

1 PLACE: Dobbs Building, Raleigh, North Carolina
2 DATE: Monday, November 8, 2018
3 TIME: 9:50 a.m. - 9:59 a.m.
4 DOCKET NO: E-22, Sub 557
5 BEFORE: Commissioner Daniel G. Clodfelter, Presiding
6 Chairman Edward S. Finley, Jr.
7 Commissioner ToNola D. Brown-Bland
8 Commissioner Jerry C. Dockham
9 Commissioner James G. Patterson
10 Commissioner Lyons Gray
11 Commissioner Charlotte A. Mitchell
12

13 IN THE MATTER OF:

14 Application of Virginia Electric and Power Company,
15 d/b/a Dominion Energy North Carolina for
16 Approval of Renewable Energy and Energy Efficiency
17 Portfolio Standard Cost Rider Pursuant to
18 N.C.G.S. § 62-133.8 and Commission Rule R8-67.
19

20 VOLUME 2
21
22
23
24

1 A P P E A R A N C E S:

2 FOR VIRGINIA ELECTRIC and POWER COMPANY, d/b/a

3 DOMINION ENERGY NORTH CAROLINA:

4 Andrea Kells, Esq.

5 Brett Breitschwerdt, Esq.

6 McGuireWoods LLP

7 434 Fayetteville Street, Suite 2600

8 Raleigh, North Carolina 27613

9

10 FOR THE USING AND CONSUMING PUBLIC:

11 Tim R. Dodge, Jr., Esq.

12 Public Staff - North Carolina Utilities Commission

13 4326 Mail Service Center

14 Raleigh, North Carolina 27699-4300

15

16

17

18

19

20

21

22

23

24

NORTH CAROLINA UTILITIES COMMISSION

1	T A B L E O F C O N T E N T S	
2	E X A M I N A T I O N S	
3	DIRECT TESTIMONY and APPENDIX A OF	
4	GEORGE E. HITCH.....	12
5	DIRECT TESTIMONY and APPENDIX A OF	
6	ALAN J. MOORE.....	33
7	DIRECT TESTIMONY and APPENDIX A OF	
8	ROBERT C. RICE.....	41
9	SUPPLEMENTAL TESTIMONY OF	
10	GEORGE E. HITCH.....	51
11	SUPPLEMENTAL TESTIMONY OF	
12	ALAN J. MOORE.....	56
13	SUPPLEMENTAL TESTIMONY OF	
14	ROBERT C. RICE.....	62
15	SECOND SUPPLEMENTAL TESTIMONY OF	
16	GEORGE E. HITCH.....	66
17	AFFIDAVIT and APPENDIX A OF	
18	JENNY X. LI.....	71
19	AFFIDAVIT and APPENDIX A OF	
20	EVAN D. LAWRENCE	77
21		
22		
23		
24		

1	E X H I B I T S	
2		IDENTIFIED/ADMITTED
3	Company Exhibit GEH-1 and	
4	Company Exhibit GEH-2, Schedules 1 and 2....	12/12
5	Company Exhibit AJM-1, Schedules 1 and 2....	33/33
6	Company Exhibit RCR-1, Schedules 1 - 7.....	41/41
7	Company Supplemental Exhibit GEH-2,	
8	Schedule 1.....	51/51
9	Company Supplemental Exhibit AJM-1,	
10	Schedule 2.....	56/56
11	Company Supplemental Exhibit RCR-1,	
12	Schedules 1 - 7.....	62/62
13	Company Second Supplemental	
14	Exhibit GEH-1.....	66/66
15	Exhibit DENC 1 and Exhibit DENC 2.....	70/70

16
17
18
19
20
21
22
23
24

(All confidential schedules and/or portions
thereof are filed under seal)

P R O C E E D I N G S

COMMISSIONER CLODFELTER: Let's come back to order. We'll go on the record now and proceed with Docket E-22, Sub 557. I'm Commissioner Dan Clodfelter and have been assigned by the Chairman to preside over this hearing. With me today, as already noted in the prior matter, and Chairman Finley; and Commissioners Brown-Bland, Dockham, Patterson, Gray and Mitchell.

We'll take up now for hearing Docket Number E-22, Sub 557, which is In the Matter of an Application of 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 General Statute § 62-133.8 and Commission Rule R8-67.

At this point, and as required by the State Government Ethics Act, I remind all Commission members of our duty to avoid conflicts of interest, and inquire whether any member of the Commission has a known conflict of interest with respect to this docket?

(No response)

Please let the record reflect that no conflicts were identified.

1 On August 30, 2018, Dominion Energy North
2 Carolina filed an Application for approval of
3 Renewable Energy and Energy Efficiency Portfolio
4 Standard Cost Recovery Rider and its 2017 REPS
5 Compliance Report pursuant to Commission Rule R8-67,
6 along with the written direct testimonies and exhibits
7 of George Hitch consisting of 18 pages of direct
8 testimony, one Appendix, and including certain
9 confidential information as marked; the testimony of
10 Alan J. Moore consisting of five pages of direct
11 testimony, one Appendix, and one exhibit containing
12 confidential information; and the testimony of Robert
13 C. Rice consisting of seven pages of direct testimony
14 and one Appendix and seven schedules. I do not
15 believe there was any confidential information in
16 those.

17 MS. KELLs: That's correct, Commissioner.

18 COMMISSIONER CLODFELTER: On September 7,
19 2018, the Commission issued an Order Scheduling
20 Hearing for this place and time, establishing
21 discovery guidelines, setting deadlines for the
22 parties to file testimony, and requiring Dominion to
23 publish notice of the hearing.

24 On September 28, the Public Staff filed a

1 motion to amend the procedural schedule. The
2 Commission granted that motion in an Order - changing
3 the dates for intervention, direct and rebuttal
4 prefiled testimony, expert witness hearing - issued by
5 the Commission on October 2, 2018.

6 On October 15, Dominion filed supplemental
7 testimony and confidential exhibits of George Hitch
8 consisting of three pages of supplemental testimony
9 and one confidential exhibit; Alan J. Moore consisting
10 of five pages and one exhibit containing confidential
11 information; and Robert C. Rice, three pages and one
12 exhibit, again with no confidential information in
13 Mr. Rice's filing.

14 On October 17, Dominion filed a corrected
15 page 3 of the supplemental testimony of George Hitch.

16 On October 19, the Public Staff filed the
17 Affidavits of Evan Lawrence consisting of six pages
18 and one Appendix, and Jenny Li consisting of four
19 pages and one Appendix.

20 On October 24, Dominion filed its Affidavits
21 of Publication of Public Notice as required.

22 On October 30, Dominion filed the second
23 supplemental testimony and confidential exhibits of
24 George Hitch consisting of three pages of testimony

1 and one confidential exhibit.

2 On October 30, the Public Staff filed the
3 Revised Affidavit of Evan Lawrence consisting of six
4 pages and one Appendix.

5 On November 5, the Public Staff filed a
6 Joint Motion -- well, the parties filed a Joint Motion
7 to Excuse Witnesses. And on November 5, an Order was
8 issued granting that Joint Motion to Excuse Witnesses.

9 Participation by the Public Staff is
10 recognized pursuant to G.S. § 62-15.

11 The record does not reflect that there are
12 any intervenors in this docket.

13 So I'll call on counsel now for the parties
14 to make their appearances for the record, beginning
15 with Dominion.

16 MS. KELLS: Thank you, Presiding
17 Commissioner Clodfelter and Commissioners. My name is
18 Andrea Kells. I'm with the Law Firm of McGuireWoods
19 appearing on behalf of Dominion Energy North Carolina.
20 Also appearing today on behalf of the Company is Brett
21 Breitschwerdt with the Law Firm of McGuireWoods. And
22 also here with us today is Mr. Horace Payne and Ms.
23 Teirra Everette, in-house counsel with the Company.

24 COMMISSIONER CLODFELTER: Glad to have you

1 with us today.

2 MR. BREITSCHWERDT: I'm Mr. Breitschwerdt.

3 COMMISSIONER CLODFELTER: Right. I didn't
4 know why you were standing. You've already been
5 introduced.

6 (Laughter)

7 MR. BREITSCHWERDT: As a courtesy --
8 following Chairman Finley's -- noting my appearance.

9 (Laughter)

10 COMMISSIONER DOCKHAM: How does he look?

11 (Laughter)

12 COMMISSIONER CLODFELTER: Commissioner
13 Dockham says you look very nice today.

14 (Laughter)

15 MR. BREITSCHWERDT: Thank you, sir.

16 MR. DODGE: Good morning, Commissioners.
17 I'm Tim Dodge with the Public Staff. We represent the
18 Using and Consuming Public. Normally appearing in
19 this docket today would be Robert Josey but he is at
20 home with his wife, Nikki, celebrating the first week
21 of their new son. Davis Bruce Josey was born last
22 Friday. Both Nikki and the baby are doing well.

23 COMMISSIONER CLODFELTER: Are there any
24 preliminary matters we need to take up?

1 MS. KELLS: No, sir.

2 COMMISSIONER CLODFELTER: And I don't know
3 that there's any public witnesses here. We had the
4 public hearing on Monday but I don't know if we have
5 anyone here today. I don't see anyone. Correct?

6 MR. DODGE: We haven't identified anyone.

7 COMMISSIONER CLODFELTER: Then the case is
8 with the Applicant.

9 MS. KELLS: Thank you, Commissioner
10 Clodfelter. I'd first like to identify the Company's
11 Application filed August 30, 2018, as Exhibit DENC 1
12 and would ask that it be included in the record in the
13 case and received into evidence. And, with your
14 permission, Commissioner, since you detailed all the
15 pages and confidentiality of the testimonies and
16 exhibits, I'll just list them briefly and not through
17 all that detail, okay.

18 I'll go through the testimonies and exhibits
19 of the Company's witnesses who have been excused from
20 appearing today briefly, and ask that the testimonies
21 and appendices be copied into the record as if given
22 orally from the stand, and that the exhibits and
23 schedules filed in support of that testimony be
24 identified as prefiled and received into evidence.

1 So that would be in support of the
2 Application, the direct testimony of George E. Hitch
3 with exhibits including confidential information;
4 direct testimony of Alan J. Moore with two schedules
5 including confidential information; direct testimony
6 of Robert C. Rice, seven schedules, all of which were
7 public.

8 And then the supplemental testimony filed on
9 October 15, 2018, of George Hitch with one
10 confidential schedule; Alan J. Moore with one
11 confidential schedule; and Robert C. Rice with seven
12 schedules, again all of which were public.

13 Also included on October 17, 2018, the
14 corrected page 3 to the supplemental testimony of
15 George E. Hitch.

16 And on October 30, 2018, the second
17 supplemental testimony of George E. Hitch with one
18 exhibit, which was confidential.

19 Finally, I would ask that the Company's
20 letter in lieu of rebuttal testimony filed on
21 November 2, 2018, be identified as Exhibit DENC 2 and
22 included in the record and received into evidence.

23 And at this time would ask that all of the
24 testimony and appendices be copied into the record and

1 all of the supporting exhibits be received into
2 evidence. And that concludes the Company's case.

