Hitch, Elizabeth B. Lecky, and Emilia L. Catron.

WHEREFORE, Dominion Energy North Carolina respectfully requests that the Commission approve the changes to its rates as set forth in Paragraph nine (9) above, finding them just and reasonable, and approve the Company's 2020 REPS Compliance Report.

Respectfully submitted, this the 11th day of August, 2020.

DOMINION ENERGY NORTH CAROLINA

By: s/Andrea R. Kells

Counsel

Paul E. Pfeffer
Lauren W. Biskie
Dominion Energy Services, Inc.
Legal Department
120 Tredegar Street, RS-2
Richmond, Virginia 23219
(804) 787-5607 (PEP phone)
(804) 819-2396 (LWB phone)
paul.e.pfeffer@dominionenergy.com
lauren.w.biskie@dominionenergy.com

Andrea R. Kells Nick A. Dantonio McGuireWoods LLP 501 Fayetteville Street, Suite 500 Raleigh, North Carolina 27601 (919) 755-6614 (ARK Phone) (919) 755-6605 (NAD Phone) akells@mcguirewoods.com ndantonio@mcguirewoods.com

Counsel for Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina

DIRECT TESTIMONY OF GEORGE E. HITCH ON BEHALF OF DOMINION ENERGY NORTH CAROLINA BEFORE THE NORTH CAROLINA UTILITIES COMMISSION DOCKET NO. E-22, SUB 588

1	Q.	Please state your name, business address and position with Virginia
2		Electric and Power Company ("Dominion Energy North Carolina" or the
3		"Company").
4	A.	My name is George E. Hitch, and my business address is 600 East Canal
5		Street, Richmond, Virginia. I am a Senior Market Originator for Dominion
6		Energy North Carolina and Dominion Energy Virginia.
7	Q.	Please describe your current responsibilities for the Company.
8	A.	I am part of the team responsible for developing Dominion Energy North
9		Carolina's compliance strategy for the North Carolina Renewable Energy and
10		Energy Efficiency Portfolio Standard ("REPS"), as well as the Virginia
11		Renewable Energy Portfolio Standards. My responsibilities include
12		developing the Company's Rule R8-67(b) REPS Compliance Plan and Rule
13		R8-67(c) REPS Compliance Report. I am also responsible for managing the
14		Company's capacity, energy, emissions, and renewable energy certificate
15		("REC") portfolios.
16	Q.	What is the purpose of your testimony?
17	A.	My testimony supports the Company's request to recover all reasonable and
18		prudent incremental REPS compliance costs. More specifically, the purpose

of my testimony is to describe the Company's REPS compliance activities under review in this proceeding and the costs the Company has incurred, or will incur, in support of its compliance efforts with North Carolina's REPS under N.C.G.S. § 62-133.8. My testimony supports the Company's incremental REPS compliance costs incurred for calendar year 2019 and future years' compliance, and also forecasts the incremental REPS costs the Company expects to incur during the February 1, 2021 through January 31, 2022 rate period ("Rate Period").

9 Q. Are you sponsoring any exhibits or schedules in support of your10 testimony?

A.

Yes. Company Exhibit GEH-1 is the Company's 2020 REPS Compliance Report for calendar year 2019 REPS compliance. Company Exhibit GEH-2 consists of two schedules, Schedule 1 and 2. (Exhibits GEH 1-2 provided in public and confidential versions filed under seal). Both the Company's 2020 REPS Compliance Report and my Schedules 1 and 2 were prepared by me and are accurate and complete to the best of my knowledge and belief. Schedule 1 provides actual REPS compliance costs, by source, that the Company has incurred during the July 1, 2019 to June 30, 2020, experience modification factor true up period ("EMF True Up Period"), as further described in the Company's Application and later in my testimony. My Schedule 2 provides REPS compliance costs, by source, that the Company projects to incur during the Rate Period in support of compliance with the REPS. Finally, Company Exhibit GEH-3 is a report on the Company's Kitty

2		quality and vendor support issues experienced at the project over the last
3		several years and explains why the Company intends to decommission several
4		components of the project.
5	Q.	Can you please describe the Company's REPS obligations under
6		N.C.G.S. § 62-133.8?
7	A.	Pursuant to N.C.G.S. § 62-133.8, 1 as an electric power supplier, the
8		Company ² is required to comply with the overall REPS requirement ("Total
9		Obligation") by submitting for retirement a total volume of RECs in each
10		calendar year that is equivalent to the following percentages of its North
11		Carolina retail sales in the prior year:
12		• In 2012, 2013, and 2014, three percent (3%);
13		• In 2015, 2016, and 2017, six percent (6%);

Hawk micro-grid project. The report provides an overview of several power

1

14

16 Furthermore, each electric power supplier must comply with the requirements 17 of N.C.G.S. § 62-133.8(d), (e), and (f) (individually referred to as the "Solar 18 Set-Aside," "Swine Waste Set-Aside," and "Poultry Waste Set-Aside," 19 respectively). These provisions of the overall REPS require that within the

In 2018, 2019, and 2020, ten percent (10%); and

¹⁵ In 2021 and thereafter, twelve and one-half percent (12.5%).

¹ In its Order Clarifying Electric Power Suppliers' Annual REPS Requirements, issued on November 26, 2008, in Docket No. E-100, Sub 113, the Commission clarified that the calculation of these requirements for each year shall be based upon the electric utility's North Carolina retail sales for the prior year.

² As discussed later in my testimony, the REPS requirements described in this testimony and accompanying Schedules reflect the REPS requirements of the Company's retail customers only.

1	Total Obligation described above, each electric power supplier is to ensure
2	that specific quantities of qualifying solar RECs, swine waste RECs, and
3	poultry waste RECs are also submitted for retirement. The Company
4	generally refers to its Total Obligation net of the three set-asides as its
5	"General Requirement."
6	To comply with the Solar Set-Aside, each electric power supplier is required
7	to submit for retirement a volume of qualifying solar RECs equivalent to the
8	following percentages of its North Carolina retail sales in the prior year:
9	• In 2010 and 2011, two-hundredths of one percent (0.02%);
10	• In 2012, 2013, and 2014, seven-hundredths of one percent (0.07%);
11	• In 2015, 2016, and 2017, fourteen-hundredths of one percent (0.14%);
12	and
13	• In 2018 and thereafter, two-tenths of one percent (0.2%).
14	To comply with the Swine Waste Set-Aside, each electric power supplier is
15	also required to submit for retirement a volume of qualifying swine waste
16	RECs equivalent to its pro-rata share of total retail electric power sold in
17	North Carolina multiplied by the statewide, aggregate swine set-aside

1	requirement. ³ The Company's Swine Waste Set-Aside requirements, as
2	recently modified by the Commission, ⁴ are as follows:
3	• In 2020 and 2021, its pro-rata share of seven-hundredths of one
4	percent (0.07%) of total retail electric power sold in North Carolina in
5	the year prior;
6	• In 2022 through 2024, its pro-rata share of fourteen-hundredths of one
7	percent (0.14%) of total retail electric power sold in North Carolina in
8	the year prior; and
9	• In 2025 and thereafter, its pro-rata share of two-tenths of one percent
10	(0.2%) of total retail electric power sold in North Carolina in the year
11	prior.
12	Finally, each electric power supplier is also to submit for retirement a volume
13	of qualifying poultry waste-to-energy RECs equivalent to its pro-rata share of
14	the aggregate poultry set-aside obligation. The Company's Poultry Waste
15	Set-Aside requirements, as modified by the Commission in the 2019 REPS

• In 2019, its pro-rata share of 500,000 MWh;

16

17

³ In its Order on Pro Rata Allocation of Aggregate Swine and Poultry Waste Set-Aside Requirements and Motion for Clarification in Docket No. E-100, Sub 113 (March 31, 2010), the Commission approved the electric power suppliers' proposed pro-rata allocation of the statewide aggregate swine and poultry waste set-aside requirements, such that the aggregate requirements will be allocated among the electric power suppliers based on the ratio of each electric power supplier's prior year retail sales to the total statewide retail sales.

Modification Order and 2019 REPS Errata Order, are as follows:

⁴ On December 16, 2019, the Commission issued an Order reducing the initial swine waste set-aside requirement to 0.04% for the electric public utilities and delaying the initial Swine Waste Set-Aside requirement until 2020 for municipalities. The Commission also modified the poultry waste set-aside aggregate requirement to 500,000 MWh. *Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief,* Docket No. E-100, Sub 113 (December 16, 2019) ("2019 REPS Modification Order"); *Errata Order,* Docket No. E-100, Sub 113 (Feb. 13, 2020) ("2019 REPS Errata Order").

• In 2020, its pro-rata share of 700,000 MWł	ı: and
--	--------

• In 2021 and each year thereafter, its pro-rata share of 900,000 MWh. ⁵
The Company's pro-rata share will be determined by averaging three years of
historic retail sales. ⁶ The resulting allocation will be held constant for three
years. For example, in 2019, 2020, and 2021, the Company's pro-rata share
will be the average of 2016, 2017, and 2018 retail sales. The North Carolina
Renewable Energy Tracking System ("NC-RETS") administrator calculates
each electric power supplier's proportionate share of the Poultry Waste Set-
Aside Obligation using this methodology. ⁷

10 Q. Please describe the Company's historical REPS compliance.

12 Obligations, including the 2015-2018 Poultry Waste Set-Aside compliance
13 Obligation, the 2010-2018 Solar Set-Aside compliance obligation and the
14 2013-2018 Total Obligations, for the 2010 through 2018 REPS compliance
15 periods. The Commission approved the Company's 2011, 2012, 2013, 2014,
16 2015, 2016, 2017, 2018, and 2019 REPS Compliance Reports in Orders

⁵ In its *Order Establishing Method of Allocating the Aggregate Poultry Waste Resource Set-Aside Requirement*, issued on April 18, 2016, in Docket No. E-100, Sub 113, the Commission ordered that, starting with calendar year 2016, the calculation of the requirements for each compliance year shall be based upon the electric utility's North Carolina retail sales for the prior three years and held constant for three years.

⁶ Order Addressing Poultry Compliance Shortfall and Requesting Comments on New Allocation Method at 7, Docket No. E-100, Sub 113 (October 19, 2015).

⁷ Order Establishing 2019, 2020, and 2021 Poultry Waste Set-Aside Requirement Allocation, Docket No. E-100, Sub 113 (Dec. 16, 2019); 2019 REPS Errata Order.

- 1 issued on December 15, 2011, 8 December 11, 2012, 9 December 18, 2013, 10
- 2 December 11, 2014, 11 December 16, 2015, 12 December 20, 2016, 13 December
- 3 13, 2017,¹⁴ January 4, 2019,¹⁵ and January 24, 2020,¹⁶ respectively.

4 Q. Please discuss the Company's REPS obligations during the 2019

5 Compliance Period under review and during the 2021 Compliance

- 6 **Period.**
- 7 A. For purposes of the 2019 compliance year, the Company has submitted for
- 8 retirement a total of 408,693 RECs and 31,386 Energy Efficiency Credits
- 9 ("EECs") to meet its 2019 Total Obligation. Within this total, the Company
- has submitted for retirement 8,802 RECs to meet the Solar Set-Aside
- requirement. The Company will submit for retirement 15,937 RECs to meet
- the Poultry Waste Set-Aside requirement. The Company will also submit for

⁸ Order Approving 2010 REPS Compliance, Docket No. E-22, Sub 475 (Dec. 15, 2011).