3 COMMISSIONER CLODFELTER: If there is no
4 objection, then that motion will be allowed as made.

5 MS. KELLS: Thank you.

6 (WHEREUPON, Company Exhibit GEH-1
7 and Company Exhibit GEH-2,
8 Schedules 1 and 2, are marked for
9 identification as prefiled and
10 received into evidence.)

11 (Confidential pages filed under seal.)

12 (WHEREUPON, the prefiled direct
13 testimony of is copied into the
14 record as if given orally from the
15 stand.)
16
17
18
19
20
21
22
23
24

**DIRECT TESTIMONY
OF
GEORGE E. HITCH
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 557**

OFFICIAL COPY
OFFICIAL COPY

Aug 30 2018
Dec 05 2018

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 5000 Dominion**
5 **Boulevard, Glen Allen, Virginia. I am a Senior Market Originator for**
6 **Dominion 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 short-term compliance strategy for the North Carolina Renewable**
10 **Energy and Energy Efficiency Portfolio Standard (“REPS”), as well as the**
11 **Virginia Renewable Energy Portfolio Standards (“REPS”). My**
12 **responsibilities include developing the Company’s Rule R8-67(b) REPS**
13 **Compliance Plan and Rule R8-67(c) REPS Compliance Report. I am also**
14 **responsible for managing the Company’s capacity, energy, and renewable**
15 **energy certificate (“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**

1 of my testimony is to describe the Company's REPS compliance activities
2 under review in this proceeding and the costs the Company has incurred, or
3 will incur, in support of its compliance efforts with North Carolina's REPS
4 under N.C.G.S. § 62-133.8. My testimony supports the Company's
5 incremental REPS compliance costs incurred for calendar year 2017 and
6 future years' compliance, and also forecasts the incremental REPS costs the
7 Company expects to incur during the February 1, 2019 through January 31,
8 2020 rate period ("Rate Period"). Company Witness Alan J. Moore provides
9 support for the Company's adjusted Rate Period proposed in this proceeding.

10 **Q. Are you sponsoring any exhibits or schedules in support of your**
11 **testimony?**

12 **A.** Yes. Company Exhibit GEH-1 is the Company's 2018 REPS Compliance
13 Report for calendar year 2017 REPS compliance. Company Exhibit GEH-2
14 consists of two schedules, Schedule 1 and 2. (Exhibits GEH 1-2 provided in
15 public and confidential versions filed under seal). Both the Company's 2018
16 REPS Compliance Report and my Schedules 1 and 2 were prepared by me
17 and are accurate and complete to the best of my knowledge and belief.
18 Schedule 1 provides actual REPS compliance costs, by source, that the
19 Company has incurred during the July 1, 2017 to June 30, 2018 experience
20 modification factor true up period ("EMF True Up Period"), as further
21 described in the Company's Application and later in my testimony. My
22 Schedule 2 provides REPS compliance costs, by source, that the Company

1 projects to incur during the Rate Period in support of compliance with the
2 REPS.

3 **Q. Can you please describe the Company's REPS obligations under**
4 **N.C.G.S. § 62-133.8?**

5 A. Pursuant to N.C.G.S. § 62-133.8,¹ as an electric power supplier, the
6 Company² is required to comply with the overall REPS requirement ("Total
7 Obligation") by submitting for retirement a total volume of RECs in each
8 calendar year that is equivalent to the following percentages of its North
9 Carolina retail sales in the prior year:

- 10 • In 2012, 2013, and 2014, three percent (3%);
- 11 • In 2015, 2016, and 2017, six percent (6%);
- 12 • In 2018, 2019, and 2020, ten percent (10%); and
- 13 • In 2021 and thereafter, twelve and one-half percent (12.5%).

14 Furthermore, each electric power supplier must comply with the requirements
15 of N.C.G.S. § 62-133.8(d), (e), and (f) (individually referred to as the "Solar
16 Set-Aside," "Swine Waste Set-Aside," and "Poultry Waste Set-Aside,"
17 respectively). These provisions of the overall REPS require that within the
18 Total Obligation described above, each electric power supplier is to ensure
19 that specific quantities of qualifying solar RECs, swine waste RECs, and

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 poultry waste RECs are also submitted for retirement. The Company
2 generally refers to its Total Obligation net of the three set-asides as its
3 “General Requirement.”

4 To comply with the Solar Set-Aside, each electric power supplier is required
5 to submit for retirement a volume of qualifying solar RECs equivalent to the
6 following percentages of its North Carolina retail sales in the prior year:

- 7 • In 2010 and 2011, two-hundredths of one percent (0.02%);
- 8 • In 2012, 2013, and 2014, seven-hundredths of one percent (0.07%);
- 9 • In 2015, 2016, and 2017, fourteen-hundredths of one percent (0.14%);
- 10 and
- 11 • In 2018 and thereafter, two-tenths of one percent (0.2%).

12 To comply with the Swine Waste Set-Aside, each electric power supplier is
13 also required to submit for retirement a volume of qualifying swine waste
14 RECs equivalent to its pro-rata share of total retail electric power sold in
15 North Carolina multiplied by the statewide, aggregate swine set-aside
16 requirement.³ The Company’s Swine Waste Set-Aside requirements, as most
17 recently modified by the Commission,⁴ are as follows:

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.

⁴ On October 16, 2017, the Commission issued an Order delaying the initial Swine Waste Set-Aside requirement until 2018 and delaying the scheduled increase in the poultry requirement by one year. *Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief* at 5, Docket No. E-100, Sub 113 (October 16, 2017).

- 1 • In 2017 and 2018, its pro-rata share of seven-hundredths of one
- 2 percent (0.07%) of the total retail electric power sold in North Carolina
- 3 in the year prior;
- 4 • In 2019, 2020, and 2021, its pro-rata share of fourteen-hundredths of
- 5 one percent (0.14%) of total retail electric power sold in North
- 6 Carolina in the year prior; and
- 7 • In 2022 and thereafter, its pro-rata share of two-tenths of one percent
- 8 (0.2%) of total retail electric power sold in North Carolina in the year
- 9 prior.

10 Finally, each electric power supplier is also to submit for retirement a volume
 11 of qualifying poultry waste-to-energy RECs equivalent to its pro-rata share of
 12 the aggregate poultry set-aside obligation. The Company's Poultry Waste
 13 Set-Aside requirements, as modified by the Commission, are as follows:

- 14 • In 2017, its pro-rata share of 170,000 MWh;
- 15 • In 2018, its pro-rata share of 700,000 MWh; and
- 16 • In 2019 and each year thereafter, its pro-rata share of 900,000 MWh.⁵

17 The Company's pro-rata share will be determined by averaging three years of
 18 historic retail sales.⁶ The resulting allocation will be held constant for three
 19 years. For example, in 2017 and 2018, the Company's pro-rata share will be

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 3 years and held constant for 3 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).

1 the average of 2013, 2014, and 2015 retail sales. The North Carolina
2 Renewable Energy Tracking System ("NC-RETS") administrator calculates
3 each electric power supplier's proportionate share of the Poultry Waste Set-
4 Aside Obligation using this methodology.⁷

5 **Q. Please describe Dominion Energy North Carolina's REPS compliance for**
6 **the prior compliance years.**

7 A. The Company has fully complied with its prior years' REPS compliance
8 obligations, including the 2015-2016 Poultry Waste Set-Aside compliance
9 obligation, the 2010-2016 Solar Set-Aside compliance obligation and the
10 2013-2016 Total Obligations, for the 2010 through 2016 REPS compliance
11 periods. The Commission approved the Company's 2011, 2012, 2013, 2014,
12 2015, 2016, and 2017 REPS Compliance Reports in Orders issued on
13 December 15, 2011,⁸ December 11, 2012,⁹ December 18, 2013,¹⁰ December
14 18, 2014,¹¹ December 16, 2015,¹² December 20, 2016,¹³ and December 13,
15 2017,¹⁴ respectively.

⁷ On August 5, 2016, the Commission approved the NC-RETS administrator's proposed Poultry Waste Set-Aside allocation in the *Order Establishing 2016, 2017, and 2018 Poultry Waste Set-Aside Requirement Allocation* issued in Docket No. E-100, Sub 113.

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).

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

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

1 **Q. Please discuss the Company's REPS obligations during the 2017**
2 **Compliance Period under review and during the 2019 Compliance**
3 **Period.**

4 A. For purposes of the 2017 compliance year, the Company will submit for
5 retirement a total of 239,213 RECs and 18,431 Energy Efficiency Credits
6 ("EECs") to meet its 2017 Total Obligation. Within this total, the Company
7 will submit for retirement 6,012 RECs to meet the Solar Set-Aside
8 requirement. The Company will also submit for retirement 5,628 RECs to
9 meet the Poultry Waste Set-Aside requirement. As noted above, the initial
10 year for compliance with the Swine-Waste Set Aside has been delayed
11 to 2018.

12 For purposes of the 2019 compliance year, the Company estimates that it will
13 be required to submit for retirement a total of 415,631 RECs to meet its 2019
14 Total Obligation. Within this total, the Company estimates that it will be
15 required to retire approximately 8,313 solar RECs, 2,910 swine waste RECs,
16 and 29,796 poultry waste RECs.

17 **Q. Has the Company complied with its Solar Set-Aside obligation for 2017?**

18 A. Yes. The Company met the 2017 Solar Set-Aside requirement of 6,012 solar
19 RECs. Pursuant to the NC-RETS Operating Procedures, the Company has
20 submitted for retirement 6,012 solar RECs. Specifically, the RECs to be used
21 for 2017 compliance have been transferred from the NC-RETS Dominion
22 Energy North Carolina Electric Power Supplier account to the Dominion
23 Energy North Carolina Compliance Sub-Account. As in past years, upon

1 completion of this regulatory proceeding and approval of the Company's
2 Compliance Report, the Commission will finalize retirement of the RECs.

3 **Q. Has the Company complied with its Poultry Waste Set-Aside obligation**
4 **for 2017?**

5 A. Yes. The Company has met the 2017 Poultry Waste Set-Aside requirement of
6 5,628 poultry waste RECs. Pursuant to the NC-RETS Operating Procedures,
7 the Company has submitted for retirement 5,628 poultry waste RECs. Again,
8 the RECs to be used for 2017 compliance have been transferred from the NC-
9 RETS Dominion Energy North Carolina Electric Power Supplier account to
10 the Dominion Energy North Carolina Compliance Sub-Account.

11 **Q. Has the Company complied with its General Requirement obligation for**
12 **2017?**

13 A. Yes. The Company has met the 2017 General Requirement of 246,004 RECs.
14 Pursuant to NC-RETS Operating Procedures, the Company has submitted for
15 retirement 227,573 RECs and 18,431 EECs in a similar manner to that
16 described above. Upon completion of this regulatory proceeding, the
17 Commission will finalize retirement of these RECs for 2017 compliance.