⁹ Order Approving 2011 REPS Compliance, Docket No. E-22, Sub 487 (Dec. 11, 2012).

¹⁰ Order Approving REPS and REPS EMF Riders and 2012 REPS Compliance, Docket No. E-22, Sub 503 (Dec. 18, 2013) ("2013 REPS Order").

¹¹ Order Approving REPS and REPS EMF Riders and 2013 REPS Compliance, Docket No. E-22, Sub 514 (Dec. 11, 2014) ("2014 REPS Order").

¹² Order Approving REPS and REPS EMF Riders and 2014 REPS Compliance, Docket No. E-22, Sub 525 (Dec. 16, 2015) ("2015 REPS Order").

¹³ Order Approving REPS and REPS EMF Riders and 2015 REPS Compliance, Docket No. E-22, Sub 535 (Dec. 20, 2016) ("2016 REPS Order").

¹⁴ Order Approving REPS and REPS EMF Riders and 2016 REPS Compliance, Docket No. E-22, Sub 544 (Dec. 13, 2017) ("2017 REPS Order").

¹⁵ Order Approving REPS and REPS EMF Riders and 2017 REPS Compliance, Docket No. E-22, Sub 557 (Jan. 4, 2019) ("2018 REPS Order").

¹⁶ Order Approving REPS and REPS EMF Riders and 2018 REPS Compliance, Docket No. E-22, Sub 578 (Jan. 24, 2020) ("2019 REPS Order").

1		retirement 1,761 RECs for compliance with the Swine Waste Set-Aside
2		requirement.
3		For purposes of the 2021 Compliance Period, the Company estimates that it
4		will be required to submit for retirement a total of 559,000 RECs to meet its
5		2021 Total Obligation. Within this total, the Company estimates that it will
6		be required to retire approximately 8,944 solar RECs, 3,131 swine waste
7		RECs, and approximately 28,686 poultry waste RECs.
8	Q.	Has the Company complied with its Solar Set-Aside obligation for 2019?
9	A.	Yes. The Company met the 2019 Solar Set-Aside requirement of 8,802 solar
10		RECs. Pursuant to the NC-RETS Operating Procedures, the Company has
11		submitted for retirement 8,802 solar RECs. Specifically, the RECs to be used
12		for 2019 compliance have been transferred from the NC-RETS Dominion
13		Energy North Carolina Electric Power Supplier account to the Dominion
14		Energy North Carolina Compliance Sub-Account. As in past years, upon
15		completion of this regulatory proceeding and approval of the Company's
16		Compliance Report, the Commission will finalize retirement of the RECs.
17	Q.	Has the Company complied with its Poultry Waste Set-Aside obligation
18		for 2019?
19	A.	Yes. The Company has met the 2019 Poultry Waste Set-Aside requirement of
20		15,937 poultry waste RECs. Pursuant to the NC-RETS Operating Procedures,
21		the Company has submitted for retirement 15,937 poultry waste RECs.

Again, the RECs to be used for 2019 compliance have been transferred from

1		the NC-RETS Dominion Energy North Carolina Electric Power Supplier
2		account to the Dominion Energy North Carolina Compliance Sub-Account.
3	Q.	Has the Company complied with its General Requirement obligation for
4		2019?
5	A.	Yes. The Company has met the 2019 General Requirement of 413,579 RECs.
6		Pursuant to NC-RETS Operating Procedures, the Company has submitted for
7		retirement 382,193 RECs and 31,386 EECs in a similar manner to that
8		described above. Upon completion of this regulatory proceeding, the
9		Commission will finalize retirement of these RECs for 2019 compliance.
10	Q.	Is Dominion Energy North Carolina positioned to comply with its REPS
11		requirements in 2020?
12	A.	The Company currently has sufficient RECs in NC-RETS to comply with its
13		Solar Set-Aside, Poultry Waste Set-Aside, Swine Waste Set-Aside and
14		General Requirements in 2020. ¹⁷ However, the Company anticipates some
15		Electric Power Suppliers may file a joint motion to request a delay in or
1516		Electric Power Suppliers may file a joint motion to request a delay in or modification of the 2020 Swine Waste Set-Aside and a modification of the

¹⁷ In 2020, the Company estimates that it will be required to submit for retirement 428,070 RECs to meet its Total Obligation. Within this total, the Company is also required to retire the following: 8,562 solar RECs, 2,997 swine waste RECs, and 22,312 poultry waste RECs.

Q. Please summarize the actions Dominion Energy North Carolina has
 undertaken to satisfy its current and future REPS requirements.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

A.

The Company continues to procure unbundled RECs to satisfy its REPS obligations. Specifically, the Company has taken the following actions: (1) introduced additional energy efficiency programs that will generate savings that can be counted towards the Company's REPS obligation; (2) executed and continued negotiations for additional REC purchase agreements with renewable facilities; (3) solicited renewable energy proposals of various types, namely for swine waste-to-energy and poultry waste-to-energy resources; (4) participated in joint procurement activities with other electric power suppliers, including the Swine Waste REC Buyers Group; and (5) participated in the annual and bi-annual stakeholder meetings organized by the Public Staff to facilitate discussion regarding Swine Waste and Poultry Waste Set-Aside compliance. The Company intends to contract for Poultry and Swine REC supply in excess of the initial Swine Waste and Poultry Waste Set-Aside compliance requirements to compensate for the experienced high failure rate of animal waste-to-energy projects. The Company will evaluate the banking or sale of Swine or Poultry RECs in excess of its compliance obligations to manage any significant inventories that may develop.

1	Q.	More specifically, what actions has Dominion Energy North Carolina
2		taken to procure or develop swine waste-to-energy resources to meet its
3		Swine Waste Set-Aside requirements?
4	A.	In an ongoing effort to comply with the Swine Waste Set-Aside, the Company
5		has attempted to obtain swine waste RECs from facilities in Virginia, North
6		Carolina, and across the continental United States. The Company has
7		contacted digester owners and operators, hog producers and REC
8		marketers/brokers to determine if any swine waste RECs are available for
9		purchase by the Company.
10		In January 2016, the Company executed a contract with Orion Energy
11		Marketing & Consulting, Inc. ("Orion") for sufficient swine waste RECs to
12		meet compliance during the period 2020 to 2022. Orion is currently meeting
13		all contractual obligations. The Company continues to work with the Swine
14		Waste REC Buyers Group to secure additional swine RECs that could be
15		banked for future use or used for compliance.
16	Q.	Also, what actions has Dominion Energy North Carolina undertaken to
	ζ.	
17		procure or develop poultry waste-to-energy resources in order to satisfy
18		its Poultry Waste Set-Aside requirements?
19	A.	The Company has worked actively and diligently to comply with its Poultry
20		Set-Aside requirements for the Company and the Town of Windsor. The
21		Company, after searching the REC market for available in-state RECs,
22		concluded that joining the Poultry Waste REC Buyers Group was the most

1	prudent way to meet the Town of Windsor's Poultry Waste Set-Aside
2	requirement.

- The Poultry Waste REC Buyers Group executed three (3) long-term poultry waste contracts and the Company, as a part of this group, executed three (3) long-term contracts for the Town of Windsor's in-state requirements. One (1) of these contracts was terminated by mutual agreement with the supplier in September 2013. Prestage Ag Energy ("Prestage") started making regular monthly deliveries in November 2018. Prestage is currently meeting all contractual obligations. The remaining project under long-term contract started producing poultry waste RECs in October 2019. At this time, the Company has sufficient RECs in NC-RETS to meet the Town of Windsor's in-state Poultry Waste Set-Aside requirement for 2020-2023.
- The Company has sufficient poultry waste RECs in NC-RETS to comply with both Dominion Energy North Carolina's and Town of Windsor's out-of-state Poultry Waste Set-Aside requirements for years 2020, 2021, and 2022.
- Q. Please also provide an update on the Company's efforts to comply with its General Requirement in 2020.
- 19 A. The Company is well-positioned to comply with its General Requirement and
 20 Total Obligation in 2020. The Company's efforts to comply with the General
 21 Requirement and Total Obligation include its continued implementation of
 22 energy efficiency programs and the purchase of RECs from renewable energy

1		facilities. As allowed by Senate Bill 3, Dominion Energy North Carolina
2		continues to find that purchasing out-of-state RECs to achieve all aspects of
3		its Total Obligation is the most cost-effective REPS compliance option for the
4		Company and its customers.
5		The Company has sufficient RECs in NC-RETS to comply with both
6		Dominion Energy North Carolina's and Town of Windsor's General
7		Requirements for 2020.
8	Q.	Please also provide an update on the Company's efforts to comply with its
9		Solar Set-Aside requirement in 2020.
10	A.	The Company is well-positioned to comply with its Solar Set-Aside
11		requirement in 2020. The Company has also purchased enough RECs to
12		comply with in-state Solar Set-Aside requirements for the Town of Windsor
13		in 2020-2022.
14	Q.	Is the Company continuing to execute additional REC purchase
15		agreements?
16	A.	Yes. The Company continues to execute additional REC purchase
17		agreements, as needed, to meet its future REPS General Obligation and set-
18		aside requirements. The Company addressed its REPS compliance strategy in
19		its 2020 REPS Compliance Plan, which was filed with the Company's 2020
20		Integrated Resource Plan update on May 1, 2020.

1	Q.	What are the Company's costs associated with REPS compliance during
2		the EMF True Up Period and the upcoming Rate Period?
3	A.	Costs requested to be recovered include REC costs, as well as other
4		incremental REPS compliance expenses (e.g., Renewable Energy Tracking
5		System fees) (collectively, "Other Incremental Costs"). Both REC expenses
6		and Other Incremental Expenses incurred after June 30, 2020, will be trued up
7		and recovered as part of the Company's EMF in its 2021 REPS cost recovery
8		proceeding. My Exhibit 2, Schedule 1 presents the Company's reasonable
9		and prudently-incurred incremental REPS Compliance Costs during the EMF
10		True Up Period. My Exhibit 2, Schedule 2 presents the Company's forecasted
11		incremental REPS compliance costs projected to be incurred during the Rate
12		Period.
13	Q.	Has the Company made any purchases of renewable energy as part of its
14		compliance strategy?
15	A.	No. The Company has not made any bundled renewable energy purchases to
16		date. For this reason, 100% of the Company's incurred REC costs are
17		"incremental costs" recoverable through the REPS Rider. While the
18		Company presents its avoided cost capacity and energy rates in its 2020 REPS
19		Compliance Plan, these avoided costs were not required to determine the
20		incremental costs of Dominion Energy North Carolina's REC purchases for

recovery in this proceeding.

1	Q.	In addition to REC costs, please explain the Other Incremental Costs of
2		REPS compliance that the Company seeks to recover in this proceeding?
3	A.	My Exhibit 2, Schedules 1 and 2 identify the Other Incremental Costs
4		that the Company has incurred in association with REPS compliance.
5		Other Incremental Costs represent the Company's direct and non-labor
6		costs associated with REPS compliance, including the Company's
7		subscription to NC-RETS and REC broker fees. The Company is not
8		seeking to recover any incremental internal labor costs associated with
9		administration of REPS compliance for either the EMF True Up
10		Period or forecasted Rate Period in this proceeding. 18
11	Q.	Please describe Dominion Energy North Carolina's internal REC
12		Portfolio Management System noted above.
13	A.	The Company uses the Environmental Management Account ("EMA") RECs
14		system developed by APX to support the Company's REPS compliance
15		efforts. The EMA system is a REC asset management tool, which includes
16		multiple REPS compliance functionalities, including supporting the
17		Company's REC portfolio management and valuation, allowing connectivity

¹⁸ The Company continues to review how to most appropriately track and allocate such costs and may seek to recover such incremental internal REPS labor costs in the future.

compliance, and invoicing services.

to NC-RETS, as well as managing post-trade settlement, credit, delivery, and

18

1	Q.	What portion of the EMA costs is the Company requesting to recover
2		from its North Carolina customers as an incremental cost of REPS
3		compliance?
4	A.	Due to a change of EMA ownership and related invoice timing, the Company
5		does not have any EMA costs to recover in True Up Period. However,
6		consistent with the approach since the 2014 REPS Order, in future
7		proceedings the Company will continue to allocate the regulated portion of
8		EMA system costs between Virginia and North Carolina because the EMA
9		system will also be used for REC management in the Company's Virginia
10		jurisdiction.
11	Q.	Do the costs presented in your Exhibit No. 2, Schedules 1 and 2 also
12		include REC costs incurred by the Company attributable to the Town of
13		Windsor?
14	A.	No. The incremental REPS costs presented in my Schedules 1 and 2 are net
15		of the REC costs incurred by the Company for Town of Windsor's REPS
16		compliance. As I have noted previously, the Company is uniquely situated in
17		that it is statutorily authorized to use 100% out-of-state RECs to achieve REPs
18		compliance. In most instances, the Company has found purchasing out-of-
19		state RECs to be more cost-effective than almost all other REPS compliance
20		options, even including using its utility-owned renewable generating facilities
21		for North Carolina REPS compliance. 19 In contrast to the Company, Town of

¹⁹ For example, the Company has found it more cost-effective to purchase out-of-state RECs for North Carolina REPS compliance and to sell the biomass RECs generated by the Company's biomass-fueled

1		Windsor is required to obtain /5% of its RECs from in-state renewable
2		resources. Thus, the Company has been required to purchase in-state RECs
3		that are specifically designated for Town of Windsor's REPS compliance. For
4		this reason, the Company has directly assigned specific REC costs to Town of
5		Windsor that may be used for its REPS compliance, and has excluded them
6		from the REPS costs that the Company is requesting to recover from the
7		North Carolina retail jurisdiction in this proceeding.
8	Q.	Are the REPS costs incurred for Town of Windsor's REPS compliance
9		presented in the Company's REPS Plan and Report?
10	A.	Yes.
11	Q.	Do the costs presented in your Exhibit No. 2, Schedules 1 and 2 include
12		non-REC costs incurred by the Company attributable to the Town of
13		Windsor?
14	A.	No. The Company's Other Incremental Costs requested to be recovered in
15		this proceeding do not include non-REC costs reasonably attributable to Town
16		of Windsor. While Town of Windsor's compliance obligation accounts for a

generating facilities at a higher price into other renewable energy compliance markets. The revenue generated from such REC sales is then credited back to North Carolina customers through base rates.

very small percent of Dominion Energy North Carolina's non-REC costs of

REPS compliance, Town of Windsor is still responsible for certain of these

costs. The Company has either assigned or allocated these costs to Town of

Windsor. For example, broker's fees attributable to REC transactions for

Town of Windsor's REPS compliance are directly assigned to Town of

17

18

19

20

Windsor. For any Other Incremental Costs not directly assignable to Town of Windsor, the Company has adopted NC-RETS' approach of allocating its costs based upon each electric power supplier's load-ratio share determined on an energy basis for the prior calendar year. As Town of Windsor is approximately 1.2% of the Company's total load-ratio share, the Company feels that this percentage of its Other Incremental Cost of REPS compliance should be attributable to Town of Windsor and should not be recovered from North Carolina retail customers. My Exhibit 2, Schedules 1 and 2 specifically exclude Other Incremental Costs assigned or allocated to Town of Windsor.

In response to Ordering Paragraph 3 of the 2019 REPS Order, has the Company performed an analysis of the Kitty Hawk micro-grid project and developed a recommendation for the future of the project?²⁰

Yes. The Company has prepared a report, attached as Company Exhibit GEH-3, in response to Ordering Paragraph 3 of the 2019 REPS Order, which required DENC to provide "an analysis of the issues experienced at its Kitty Hawk micro-grid project" in its 2020 application, "as well as any actions taken regarding whether to recommission or decommission the project." As explained further in the report, the micro-grid project has experienced numerous power quality issues, including voltage and harmonics issues, since it was installed. Resolving these issues has been challenging because many of the start-up companies that provided the emerging technologies used in the Kitty Hawk micro-grid project are no longer in business. As a result, it is

Q.

A.

²⁰ 2019 REPS Order, *supra* n. 16, at Ordering Paragraph 3.

difficult for the Company to source parts for the equipment and locate vendors to perform necessary testing and maintenance on the equipment. Because the Company does not have the support necessary to continue safely operating the equipment, Dominion Energy North Carolina intends to decommission most components of the Kitty Hawk micro-grid project. Because it is still operational and safely providing electricity to the local office at virtually no cost, the Company plans to continue operating the solar array. In addition, the Company plans to maintain the battery portion of the Project. Any costs associated with these components will not be sought for recovery in future REPS cost recovery proceedings.

A.

Q. Are you satisfied that the Company's REPS compliance costs incurred during the EMF True Up Period have been prudently incurred, and that the projected Rate Period costs will be prudently incurred?

Yes. The Company has incurred, and also projects to incur, all of its costs associated with REPS compliance in a prudent manner. For example, Dominion Energy North Carolina has effectively evaluated its options and negotiated with counter-parties to procure reasonably-priced out-of-state RECs for compliance with the Solar, Swine Waste, and Poultry Waste Set-Asides. This also holds true for the General Requirements RECs. Dominion Energy North Carolina has significant experience and expertise within the national REC market, and the Company has taken full advantage of its statutory ability to procure its full REC requirements from out-of-state

- 1 facilities. As noted above, this strategy has resulted in very reasonable
- 2 compliance costs for our customers.
- 3 Q. Does this conclude your testimony?
- 4 A. Yes.

BACKGROUND AND QUALIFICATIONS OF GEORGE E. HITCH

George E. Hitch joined Dominion Energy North Carolina (the "Company") in 2002 as an Hourly Trader. Mr. Hitch has a Bachelor of Science Degree from Virginia Tech. He has been an Hourly Trader, Coordinator Hourly Trading and Generation Asset Trader at both the regulated utilities and Dominion Energy Marketing. He has traded physical and financial power, capacity and RECs in the spot and forward markets.

Mr. Hitch is currently a Senior Market Originator and part of the group responsible for managing the Company's regulated capacity, energy, emissions, and REC portfolios, and developing and executing compliance strategies for the Company's North Carolina Renewable Energy and Energy Efficiency Portfolio Standards and the Virginia Renewable Energy Portfolio Standards.

STATE OF NORTH CAROLINA NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-22, SUB 588

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)
Dominion Energy North Carolina	2020 REPS COMPLIANCE
REPS Compliance Report Pursuant	REPORT OF DOMINION
to Rule R8-67(c)	ÉNERGY NORTH CAROLINA
to Rule Ro-o/(c)	FOR CALENDAR YEAR 2019

Pursuant to North Carolina General Statute ("N.C.G.S.") § 62-133.8 and Rule R8-67(c) of the Rules of the North Carolina Utilities Commission ("Commission"), Virginia Electric and Power Company d/b/a Dominion Energy North Carolina ("DENC" or the "Company") hereby files its 2020 North Carolina Renewable Energy and Energy Efficiency Portfolio Standards ("NC REPS") Compliance Report for calendar year 2019.

As required by Rule R8-67(c)(1), each year, each electric power supplier shall file with the Commission a report describing the electric power supplier's compliance with the requirements of N.C.G.S. § 62-133.8(b), (c), (d), (e) and (f) during the previous calendar year. The elements of the Company's 2019 NC REPS Compliance Report for calendar year 2018 are stated below and correspond to the items listed in Rule R8-67(c)(1).

As demonstrated by this Report, the Company achieved its 2019 REPS compliance requirements by satisfying the solar carve-out requirement, the poultry waste carve-out, the swine waste carve-out, and the general REPS requirement.² The Company also satisfied the solar requirement, poultry requirement and general REPS requirement for the Town of

¹ The compliance obligation set forth in N.C.G.S. § 62-133.8(c) does not apply to electric public utilities, such as Dominion Energy North Carolina. However, the Company has committed to provide REPS compliance services for Town of Windsor, a full requirements customer of the Company, which is subject to the requirements of this subsection.

² On December 16, 2019, the Commission issued an Order reducing the initial swine waste set-aside requirement to 0.04% for the electric public utilities and delaying the initial Swine Waste Set-Aside requirement until 2020 for municipalities. The Commission also modified the poultry waste set-aside aggregate requirement to 500,000 MWh. *Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief,* Docket No. E-100, Sub 113 (December 16, 2019) ("2019 Delay Order"); *Errata Order,* Docket No. E-100, Sub 113 (Feb. 13, 2020) ("2019 REPS Errata Order").

Dominion Energy North Carolina Docket No. E-22, Sub 588

Windsor, a wholesale customer.

(i) Provide the sources, amounts, and costs of renewable energy certificates, by source, used to comply with N.C.G.S. § 62-133.8(b), (c), (d), (e) and (f). Renewable energy certificates for energy efficiency may be based on estimates of reduced energy consumption through the implementation of energy efficiency measures, to the extent approved by the Commission;

Status: As the Commission has previously confirmed, N.C.G.S. § 62-133.8(b)(2)(e) provides that Dominion Energy North Carolina may use unbundled out-of-state RECs to meet some or all of the Company's NC REPS requirements.³ With regard to the Town of Windsor's compliance obligations, 75% of its general obligation and set-aside REPS requirements must be satisfied by renewable power or RECs generated from in-state facilities.

The Company purchased unbundled out-of-state swine and poultry waste RECs, out-of-state wind RECs and in-state and out-of-state solar and hydro RECs to comply with its 2019 NC REPS requirements. In addition, the Company is using energy efficiency ("EE") savings created by Commission-approved EE programs for 2019 compliance. The Company also purchased sufficient in-state and out-of-state solar, poultry, and biomass RECs, for the Town of Windsor.

Figure 1.1 shows RECs to be retired for 2019 compliance with the solar set-aside REPS requirement for the Company, as well as for the Town of Windsor. Figure 1.2 shows poultry waste RECs to be retired for 2019 compliance with the poultry waste set-aside REPS requirement for the Company, as well as for the Town of Windsor. Figure 1.3 shows swine waste RECs to be retired for 2019 compliance with the swine waste set-aside REPS requirement for the Company. Figure 1.4 shows the wind, biomass, energy efficiency and hydro RECs to be retired for 2019 compliance with the general REPS requirement for the Company, as well as for the Town of Windsor.

³ Order on Dominion's Motion for Further Clarification, Docket No. E-100, Sub 113 (Sept. 22, 2009) (holding that the meaning of N.C.G.S. § 62-133.8(b)(2)(e) is to allow Dominion Energy North Carolina to achieve up to 100% REPS general obligation and set-aside compliance using out-of-state RECs).