18 **Q. Is Dominion Energy North Carolina positioned to comply with its REPS**
19 **requirements in 2018?**

20 A. The Company is well-positioned to comply with its Solar Set-Aside, Poultry
21 Waste Set-Aside, Swine Waste Set-Aside, and General Requirements in

1 2018.¹⁵ However, the Company projects that it may not have sufficient in-
2 state Poultry Waste RECs to meet the Town of Windsor's in-state Poultry
3 Waste Set-Aside compliance obligation in 2018. The Company has executed
4 three (3) contracts that could each, individually, provide sufficient RECs in
5 2018. However, each supplier is significantly behind schedule due to delays
6 in securing sites, local community objections, and vendor equipment
7 shortfalls. The Company anticipates some Electric Power Suppliers may file a
8 joint motion to request a delay in the 2018 Swine Waste Set Aside and a
9 modification of the 2018 Poultry Waste Set Aside.

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

12 **A.** The Company continues to produce and procure RECs to satisfy its REPS
13 obligations. Specifically, the Company has taken the following actions:
14 (1) introduced additional energy efficiency programs that will generate
15 savings that can be counted towards the Company's REPS obligation;
16 (2) executed and continued negotiations for additional REC purchase
17 agreements with renewable facilities; (3) solicited renewable energy proposals
18 of various types, namely for swine waste-to-energy and poultry waste-to-
19 energy resources; (4) participated in joint procurement activities with other
20 electric power suppliers, including the Poultry Waste REC Buyers Group and
21 the Swine Waste REC Buyers Group; and (5) participated in the annual and

¹⁵ In 2018, the Company estimates that it will be required to submit for retirement 416,745 RECs to meet its Total Obligation. Within this total, the Company is also required to retire the following: 8,335 solar RECs, 2,918 swine waste RECs, and 23,174 poultry waste RECs.

1 bi-annual stakeholder meetings organized by the Public Staff to facilitate
2 discussion regarding Swine Waste and Poultry Waste Set-Aside compliance.
3 The Company intends to contract for Poultry and Swine REC supply in excess
4 of the initial Swine Waste and Poultry Waste Set-Aside compliance
5 requirements to compensate for the experienced high failure rate of animal
6 waste to energy projects. The Company will evaluate the banking or sale of
7 Swine or Poultry RECs in excess of its compliance obligations to manage any
8 significant inventories that may develop.

9 **Q. More specifically, what actions has Dominion Energy North Carolina**
10 **taken to procure or develop swine waste-to-energy resources to meet its**
11 **Swine Waste Set-Aside requirements?**

12 **A.** In an ongoing effort to comply with the Swine Waste Set-Aside, the Company
13 has attempted to obtain swine waste RECs from facilities in Virginia, North
14 Carolina, and across the continental United States. The Company has
15 contacted digester owners and operators, hog producers, and REC
16 marketers/brokers to determine if any swine waste RECs are available for
17 purchase by the Company.

18 Initially, the Swine Waste REC Buyers Group executed seven (7) long-term
19 contracts with a number of swine waste-to-energy developers. Four (4) of
20 these swine waste REC contracts were terminated in May and June 2012 due
21 to consistent failure by the developers to meet project milestones and to
22 demonstrate progress toward commercial operation. Because of these
23 terminations, the Company continues to conduct new searches for other swine

1 waste REC suppliers in North Carolina and across the nation. Dominion
2 Energy North Carolina has spent considerable time and effort in its attempts to
3 locate operational swine waste digesters in the continental United States.

4 In January 2016, the Company executed a contract with Orion Energy
5 Marketing & Consulting, Inc. ("Orion") for sufficient swine waste RECs to
6 meet compliance during the period 2017 to 2021. Orion made a partial
7 delivery of 2016 vintage RECs, four complete quarterly deliveries in 2017,
8 and two complete quarterly deliveries to date in 2018. Orion is currently
9 meeting all contractual obligations. The Company continues to work with the
10 Swine Waste REC Buyers Group to secure additional swine RECs that could
11 be banked for future use or used for compliance.

12 **Q. Also, what actions has Dominion Energy North Carolina undertaken to**
13 **procure or develop poultry waste-to-energy resources in order to satisfy**
14 **its Poultry Waste Set-Aside requirements?**

15 A. The Company has worked actively and diligently to comply with its Poultry
16 Set-Aside requirements for the Company and the Town of Windsor. The
17 Company, after searching the REC market for available in-state RECs,
18 concluded that joining the Poultry Waste REC Buyers Group was the most
19 prudent way to meet the Town of Windsor's Poultry Waste Set-Aside
20 requirement.

21 The Poultry Waste REC Buyers Group executed three (3) long-term poultry
22 waste contracts and the Company, as a part of this group, executed three (3)

1 long-term contracts for the Town of Windsor's in-state requirements. One
2 (1) of these contracts was terminated by mutual agreement with the supplier
3 in September 2013. The remaining long-term contracts will not produce any
4 significant poultry waste RECs until late 2018. At this time, the Company
5 believes it can meet the Town of Windsor's in-state Poultry Waste Set-Aside
6 requirement for 2018 only if the Commission delays the scheduled increase
7 from the initial 170,000 MWhs to 700,000 MWhs by one year, as it did for
8 compliance years 2015, 2016, and 2017. The Company also believes it is
9 likely to have sufficient RECs for the Town of Windsor's in-state Poultry
10 Waste Set-Aside requirement for 2019 and 2020.

11 The Company has sufficient poultry waste RECs in NC-RETS to comply
12 with both Dominion Energy North Carolina's and the Town of Windsor's
13 out-of-state Poultry Waste Set-Aside requirements for years 2017-2021.

14 **Q. Please also provide an update on the Company's efforts to comply with its**
15 **General Requirement in 2018.**

16 **A.** The Company is well-positioned to comply with its General Requirement, and
17 Total Obligation, in 2018. The Company's efforts to comply with the General
18 Requirement and Total Obligation include its continued implementation of
19 energy efficiency programs and the purchase of RECs from renewable energy
20 facilities. As allowed by Senate Bill 3, Dominion Energy North Carolina
21 continues to find that purchasing out-of-state RECs to achieve all aspects of
22 its Total Obligation is the most cost-effective REPS compliance option for the
23 Company and its customers.

1 The Company has sufficient RECs in NC-RETS to comply with both
2 Dominion Energy North Carolina's and the Town of Windsor's General
3 Requirements for 2018.

4 **Q. Please also provide an update on the Company's efforts to comply with its**
5 **Solar Set-Aside requirement in 2018.**

6 A. The Company is well-positioned to comply with its Solar Set-Aside
7 requirement in 2018. The Company has also purchased enough RECs to
8 comply with in-state Solar Set-Aside requirements for the Town of Windsor
9 in 2018-2021.

10 **Q. Is the Company continuing to execute additional REC purchase**
11 **agreements?**

12 A. Yes. The Company continues to execute additional REC purchase
13 agreements, as needed, to meet its future REPS General Obligation and set-
14 aside requirements. The Company addresses its REPS compliance strategy in
15 its 2018 REPS Compliance Plan, which was filed as an Appendix to the
16 Company's 2018 Integrated Resource Plan Update on May 1, 2018, in Docket
17 No. E-100, Sub 157.

18 **Q. What are the Company's costs associated with REPS compliance during**
19 **the EMF true up period and the upcoming Rate Period?**

20 A. Costs requested to be recovered include REC costs, as well as other
21 incremental REPS compliance expenses (e.g., Renewable Energy Tracking
22 System fees) (collectively, "Other Incremental Costs"). Both REC expenses

1 and Other Incremental Expenses incurred after June 30, 2018, will be trued up
2 and recovered as part of the Company's EMF in its 2019 REPS cost recovery
3 proceeding. My Exhibit 2, Schedule 1 presents the Company's reasonable
4 and prudently-incurred incremental REPS Compliance Costs during the EMF
5 True Up Period. My Exhibit 2, Schedule 2 presents the Company's forecasted
6 incremental REPS compliance costs projected to be incurred during the Rate
7 Period.

8 **Q. Has the Company made any purchases of renewable energy as part of its**
9 **compliance strategy?**

10 A. No. The Company has not made any bundled renewable energy purchases to
11 date. For this reason, 100 percent of the Company's incurred REC costs are
12 "incremental costs" recoverable through the REPS Rider. While the
13 Company presents its avoided cost capacity and energy rates in its 2018 REPS
14 Compliance Plan, these avoided costs were not required to determine the
15 incremental costs of Dominion Energy North Carolina's REC purchases for
16 recovery in this proceeding.

17 **Q. In addition to REC costs, please explain the Other Incremental Costs of**
18 **REPS compliance that the Company seeks to recover in this proceeding?**

19 A. My Exhibit 2, Schedules 1 and 2 identify the Other Incremental Costs
20 that the Company has incurred in association with REPS compliance.
21 Other Incremental Costs represent the Company's direct and non-labor
22 costs associated with REPS compliance, including the Company's
23 subscription to NC-RETS, internal REC tracking software costs, and

1 REC broker fees. The Company is not seeking to recover any
2 incremental internal labor costs associated with administration of
3 REPS compliance for either the EMF true up period or forecasted Rate
4 Period in this proceeding.¹⁶

5 The Company is also seeking to recover maintenance and fuel costs
6 associated with its NC Microgrid Project located at its Kitty Hawk
7 District Office. The Microgrid was dedicated and local operation
8 commenced in July 2014, and a small-scale fuel cell was added in July
9 2015. As further explained by Company Witness Moore, the
10 Company is requesting to recover the ongoing operations and
11 maintenance costs associated with the NC Microgrid Project during
12 the Rate Period.

13 As directed in the Commission's *2013 REPS Order*, the Company
14 provided its third and final NC Microgrid Project study phase report as
15 Appendix C to the Company's 2017 REPS Report.

16 **Q. Please describe Dominion Energy North Carolina's internal REC**
17 **Portfolio Management System noted above.**

18 A. The Company uses the Environmental Management Account ("EMA") RECs
19 system developed by APX to support the Company's REPS compliance
20 efforts. The EMA system is a REC asset management tool, which includes
21 multiple REPS compliance functionalities, including supporting the

¹⁶ The Company is reviewing how to most appropriately track and allocate such costs and may seek to recover such incremental internal REPS labor costs in the future.

1 Company's REC portfolio management and valuation, allowing connectivity
2 to NC-RETS, as well as managing post-trade settlement, credit, delivery, and
3 compliance and invoicing services.

4 **Q. What portion of the EMA costs is the Company requesting to recover**
5 **from its North Carolina customers as an incremental cost of REPS**
6 **compliance?**

7 A. Consistent with the approach since the *2014 REPS Order*, the Company has
8 allocated the regulated portion of EMA system costs between Virginia and
9 North Carolina because the EMA system will also be used for REC
10 management in the Company's Virginia jurisdiction. Company Witness
11 Robert C. Rice supports the two-state factor 3 allocation approach, which
12 allocates 5.0619 percent of the regulated portion of the EMA system costs and
13 maintenance fees to the North Carolina jurisdiction. Company Witness
14 Moore presents the EMA costs included for recovery on Page 2 of his
15 Schedule 1 for the Rate Period Rider RP revenue requirement, and Page 3 of
16 his Schedule 2 for the True-up Period EMF Rider RPE revenue requirement.