CONFIDENTIAL INFORMATION REDACTED

Figure 1.1 RECs Used for 2019 Solar Set-Aside Compliance

	Quantity	Price / MWh	REC Cost
For DENC (Requirement)	8,802		
	1,266		
	1,659		
	255		
	2,824		
	107		
	1,686		
	1,005		
For Town of Windsor (Requirement)	101		
	101		
Total Volume	8,903	Total REC Cost	

Figure 1.2 RECs Used for 2019 Poultry Waste Set-Aside Compliance

	Quantity	Price / MWh	REC Cost
For DENC (Requirement)	15,937		
	8,460		
	7,477		
For Town of Windsor (Requirement)	182		
	46		
	121		
	15		
Total Volume	16,119	Total REC Cost	

CONFIDENTIAL INFORMATION REDACTED

Figure 1.3 RECs Used for 2019 Swine Waste Set-Aside Compliance

	Quantity	Price / MWh	REC Cost
For DENC (Requirement)	1,761		
	391		
	1,370		
For Town of Windsor (Requirement)	0		
Total Volume	1,761	Total REC Cost	

Figure 1.3 RECs Used for 2019 General REPS Compliance

	Quantity	Price / MWh	REC Cost
For DENC (Requirement)	413,579		
	51,962		
	37,592		
	40,308		
	150,000		
	15,000	8	
	14,983		
	14,095		
	13,813		
	12,198	ŝ	
	32,242		
DENC Energy Efficiency ¹	31,386	N/A ²	N/A ²
For Town of Windsor (Requirement)	<mark>4,764</mark>		
SEPA (Hydro)	248	\$0.00	\$0.00
	3,348	8	
	540		
	628		
Total Volume	418,343	Total REC Cost	

¹⁾ Vintage 2019 energy efficiency credits ("EECs") are derived from Appendix C of the Company's 2020 Evaluation, Measurement, and Verification Report, as filed in Docket No. E-22, Sub 577, on May 15, 2020. 2) The cost of EECs is based upon the Company's EE program deployment cost approved annually by the Commission for recovery pursuant to N.C.G.S. § 62-133.9.

Dominion Energy North Carolina Docket No. E-22, Sub 588

ii) Provide the actual North Carolina retail sales and year-end number of customer accounts by customer class;

Status: The following figures are based on the actual Dominion Energy North Carolina retail sales and year-end number of customer accounts by customer class as of December 31, 2019.⁴

Actual North Carolina Retail Sales: 4,280,697 MWh

Residential Customer Accounts: 103,813
Commercial Customer Accounts: 18,262
Industrial Customer Accounts: 50
Total Accounts: 122,125

In addition, the Company has a full requirement contract with the Town of Windsor, and its actual retail sales were 50,462 MWh for calendar year 2019 (as reported to the Company by the Town of Windsor).

(iii) Current avoided cost rates and the avoided cost rates applicable to energy received pursuant to long-term power purchase agreements are discussed below;

Status: The Company's most recently approved Schedule 19 avoided cost rates that would be generally applicable to energy received pursuant to renewable power purchase agreements were approved by the Commission in Docket No E-100, Sub 158.⁵ However, no long-term power purchase agreements have been entered into to comply with N.C.G.S. § 62-133.8(b), (c), (d), (e) or (f), so Dominion Energy North Carolina's avoided costs are not required to determine its incremental costs of 2019 REPS compliance.

(iv) Provide the Company's actual total and incremental costs during the calendar year incurred to comply with N.C.G.S. § 62-133.8(b), (c), (d), (e), and (f);

Status: Figure 2.1 shows that the Company's actual total and incremental REPS compliance costs incurred during calendar year 2019 comprised purchases of various types

-

⁴ Pursuant to the Commission's *Order Clarifying Electric Power Suppliers' Annual REPS Requirements* in Docket No. E-100, Sub 113 (November 26, 2008), each year's solar, swine waste and poultry waste set aside requirements are based on the previous year's actual sales. The Company's actual 2018 sales were 4,400,784 MWh. The Town of Windsor's actual 2018 sales were 50,462 MWh.

⁵ Order Establishing Standard Rates and Contract Terms for Qualifying Facilities, Docket No. E-100, Sub 158 (Nov. 1, 2018).

of RECs, as well as other reasonable and prudent incremental direct costs.

Figure 2.1 DENC Total Costs

	REC Purchases	Direct	Total Costs
Actual Total Compliance Costs	\$714,188.06	\$14,566.14	\$728,754.20
Actual Total Avoided Costs	-	-	-
Actual Incremental Costs	\$714,188.06	\$14,566.14	\$728,754.20

For the Town of Windsor, the Company incurred costs of approximately \$19,000 during calendar year 2019. Since the Company is purchasing unbundled RECs, actual and incremental compliance costs are the same.

(v) Provide a comparison of the actual incremental costs incurred during the calendar year to the per-account annual charges (in N.C.G.S. \S 62-133.8(h)(4)) applied to its total number of customer accounts as of December 31 of the previous calendar year;

Status: Dominion Energy North Carolina determined the number of year-end 2018 customer accounts by customer class. The year-end number of customer accounts was then multiplied by the per-account charges set forth in N.C.G.S. § 62-133.8(h)(4) to calculate the cost cap by customer class and in the aggregate. The Company then allocated its share of the incremental costs based upon the customer class' pro rata share of the aggregate cost cap.

Figure 2.2 DENC Customers

	Total 2018 Year- End Retail Accounts	2019 Per- Account Cost Cap	Total Annual Cost Cap	Actual Incremental Costs		
Account Type						
Residential	103,159	\$27.00	\$2,785,293.00	\$364,458.42		
Commercial	18,227	\$150.00	\$2,734,050.00	\$357,753.22		
Industrial	50	\$1,000.00	\$50,000.00	\$6,542.55		
Total	121,436	Total	\$5,569,343.00	\$728,754.20		

⁽vi) Discuss the status of compliance with the requirements of N.C.G.S. \S 62-133.8(b), (c), (d), (e), and (f);

Status:

Solar REPS requirements of N.C.G.S. § 62-133.8(d). The Company has complied with the N.C.G.S. § 62-133.8(d) solar set-aside requirement for 2019 through the purchases of 8,802 solar RECs, representing 0.20% of its 2018 retail megawatt hour sales of 4,400,784. The Company also purchased 101 qualifying solar RECs on behalf of the Town of Windsor, representing 0.20% of Windsor's 2018 retail megawatt hour sales of 50,426.

Swine Waste Set-Aside requirements of N.C.G.S. § 62-133.8(e). Through the 2019 Delay Order, the Commission reduced the swine waste set-aside requirement to 0.04% for the electric public utilities and delayed the Town of Windsor's 2019 swine waste set-aside compliance obligation by one (1) year. However, as directed by Ordering Paragraph 7 of both the 2012 and 2013 Delay Orders, Dominion Energy North Carolina has continued to take all reasonable actions to purchase any available swine RECs. In addition, the Company filed Semiannual Progress Reports as required by Ordering Paragraph 3 of the 2015 Delay Order. The Company has also attended all the animal waste-to-energy stakeholder meetings arranged by the Public Staff. Dominion Energy North Carolina has complied with the N.C.G.S. § 62-133.8(e) swine waste set-aside requirement for 2019 through the purchases of 1,761 swine waste RECs, representing 0.04% of the Company's 2018 retail megawatt hour sales of 4,400,784.

The Company has sufficient RECs in NC-RETs to satisfy both Dominion Energy North Carolina and the Town of Windsor's 2020, 2021, and 2022 swine waste set-aside requirements. The Company continues to work with the Swine Waste REC Buyers Group to monitor developments in the swine waste to energy sector.

Poultry Waste Set-Aside requirements of N.C.G.S. § 62-133.8(f). Dominion Energy North Carolina has complied with the N.C.G.S. § 62-133.8(f) poultry waste set-aside requirement for 2019 through the purchases of 15,937 poultry waste RECs, representing 0.36% of the Company's 2018 retail megawatt hour sales of 4,400,784. The Company also purchased 114 qualifying poultry waste RECs on behalf of the Town of Windsor, representing 0.36% of Windsor's 2018 retail megawatt hour sales of 50,426.

The Company has sufficient RECs in NC-RETs to satisfy both Dominion Energy North Carolina and the Town of Windsor's 2020, 2021, and 2022 poultry waste set-aside requirements. .

General REPS requirements of N.C.G.S. § 62-133.8(b). Dominion Energy North Carolina has complied with the N.C.G.S. § 62-133.8(b) general REPS requirement for

_

⁶ Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief, Docket No. E-100, Sub 113 (Dec. 1, 2015) ("2015 Delay Order").

Dominion Energy North Carolina Docket No. E-22, Sub 588

2019, by retiring 413,579 RECs and EECs, representing 9.40% of the Company's 2018 retail megawatt hour sales and consisting of eligible wind and biomass RECs and EECs. The Company also purchased 4,516 qualifying general obligation biomass RECs and retired 248 SEPA hydro RECs, on behalf of the Town of Windsor, representing 9.44% of Windsor's 2018 retail megawatt hour sales.

(vii) Identify any renewable energy certificates or energy savings to be carried forward pursuant to N.C.G.S.§ 62-133.8(b)(2)f or (c)(2)f;

Appendix A contains the renewable energy certificates to be carried forward by the Company on behalf of Dominion Energy North Carolina and the Town of Windsor.

(viii) The dates and amounts of all payments made for renewable energy certificates; and

Appendix B contains the dates and amounts of all payments made for renewable energy certificates for the period July 1, 2019, through June 30, 2020.

(ix) For electric membership corporations and municipal electric suppliers, reduced energy consumption achieved after January 1, 2008, through the implementation of a demand-side management program.

Status: As an investor owned utility, this question is not applicable to the Company.

Pursuant to Rule R8-67(c)(4), in each electric power supplier's initial REPS compliance report, the electric power supplier shall propose a methodology for determining its cap on incremental costs incurred to comply with N.C.G.S. § 62-133.8(b), (c), (d), (e) and (f) and fund research as provided in N.C.G.S. § 62-133.8(h)(1), including a determination of year-end number of customer accounts. The proposed methodology may be specific to each electric power supplier, shall be based upon a fair and reasonable allocation of costs, and shall be consistent with N.C.G.S. § 62-133.8(h). The electric power supplier may propose a different methodology that meets the above requirements in a subsequent REPS compliance report filing. For electric public utilities, this methodology shall also be used for assessing the per-account charges pursuant to N.C.G.S. § 62-133.8(h)(5)

Status:

The Company has defined a "Customer" for the purposes of REPS billing as a "service point" or "application of a tariff" to determine the per-account REPS charge. The following rate schedules are not considered "accounts" for purposes of the per-account charge because these rate schedules are generally secondary accounts and customers on

these rate schedules will pay a per-account charge under another primary tariff connected with these rate schedules.

- Residential Time Controlled Storage Water Heating (Schedule 1W)
- Residential Dual Fuel (Schedule 1DF)
- Outdoor Lighting (Schedule 26)
- County, Municipal or State Traffic Control (Schedule 30T)
- Commercial Electric Heating (Schedule 7)
- Commercial Schedule SG (Schedule SG)

Further, if a customer has a non-demand metered service point on contiguous property, with the same service address, premise and name, that account may be deemed to be auxiliary and not subject to the REPS riders if the Company is notified by the Customer. Upon written notification from the Customer, accounts meeting these criteria will be coded in the billing system to allow the customer to receive only one monthly REPS charge at the Primary service point. A governmental customer for purposes of the application of the REPS charge is considered a commercial account.

Qualifying Research Projects of N.C.G.S. 62-133.8(h)(1). In 2013, the Commission approved the Company's request to pursue a Microgrid demonstration project as a research project qualifying for REPS rider cost recovery pursuant to N.C.G.S. 62-133.8(h)(1).⁷ The Microgrid project is located at the Company's Kitty Hawk District Office. Construction of the Microgrid project started in February 2014. The facility was dedicated and local operation commenced in July 2014. A fuel cell was added to the project in July 2015.