17 **Q. Do the costs presented in your Exhibit No. 2, Schedules 1 and 2 also**
18 **include REC costs incurred by the Company attributable to the Town of**
19 **Windsor?**

20 A. No. The incremental REPS costs presented in my Schedules 1 and 2 are net
21 of the REC costs incurred by the Company for the Town of Windsor's REPS
22 compliance. As I have noted previously, the Company is uniquely situated in
23 that it is statutorily authorized to use 100 percent out-of-state RECs to achieve

1 REPs compliance. In most instances, the Company has found purchasing out-
2 of-state RECs to be more cost effective than almost all other REPS
3 compliance options, even including using its utility-owned renewable
4 generating facilities for North Carolina REPS compliance.¹⁷ In contrast to the
5 Company, the Town of Windsor is required to obtain 75% of its RECs from
6 in-state renewable resources. Thus, the Company has been required to
7 purchase in-state RECs that are specifically designated for the Town of
8 Windsor's REPS compliance. For this reason, the Company has directly
9 assigned specific REC costs to the Town of Windsor that may be used for its
10 REPS compliance, and has excluded them from the REPS costs that the
11 Company is requesting to recover from the North Carolina retail jurisdiction
12 in this proceeding.

13 **Q. Are the REPS Costs incurred for the Town of Windsor's REPS**
14 **compliance presented in the Company's REPS Plan and Report?**

15 A. Yes.

16 **Q. Do the costs presented in your Exhibit No. 2, Schedules 1 and 2 include**
17 **non-REC costs incurred by the Company attributable to the Town of**
18 **Windsor?**

19 A. No. The Company's Other Incremental Costs requested to be recovered in
20 this proceeding do not include non-REC costs reasonably attributable to the

¹⁷ 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 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.

1 Town of Windsor. While the Town of Windsor's compliance obligation
2 accounts for a very small percent of Dominion Energy North Carolina's non-
3 REC costs of REPS compliance, the Town of Windsor is still responsible for
4 certain of these costs. The Company has either assigned or allocated these
5 costs to the Town of Windsor. For example, broker's fees attributable to REC
6 transactions for the Town of Windsor's REPS compliance are directly
7 assigned to the Town of Windsor. For any Other Incremental Costs not
8 directly assignable to the Town of Windsor, the Company has adopted NC-
9 RETS' approach of allocating its costs based upon each electric power
10 supplier's load-ratio share determined on an energy basis for the prior
11 calendar year. As the Town of Windsor is approximately 1.2 percent of the
12 Company's total load-ratio share, the Company feels that this percentage of its
13 Other Incremental Cost of REPS compliance should be attributable to the
14 Town of Windsor and should not be recovered from North Carolina retail
15 customers. My Exhibit 2, Schedules 1 and 2 specifically exclude Other
16 Incremental Costs assigned or allocated to the Town of Windsor.

17 **Q. Are you satisfied that the Company's REPS compliance costs incurred**
18 **during the EMF true up period have been prudently incurred, and that**
19 **the projected Rate Period costs will be prudently incurred?**

20 **A.** Yes. The Company has incurred and also projects to incur all of its costs
21 associated with REPS compliance in a prudent manner. For example,
22 Dominion Energy North Carolina has effectively evaluated its options and
23 negotiated with counter-parties to procure reasonably-priced out-of-state

1 RECs for compliance with the Solar, Swine Waste, and Poultry Waste Set-
2 Asides. This also holds true for the General Requirements RECs. Dominion
3 Energy North Carolina has significant experience and expertise within the
4 national REC market, and the Company has taken full advantage of its
5 statutory ability to procure its full REC requirements from out-of-state
6 facilities. As noted above, this strategy has resulted in very reasonable
7 compliance costs for our customers.

8 **Q. Does this conclude your testimony?**

9 A. Yes.

**BACKGROUND AND QUALIFICATIONS
OF
GEORGE E. HITCH**

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

I am currently a Senior Market Originator and part of the group responsible for managing the Company's regulated capacity, energy 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.

1 (WHEREUPON, Company Exhibit AJM-1,
2 Schedules 1 and 2, is marked for
3 identification as prefiled and
4 received into evidence.)
5 (Confidential pages filed under seal.)
6 (WHEREUPON, the prefiled direct
7 testimony of ALAN J. MOORE is
8 copied into the record as if given
9 orally from the stand.)
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

**DIRECT TESTIMONY
OF
ALAN J. MOORE
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 557**

**OFFICIAL COPY
OFFICIAL COPY**

**Aug 30 2018
Dec 05 2018**

1 **Q. Please state your name, business address, and position with Virginia**
2 **Electric and Power Company (“Dominion Energy North Carolina,” or**
3 **the “Company”).**

4 **A. My name is Alan J. Moore. I am a Regulatory Analyst III in the Regulatory**
5 **Accounting Department for Virginia Electric and Power Company doing**
6 **business in North Carolina as Dominion Energy North Carolina. My business**
7 **address is 701 East Cary Street, Richmond, Virginia 23219. A statement of**
8 **my background and qualifications is attached as Appendix A.**

9 **Q. Please describe your area of responsibility with the Company.**

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**
16 **(“N.C.G.S.”) § 62-133.8(h)(1) provides that the recoverable “incremental**
17 **cost” of REPS compliance includes “all reasonable and prudent costs incurred**
18 **by an electric power supplier” to comply with its REPS obligations “that are**

1 in excess of the electric power supplier's avoided costs other than those costs
2 recovered [through the demand side management rider] pursuant to N.C.G.S.
3 § 62-133.9." North Carolina Utilities Commission ("NCUC" or the
4 "Commission") Rule R8-67(e)(2) states that "[t]he cost of an unbundled
5 renewable energy certificate, to the extent that it is reasonable and prudently-
6 incurred, is an incremental cost and has no avoided cost component," and is,
7 therefore, eligible for full recovery through the REPS Rider. In addition to
8 recovery of all reasonable and prudent REPS compliance costs, N.C.G.S. §
9 62-133.8(h)(1)(b) provides that an electric power supplier may also recover
10 any investments in "research that encourages the development of renewable
11 energy, energy efficiency, or improved air quality, provided those costs do not
12 exceed one million dollars (\$1,000,000) per year."

13 The purpose of my testimony is to address the development of the Company's
14 REPS Riders RP and RPE updated revenue requirements in support of the
15 Company's Application. Specifically, my testimony presents: (i) the
16 Company's forecasted revenue requirement for the February 1, 2019 through
17 January 31, 2020 rate period ("Rate Period") to be recovered through the
18 Company's updated REPS rider, Rider RP; and (ii) the Company's revenue
19 requirement for the Company's experience modification factor ("EMF") true-
20 up period of July 1, 2017, through June 30, 2018 ("EMF True Up Period"), to
21 be recovered through the Company's updated REPS EMF rider, Rider RPE.
22 The Company's Application and the pre-filed direct testimony of Company
23 Witness George E. Hitch support the Company's request to recover all

1 reasonable and prudently-incurred REPS compliance costs incurred during the
2 EMF True Up Period and projected to be incurred during the Rate Period.

3 **Q. Why is the Rate Period proposed in this case different from previous**
4 **years?**

5 A. Pursuant to NCUC Rule R8-67(e)(3), the Rate Period is the same as the period
6 during which the rider established under Commission Rule R8-55, the
7 Company's fuel factor, is in effect. In previous years, the Company has
8 proposed Rider RP rates to be effective for a calendar year Rate Period,
9 consistent with the rate period previously used for fuel factor riders under
10 Rule R8-55. Based on discussions with the Public Staff following the
11 conclusion of the Company's 2017 rider proceedings, the Company is
12 proposing for updated Rider RP to be effective for a February 1, 2019 through
13 January 31, 2020 Rate Period. The Company is requesting this adjustment to
14 the annual Rate Period in order to extend the time for the Commission to issue
15 orders in the Company's three annual rider proceedings filed pursuant to
16 NCUC Rules R8-55, R8-67, and R8-69, respectively, and to then allow the
17 Company additional time to finalize rates and customer notices (including
18 allowing reasonable time for Public Staff review) prior to the updated annual
19 riders' effective date. The Company intends to continue to use a February 1
20 through January 31 rate period in future rider cases.

1 **Q. Mr. Moore, are you sponsoring any exhibits or schedules in connection**
2 **with your testimony?**

3 A. Yes. Company Exhibit AJM-1, consisting of Schedules 1-2 (Schedules 1-2
4 provided in public and confidential versions filed under seal), was prepared
5 under my supervision and direction, and is accurate and complete to the best
6 of my knowledge and belief. My Schedule 1 supports the projected Rate
7 Period revenue requirement for Rider RP. My Schedule 2 presents the
8 revenue requirement for EMF Rider RPE for the True Up Period.

9 **Q. Please summarize the key components of the Rate Period Rider RP**
10 **revenue requirement presented in this case.**

11 A. The testimony and schedules of Company Witness Hitch provide the
12 forecasted Rate Period incremental costs related to the Company's compliance
13 with the REPS requirements of N.C.G.S. § 62-133.8(b), (d), (e) and (f). I
14 have used these cost projections to calculate the forecasted revenue
15 requirement for the REPS Rider RP to be recovered during the Rate Period in
16 this proceeding.

17 **Q. Is it your understanding that the cost information used to develop the**
18 **revenue requirements in this proceeding includes only Dominion Energy**
19 **North Carolina's incremental retail REPS compliance expenses and does**
20 **not include costs associated with any wholesale customers' REPS**
21 **compliance?**

22 A. Yes. Although the Company does provide REPS compliance services for the
23 Town of Windsor, as described by Company Witness Hitch in his pre-filed

1 direct testimony, his Exhibit 2, Schedules 1 and 2 present the Company's
2 retail incremental REPS compliance costs, net of the costs assigned or
3 allocated to the Town of Windsor. Consistent with previous REPS rider
4 filings, the Company is not allocating any research costs associated with the
5 Company's microgrid research demonstration project located at the
6 Company's Kitty Hawk District Office ("NC Microgrid Project") to the Town
7 of Windsor.

8 **Q. Can you comment on the tax credits being refunded back to the**
9 **Company's customers?**

10 A. Yes. The final 20% amortization of the North Carolina Renewable Energy
11 Tax Credits ("RETC") was included in the 2017 REPS cost recovery
12 proceeding, in Docket No. E-22, Sub 544, for the rate year of January 1, 2018
13 through December 31, 2018. Therefore the current filing does not include any
14 RETC with the projected costs for the Rate Period.¹

15 **Q. Please describe the recovery of previously incurred costs during the EMF**
16 **True Up Period through the REPS EMF Rider RPE requested in this**
17 **case.**

18 A. As noted above, the Company is requesting to fully recover its reasonable and
19 prudently-incurred incremental REPS compliance costs incurred during the
20 July 1, 2017, through June 30, 2018 EMF True Up Period. As described by
21 Company Witness Hitch, the EMF True Up Period costs proposed to be

¹ N.C.G.S. § 105-129.16A. requires the NC RETC to be taken in five equal installments beginning with the taxable year in which the property is placed in service. The Company will credit the final one-fifth of the North Carolina RETC to retail customers through the current REPS Rider filing for the 2018 Rate Period.

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

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

8 A. As summarized on Page 1 of my Schedule 1, through Rider RP, the Company
9 is requesting recovery of projected REPS compliance costs of \$826,817. In
10 addition, the Company's EMF Rider RPE is presenting a revenue requirement
11 in the amount of \$278,308. The combined revenue requirements for the two
12 riders, Rider RP and Rider RPE totals \$1,105,125, representing a (\$80,600)
13 decrease over the rates currently in effect.

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

15 A. Yes, it does.

**BACKGROUND AND QUALIFICATIONS
OF
ALAN J. MOORE**

Alan J. Moore received his undergraduate degree from Longwood University with a Bachelor of Science in Business Administration with an Accounting concentration in 2007. Mr. Moore received his Master's of Business Administration degree from Longwood University in 2015. Mr. Moore was hired by the Company in 2007 as an Internal Auditor prior to joining the Regulatory Accounting Department in April 2014. His current position of Regulatory Analyst III in the Regulatory Accounting Department includes responsibility for analyzing and calculating revenue requirements for Dominion Energy North Carolina rate proceedings.

OFFICIAL COPY
OFFICIAL COPY

Aug 30 2018
Dec 05 2018

1 (WHEREUPON, Company Exhibit RCR-1
2 is marked for identification as
3 prefiled and received into
4 evidence.)
5 (WHEREUPON, the prefiled direct
6 testimony of ROBERT C. RICE is
7 copied into the record as if given
8 orally from the stand.)
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

**DIRECT TESTIMONY
OF
ROBERT C. RICE
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 557**

OFFICIAL COPY
OFFICIAL COPY

Aug 30 2018
Dec 05 2018

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 Robert C. Rice. I am Manager – Customer Rates for Dominion
5 Energy North Carolina. My business address is One James River Plaza, 701
6 East Cary Street, Richmond, Virginia 23219. A statement of my background
7 and qualifications is attached as 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:
12 (i) 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 REPS costs forecasted to be incurred during the proposed February 1, 2019 –
2 January 31, 2020 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, 2017 to June 30, 2018 EMF true up period
5 (“EMF True Up Period”), as described in the Company’s Application and the
6 prefiled 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, 2019.

9 **Q. Mr. Rice, are you sponsoring any exhibits or schedules in connection with**
10 **your testimony?**

11 A. Yes. Company Exhibit No. RCR-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

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

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

9 Further, if a customer has a service point on contiguous property with the
10 same service address, premise, and name, that account may be deemed to be
11 auxiliary and not subject to the REPS Riders RP and RPE. If the Company
12 identifies an account as an auxiliary account or if the Company is notified by
13 the customer that an account should be classified as an auxiliary account or
14 upon written notification from the customer, accounts meeting these criteria
15 will be coded in the billing system to allow the customer to be charged only a
16 single monthly REPS charge at the customer's primary service point. A
17 governmental customer for purposes of the application of the REPS charge is
18 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
23 fully recoverable from the Company's North Carolina jurisdiction, the
24 Company has also recognized that, in certain unique circumstances, capital
25 investments made by the Company at a system level that are allocated

1 between the Company's respective jurisdictions and are incremental to North
2 Carolina REPS compliance should also be allocated between the Company's
3 respective jurisdictions. The Company has determined that allocation of the
4 costs of its investment in the EMA system represents an instance where such
5 allocation is appropriate.

6 **Q. Would you please explain the method used to allocate these system-level**
7 **EMA costs between Virginia and North Carolina jurisdictional**
8 **customers?**

9 A. Consistent with the approach first approved by the Commission in Docket
10 E-22, Sub 503 and followed in the Company's most recent cost recovery
11 proceeding, the Company has used its two-state factor three allocation
12 approach to determine the proper amount of EMA system costs to be allocated
13 to the North Carolina jurisdiction. This is an allocation factor based upon
14 relative energy sales between the customers served in Virginia and customers
15 served in North Carolina and is based on the twelve months ending December
16 31, 2017. The North Carolina energy sales component excludes the Town of
17 Windsor. Using this approach, the Company's Rider RP revenue requirement
18 for the forecasted Rate Period includes an allocated 5.0619% share of the
19 regulated portion of EMA costs for recovery from the Company's North
20 Carolina jurisdictional customers.

1 **Q. Would you please discuss the calculation of the proposed Rider RPE to**
2 **collect for the EMF True Up Period?**

3 **A. Rider RPE is calculated using the Rider RPE revenue requirement provided**
4 **by Company Witness Alan J. Moore, as shown in my Schedule 1. My**
5 **Schedule 2 presents the allocation of the Rider RPE revenue requirement**
6 **amongst the Company's residential, commercial, and industrial customer**
7 **classes. In 2017, House Bill 589 revised the residential 2015 and thereafter**
8 **REPS cost cap from \$34 to \$27 effective July 1, 2017. There were no**
9 **changes to the commercial or industrial cost caps. The annual revenue cap**
10 **was calculated by multiplying the revised applicable cost caps for each**
11 **customer class by the Company's forecasted average adjusted number of**
12 **customer accounts for the 2019 rate year. A cost cap allocation factor was**
13 **then calculated by dividing the annual REPS revenue cap for each class by the**
14 **total annual revenue cap established for all classes. This allocation factor was**
15 **then used to allocate the Company's REPS compliance requirement to each of**
16 **the three customer classes.**

17 The Company also incorporated an adjustment to allocate Energy Efficiency
18 Credit ("EEC") RECs to the customer class that created the EEC savings. The
19 EEC RECs can only be used to meet the Company's General Obligation REC
20 requirement; therefore, schedule 2 and schedule 4 have been divided between
21 General Obligation REC costs and all costs other than for General Obligation
22 RECs. Once the EECs were deducted according to the class that created the
23 EE savings, a new adjusted allocation factor was calculated and the Rider

1 RPE revenue requirement from my Schedule 1 was allocated to the customer
2 classes based on the newly calculated allocation factor.

3 **Q. Would you please discuss the calculation of the monthly RPE per**
4 **customer charges?**

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

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

13 A. My Schedule 4 shows the total projected REPS compliance calculation for
14 Rider RP during the Rate Period. The methodology is the same as the
15 calculations for Rider RPE that I have just described, but uses forecasted EEC
16 savings, as well as a forecasted revenue requirement for the Rate Period. My
17 Schedule 1 shows the forecasted Rate Period revenue requirement to be
18 recovered through Rider RP. My Schedule 5 then calculates the monthly per-
19 account customer charge for each customer class. This charge is then adjusted
20 for the North Carolina regulatory fee to calculate the final per-account
21 customer charges that will be shown in the Rider RP.

1 **Q. Have you confirmed that the Company's proposed total monthly REPS**
2 **per-account customer charges to be recovered through Riders RP and**
3 **RPE do not exceed the per-account cost caps established in N.C.G.S. § 62-**
4 **133.8(h)(4)?**

5 **A. Yes. My Schedule 6 presents the total monthly REPS per-account customer**
6 **charges to be recovered through Riders RP and RPE. These per-account**
7 **charges do not exceed the caps on allowable per-account annual charge**
8 **established in N.C.G.S. § 62-133.8(h)(4), as amended by Session Law 2017-**
9 **192, and satisfy the requirements of Commission Rule R8-67(e)(9).**

10 **Q. Have you included the Company's proposed Riders RP and RPE in**
11 **Schedule 7 of your pre-filed direct testimony?**

12 **A. Yes. Schedule 7 comprises the tariff sheets showing the proposed Riders RP**
13 **and RPE, which, if approved as proposed, would be applicable for usage on**
14 **and after February 1, 2019.**

15 **Q. Are you submitting any proposed revised tariffs to be effective during**
16 **January 2019?**

17 **A. Yes. In order to effectuate the transition to a February 1 – January 31 Rate**
18 **Period, as further discussed in the direct testimony of Company Witness**
19 **Moore, the Company is proposing to maintain Rider RP as approved by the**
20 **Commission in the Company's previous REPS cost recovery proceeding, and**
21 **to reduce Rider RPE for all classes to zero during the period January 1 to**
22 **January 31, 2019. While this proposal does not require any revision to the**
23 **currently effective Rider RP tariff sheet, it does require that Rider RPE be**

1 revised to show a rate of zero. A tariff sheet showing that proposed change
2 for the month of January 2019 is shown at my Schedule 7, page 2 of 3.

3 **Q. Would you explain how the proposed Riders RP and RPE will impact**
4 **customers' bills?**

5 A. Per my Schedule 6, customers served on a residential rate will see a total
6 REPS charge on their bill of \$0.46 which is a decrease of \$0.03 per month
7 from the previous monthly REPS charge. Commercial customers will see a
8 \$2.48 charge per month on their bills resulting in a decrease of \$0.23 per
9 month from the previous monthly REPS charge, and an industrial customer
10 will see a charge of \$16.89 per month resulting in a decrease of \$1.23 per
11 month from the previous monthly REPS charge. Monthly billing schedules
12 will be prorated only if the number of days in the billing month is less than 26
13 or greater than 40.

14 **Q. Does this conclude your prefiled direct testimony?**

15 A. Yes, it does.

**BACKGROUND AND QUALIFICATIONS
OF
ROBERT C. RICE**

Robert C. Rice graduated from East Carolina University in 1987 with a Bachelor of Arts degree in Marketing. He was hired by Virginia Electric and Power Company in 1988. From 1988 to 1993, he worked in Commercial Operations in the Customer Service Department as a service representative designing overhead and underground facilities for residential, commercial and industrial customers. In 1993, he transferred to the Company's Energy Efficiency Department as an account manager for large industrial and governmental accounts. In 2001, Mr. Rice moved to the Company's rate department as a regulatory analyst. Effective January 1, 2009, he was appointed to Manager – Cost Allocation and Pricing managing the Load Research group. As of January 1, 2013, he was appointed to Manager – Cost Allocation and Pricing managing the non-traditional rate design group. As of October 1, 2014, he was appointed to Manager – Customer Rates group, the Load Research group and the Cost Allocation group.

Mr. Rice has previously presented testimony before the State Corporation Commission of Virginia and the North Carolina Utilities Commission.

1 (WHEREUPON, Company Supplemental
2 Exhibit GEH-2, Schedule 1, is
3 marked for identification as
4 prefiled and received into
5 evidence.)

6 (Confidential pages filed under seal.)

7 (WHEREUPON, the prefiled
8 supplemental testimony of
9 GEORGE E. HITCH is copied into the
10 record as if given orally from the
11 stand.)
12
13
14
15
16
17
18
19
20
21
22
23
24

**SUPPLEMENTAL TESTIMONY
OF
GEORGE E. HITCH
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 557**

OFFICIAL COPY

Oct 15 2018
Dec 05 2018

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 5000 Dominion
5 Boulevard, Glen Allen, Virginia. I am a Senior Market Originator for
6 Dominion Energy North Carolina and Dominion Energy Virginia.

7 **Q.** Are you the same George E. Hitch who previously prefiled direct
8 testimony, including schedules, in this proceeding?