The Commission's 2013 Order approving the Microgrid directed Dominion Energy North Carolina to file annual project updates with the Commission detailing its Microgrid study results after each year of the three-year demonstration period (2015 to 2017). The Company submitted its third and final annual study period report as Appendix C to the 2017 REPS Compliance Report.

Ordering Paragraph 3 of the 2019 REPS Order directed the Company to provide in its next REPS cost recovery case "an analysis of the issues experienced at its Kitty Hawk microgrid project," and "any actions taken regarding whether to recommission or decommission the project." The report is attached as Company Exhibit GEH-3. As discussed further in the report, the micro-grid project has experienced voltage and harmonics issues since it began operation. The Company does not have the support necessary to continue safely operating most of the equipment. As a result, Dominion Energy North Carolina intends to

⁷ Order Approving REPS and REPS EMF Riders and 2012 REPS Compliance, Docket No. E-22, Sub 503 (Dec. 18, 2013).

decommission most of the Kitty Hawk micro-grid project. The Company plans to continue operating the solar array, which appears to be in good condition and able to safely provide electricity to the local office. In addition, as the battery enclosure appears to be in good condition, the Company will endeavor to continue maintenance on the batteries.

CONFIDENTIAL INFORMATION REDACTED

Appendix A Renewable Energy Certificates to be Carried Forward by the Company On Behalf of Dominion Energy North Carolina and the Town of Windsor

Location	ation REC Type		Company	Total
In-State		1,155	0	1,155
Out-of-State		561	94,835	95,396
In-State		556	0	556
Out-of-State		443	19,030	19,473
In-state		2,399	9,091	11,490
Out-of-State		0	9,782	9,782
In-State		15,740	71,605	87,345
Out-of-State		6,177	1,410,415	1,416,592
		27,031	1,614,758	1,641,789

CONFIDENTIAL INFORMATION REDACTED

Appendix B Payments Made Between July 1, 2019 and June 30, 2020 On Behalf of the Company and the Town of Windsor for Renewable Energy Certificates

Dominion E	nergy North Carolina	
Seller	Transfer Date	Payment
	7/3/2019	\$146,387.50
	7/2/2019	\$642.24
	7/2/2019	\$86,250.00
	10/3/2019	\$146,387.50
	10/1/2019	\$71.36
	1/2/2020	\$146,387.50
	2/2/2020	\$147.76
	2/2/2020	\$172,000.00
	4/1/2020	\$24,793.72
	6/20/2020	\$3,812.40
Tow	n of Windsor	
	7/12/2019	\$4,681.80
	8/17/2019	\$7,196.10
	9/14/2019	\$7,282.80
	12/21/2019	\$3,250.00
	1/16/2020	\$3,250.00
	2/15/2020	\$8,478.80
	2/20/2020	\$1,690.00
	3/13/2020	\$6,855.20
	3/13/2020	\$1,690.00
	4/12/2020	\$7,757.20
	4/19/2020	\$1,690.00
	5/15/2020	\$6,133.60
	5/16/2020	\$1,690.00
	6/13/2020	\$1,690.00
	6/14/2020	\$6,314.00

Dominion Energy North Carolina Docket E-22, Sub 588 For the EMF True Up Period July 1, 2019 to June 30, 2020

CONFIDENTIAL INFORMATION REDACTED

				Date Invoice		
<u>Supplier</u>	Renewable Resources	<u>Volume</u>	<u>Price</u>	<u>Paid</u>	<u>Cost</u>	
				July-19	\$146,388	
				July-19	\$642	
				July-19	\$86,250	
				October-19	\$146,388	
				October-19	\$71	
				January-20	\$146,388	
				February-20	\$143	
				February-20	\$172,000	
				April-20	\$24,794	
				June-20	<u>\$3,812</u>	
					\$726,875	
Other Incremental Costs						
NC-R	RETS				\$11,052	
Microgrid O	&M				\$259	
Broker	rage				\$428	
Less EMA Credit T	ōW				<u>-\$20</u>	
Т	otal				\$738,594	

Dominion Energy North Carolina Docket E-22, Sub 588 For the Rate Period February 1, 2021 to January 31, 2022

CONFIDENTIAL INFORMATION REDACTED

<u>Supplier</u>	Renewable Resources	<u>Volume</u>	<u>Price</u>	Delivery Date	<u>Cost</u>
				February-21	\$74,296
				February-21	\$60,000
				February-21	\$14,300
				February-21	\$4,000
				May-21	\$75,408
				May-21	\$14,300
				May-21	\$60,000
				August-21	\$75,408
				August-21	\$14,300
				August-21	\$60,000
				November-21	\$75,408
				November-21	\$14,300
				November-21	<u>\$60,000</u>
				-	\$601,719
Other Incremental Costs					
NC-RETS					\$11,052
EMA Maintenance Fee					\$1,652
Brokerage					\$428
Less EMA Credit ToW					<u>-\$20</u>
Total					\$614,831

Kitty Hawk, North Carolina Microgrid Research Project 2020 Study Report to North Carolina Utilities Commission



I. Background

On July 22, 2014, Dominion Energy North Carolina (the "Company") commissioned its micro-grid research demonstration project in Kitty Hawk, NC ("NC Microgrid Project"). The project is co-located at the Company's Kitty Hawk District Office. The primary goal of this project was to integrate and study innovative distributed renewable generation and energy storage technologies. A microgrid, as defined by the U.S. Department of Energy, is a group of interconnected loads and distributed energy resources within clearly-defined electrical boundaries that acts as a single controllable entity with respect to the grid, allowing it to operate in grid-connected or island mode. Interest in microgrids is gaining traction throughout the country, particularly in campus-based environments such as military bases and universities. Microgrids have the potential to enhance power grid reliability and more efficiently integrate renewable and alternative energy technologies; however, a need exists to conduct microgrid demonstrations in order to study and better understand the opportunities and challenges that microgrids may provide to utilities and their customers.

As permitted by North Carolina General Statute ("N.C.G.S.") § 62-133.8(h), the Company constructed this NC Microgrid Project "... that encourages the development of renewable energy, energy efficiency, or improved air quality" as part of its annual North Carolina Renewable Energy and Efficiency Portfolio Standard ("REPS") Compliance. The Project was designed as a three-year demonstration project, and in compliance with the North Carolina Utilities Commission's directive, the Company submitted Project status reports in 2015, 2016, and 2017.

The NC Microgrid Project consists of four types of micro-wind turbines, a solar photovoltaic ("PV") array, a lithium-ion battery, and two fuel cells – added in 2015 – that are integrated behind-the-meter with the existing on-site diesel generator and utility feed. More specifically, the project integrates the following technologies:

- A. Wind turbines one 6 kilowatt ("kW") horizontal axis turbine and three vertical axis turbines (3 kW, 4 kW, and 1.2 kW);
- B. Lithium Ion Phosphate battery 25 kW power rating, 75 kilowatt-hour ("kWh") energy storage capacity;
- C. Fuel Cells two 1.5 kW solid oxide fuel cells;
- D. Ground-mounted solar photovoltaic ("PV") array 6 kW;
- E. Protective relays, inverters, proprietary control software, metering, and circuit breakers; and
- F. Round-the-clock system monitoring.

The Company has gained valuable experience through the development and operation of the NC Microgrid Project. The Project was considered an early demonstration of the multiple types of technologies it comprised. By incorporating these multiple types of emerging technologies into one study project, the Project provided the Company with knowledge about these technologies that would have not otherwise been available.

II. NC Microgrid System Audit Results

The Company has learned that integrating multiple types of generating equipment across numerous manufacturers creates unique challenges that may ultimately lead to time consuming and difficult troubleshooting efforts. Throughout the life of the NC Microgrid Project, the Dominion Energy NC Kitty Hawk Office ("Local Office") has experienced many power quality issues associated with the Project, primarily voltage and harmonics issues, which PowerSecure, the maintenance vendor for the Project, was not able to resolve. In addition to those operational problems, equipment reliability and availability, and vendor support proved to be challenging. The Project was disconnected in August 2016 due to voltage and harmonics issues at the

Local Office that the system served. As indicated in the Company's 2019 REPS cost recovery proceeding, Docket No. E-22, Sub 578, the Company was working with PowerSecure to evaluate recommissioning and decommissioning options.

On February 10, 2020, PowerSecure performed an on-site audit of the Project and all associated equipment. Based on the audit and the Company's own experience with this project, the Company has concluded that the combination of the factors noted above and discussed further herein necessitate decommissioning of the majority of the microgrid equipment.

A. Wind Turbines

There are four types of wind turbines located at the NC Microgrid Project.

- 1. Bergey 6kW
- Aeolos-V 3kW
- 3. UGE 4kW
- 4. Windspire 1.2kW









PowerSecure identified safety concerns, possible operational issues due to inactivity, and several other factors with the four wind turbines. The wind turbine manufacturers are either out of business or no longer supporting these types of turbines, making any sort of maintenance on the equipment impossible. Lack of access to replacement parts is also a concern.

In addition to the identified maintenance issues is the failure of the hydraulic lift system. The hydraulic lift is essential for lowering the turbines in advance of approaching hurricanes or other inclement weather. The Company made exhaustive efforts to identify a vendor that would be willing to repair or replace the lift system, but no vendor was identified that could do the work. Without the hydraulic lift system operable, the turbines cannot be raised and lowered.

B. Solar Array

The NC Microgrid Project includes a 6 kW solar PV array, with a collection of 24,250-watt Renewable Energy Corporation Peak Energy Series solar modules. The ground mounted solar array has a tilt of 5 degrees, and an azimuth of 72 degrees, or 18 degrees north of east. When in operation, and as stated in past reports, the solar generation powered approximately one-third of the Local Office's power.

Upon inspection by PowerSecure, the solar array appears to be in good condition with no major corrosion visible.



C. Batteries & Peak Shaving

As part of the NC Microgrid Project, Valence
Technology batteries were installed to study battery
technology and peak shaving effects. While in operation,
the 53 LiFePO₄ batteries, totaling 25 kW/75 kWh, exhibited
reliability and efficiency despite intensive use patterns.



While the exterior of the battery enclosure appears

to be in good condition, PowerSecure identified that in order to continue operations, all batteries would likely need to be replaced due to inactivity for such an extended duration.

D. Fuel Cell

The NC Microgrid Project includes two small-scale commercial fuel cells (1.5 kW each) manufactured by Acumentrics. The total fuel cell name plate capacity is roughly 3.0 kW. When operational, the fuel cells performed at capacity most hours of the day, except when they were cycled off to prevent backfeeding the grid.

PowerSecure's audit of the equipment noted a scent of gas and the Company has taken action to determine and address this issue. Also, as with the wind turbines, the manufacturer of the fuel cell is no longer available for contact in order to provide maintenance support.

III. Company Recommendations and Next Steps

The NC Microgrid Project was considered an early demonstration of the technologies it comprised. The Project incorporated multiple types of emerging technologies into one study project and has provided the Company with knowledge about these technologies that would have not otherwise been available. Since the conclusion of the three year demonstration period in 2017, the Company has evaluated

the state of the NC Microgrid Project and next steps, including through the recently conducted audit.

Through the operational use of these emerging technologies and efforts to support the safe operation of equipment, the Company has learned that many of these emerging technology companies are no longer in business. This leaves the majority of the NC Microgrid Project without adequate availability of replacement parts and expertise on maintenance and operation from the manufacturers.

Based on the challenges identified, the Company intends to decommission all of the elements of the NC Microgrid Project, except the solar array and the battery component. As stated above, the solar array has proven to be beneficial to the Local Office and the Company intends to continue to maintain the solar array. In addition, as the battery enclosure appears to be in good condition as observed by PowerSecure, the Company will endeavor to continue maintenance on the batteries.

DIRECT TESTIMONY OF ELIZABETH B. LECKY ON BEHALF OF DOMINION ENERGY NORTH CAROLINA BEFORE THE NORTH CAROLINA UTILITIES COMMISSION DOCKET NO. E-22, SUB 588

1	Q.	Please state your name, position, and business address with Virginia
2		Electric and Power Company ("Dominion Energy North Carolina," or
3		the "Company").
4	A.	My name is Elizabeth B. Lecky. I am a Regulatory Specialist in the
5		Regulatory Accounting Department for Virginia Electric and Power Company
6		doing business in North Carolina as Dominion Energy North Carolina. My
7		business address is 120 Tredegar Street, Richmond, VA 23219. A statement
8		of my background and qualifications is attached as Appendix A.
9	Q.	Please describe your area of responsibility with the Company.
10		I am responsible for analyzing and calculating revenue requirements for the
10	A.	i am responsible for analyzing and calculating revenue requirements for the
11		Company.
12	Q.	What is the purpose of your testimony in this proceeding?
13	A.	My testimony supports the Company's request to recover all reasonable and
14		prudent incremental Renewable Energy and Energy Efficiency Portfolio
15		Standard ("REPS") compliance costs. North Carolina General Statute ("N.C.
16		Gen. Stat.") § 62-133.8(h)(1) provides that the recoverable "incremental cost"
17		of REPS compliance includes "all reasonable and prudent costs incurred by an
18		electric power supplier" to comply with its REPS obligations "that are in

excess of the electric power supplier's avoided costs other than those costs recovered [through the demand side management rider] pursuant to N.C. Gen. Stat. § 62-133.9." North Carolina Utilities Commission ("NCUC" or the "Commission") Rule R8-67(e)(2) states that "[t]he cost of an unbundled renewable energy certificate, to the extent that it is reasonable and prudentlyincurred, is an incremental cost and has no avoided cost component," and is, therefore, eligible for full recovery through the REPS Rider. In addition to recovery of all reasonable and prudent REPS compliance costs, N.C. Gen. Stat. § 62-133.8(h)(1)(b) provides that an electric power supplier may also recover any investments in "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." The purpose of my testimony is to address the development of the Company's REPS Riders RP and RPE updated revenue requirements in support of the Company's Application. Specifically, my testimony presents: (i) the Company's forecasted revenue requirement for the February 1, 2021 through January 31, 2022 rate period ("Rate Period") to be recovered through the Company's updated REPS rider, Rider RP; and (ii) the Company's revenue requirement for the Company's experience modification factor ("EMF") true up period of July 1, 2019 through June 30, 2020 ("EMF True Up Period"), to be recovered through the Company's updated REPS EMF rider, Rider RPE. The Company's Application and the pre-filed direct testimony of Company Witness George E. Hitch support the Company's request to recover all

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

1 reasona	able and prudently-in	curred REPS compliance	costs incurred during the
-----------	-----------------------	------------------------	---------------------------

- 2 EMF True Up Period and projected to be incurred during the Rate Period.
- 3 Q. Mrs. Lecky, are you sponsoring any exhibits or schedules in connection
- 4 with your testimony?
- 5 A. Yes. Company Exhibit EBL-1, consisting of Schedules 1-2 (Schedules 1-2
- 6 provided in public and confidential versions filed under seal), was prepared
- 7 under my supervision and direction and is accurate and complete to the best of
- 8 my knowledge and belief. My Schedule 1 supports the projected Rate Period
- 9 revenue requirement for Rider RP. My Schedule 2 presents the revenue
- requirement for EMF Rider RPE for the True Up Period.
- 11 Q. Are there any changes to your schedules presented in this case?
- 12 A. Yes. Page 3 of my Schedule 2, which previously represented the amortization
- of prepaid subscription and enhancement costs associated with the Company's
- 14 Environmental Management Account ("EMA") RECs tracking system
- software, has been removed as it is no longer a necessary component of the
- REPS EMF Rider RPE revenue requirement. These costs were fully
- amortized as of December 2016.
- 18 Q. Please summarize the key components of the Rate Period Rider RP
- revenue requirement presented in this case.
- 20 A. The testimony and schedules of Company Witness Hitch provide the
- forecasted Rate Period incremental costs related to the Company's compliance
- with the REPS requirements of N.C. Gen. Stat. § 62-133.8(b), (d), (e), and (f).

1	I have used these cost projections to calculate the forecasted revenue
2	requirement for the REPS Rider RP to be recovered during the Rate Period in
3	this proceeding.

- Q. Is it your understanding that the cost information used to develop the
 revenue requirements in this proceeding includes only Dominion Energy
 North Carolina's incremental retail REPS compliance expenses and does
 not include costs associated with any wholesale customers' REPS
 compliance?
- 9 A. Yes. Although the Company does provide REPS compliance services for the 10 Town of Windsor, as described by Company Witness Hitch in his pre-filed 11 direct testimony, his Exhibit 2, Schedules 1 and 2 present the Company's 12 retail incremental REPS compliance costs, net of the costs assigned or 13 allocated to the Town of Windsor. Consistent with previous REPS rider 14 filings, the Company is not allocating any costs associated with the 15 Company's microgrid research demonstration project located at the 16 Company's Kitty Hawk District Office ("NC Microgrid Project") to the Town 17 of Windsor.
- Q. Please describe the recovery of previously incurred costs during the EMF
 True Up Period through the REPS EMF Rider RPE requested in this
 case.
- As noted above, the Company is requesting to fully recover its reasonable and prudently-incurred incremental REPS compliance costs incurred during the July 1, 2019 through June 30, 2020 EMF True Up Period. As described by

1	Company Witness Hitch, the EMF True Up Period costs proposed to be
2	recovered include: (i) incremental REPS costs incurred during the current
3	EMF True Up Period to achieve REPS compliance for the current and future
4	reporting years; (ii) the Company's "Other Incremental Costs" of REPS
5	compliance; and (iii) actual costs incurred through the end of the True Up
6	Period related to the Company's NC Microgrid Project.

7 Q. What is the total revenue requirement for Riders RP and RPE?

A. As summarized on Page 1 of my Schedule 1, through Rider RP, the Company is requesting recovery of projected REPS compliance costs of \$614,851. In addition, as summarized on Page 1 of my Schedule 2, the Company's EMF Rider RPE is presenting a revenue requirement in the amount of (\$255,874). The combined revenue requirements for the two riders, Rider RP and Rider RPE totals \$358,977, representing a \$993,127 decrease from the rates currently in effect.

15 Q. Does this conclude your pre-filed direct testimony?

16 A. Yes, it does.

BACKGROUND AND QUALIFICATIONS OF ELIZABETH B. LECKY

Elizabeth B. Lecky graduated from Randolph-Macon College with a Bachelor of Science degree in Business/Economics and Accounting, and she is a Certified Public Accountant. Prior to joining the Company in June 2010, she had over five years of experience in accounting. Mrs. Lecky has held numerous accounting positions within the Company prior to joining the Regulatory Accounting Department in February 2018. Her current position of Regulatory Specialist includes responsibility for analyzing and calculating revenue requirements for Dominion Energy Virginia rate proceedings.

Mrs. Lecky has previously provided testimony before the State Corporation Commission of Virginia.

Company Exhibit EBL-1 Schedule 1 Page 1 of 2

Dominion Energy North Carolina Docket No. E-22, Sub 588 Revenue Requirement for the REPS Rider RP For the Rate Period February 1, 2021 - January 31, 2022

line no.	REF	S Rider RP	Item Location / Formula
1 Projected REPS Compliance Costs Revenue Requirement	\$	614,851	Sch 1, Page 2, Line 1
2 Projected Microgrid Research Project Costs Revenue Requirement	\$	<u>-</u>	Sch 1, Page 2, Line 2
3 Total REPS Rider RP Revenue Requirement	\$	614,851	Line 1 + Line 2

CONF DENTIAL INFORMATION REDACTED

Company Exhibit EBL-1 Schedule 1 Page 2 of 2

Dominion Energy North Carolina Docket No. E-22, Sub 588 Projected Revenue Requirement for REPS Rider RP For the Rate Period February 1, 2021 - January 31, 2022

no.

- 1 Projected NC Jurisdiction Revenue Requirement REPS Compliance Costs
- 2 Microgrid Research Project Costs
- 3 Total REPS Rider RP Revenue Requirement

Projection Feb-21	Projection Mar-21	Projection Apr-21	Projection May-21	Projection Jun-21	Projection Jul-21	Projection Aug-21	Projection Sep-21	Projection Oct-21	Projection Nov-21	Projection Dec-21	Projection Jan-22	Rate Period Total	<u>i</u>
\$ 153 517	\$ 921	\$ 921	\$ 152 281	\$ 921	\$ 1349	\$ 150.629	\$ 921	\$ 921	\$ 150 629	\$ 921	\$ 921	\$ 614.85	1

Company Exhibit EBL-1 Schedule 2 Page 1 of 2

Dominion Energy North Carolina

Docket No. E-22, Sub 588
DSM/EE Experience Modification Factor REPS Rider RPE for the Test Period July 1, 2019 through June 30, 2020 For (Refund)/Recovery in the Rate Period February 1, 2021 - January 31, 2022

line																							r RPE
no.	<u>Ju</u>	<u>ıl-19</u>	<u>A</u>	ug-19	<u>s</u>	Sep-19	Oct-19		<u>Nov-19</u>	D	ec-19	<u>Jan-20</u>	ļ	Feb-20	N	<u> 1ar-20</u>	<u>Apr-20</u>	ŗ	May-20	<u>Jı</u>	<u>un-20</u>	<u>To</u>	<u>otal</u>
1 Monthly REPS Rider RPE Revenue Requirement (Page 2, Line 3)	\$ 2	34,224	\$	1,373	\$	945 \$	147,380) \$	968	\$	921 \$	147,312	\$	173,087	\$	945	25,738	3 \$	945	\$	4,757 \$; 7	738,594
2 Monthly REPS Compliance Rider RP Revenues (exclude EMF rev)	\$	73,208	\$	71,706	\$	67,281 \$	72,076	\$	63,300	\$	70,037 \$	74,216	\$	77,233	\$	110,454	105,04	4 \$	98,671	\$	111,243 \$;	994,469
REPS EMF Rider RPE (Over)/Under Recovery to be (refunded)/collected over 3 the Rate Period February 1, 2021 - January 31, 2022 (Line 1 - Line 2)	\$ 1	61,016	\$	(70,333)	\$	(66,337) \$	75,304	. \$	(62,331)	\$	(69,116) \$	73,096	\$	95,854	\$ ((109,510)	(79,30	3) \$	(97,726)	\$ (106,486) \$; (2	255,874)

Company Exhibit EBL-1 Schedule 2 Page 2 of 2

CONFIDENTIAL INFORMATION REDACTED

Dominion North Carolina Power Docket No. E-22, Sub 588 Acutal Revenue Requirement for DSM/EE Experience Modification Factor REPS Rider RPE For the Test Period July 1, 2019 - June 30, 2020

no.