9 **A.** Yes. I prefiled direct testimony, Company Exhibit GEH-1 which is the
10 Company's 2018 REPS Compliance Report for calendar year 2017 REPS
11 compliance, and Company Exhibit GEH-2 consisting of two schedules,
12 Schedule 1 and 2. (Company Exhibits GEH 1-2 provided in public version
13 and confidential version filed under seal).

14 **Q.** What is the purpose of your supplemental testimony in this proceeding?

15 **A.** The purpose of my supplemental testimony is to explain the Company's
16 implementation of three changes in the EMF True-up Period costs due to
17 corrected information for the brokerage costs, the revenue from excess
18 renewable energy credit ("REC") sales, and the allocation factor used to

1 calculate the EMA maintenance fee. These adjustments only affect the EMF
2 True-up Period used to develop Rider RPE. There are no changes to the
3 Company's RP rate period costs that were supported by my direct testimony
4 filed on August 30, 2018.

5 **Q. Mr. Hitch, are you sponsoring any exhibits or schedules in connection**
6 **with your supplemental testimony?**

7 A. Yes. Company Supplemental Exhibit GEH-2, consisting of updated
8 Schedule 1 (Schedule 1 provided in public version and confidential version
9 filed under seal), was prepared under my supervision and direction and is
10 accurate and complete to the best of my knowledge and belief. Updated
11 Schedule 1 updates Schedule 1, Page 1 of my Company Exhibit GEH-2 as
12 filed with my direct testimony, and continues to present the Company's
13 reasonable and prudently-incurred incremental REPS Compliance Costs
14 during the EMF True-up Period. No changes to my Company Exhibit GEH-1,
15 to Schedule 1, Page 2 of my Company Exhibit GEH-2, or to Schedule 2 of my
16 Company Exhibit GEH-2, are required.

17 **Q. First, can you comment on the corrected information for the brokerage**
18 **costs?**

19 A. Yes. In reviewing the Company's records to respond to a Public Staff data
20 request, I determined that the Company inadvertently double counted a \$2,000
21 broker invoice in its initial cost recovery application filed on August 30, 2018,
22 in this proceeding, resulting in overstated brokerage costs for the EMF period.
23 To correct this error, the Company is reducing the brokerage cost by \$2,000.

1 The correct EMF period brokerage cost, as shown in Company Supplemental
2 Exhibit GEH-2, is \$19,053.

3 **Q. Mr. Hitch, what change are you making to the credit for excess REC**
4 **sales?**

5 A. In reviewing the Company's records to respond to a Public Staff data request,
6 I determined that Schedule 1, Page 1 of my Company Exhibit GEH-2
7 inadvertently only recognized the margin on excess REC sales associated with
8 the sale of 225,953 out-of-state wind RECs in April 2018, rather than the total
9 revenue generated by the excess REC sales associated with this transaction.
10 Company Supplemental Exhibit GEH-2 reflects the total sales revenue of
11 \$103,726 ($40,941 * \$0.50 = \$20,470.50$ and $185,012 * \$0.45 = \$83,255.40$).

12 **Q. Mr. Hitch, are you presenting any other changes to the updated EMF**
13 **revenue requirement at this time?**

14 A Yes. In preparing this Supplemental Testimony, I discovered that in
15 Schedule 1, Page 1 of my Company Exhibit GEH-2, I used the wrong
16 allocation factor. There is a \$22 increase to the EMA maintenance fee to
17 reflect the application of the 5.0619 percent allocation factor that was used in
18 calculating the Rate period Rider RP revenue requirement and the True-up
19 Period EMF Rider RPE revenue requirement, but not used in Company
20 Exhibit GEH-2 Schedule 1, which my Company Supplemental Exhibit GEH-2
21 updates.

1 **Q. What is the result of the three changes identified above?**

2 **A. The result of the three changes I have discussed is an updated EMF period**
3 **total cost of \$798,588 as calculated in my Company Supplemental Exhibit**
4 **GEH-2, which reflects a \$69,764 decrease from the original amount of**
5 **\$868,352 calculated in my Company Exhibit GEH-2 Schedule 1 as filed on**
6 **August 30, 2018.**

7 **Q. Does this conclude your supplemental testimony?**

8 **A. Yes, it does.**

1 (WHEREUPON, Company Supplemental
2 Exhibit AJM-1, Schedule 2, is
3 marked for identification as
4 prefiled and received into
5 evidence.)

6 (Confidential pages filed under seal.)

7 (WHEREUPON, the prefiled
8 supplemental testimony of ALAN J.
9 MOORE is copied into the record as
10 if given orally from the stand.)
11
12
13
14
15
16
17
18
19
20
21
22
23
24

**SUPPLEMENTAL TESTIMONY
OF
ALAN J. MOORE
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 557**

OFFICIAL COPY
OFFICIAL COPY

Oct 15 2018
Dec 05 2018

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 Alan J. Moore. I am a Regulatory Analyst III in the Regulatory
5 Accounting Department for Dominion Energy North Carolina. My business
6 address is 701 East Cary Street, Richmond, Virginia 23219.

7 **Q.** Are you the same Alan J. Moore who previously prefilled direct
8 testimony, including schedules, in this proceeding?

9 **A.** Yes. I prefilled direct testimony and Company Exhibit AJM-1, consisting of
10 Schedules 1-2 on August 30, 2018, in support of the Company's Application
11 to recover the reasonable and prudently incurred cost of its North Carolina
12 Renewable Energy and Efficiency ("REPS") incremental costs, through its
13 updated Rider RP, as well as the Company's experience modification factor
14 ("EMF") rider, Rider RPE ("Application").

15 **Q.** What is the purpose of your supplemental testimony in this proceeding?

16 **A.** The purpose of my supplemental testimony is to support a change in the Rider
17 RPE revenue requirement due to corrected information regarding Renewable
18 Energy Credit ("REC") sales and broker fees, as further discussed in the

1 supplemental testimony of Company Witness George E. Hitch, and regarding
2 the July 2017 Rider RP revenue. The adjustments due to this corrected
3 information only affect the EMF Rider RPE revenue requirement. There is no
4 change to the Company's revenue requirement for Rider RP that was
5 supported by my direct testimony filed on August 30, 2018.

6 **Q. Mr. Moore, are you sponsoring any exhibits or schedules in connection**
7 **with your supplemental testimony?**

8 A. Yes. Company Supplemental Exhibit AJM-1, consisting of updated
9 Schedule 2 (provided in public version and confidential version filed under
10 seal), was prepared under my supervision and direction and is accurate and
11 complete to the best of my knowledge and belief. My Company
12 Supplemental Exhibit AJM-1 presents the updated revenue requirement for
13 EMF Rider RPE for the EMF true-up period.

14 **Q. First, can you comment on the corrected information for the sale of**
15 **RECs?**

16 A. Yes. In responding to the Public Staff's data requests, the Company's review
17 of its records identified that in April 2018 there was a sale of 225,953
18 previously purchased RECs, and while the gain on this sale was included in
19 the true-up calculation, a reversal of the purchase price was excluded. As a
20 result the total costs included in Company Exhibit AJM-1, Schedule 2, Page 2
21 of 3, Line 1, were overstated by \$67,786. The corrected amount is shown on
22 my Company Supplemental Exhibit AJM-1, Schedule 2, Page 2 of 3.

1 **Q. Next, can you comment on the corrected information for the broker fees?**

2 A. Yes. In responding to the Public Staff's data requests, the Company's review
3 of its records identified that brokerage fees of \$2,000 were charged twice to
4 the true-up costs. As a result, the costs shown on Company Exhibit AJM-1,
5 Schedule 2, Page 2 of 3, Line 1 were overstated by \$2,000. The corrected
6 amount is shown on my Company Supplemental Exhibit AJM-1, Schedule 2,
7 Page 2 of 3.

8 **Q. Next, can you comment on the corrected information for the Rider RP**
9 **revenues?**

10 A. Yes. In responding to a Public Staff data request, the Company's review of its
11 records identified that revenues used for July 2017 were misstated. As a result
12 the revenues shown on Company Exhibit AJM-1, Schedule 2, Page 1 of 3,
13 Line 2 were overstated by \$4,367. The corrected amount is shown on my
14 Company Supplemental Exhibit AJM-1, Schedule 2, Page 1 of 3.

15 **Q. Are there any changes to Page 3 of your Company Exhibit AJM-1,**
16 **Schedule 2?**

17 A. No, but I am including Page 3 of Company Exhibit AJM-1, Schedule 2 in my
18 Company Supplemental Exhibit AJM-1 for the purpose of presenting a
19 complete updated Schedule to the Commission.

1 **Q. Mr. Moore, do the corrected REC sales, broker fees, and Rider RP**
2 **revenues that you discuss above change the revenue requirement of Rider**
3 **RPE that was presented in your direct testimony?**

4 A. Yes. I have updated the EMF Rider RPE true-up revenue requirement to
5 correct for the updated REC sales, brokerage fees, and Rider RP revenues.
6 The changes due to both the RECs sales and brokerage fees adjustment can be
7 found on Page 2 of 3, Line 1, and the update to the July 2017 Rider RP
8 revenues can be found on Page 1 of 3, Line 2 of my Company Supplemental
9 Exhibit AJM-1, Schedule 2, respectively. These changes resulted in an
10 overall Rider RPE revenue requirement under-recovery position of \$212,889,
11 as shown at Page 1 of 3, Line 3 of my Supplemental Schedule 2. This under-
12 recovery amount is \$65,419 less than the revenue requirement under-recovery
13 position of \$278,308 presented in my Direct Schedule 2.

14 **Q. Mr. Moore, are you presenting any other changes to the development of**
15 **the updated Rider RPE revenue requirement at this time?**

16 A. No, I am not.

17 **Q. What is the result of the changes identified above?**

18 A. The updated Rider RPE revenue requirement under-recovery of \$212,889 as
19 calculated in my Supplemental Schedule 2 reflects a \$65,419 decrease to the
20 original Rider RPE under-recovery amount of \$278,308. As there is no
21 change to the Rider RP revenue requirement, this decrease results in a total
22 combined revenue requirement for Rider RP and Rider RPE of \$1,039,706,
23 representing a (\$146,019) decrease over the rates currently in effect.

1 **Q. Has the Company developed final rates to reflect the updates to the Rider**
2 **RPE revenue requirement described above?**

3 **A. Yes. Company Witness Robert C. Rice has developed final rates to reflect the**
4 **updates to the Rider RPE revenue requirement. These rates will be filed in**
5 **Company Witness Rice's Supplemental Testimony and Exhibit.**

6 **Q. Does this conclude your supplemental testimony?**

7 **A. Yes, it does.**

1 (WHEREUPON, Company Supplemental
2 Exhibit RCR-1, Schedules 1 - 7, is
3 marked for identification and
4 received into evidence.)

5 (WHEREUPON, the prefiled
6 supplemental testimony of ROBERT
7 C. RICE is copied into the record
8 as if given orally from the
9 stand.)

**SUPPLEMENTAL TESTIMONY
OF
ROBERT C. RICE
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 557**

OFFICIAL COPY
OFFICIAL COPY

Oct 15 2018
Dec 05 2018

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 Robert C. Rice. I am Manager – Customer Rates for Dominion
5 Energy North Carolina. My business address is One James River Plaza, 701
6 East Cary Street, Richmond, Virginia 23219.

7 **Q.** Did you previously file direct testimony and an exhibit in this
8 proceeding?

9 **A.** Yes. I prefiled direct testimony and Company Exhibit RCR-1, consisting of
10 Schedules 1-7 on August 30, 2018, in support of the Company’s Application
11 to recover all reasonable and prudent incremental Renewable Energy and
12 Energy Efficiency Portfolio Standard (“REPS”) compliance costs through its
13 updated Rider RP, as well as the Company’s experience modification factor
14 (“EMF”) rider, Rider RPE (“Application”).

15 **Q.** What is the purpose of your supplemental testimony in this proceeding?

16 **A.** The purpose of my supplemental testimony is to support the updated Rider
17 RPE revenue requirement presented by Company Witness Alan J. Moore and
18 to develop updated Rider RPE rates, to be effective for usage on and after

1 February 1, 2019. I will also discuss the impact the revised rates will have on
2 customer bills.

3 **Q. Mr. Rice, are you sponsoring any exhibits or schedules in connection with**
4 **your supplemental testimony?**

5 A. Yes. Company Supplemental Exhibit RCR-1, consisting of updated
6 Schedules 1 through 7, was prepared under my supervision and is accurate
7 and complete to the best of my knowledge and belief.

8 **Q. Please summarize the revised rates that the Company is requesting the**
9 **Commission approve through this supplemental filing.**

10 A. In addition to the Rider RP rates that were proposed in its August 30, 2018
11 Application, the Company requests Commission approval of updated RPE
12 rates as follows (all shown on a dollars per account basis):

<u>Customer Class</u>	<u>Rider RP</u> Customer Class Rate (unchanged)	<u>Rider RPE</u> Customer Class Rate (updated)	<u>Total Riders RP & RPE</u> Customer Class Rate (updated)
Residential	\$ 0.34	\$0.09	\$ 0.43
Commercial	\$ 1.88	\$0.47	\$ 2.35
Industrial	\$ 12.63	\$3.26	\$15.89

13 These proposed Rider RP and Rider RPE rates are requested to be in effect for
14 the 12-month period from February 1, 2019, through January 31, 2020, the
15 proposed Rate Period.

16 **Q. Have you included the Company's updated Rider RPE in your**
17 **Supplemental Schedule 7?**

1 A. Yes. Page 1 of my Supplemental Schedule 7 to Company Supplemental
2 Exhibit RCR-1 presents an updated tariff sheet for the updated Rider RPE,
3 which, if approved as proposed, would be applicable for usage on and after
4 February 1, 2019.

5 **Q. Do the changes you have described affect either Rider RP or the Rider**
6 **RPE for January 2019?**

7 A. No. The changes I have described impact only the Rider RPE rates for the
8 Rate Period of February 1, 2019, through January 31, 2020. I am including
9 the unchanged tariff sheets for the January 2019 Rider RPE and for Rider RP
10 at Pages 2 and 3 of my Supplemental Schedule 7 for ease of reference,
11 however, in addition to the updated Rate Period Rider RPE tariff sheet at Page
12 1 of Supplemental Schedule 7.

13 **Q. Does this conclude your supplemental testimony?**

14 A. Yes, it does.

1 (WHEREUPON, Company Second
2 Supplemental Exhibit GEH-1 is
3 marked for identification as
4 prefiled and received into
5 evidence.)

6 (Confidential pages filed under seal.)

7 (WHEREUPON, the prefiled second
8 supplemental testimony of
9 GEORGE E. HITCH is copied into the
10 record as if given orally from the
11 stand.)
12
13
14
15
16
17
18
19
20
21
22
23
24

**SECOND SUPPLEMENTAL TESTIMONY
OF
GEORGE E. HITCH
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 557**

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 5000 Dominion
5 Boulevard, Glen Allen, Virginia. I am a Senior Market Originator for
6 Dominion Energy North Carolina and Dominion Energy Virginia.

7 **Q.** Are you the same George E. Hitch who previously prefled direct
8 testimony, including schedules, and supplemental testimony in this
9 proceeding?

10 **A.** Yes. I prefled direct testimony and Company Exhibit GEH-1 which is the
11 Company's 2018 REPS Compliance Report for calendar year 2017 REPS
12 compliance and Company Exhibit GEH-2 consisting of two schedules,
13 Schedule 1 and 2. (Exhibits GEH 1-2 provided in public and confidential
14 versions filed under seal). I also filed supplemental testimony and Company
15 Supplemental Exhibit GEH-2 consisting of an updated Schedule 1.

1 **Q. What is the purpose of your second supplemental testimony in this**
2 **proceeding?**

3 A. The purpose of my second supplemental testimony is to support a change to
4 Figure 1.3 of my Company Exhibit GEH-1 that the Company is making to
5 recognize the effects of adjustments made to the Company's Evaluation,
6 Measurement & Verification ("EM&V") Report filed with the Commission on
7 October 25, 2018, in Docket No. E-22, Sub 545. The corrected EM&V Report
8 adjusted the kWh/year savings associated with the Company's Residential
9 Retail LED Lighting Program for the 2017 compliance year, which resulted in
10 a decrease of 488 energy efficiency credits ("EECs") for 2017. In order to
11 reflect that adjustment for purposes of the Company's 2018 REPS
12 Compliance Report, DENC will place 488 additional general RECs in its NC-
13 RETS 2017 compliance sub-account to account for the decrease of 488 EECs.

14 **Q. Mr. Hitch, are you sponsoring any exhibits or schedules in connection**
15 **with your rebuttal testimony?**

16 A. Yes. Company Second Supplemental Exhibit GEH-1, consisting of page 3 of
17 Company Exhibit GEH-1 with an updated Figure 1.3 (provided in public
18 version and confidential version filed under seal), was prepared under my
19 supervision and direction and is accurate and complete to the best of my
20 knowledge and belief.

21 **Q. Mr. Hitch, are you presenting any changes to the rates or revenue**
22 **requirements at this time?**

1 A. No, the Company is not proposing any changes to the rates or revenue
2 requirements.

3 **Q. What effect does the change identified above have on the Company's cost**
4 **recovery in this proceeding?**

5 A. The change I have described above has no effect on the Company's cost
6 recovery request in this case.

7 **Q. Does this conclude your second supplemental testimony?**

8 A. Yes, it does.

1 COMMISSIONER CLODFELTER: And, in addition,
2 the Application will be identified and received into
3 evidence as DENC Exhibit 1. The letter of
4 November 2nd will be identified and received into
5 evidence as DENC Exhibit 2.

6 MS. KELLS: Thank you.

7 COMMISSIONER CLODFELTER: The motion is
8 granted.

9 (WHEREUPON, Exhibit DENC 1 and
10 Exhibit DENC 2 are marked for
11 identification and received into
12 evidence.)

13 COMMISSIONER CLODFELTER: Mr. Dodge.

14 MR. DODGE: Thank you, Chairman -- or
15 Commissioner Clodfelter. Excuse me. The Public Staff
16 requests that the prefiled affidavits of Public Staff
17 Witness Jenny Li consisting of four pages and an
18 Appendix filed on October 19, 2018; and Evan Lawrence
19 consisting of six pages and an Appendix, as revised on
20 October 30, 2018, be received into evidence and given
21 the same effect as if given orally from the stand.

22 COMMISSIONER CLODFELTER: Without objection,
23 that motion is granted.

24 MR. DODGE: Thank you.

1 (WHEREUPON, the prefiled Affidavit
2 and Appendix of JENNY X. LI is
3 copied into the record as if given
4 orally from the stand.)
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-22, SUB 557

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)

AFFIDAVIT OF
JENNY X. LI

STATE OF NORTH CAROLINA

COUNTY OF WAKE

I, Jenny X. Li, first being duly sworn, do depose and say:

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

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

OFFICIAL COPY
OFFICIAL COPY

Oct 19 2018
Dec 05 2018

The purpose of my affidavit is to present the results of the Public Staff's investigation of the REPS EMF rider proposed by Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina (DENC or the Company), in this proceeding, based on incremental REPS compliance costs incurred and revenues recorded from July 1, 2017 through June 30, 2018 (REPS EMF period or test period).

On August 30, 2018, DENC filed its application, testimony and exhibits related to the incremental costs incurred for compliance with the REPS. DENC witness Rice presented the Company's proposed annual and monthly REPS EMF Rider (Rider RPE) increments for each of the North Carolina retail customer classes. Company Exhibit No. RCR-1, Schedule 3 set forth the proposed annual EMF increment riders of \$1.38, \$7.58, and \$51.10 per retail customer account, excluding the regulatory fee, for the residential, commercial, and industrial classes, respectively. Also set forth on Company Exhibit No. RCR-1, Schedule 3 are the proposed monthly EMF increment riders of \$0.12, \$0.60, and \$4.26 per retail customer account, excluding the regulatory fee, for the residential commercial, and industrial classes, respectively.

On October 15, 2018, DENC filed the Supplemental Testimony and Exhibits of George E. Hitch, Alan J. Moore, and Robert C. Rice. The purpose of DENC's supplemental testimony is to implement three changes in the EMF True-up period costs to correct information for the brokerage costs, the revenue from excess renewable energy credit ("REC") sales, and the allocation factor used to calculate the EMA maintenance fee. As noted by Company witness Hitch, these

adjustments only affect the EMF True-up period used to develop Rider RPE. DENC witness Rice Supplemental Testimony and Exhibit RCR-1, Schedule 3 presents the Company's proposed annual and monthly REPS EMF Rider (Rider RPE) increments for each of the North Carolina retail customer classes, based on (1) the revised incremental REPS compliance costs of \$108,810 for the residential class, \$101,733 for the commercial class, and \$2,347 for the industrial class, and (2) the customer accounts totaling 103,079 for the residential class, 17,565 for the commercial class, and 60 for the industrial class. The proposed revised annual EMF increment riders are \$1.06, \$5.79, and \$39.11 per retail customer account, excluding the regulatory fee, for the residential, commercial, and industrial classes, respectively. These rates are calculated by dividing the REPS EMF Rider RPE under-recovery amount by the customer count for that class. The proposed revised monthly EMF increment riders are \$0.09, \$0.47, and \$3.26 per retail customer account, whether excluding or including the regulatory fee for the residential, commercial, and industrial classes, respectively.

The Public Staff's investigation included procedures intended to evaluate whether the Company properly determined its per books incremental compliance costs and revenues, and complied with the annual REPS revenue cap during the test period. These procedures included a review of the Company's filings and other Company data provided to the Public Staff. Additionally, the procedures included a review of certain specific types of expenditures impacting the Company's costs, including research and development costs. Performing the

Public Staff's investigation also required the review of responses to written data requests.