1 NC Jurisdictional REPS Compliance Costs
REC Purchases
Broker Fees for REC Purchases
Admin Expenses (NC - RETS Fees)
Excess REC Sales

EMA Credit ToW
EMA Maintenance Fee
Carolina Poultry Power LD Payment

line

2 Micro Grid O&M Expenses

3 Revenue Requirement (Line 1 + Line 2)

Actual Actual <u>Actual</u> <u>Actual</u> **Actual Actual Actual Actual** <u>Actual</u> <u>Actual</u> <u>Actual</u> **Actual Totals** Jul-19 Oct-19 Nov-19 Jan-20 Aug-19 Sep-19 Dec-19 Feb-20 Mar-20 Apr-20 May-20 Jun-20



DIRECT TESTIMONY OF EMILIA L. CATRON ON BEHALF OF DOMINION ENERGY NORTH CAROLINA BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-22, SUB 588

1	Q.	Please state your name, business address, and your position with Virginia
2		Electric and Power Company ("Dominion Energy North Carolina" or the
3		"Company").
4	A.	My name is Emilia L. Catron and I am a Regulatory Analyst II for the
5		Company. My business address is 120 Tredegar Street, Richmond, Virginia
6		23219. A statement of my background and qualifications is attached as
7		Appendix A.
8	Q.	What is the purpose of your testimony in this case?
9	A.	My testimony supports the Company's request to recover all reasonable and
10		prudent incremental Renewable Energy and Energy Efficiency Portfolio
11		Standard ("REPS") compliance costs. The purpose of my testimony is to: (i)
12		describe the Company's approach to defining a "customer account" for
13		purposes of calculating the REPS riders; (ii) explain the Company's system-
14		level allocation approach for allocating the cost of the Environmental
15		Management Account RECs ("EMA") software; and (iii) present the
16		calculation of the Company's updated REPS rider, Rider RP, and the updated
17		Experience Modification Factor ("EMF") rider, Rider RPE. Proposed Rider
18		RP is designed to recover the Company's reasonable and prudent incremental

1		KEFS costs forecasted to be incurred during the proposed February 1, 2021 –
2		January 31, 2022 rate period ("Rate Period"). Proposed Rider RPE is
3		designed to recover the Company's reasonable and prudent incremental REPS
4		costs incurred during the July 1, 2019 to June 30, 2020 EMF true up period
5		("EMF True Up Period"), as described in the Company's Application and the
6		pre-filed direct testimony of Company Witness George E. Hitch. The
7		Company is requesting that the proposed Rider RP and Rider RPE become
8		effective for usage on February 1, 2021.
9	Q.	Ms. Catron, are you sponsoring any exhibits or schedules in connection
10		with your testimony?
11	A.	Yes. Company Exhibit ELC-1, consisting of Schedules 1 through 7, was
12		prepared under my supervision and is accurate and complete to the best of my
13		knowledge and belief.
14	Q.	How has Dominion Energy North Carolina defined a "customer" for the
15		purposes of developing Rider RP and Rider RPE?
16	A.	The Company has followed the same approach that the Commission approved
17		in the Company's most recent REPS Rider cost recovery proceeding and prior
18		cases. For purposes of developing the per-account REPS charges, the
19		Company has defined a "customer account" as a "service point" or
20		"application of a tariff." The following rate schedules are not considered
21		"accounts" for purposes of the per-account charge because these rate
22		schedules are generally secondary accounts and customers on these rate

- schedules will pay a per-account charge under another primary tariff

 connected with these rate schedules.
 - Residential Time Controlled Storage Water Heating (Schedule 1W)
- Residential Dual Fuel (Schedule 1DF)
- Outdoor Lighting (Schedule 26)

3

8

9

10

11

12

13

14

15

16

17

18

23

- County, Municipal or State Traffic Control (Schedule 30T)
- 7 Commercial Electric Heating (Schedule 7)
 - Commercial Schedule SG (Schedule SG)
 - Further, if a customer has a service point on contiguous property with the same service address, premise and name, that account may be deemed to be auxiliary and not subject to the REPS Riders RP and RPE. If the Company identifies an account as an auxiliary account or if the Company is notified by the customer that an account should be classified as an auxillary account or upon written notification from the customer, accounts meeting these criteria will be coded in the billing system to allow the customer to be charged only a single monthly REPS charge at the customer's primary service point. A governmental customer for purposes of the application of the REPS charge is considered a commercial account.
- 19 Q. In determining the Company's incremental REPS compliance costs to be
 20 recovered through its REPS Riders, has the Company addressed
 21 allocation of any system-level costs to the North Carolina jurisdiction?
 22 A. Yes. While incremental REPS compliance costs are generally assigned to and

fully recoverable from the Company's North Carolina jurisdiction, the

Company has also recognized that, in certain unique circumstances, capital investments made by the Company at a system level that are allocated between the Company's respective jurisdictions and are incremental to North Carolina REPS compliance should also be allocated between the Company's respective jurisdictions. The Company has determined that allocation of the costs of its investment in the EMA system represents an instance where such allocation is appropriate. However, as stated in the testimony of Company Witness Hitch, there are no EMA system costs included in the true up period for this case.

Q. Would you please discuss the calculation of the proposed Rider RPE tocollect for the EMF True Up Period?

A.

Rider RPE is calculated using the Rider RPE revenue requirement provided by Company Witness Elizabeth B, Lecky, as shown in my Schedule 1. My Schedule 2 presents the allocation of the Rider RPE revenue requirement amongst the Company's residential, commercial, and industrial customer classes. The annual revenue cap was calculated by multiplying the revised applicable cost caps for each customer class by the Company's forecasted average adjusted number of customer accounts for the rate year. A cost cap allocation factor was then calculated by dividing the annual REPS revenue cap for each class by the total annual revenue cap established for all classes. This allocation factor was then used to allocate the Company's REPS compliance requirement to each of the three customer classes.

1	The Company also incorporated an adjustment to allocate Energy Efficiency
2	Credit ("EEC") RECs to the customer class that created the EEC savings. The
3	EEC RECs can only be used to meet the Company's General Obligation REC
4	requirement; therefore, Schedule 2 and Schedule 4 have been divided between
5	General Obligation REC costs and all costs other than for General Obligation
6	RECs. Once the EECs were deducted according to the class that created the
7	EE savings, a new adjusted allocation factor was calculated and the Rider
8	RPE revenue requirement from my Schedule 1 was allocated to the customer
9	classes based on the newly calculated allocation factor.

10 Q. Would you please discuss the calculation of the monthly RPE per11 customer charges?

A. My Schedule 3 presents the total annual Rider RPE and then calculates the monthly per-account customer charge for each customer class by dividing the annual value by 12. This charge is then adjusted to account for the North Carolina regulatory fee to calculate the final per-account customer charges that will be shown for the residential, commercial, and industrial customer classes in the rider.

Q. Would you please discuss the calculation of the proposed Rider RP to collect during the Rate Period?

A. My Schedule 4 shows the total projected REPS compliance calculation for Rider RP during the Rate Period. The methodology is the same as the calculations for Rider RPE that I have just described, but uses a forecasted revenue requirement for the Rate Period. My Schedule 1 shows the forecasted

1	Rate Period revenue requirement to be recovered through Rider RP. My
2	Schedule 5 then calculates the monthly per-account customer charge for each
3	customer class. This charge is then adjusted for the North Carolina regulatory
4	fee to calculate the final per-account customer charges that will be shown in
5	the Rider RP.

- Q. Have you confirmed that the Company's proposed total monthly REPS
 per-account customer charges to be recovered through Riders RP and
 RPE do not exceed the per-account cost caps established in N.C. Gen.
- 9 Stat. § 62-133.8(h)(4)?
- 10 A. Yes. My Schedule 6 presents the total monthly REPS per-account customer

 11 charges to be recovered through Riders RP and RPE. These per-account

 12 charges do not exceed the caps on allowable per-account annual charge

 13 established in N.C. Gen. Stat. § 62-133.8(h)(4), as amended by Session Law

 14 2017-192, and satisfy the requirements of Commission Rule R8-67(e)(9).
- Q. Have you included the Company's proposed Riders RP and RPE in
 Schedule 7 of your pre-filed direct testimony?
- 17 A. Yes. Schedule 7 comprises the tariff sheets showing the proposed Riders RP

 18 and RPE, which, if approved as proposed, would be applicable for usage on

 19 and after February 1, 2021.

- Q. Would you explain how the proposed Riders RP and RPE will impactcustomers' bills?
- 3 Per my Schedule 6, customers served on a residential rate will see a total A. 4 REPS charge on their bill of \$0.14 which is a decrease of \$0.41 per month 5 from the previous monthly REPS charge. Commercial customers will see a 6 \$0.82 charge per month on their bills resulting in a decrease of \$2.26 per 7 month from the previous monthly REPS charge. An industrial customer will 8 see a charge of \$5.35 per month resulting in a decrease of \$15.48 per month from the previous monthly REPS charge. Monthly billing schedules will be 9 10 prorated only if the number of days in the billing month is less than 26 or
- 12 Q. Does this conclude your pre-filed direct testimony?
- 13 A. Yes, it does.

greater than 40.

11

BACKGROUND AND QUALIFICATIONS OF EMILIA L. CATRON

Emilia L. Catron received a Bachelor of Science degree in Computational and Applied Mathematics and Statistics and Psychology from the College of William and Mary in 2018. Ms. Catron joined the Customer Rates Department in 2016, beginning as an intern and then becoming a full-time employee as a Regulatory Analyst I in 2018. In August of 2019, Ms. Catron was promoted to her current position as a Regulatory Analyst II. Her responsibilities include providing support and analysis for the Company's regulatory filings in Virginia and North Carolina. Ms. Catron has previously presented testimony before the State Corporation Commission of Virginia and the North Carolina Utilities Commission.

Docket No. E-22 Sub 588

Dominion Energy North Carolina

Revenue Requirements for Riders RPE and RP

For the Rate Year Beginning February 1, 2021

Company Exhibit ELC - 1 Schedule 1 Page 1 of 1

		Revenue	
Line No.		Requirement	
1	Rider RPE Revenue Requirement	\$738,594	Exhibit EBL-1, Schedule 2
2	REPS Compliance Rider RPE Revenues	\$994,469	Exhibit EBL-1, Schedule 2
3	REPS Compliance Recovery (Line 1 - Line 2)	-\$255,874	REPS EMF Rider RPE (over)/under recovery Exhibit EBL-1, Sch. 2
4	Rider RP Revenue Requirement	\$614,851	Exhibit EBL-1, Schedule 1
5	Total REPS Recovery	\$358,977	
6	Rider RPE - Cost of General RECs only	\$258,250	Exhibit GEH-2, Schedule 1 Wind
7	Rider RP - Cost of General RECs only	\$0	Exhibit GEH-2, Schedule 2 Wind
8	Rider RPE - All other costs	\$480,344	Line 1 Minus Line 6
9	Rider RP - All other costs	\$614,851	Line 4 Minus Line 7