Based upon the Public Staff's investigation, I am recommending that DENC's proposed revised annual and monthly REPS EMF increment riders for each customer class, as set forth on Company Supplemental Exhibit RCR-1, Schedule 3, be approved. These amounts produce annual increment REPS EMF riders of \$1.06, \$5.79, and \$39.11 per customer account, excluding the regulatory fee, and proposed monthly riders of \$0.09, \$0.47, and \$3.26 per customer account, whether excluding or including the regulatory fee for the residential, commercial, and industrial classes, respectively.

This completes my affidavit.

Jenny Li

Jenny X. Li

Sworn to and subscribed before me

On this the 19th day of October, 2018.

Cleo L. Ackerman

(Printed Name)

Cleo L. Ackerman

Notary Public

Cleo L. Ackerman
NOTARY PUBLIC
WAKE COUNTY, N.C.
My Commission Expires 01-08-2023

My Commission Expires: 1-8-2023

APPENDIX A

Jenny X. Li

I graduated from North Carolina State University with a Bachelor of Science degree in Accounting.

I joined the Public Staff Accounting Division in August 2016 as a Staff Accountant. I am responsible for the performance of the following activities: (1) the examination and analysis of testimony, exhibits, books and records, and other data presented by utilities and other parties under the jurisdiction of the Commission or involved in Commission proceedings; and (2) the preparation and presentation to the Commission of testimony, exhibits, and other documents in those proceedings.

Since joining the Public Staff, I have filed an affidavit in Duke Energy Progress, LLC (DEP) fuel case. I have also assisted on several electric cases and performed reviews in Duke Energy Carolinas, LLC (DEC), Duke Energy Progress, LLC (DEP) rate cases and fuel cases; DEC's Existing DSM Program Rider and BPM/NFPTP Rider; Western Carolina University's PPA Rider and New River Light and Power Company's PPA Factor.

Prior to joining the Public Staff, I was employed by MDU Enterprises Inc. and Neusoft America Inc. My duties there varied from examining various financial statements to supervising accounting and assisting external audits.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

(WHEREUPON, the prefiled Affidavit
and Appendix of EVAN D. LAWRENCE
is copied into the record as if
given orally from the stand.)

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-22, SUB 557

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of
Application of 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)

AFFIDAVIT OF
EVAN D. LAWRENCE

Oct 30 2018
Dec 05 2018

STATE OF NORTH CAROLINA

COUNTY OF WAKE

I, Evan D. Lawrence, being first duly sworn, do depose and say:

I am a Utilities Engineer in the Electric Division of the Public Staff – North Carolina Utilities Commission. I have attached, as Appendix A, a summary of my education and experience.

The purpose of my affidavit is to present the Public Staff's analysis and recommendations with respect to the Application for Approval of Renewable Energy and Energy Efficiency Portfolio Standard (REPS) Cost Recovery Rider and 2018 REPS Compliance Report filed by Virginia Electric and Power Company d/b/a Dominion Energy North Carolina (DENC or Company) on August 30, 2018.

G.S. 62-133.8(h) provides that electric power suppliers may recover their reasonable and prudently incurred incremental costs of compliance with the REPS through an annual rider charge. Pursuant to Commission Rule R8-67(e)(4), the REPS rider will be collected, to the extent practical, over the same period as the

utility's fuel cost rider. Rule R8-67 also provides for a REPS experience modification factor (REPS EMF) rider, which is utilized to true up the recovery of the revenues realized under the REPS rider to the reasonable and prudently incurred incremental REPS compliance costs actually experienced during the test period established for each annual rider proceeding.

For 2017 compliance, DENC acquired renewable energy certificates (RECs), but not RECs and energy bundled together. DENC provides REPS compliance and reporting services for the Town of Windsor (Windsor) and maintains separate accounts for itself and Windsor in the North Carolina Renewable Energy Tracking System (NC-RETS). None of the costs of RECs assigned to Windsor were included in DENC's requested REPS cost recovery riders.

2018 REPS Compliance Report

The 2018 REPS Compliance Report was filed as Company Exhibit No. GEH-1 in DENC's application and includes REPS compliance activities for the calendar year 2017. For 2017, each electric power supplier needed to retire enough RECs to equal six percent (6%) of jurisdictional retail megawatt-hour (MWh) sales for 2016.¹ To reach compliance DENC and Windsor were required to retire 257,644 and 2,939 RECs, respectively.

Pursuant to G.S. 62-133.8(b)(2)(c), DENC may use energy efficiency certificates (EECs) to meet no more than twenty five percent (25%) of its total

¹ 2016 North Carolina jurisdictional retail sales for DENC were 4,294,053 MWh. 2016 retail sales for Windsor were 48,968 MWh.

requirement. This limitation on the use of EECs to meet the total requirement does not apply to municipal suppliers such as Windsor. In addition, DENC is allowed to obtain all of its RECs from out-of-state sources,² whereas Windsor must obtain at least 75% of its RECs from in-state sources.³ In response to Public Staff data requests in previous years, DENC stated that it determines the service life of an energy efficiency measure for REPS compliance purposes based on the measure lives the Company uses when filing for approval of an energy efficiency (EE) or demand side management program. As an example, the Company has previously noted its Application for Approval of the Small Business Improvement Program, as filed on July 29, 2016 in Docket No. E-22, Sub 538, which presents measure lives of 14 years.

DENC and Windsor pursued retirement of a total of 248,809 general requirement⁴ RECs and EECs during 2017. For itself, DENC included 228,061 RECs and 17,943 EECs from its portfolio of in-state EE programs approved pursuant to G.S. 62-133.9, for a total of 246,004. For Windsor, DENC requested retirement of 2,805 general requirement RECs, with greater than 75% of Windsor's total RECs coming from in-state sources. Windsor did not use any EECs for compliance.

² G.S.-62-133.8(b)(2)(e).

³ G.S.-62-133.8(b)(2)(d).

⁴ The RECs or EECs that an electric power supplier is required to provide under G.S. 62-133.8(b) or (c), exclusive of those required by the set-asides in G.S. 62-133.8(d), (e), and (f), are customarily referred to as the "general requirement."

With respect to the solar requirements established by G.S. 62-133.8(d), both DENC and Windsor were required to pursue retirement of solar RECs amounting to 0.14% of the 2016 North Carolina retail sales. DENC retired a total of 6,081 solar RECs, 6,012 for itself and 69 for Windsor, in compliance with the statutory requirements.

DENC and Windsor were required to pursue retirement of their pro-rata share of the 170,000 poultry waste RECs required by G.S. 62-133.8(f).⁵ DENC retired a total of 5,693 poultry RECs, 5,628 for itself and 65 for Windsor, in compliance with the statutory requirements.

The requirement to obtain RECs derived from swine waste was delayed for a year by Commission order dated October 16, 2017, in Docket No. E-100, Sub 113.

Based on my review, I recommend that the Commission approve the 2018 REPS Compliance Report for DENC and Windsor.

REPS Cost Recovery

The total REPS charge is based on the Rider RP, which are the costs projected for the billing period (February 1, 2019 through January 31, 2020), and the Rider RPE, which is the under recovery from the Experience Modification Factor (EMF) period (July 1, 2017 through June 30, 2018).

⁵ By Order dated October 16, 2017, in Docket No. E-100, Sub 113, the Commission, exercising the authority granted to it under G.S. 62-133.8(i)(2), reduced the statewide poultry waste requirement for 2018 from 900,000 to 700,000.

I reviewed the estimated incremental costs associated with DENC's proposed REPS Rider RP in this case. Those costs are estimated to be \$826,817 and include costs to be incurred during the billing period related to: (1) the cost of RECs to be purchased, (2) research costs, and (3) other incremental costs (i.e., administrative costs, broker fees, Environmental Management Account (EMA) costs). DENC included only costs associated with RECs or with its management of REPS compliance for Windsor. Consistent with its allocation methodology used in the last REPS cost recovery proceeding, DENC allocated 5.0619% of the costs related to the EMA system to its North Carolina retail jurisdiction. This allocation is based on the level of energy sales assigned to the jurisdictions.

All of the estimated research costs to be incurred during the billing period are associated with DENC's Microgrid demonstration project at the Company's Kitty Hawk District Office.

Public Staff Accountant Li has reviewed DENC's compliance costs for the test period and its proposed EMF charge, Rider RPE, and finds them to be reasonable.

The estimated costs of RECs to be purchased, research costs, and other incremental costs appear to be reasonable.

DENC requested approval of the following monthly charges for the forecast rate and EMF rate, including the regulatory fee:

Customer Class	Forecast Rate (Rider RP)	EMF Rate (Rider RPE)	Total REPS Rate
Residential	\$0.34	\$0.09	\$0.43
General	\$1.88	\$0.47	\$2.35
Industrial	\$12.63	\$3.26	\$15.89

Based on my review of the application, supporting testimony, supplemental testimony, amending costs during the EMF period, and second supplemental testimony and revised exhibit GEH-1, amending the number of general obligation RECs and EECs used for compliance, and the review of the testimony of Public Staff witness Li, I recommend approval of DENC's proposed rates.

This completes my affidavit.

Eván Lawrence
Eván Lawrence

Sworn to and subscribed before me
On this the 30th day of October, 2018.

JOANNE M BERUBE
(Printed Name)

Joanne M Berube
(Notary Public)

Joanne M. Berube
NOTARY PUBLIC
WAKE COUNTY, N.C.
My Commission Expires 12-17-2022.

My Commission Expires: 12/17/2022

APPENDIX A

Evan D. Lawrence

I graduated from East Carolina University in Greenville, North Carolina in May of 2016 earning a Bachelor of Science degree in Engineering and a concentration in Electrical Engineering. I started my current position with the Public Staff in September of 2016. Since that time my duties and responsibilities have focused around the review of renewable energy projects, interconnection standards, rate design, and renewable energy portfolio standards compliance. I have filed an affidavit in the DENC 2017 REPS case, testimony in New River Light and Power's (NRLP) most recent general rate case, assisted with Duke Energy Carolinas (DEC) and Duke Energy Progress' (DEP) REPS cases, as well as multiple other cases.

OFFICIAL COPY
OFFICIAL COPYOct 30 2018
Dec 05 2018

1 COMMISSIONER CLODFELTER: Is there anything
2 further from the parties?

3 MS. KELLIS: No, sir.

4 MR. DODGE: (Shakes head in the negative).

5 (No response)

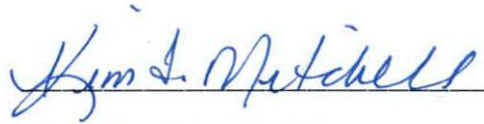
6 COMMISSIONER CLODFELTER: If not, that will
7 conclude the hearing, and we will close the record.

8 Thank you.

9 (WHEREUPON, the proceedings were adjourned.)
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

C E R T I F I C A T E

I, KIM T. MITCHELL, DO HEREBY CERTIFY that
the Proceedings in the above-captioned matter were
taken before me, that I did report in stenographic
shorthand the Proceedings set forth herein, and the
foregoing pages are a true and correct transcription
to the best of my ability.



Kim T. Mitchell
Court Reporter

FILED

DEC 05 2018

Clerk's Office
N.C. Utilities Commission