Docket No. E-22 Sub 588

Dominion Energy North Carolina

Calculation of Incremental Costs for the EMF True Up Period

Rider RPE

Company Exhibit ELC - 1 Schedule 2 Page 1 of 1

Line No.	(1) Customer Class	(2) Total Adjusted Number of Accounts*	(3) Annual Rider Cap per Customer Class	(4) Calculated Annual Revenue Cap (2)*(3)	(5) Cost Cap Allocation Factor (4)*Total(4)	(6) All Costs Other Than for General RECS (5)*Total(6)	(7) Other than General RECS Annual Per- Account Charge (6)/(2)		
1	Residential	103,353	\$27	\$2,790,531	50.89%	-\$84,686	-\$0.82		
2	Commercial	17,579	\$150	\$2,636,850	48.09%	-\$80,022	-\$4.55		
3	Industrial	56	\$1,000	\$56,000	1.02%	-\$1,699	-\$30.35		
4	Total	120,988		\$5,483,381	100.00%	-\$166,408			
			GEH-1, Figure 2.2						
	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
								Gen'l REC Rev Req	

								Allocated to Customer	
								Allocated to customer	
			Class Allocation of Total					Class Based on	
		General RECS Obligation	RECS Obligation Using	REP Requirement		Number of RECs	Adjusted Cost Cap	Adjusted Cost Cap	
		Required for 2019	Cost Cap Allocation	Supplied by EE by	% of EE REC Supplied by	Required Net of EE (9)-	Allocation Factor	Allocation Factor	General REC Annual Per-
Line No.	Customer Class	Compliance Year	Factor (5)	Class**	Class** (11)/(9)	(11)	(13)/Total(13)	(14)*Total(15)	Account Charge (15)/(2)
5	Residential	210,473	50.89%	11,171	5.31%	199,302	52.15%	-\$46,654	-\$0.45
6	Commercial	198,882	48.09%	20,215	10.16%	178,667	46.75%	-\$41,824	-\$2.38
7	Industrial	4,224	1.02%	-	0.00%	4,224	1.11%	-\$989	-\$17.66
8	Total	413,579	100.00%	31,386	7.59%	382,193	100.00%	-\$89,467	

From GEH-1, Figure 1.3 From GEH-1, Figure 1.3

** REC Requirement supplied by EE credits are under the 25% Cap

Total EMF -\$255,874

AJM-1, Schedule 2 page 1 of 3

^{*} Rate Year ending January 31, 2022 average projected number of account adjusted to remove companion accounts and auxilliary accounts.

Docket No. E-22 Sub 588

Dominion Energy North Carolina
Rider RPE

Company Exhibit ELC - 1 Schedule 3 Page 1 of 1

		(1)	(2)	(3)	(4)
			Monthly RPE Per-		
		Annual RPE Per-	Account Charge	Regulatory Fee	Total Monthly RPE Per-
Line No.	Customer Class	Account Charge**	(2)/12	(3)*0.0013	Account Charge (3)+(4)
1	Residential	-\$1.2708	-\$0.1059	-\$0.0001	-\$0.1060
2	Commercial	-\$6.9313	-\$0.5776	-\$0.0008	-\$0.5784
3	Industrial	-\$48.0034	-\$4.0003	-\$0.0052	-\$4.0055
	(5)	(6)	(7)	(8)	
		Rounded Monthly	Total Adjusted	Annual Revenue	
		RPE Per-	Number of	Including Regulatory	
Line No.	Customer Class	Account Charge	Accounts*	Fee (7)*(8)*12 ***	
4	Residential	-\$0.11	103,353	-\$136,426	
5	Commercial	-\$0.58	17,579	-\$122,350	
6	Industrial	-\$4.01	56	-\$2,695	
			-	-\$261,471	

^{*} From Schedule 2 Column 2. Rate Year ending January 31, 2021 average projected number of account adjusted to remove companion accounts and auxilliary accounts.

^{**} From Schedule 2, Page 1 (Column 7 + Column 16).

^{***} Less than revenue requirement due to rounding to two digits.

Docket No. E-22 Sub 588
Dominion Energy North Carolina
Calculation of Incremental Costs per Customer Class for the Rate Period
Rider RP

Company Exhibit ELC - 1 Schedule 4 Page 1 of 1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)		
		Total Adjusted Number of	Annual Rider Cap per	Calculated Annual	Cost Cap Allocation	All Costs other than for General	Other than General RECS Annual Per- Account Charge		
Line No.		Accounts*	Customer Class	Revenue Cap (2)*(3)	Factor (4)*Total(4)	RECS (5)*Total(6)	(6)/(2)		
1	Residential	103,353	\$27	\$2,790,531	50.89%	\$312,902	\$3.03		
2	Commercial	17,579	\$150	\$2,636,850	48.09%	\$295,670	\$16.82		
3	Industrial	56	\$1,000	\$56,000	1.02%	\$6,279	\$112.13		
4	Total	120,988		\$5,483,381	100.00%	\$614,851			
			•		From any	Exhibit ELC - 1, Sch.	1, Line 9		
	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15) Gen'l REC Rev Req	(16)
		Class Allocation of Total RECS Obligation Using	General RECS Obligation Required for 2021	REP Requirement		Number of RECs	Adjusted Cost Cap	Allocated to Customer Class Based on Adjusted Cost Cap	General REC Annual Per-
		Cost Cap Allocation	Compliance Year (9)*Total	Supplied by EE by	% of EE REC Supplied	required net of EE	Allocation Factor	Allocation Factor	Account Charge
Line No.	Customer Class	Factor (5)	(10)	Class**	by Class** (11)/(10)	(10)-(11)	(13)/Total(13)	(14)*Total(15)	(15)/(2)
5	Residential	50.89%	263,735	11,171	4.24%	252,564	51.88%	\$0	\$0.00
6	Commercial	48.09%	249,211	20,215	8.11%	228,996	47.04%	\$0	\$0.00
7	Industrial	1.02%	5,293	-	0.00%	5,293	1.09%	\$0	\$0.00
8	Total	100.00%	518,239	31,386	6.06%	486,853	100.00%	\$0	
			From Fig. 1.7.1 of the Plan	From GEH-1, Figure 1.3			From a	ny Exhibit ELC - 1, Sch. 1,	Line 7

^{*} From Schedule 2 Column 2. Rate Year ending January 31, 2021 average projected number of account adjusted to remove companion accounts and auxilliary accounts.

^{**} From Schedule 2 Column 11. REC Requirement supplied by EE credits are under the 25% Cap

Docket No. E-22 Sub 588 Dominion Energy North Carolina Rider RP Company Exhibit ELC - 1 Schedule 5 Page 1 of 1

		(1)	(2) Monthly RP Per-	(3)	(4)
Line No.	Customer Class	Annual RP Per- Account Charge **	Account Charge (2)/12	Regulatory Fee (3)*0.0013	Total Monthly RP Per- Account Charge (3)+(4)
1	Residential	\$3.0275	\$0.2523	\$0.0003	\$0.2526
2	Commercial	\$16.8195	\$1.4016	\$0.0018	\$1.4034
3	Industrial	\$112.1299	\$9.3442	\$0.0121	\$9.3563
	(5)	(6)	(7)	(8) Annual Revenue	
			Total Adjusted	Including	
		Rounded Monthly RP	Number of	Regulatory Fee	
Line No.	Customer Class	Per-Account Charge	Accounts*	(7)*(8)*12 ***	
4	Residential	\$0.25	103,353	\$310,059	
5	Commercial	\$1.40	17,579	\$295,327	
6	Industrial	\$9.36	56_	\$6,290	
			_	\$611,676	

^{*} From Schedule 2 Column 2. Rate Year ending January 31, 2021 average projected number of account adjusted to remove companion accounts and auxilliary accounts.

^{**} From Schedule 4, Page 1 (Column 7 + Column 16).

^{***} Less than revenue requirement due to rounding to two digits.

Company Exhibit ELC - 1 Schedule 6 Page 1 of 1

	(1)	(2)	(3)	(4)	(5)	(6)
			Monthly Rider RP	Total Monthly REPS	Total Adjusted	
		Monthly Rider RPE per	per Account Charge	per Customer Charge	Number of	Annual Payment**
Line No.	Customer Class	Account Charge ***	****	(2)+(3)	Accounts*	(4)*(5)*12
1	Residential	-\$0.11	\$0.25	\$0.14	103,353	\$173,633
2	Commercial	-\$0.58	\$1.40	\$0.82	17,579	\$172,977
3	Industrial	-\$4.01	\$9.36	\$5.35	56	\$3,595
					_	\$350.206

^{*} From Schedule 2 Column 2. Rate Year ending January 31, 2021 average projected number of account adjusted to remove companion accounts and auxilliary accounts.

^{**} Includes regulatory fee. Less than total revenue requirement due to rounding.

^{***} From Schedule 3 Column 6.

^{****} From Schedule 5 Column 6.

Virginia Electric and Power Company Dominion Energy North Carolina Docket No. E-22, Sub 588 Company Exhibit ELC - 1 Schedule 7 Page 1 of 2

RIDER RPE REPS EXPERIENCE MODIFICATION FACTOR (REPS EMF)

Service supplied to Dominion Energy North Carolina retail customers is subject to the Renewable Energy and Energy Efficiency Portfolio Standard ("REPS") monthly charge. This Rider is not applicable to agreements for the Company's Outdoor Lighting Rate Schedule 26, Traffic Control Rate Schedule 30T, companion rates such as Schedule 1W, Schedule 1DF or Schedule 7, or auxiliary accounts. An auxiliary account is defined as a non-demand metered service at the same premise, with the same service address, and the same customer account account for which **REPS** charge name as an a has been applied.

Rate Class	Dollars per Customer Charge Monthly Bill
Residential Customer	-\$0.11
Commercial Customer	-\$0.58
Industrial Customer	-\$4.01

¹ The Company can identify an account that qualifies as auxiliary service, not subject to this Rider, through the Company's own research, or notification from the Customer. The Company will verify that such agreement is considered an auxiliary service, after which the Rider charge will not be applied to the auxiliary service account. The customer shall also be responsible for notifying the Company of any change in service that would no longer qualify the service as auxiliary.

Company Exhibit ELC - 1 Schedule 7 Page 2 of 2

RIDER RP

RENEWABLE ENERGY & ENERGY EFFICIENCY PORTFOLIO STANDARD RIDER

Service supplied to Dominion Energy North Carolina retail customers is subject to the Renewable Energy and Energy Efficiency Portfolio Standard ("REPS") monthly charge. This Rider is not applicable to agreements for the Company's Outdoor Lighting Rate Schedule 26, Traffic Control Rate Schedule 30T, companion rates such as Schedule 1W, Schedule 1DF or Schedule 7, or auxiliary accounts. An auxiliary account is defined as a non-demand metered service at the same premise, with the same service address, and the same customer account name as an account for which a REPS charge has been applied.

Rate Class	Dollars per Customer Charge Monthly Bill
Residential Customer	\$0.25
Commercial Customer	\$1.40
Industrial Customer	\$9.36

¹ The Company can identify an account that qualifies as auxiliary service, not subject to this Rider, through the Company's own research, or notification from the Customer. The Company will verify that such agreement is considered an auxiliary service, after which the Rider charge will not be applied to the auxiliary service account. The customer shall also be responsible for notifying the Company of any change in service that would no longer qualify the service as auxiliary.

VERIFICATION

NCUC Docket No. E-22, Sub 588

I, Corynne S. Arnett, Senior Vice President, Regulatory Affairs and Customer Experience, for Virginia Electric and Power Company, do solemnly swear that the facts stated in the foregoing Application for Approval of REPS Cost Recover Rider and 2020 REPS Compliance Report, insofar as they relate to Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina, are true and correct to the best of my knowledge and belief. Corynne & Arnett

COMMONWEALTH OF VIRGINIA)	
)	to wit:
City of Richmond)	

The foregoing instrument was sworn to and acknowledged before me this 1070 day of August, 2020.

My registration number is 1707156 and my commission expires: