

# OFFICIAL COPY

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1 PLACE: Dobbs Building, Raleigh, North Carolina  
2 DATE: Monday, November 6, 2017  
3 TIME: 1:30 p.m. - 1:36 p.m.  
4 DOCKET NO: E-22, Sub 544  
5 BEFORE: Commissioner Daniel G. Clodfelter, Presiding  
6 Chairman Edward S. Finley, Jr.  
7 Commissioner Bryan E. Beatty  
8 Commissioner ToNola D. Brown-Bland  
9 Commissioner Jerry C. Dockham  
10 Commissioner James G. Patterson  
11 Commissioner Lyons Gray  
12  
13

## IN THE MATTER OF:

15 Application of Virginia Electric and Power Company,  
16 d/b/a Dominion Energy North Carolina for  
17 Approval of Renewable Energy and Energy Efficiency  
18 Portfolio Standard Cost Rider Pursuant to  
19 G.S. 62-133.8 and NCUC Rule R8-67.  
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22  
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24

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

2

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

4 DOMINION ENERGY NORTH CAROLINA:

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10 FOR THE USING AND CONSUMING PUBLIC:

11 Robert Josey, Jr., Esq.

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T A B L E O F C O N T E N T S

**GEORGE E. HITCH**

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E X H I B I T S

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(Confidential filed under seal)

Company Exhibit AJM-1..... 30/30

(Confidential filed under seal)

Company Exhibit JDM-1..... 38/38

## P R O C E E D I N G S

COMMISSIONER CLODFELTER: Good afternoon.

So let's come to order, and we'll proceed first with Docket E-22, Sub 544. I'm Commissioner Dan Clodfelter. I've been designated to preside over this proceeding this afternoon. With me today are Commission Chairman Ed Finley; and Commissioners Bryan Beatty, ToNola Brown-Bland, Jerry Dockham, James Patterson, and Lyons Gray.

I now call for hearing Docket E-22, Sub 544, which is In the Matter of the 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 North Carolina General Statute 62-133.8 and Commission Rule R8-67.

In compliance with the requirements of the State Government Ethics Act, I will remind all the Commission members of our duty to avoid conflicts of interest, and at this time inquire whether any member of the Commission has a known conflict of interest with regard to this docket?

(No response.)

Let the record reflect that no conflicts

NORTH CAROLINA UTILITIES COMMISSION

1 with identified.

2           On August 23, 2017, Dominion Energy North  
3 Carolina filed its Application for approval of the  
4 Renewable Energy and Energy Efficiency Portfolio  
5 Standard Cost Recovery Rider and its 2016 REPS  
6 Compliance Report pursuant to Commission Rule R8-67,  
7 along with written direct testimonies and exhibits of  
8 George Hinton (sic), 20 pages of direct testimony and  
9 one accompanying appendix; the testimony of Alan  
10 Moore, six pages of direct testimony, one appendix and  
11 one exhibit containing confidential information; and  
12 the testimony of James Merritt, consisting of eight  
13 pages of direct testimony, one appendix and seven  
14 schedules.

15           On August 30, 2017, the Commission issued  
16 its Order scheduling hearings for this place and time,  
17 establishing discovery guidelines, setting deadlines  
18 for the parties to file testimony, and requiring  
19 Dominion to publish notice of the hearing.

20           On October 23, 2017, the Public Staff filed  
21 the affidavits of Sonja Johnson consisting of four  
22 pages and one appendix, and the affidavit of Evan  
23 Lawrence consisting of six pages and one appendix.

24           Participation in this docket by the

1 Utilities Commission - Public Staff is recognized  
2 pursuant to G.S. 62-15.

3 There are no intervenors in this docket.

4 On October 25, 2017, Dominion filed  
5 Affidavits of Publication of the required public  
6 notice.

7 And on October 30, 2017, Dominion filed its  
8 letter in lieu of rebuttal testimony.

9 On November 1, 2017, Dominion and the Public  
10 Staff filed a Joint Motion for witnesses to be excused  
11 from evidentiary hearing. In the Motion, Dominion and  
12 Public Staff stated that all parties to the docket  
13 have consented to waive cross examination of the  
14 witnesses and offer no objection to the introduction  
15 of the witnesses' prefiled testimony, affidavits and  
16 exhibits into the record.

17 On November 3, 2017, the Commission issued  
18 its Order Granting the Joint Motion to excuse  
19 witnesses from attending the evidentiary hearing and  
20 received their testimony, exhibits, workpapers, and  
21 affidavits into evidence at the hearing.

22 So, with that recital of the history, I'll  
23 call on counsel for the parties to make their  
24 appearances for the record, beginning with the

1 Applicant.

2 MR. BREITSCHWERDT: Presiding Commissioner  
3 Clodfelter, Members of the Commission, Brett  
4 Breitschwerdt with the Law Firm of McGuireWoods on  
5 behalf of the Applicant, Dominion Energy North  
6 Carolina. With me here today is in-house counsel  
7 Horace Payne who's also representing the Company.

8 COMMISSIONER CLODFELTER: Welcome.

9 MR. JOSEY: Commissioners, Robert Josey with  
10 the Public Staff on behalf of the Using and Consuming  
11 Public.

12 COMMISSIONER CLODFELTER: Thank you. Are  
13 there any preliminary matters, motions, or other  
14 things to take up? Do we have someone else? Anyone  
15 else?

16 (No response.)

17 Well, we're okay. Are there any preliminary  
18 matters first?

19 MR. BREITSCHWERDT: No, sir.

20 MR. JOSEY: No.

21 COMMISSIONER CLODFELTER: Nothing. Okay.  
22 So I think the parties have stipulated that all the  
23 prefiled testimony, the affidavits, exhibits, and  
24 schedules can come into the record. If that's

1 correct, and without any further objections, they will  
2 be received and admitted into the record with the  
3 confidential materials so designated.

4 (WHEREUPON, Company Exhibits GEH-1  
5 and GEH-2 were marked for  
6 identification as prefiled and  
7 received into evidence.)

8 (WHEREUPON, the prefiled direct  
9 testimony of GEORGE E. HITCH is  
10 copied into the record as if given  
11 orally from the stand.)  
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**DIRECT TESTIMONY  
OF  
GEORGE E. HITCH  
ON BEHALF OF  
DOMINION ENERGY NORTH CAROLINA  
BEFORE THE  
NORTH CAROLINA UTILITIES COMMISSION  
DOCKET NO. E-22, SUB 544**

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 ("RPS"). My responsibilities**  
12 **include developing the Company's Rule R8-67(b) REPS Compliance Plan and**  
13 **Rule R8-67(c) REPS Compliance Report. I am also responsible for managing**  
14 **the Company's capacity, energy, and renewable energy certificate ("REC")**  
15 **portfolios.**

1 **Q. What is the purpose of your testimony?**

2 A. My testimony supports the Company's request to recover all reasonable and  
3 prudent incremental REPS compliance costs. More specifically, the purpose  
4 of my testimony is to describe the Company's REPS compliance activities  
5 under review in this proceeding and the costs the Company has incurred, or  
6 will incur, in support of its compliance efforts with North Carolina's REPS  
7 under N.C.G.S. § 62-133.8. My testimony supports the Company's  
8 incremental REPS compliance costs incurred for calendar year 2016 and  
9 future years' compliance, and also forecasts the incremental REPS costs the  
10 Company expects to incur during the calendar year 2018 rate period ("Rate  
11 Period").

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

14 A. Yes. Company Exhibit GEH-1 is the Company's 2017 REPS Compliance  
15 Report for calendar year 2016 REPS compliance. The Company's third annual  
16 update on the microgrid research demonstration project located at the Kitty  
17 Hawk District Office ("NC Microgrid Project") is also being filed as part of  
18 Exhibit GEH-1. Company Exhibit GEH-2 consists of two schedules,  
19 Schedule 1 and 2. (Exhibits GEH 1-2 provided in public and confidential  
20 versions filed under seal). Both the Company's 2017 REPS Compliance  
21 Report and my Schedules 1 and 2 were prepared by me and are accurate and  
22 complete to the best of my knowledge and belief. Schedule 1 provides actual  
23 REPS compliance costs, by source, that the Company has incurred during the

1 July 1, 2016, to June 30, 2017, experience modification factor true up period  
2 (“EMF True Up Period”), as further described in the Company’s Application  
3 and later in my testimony. My Schedule 2 provides REPS compliance costs,  
4 by source, that the Company projects to incur during the Rate Period in  
5 support of compliance with the REPS.

6 **Q. Can you please describe the Company’s REPS obligations under**  
7 **N.C.G.S. § 62-133.8?**

8 A. Pursuant to N.C.G.S. § 62-133.8,<sup>1</sup> as an electric power supplier, the  
9 Company<sup>2</sup> is required to comply with the overall REPS requirement (“Total  
10 Obligation”) by submitting for retirement a total volume of RECs in each  
11 calendar year that is equivalent to the following percentages of its North  
12 Carolina retail sales in the prior year:

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

17 Furthermore, each electric power supplier must comply with the requirements  
18 of N.C.G.S. § 62-133.8(d), (e), and (f) (individually referred to as the “Solar  
19 Set-Aside,” “Swine Waste Set-Aside,” and “Poultry Waste Set-Aside,”

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<sup>1</sup> 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.

<sup>2</sup> 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 respectively). These provisions of the overall REPS require that within the  
2 Total Obligation described above, each electric power supplier is to ensure  
3 that specific quantities of qualifying solar RECs, swine waste RECs, and  
4 poultry waste RECs are also submitted for retirement. The Company  
5 generally refers to its Total Obligation net of the three set-asides as its  
6 "General Requirement."

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

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

15 To comply with the Swine Waste Set-Aside, each electric power supplier is  
16 also required to submit for retirement a volume of qualifying swine waste  
17 RECs equivalent to its pro-rata share of total retail electric power sold in  
18 North Carolina multiplied by the statewide, aggregate swine set-aside

1 requirement.<sup>3</sup> The Company's Swine Waste Set-Aside requirements, as  
2 recently modified by the Commission,<sup>4</sup> are as follows:

- 3 • In 2017 and 2018, its pro-rata share of seven-hundredths of one  
4 percent (0.07%) of the total retail electric power sold in North Carolina  
5 in the year prior;
- 6 • In 2019, 2020, and 2021, its pro-rata share of fourteen-hundredths of  
7 one percent (0.14%) of total retail electric power sold in North  
8 Carolina in the year prior; and
- 9 • In 2022 and thereafter, its pro-rata share of two-tenths of one percent  
10 (0.2%) of total retail electric power sold in North Carolina in the year  
11 prior.

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

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<sup>3</sup> 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.

<sup>4</sup> On October 17, 2016, the Commission issued an Order delaying the initial Swine Waste Set-Aside requirement until 2017 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 6, Docket No. E-100, Sub 113 (October 17, 2016) ("2016 Delay Order").

- 1           • In 2016, its pro-rata share of 170,000 MWh.
- 2           • In 2017, its pro-rata share of 700,000 MWh.
- 3           • In 2018 and each year thereafter, its pro-rata share of 900,000 MWh.<sup>5</sup>

4           The Company's pro-rata share will be determined by averaging three years of  
5           historic retail sales.<sup>6</sup> The resulting allocation will be held constant for three  
6           years. For example, starting in 2016, and continuing in 2017 and 2018, the  
7           Company's pro-rata share will be the average of 2013, 2014 and 2015 retail  
8           sales. The North Carolina Renewable Energy Tracking System ("NC-RETS")  
9           administrator calculates each electric power supplier's proportionate share of  
10          the Poultry Waste Set-Aside Obligation using this methodology.<sup>7</sup>

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

13   **A.** The Company has fully complied with its prior years' REPS compliance  
14   obligations, including the 2015 Poultry Waste Set-Aside compliance  
15   obligation, the 2010-2015 Solar Set-Aside compliance obligation and the  
16   2013-2015 Total Obligations, for the 2010 through 2015 REPS compliance  
17   periods. The Commission approved the Company's 2011, 2012, 2013, 2014,

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<sup>5</sup> 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.

<sup>6</sup> 2016 Delay Order at 6.

<sup>7</sup> On August 6, 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.

1 2015, and 2016 REPS Compliance Reports in Orders issued on  
2 December 15, 2011,<sup>8</sup> December 11, 2012,<sup>9</sup> December 18, 2013,<sup>10</sup> December  
3 18, 2014,<sup>11</sup> December 16, 2015,<sup>12</sup> and December 20, 2016,<sup>13</sup> respectively.

4 **Q. Please discuss the Company's REPS obligations during the 2016**  
5 **Compliance Period under review and during the proposed 2018 Rate**  
6 **Period.**

7 A. For purposes of the 2016 compliance year, the Company will submit for  
8 retirement a total of 247,549 RECs and 15,105 Energy Efficiency Credits  
9 ("EECs") to meet its 2016 Total Obligation. Within this total, the Company  
10 will submit for retirement 6,129 RECs to meet the Solar Set-Aside  
11 requirement. The Company will also submit for retirement 5,628 RECs to  
12 meet the Poultry Waste Set-Aside requirement. As noted above, the initial  
13 year for compliance with the Swine-Waste Set Aside has been delayed to  
14 2017.

15 Calendar year 2018 represents the Company's Rate Period. The Company  
16 estimates that it will be required to submit for retirement a total of 414,769  
17 RECs to meet its 2018 Total Obligation. Within this total, the Company

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<sup>8</sup> *Order Approving 2010 REPS Compliance Report*, Docket No. E-22, Sub 475 (Dec. 15, 2011).

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

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

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

<sup>12</sup> In 2017, the Company estimates that it will be required to submit for retirement 257,644 RECs to meet its Total Obligation. Within this total, the Company is also required to retire the following: 6,012 solar RECs, 3,006 swine waste RECs, and 23,174 poultry waste RECs.

<sup>13</sup> 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 estimates that it will be required to retire approximately 8,296 solar RECs,  
2 2,904 swine waste RECs, and 29,796 poultry waste RECs.

3 **Q. Has the Company complied with its Solar Set-Aside obligation for 2016?**

4 A. Yes. The Company met the 2016 Solar Set-Aside requirement of 6,129 solar  
5 RECs. Pursuant to the NC-RETS Operating Procedures, the Company has  
6 submitted for retirement 6,129 solar RECs. Specifically, the RECs to be used  
7 for 2016 compliance have been transferred from the NC-RETS Dominion  
8 Energy North Carolina Electric Power Supplier account to the Dominion  
9 Energy North Carolina Compliance Sub-Account. As in past years, upon  
10 completion of this regulatory proceeding and approval of the Company's  
11 Compliance Report, the Commission will finalize retirement of the RECs.

12 **Q. Has the Company complied with its Poultry Waste Set-Aside obligation**  
13 **for 2016?**

14 A. Yes. The Company has met the 2016 Poultry Waste Set-Aside requirement of  
15 5,628 poultry waste RECs. Pursuant to the NC-RETS Operating Procedures,  
16 the Company has submitted for retirement 5,628 poultry waste RECs. Again,  
17 the RECs to be used for 2016 compliance have been transferred from the NC-  
18 RETS Dominion Energy North Carolina Electric Power Supplier account to  
19 the Dominion Energy North Carolina Compliance Sub-Account.

1 Q. Has the Company complied with its General Requirement obligation for  
2 2016?

3 A. Yes. The Company has met the 2016 General Requirement of 250,897 RECs.  
4 Pursuant to NC-RETS Operating Procedures, the Company has submitted for  
5 retirement 235,792 RECs and 15,105 EECs in a similar manner to that  
6 described above. Upon completion of this regulatory proceeding, the  
7 Commission will finalize retirement of these RECs for 2016 compliance.

8 Q. Is Dominion Energy North Carolina positioned to comply with its REPS  
9 requirements in 2017?

10 A. The Company is well-positioned to comply with its Solar Set-Aside, Poultry  
11 Waste Set-Aside, Swine Waste Set-Aside, and General Requirements in  
12 2017.<sup>14</sup> However, the Company projects that it may not have sufficient in-  
13 state Poultry Waste RECs to meet the Town of Windsor's in-state Poultry  
14 Waste Set-Aside compliance obligation in 2017. The Company has executed  
15 three (3) contracts that could each, individually, provide sufficient RECs in  
16 2017. However, each supplier is significantly behind schedule due to delays  
17 in securing sites and vendor equipment deliveries. The Company anticipates  
18 the Electric Power Suppliers will file a joint motion to request a delay in the  
19 2017 Swine Waste Set Aside and a modification of the 2017 Poultry Waste  
20 Set Aside.

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<sup>14</sup> In 2017, the Company estimates that it will be required to submit for retirement 257,644 RECs to meet its Total Obligation. Within this total, the Company is also required to retire the following: 6,012 solar RECs, 3,006 swine waste RECs, and 23,174 poultry waste RECs.

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

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

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

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

10 Initially, the Swine Waste REC Buyers Group executed seven (7) long-term  
11 contracts with a number of swine waste-to-energy developers. Four (4) of  
12 these swine waste REC contracts were terminated in May and June 2012 due  
13 to consistent failure by the developers to meet project milestones and to  
14 demonstrate progress toward commercial operation. Because of these  
15 terminations, the Company continues to conduct new searches for other swine  
16 waste REC suppliers in North Carolina and across the nation. Dominion  
17 Energy North Carolina has spent considerable time and effort in its attempts to  
18 locate operational swine waste digesters in the continental United States.

19 In January 2016, the Company executed a contract with Orion Energy  
20 Marketing & Consulting, Inc. ("Orion") for sufficient swine waste RECs to  
21 meet compliance during the period 2016 to 2020. Orion made a partial  
22 delivery of 2016 vintage RECs and two complete quarterly deliveries in 2017.  
23 Orion is currently meeting all contractual obligations. The Company

1 continues to work with the Swine Waste REC Buyers Group to secure  
2 additional swine RECs that could be banked for future use or used for  
3 compliance.

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

7 **A.** The Company has worked actively and diligently to comply with its Poultry  
8 Set-Aside requirements for the Company and the Town of Windsor. The  
9 Company, after searching the REC market for available in-state RECs,  
10 concluded that joining the Poultry Waste REC Buyers Group was the most  
11 prudent way to meet the Town of Windsor's Poultry Waste Set-Aside  
12 requirement.

13 The Poultry Waste REC Buyers Group executed three (3) long-term poultry  
14 waste contracts and the Company, as a part of this group, executed three (3)  
15 long-term contracts for the Town of Windsor's in-state requirements. One  
16 (1) of these contracts was terminated by mutual agreement with the supplier  
17 in September 2013. The remaining long-term contracts will not produce any  
18 significant poultry waste RECs until late 2017 or early 2018. At this time,  
19 the Company believes it can meet the Town of Windsor's in-state Poultry  
20 Waste Set-Aside requirement for 2017 only if the Commission delays the  
21 scheduled increase from the initial 170,000 MWhs to 700,000 MWhs by one  
22 year, as it did for compliance years 2015 and 2016. The Company also

1 believes it is likely to have sufficient RECs for the Town of Windsor's in-state  
2 Poultry Waste Set-Aside requirement for 2018 and 2019.

3 The Company has sufficient poultry waste RECs in NC-RETS to comply  
4 with both Dominion Energy North Carolina's and the Town of Windsor's  
5 out-of-state Poultry Waste Set-Aside requirements for years 2016-2020.

6 **Q. Please also provide an update on the Company's efforts to comply with its**  
7 **General Requirement in 2017.**

8 A. The Company is well-positioned to comply with its General Requirement, and  
9 Total Obligation, in 2017. The Company's efforts to comply with the General  
10 Requirement and Total Obligation include its continued implementation of  
11 energy efficiency programs and the purchase of RECs from renewable energy  
12 facilities. As allowed by Senate Bill 3, Dominion Energy North Carolina  
13 continues to find that purchasing out-of-state RECs to achieve all aspects of  
14 its Total Obligation is the most cost-effective REPS compliance option for the  
15 Company and its customers.

16 The Company has sufficient RECs in NC-RETS to comply with both  
17 Dominion Energy North Carolina's and the Town of Windsor's General  
18 Requirements for years 2017 and 2018.

19 **Q. Please also provide an update on the Company's efforts to comply with its**  
20 **Solar Set-Aside requirement in 2017.**

21 A. The Company is well-positioned to comply with its Solar Set-Aside  
22 requirement in 2017. The Company has also purchased enough RECs to

1 comply with in-state Solar Set-Aside requirements for the Town of Windsor  
2 in 2017-2020.

3 **Q. Is the Company continuing to execute additional REC purchase**  
4 **agreements?**

5 A. Yes. The Company continues to execute additional REC purchase  
6 agreements, as needed, to meet its future REPS General Obligation and set-  
7 aside requirements. The Company addresses its REPS compliance strategy in  
8 its 2017 REPS Compliance Plan, which was filed as an Appendix to the  
9 Company's 2017 Integrated Resource Plan Update on May 1, 2017, in Docket  
10 No. E-100, Sub 147.

11 **Q. What are the Company's costs associated with REPS compliance during**  
12 **the EMF True Up Period and the upcoming Rate Period?**

13 A. Costs requested to be recovered include REC costs, as well as other  
14 incremental REPS compliance expenses (e.g., Renewable Energy Tracking  
15 System fees) (collectively, "Other Incremental Costs"). Both REC expenses  
16 and Other Incremental Expenses incurred after June 30, 2017, will be trued up  
17 and recovered as part of the Company's EMF in its 2018 REPS cost recovery  
18 proceeding. My Exhibit 2, Schedule 1 presents the Company's reasonable  
19 and prudently-incurred incremental REPS Compliance Costs during the EMF  
20 True Up Period. My Exhibit 2, Schedule 2 presents the Company's forecasted  
21 incremental REPS compliance costs projected to be incurred during the  
22 calendar year 2018 Rate Period.

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

3 A. No. The Company has not made any bundled renewable energy purchases to  
4 date. For this reason, 100 percent of the Company's incurred REC costs are  
5 "incremental costs" recoverable through the REPS Rider. While the  
6 Company presents its avoided cost capacity and energy rates in its 2017 REPS  
7 Compliance Plan, these avoided costs were not required to determine the  
8 incremental costs of Dominion Energy North Carolina's REC purchases for  
9 recovery in this proceeding.

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

12 A. My Exhibit 2, Schedules 1 and 2 identify the Other Incremental Costs  
13 that the Company has incurred in association with REPS compliance.  
14 Other Incremental Costs represent the Company's direct and non-labor  
15 costs associated with REPS compliance, including the Company's  
16 subscription to NC-RETS, internal REC tracking software costs, and  
17 REC broker fees. The Company is not seeking to recover any  
18 incremental internal labor costs associated with administration of  
19 REPS compliance for either the EMF True Up Period or forecasted  
20 Rate Period in this proceeding.<sup>15</sup>

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<sup>15</sup> 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 The Company is also seeking to recover maintenance and fuel costs  
2 associated with its NC Microgrid Project located at its Kitty Hawk  
3 District Office. The Microgrid was dedicated and local operation  
4 commenced in July 2014, and a small-scale fuel cell was added in July  
5 2015. As further explained by Company Witness Alan J. Moore, the  
6 Company is requesting to recover the ongoing operations and  
7 maintenance costs associated with the NC Microgrid Project during  
8 the Rate Period.

9 As directed in the Commission's *2013 REPS Order*, the Company is  
10 providing its third and final NC Microgrid Project study phase report  
11 as Appendix C to the Company's REPS Report.

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

14 A. The Company uses the Environmental Management Account ("EMA") RECs  
15 system developed by APX to support the Company's REPS compliance  
16 efforts. The EMA system is a REC asset management tool, which includes  
17 multiple REPS compliance functionalities, including supporting the  
18 Company's REC portfolio management and valuation, allowing connectivity  
19 to NC-RETS, as well as managing post-trade settlement, credit, delivery, and  
20 compliance and invoicing services.

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

4 A. Consistent with the approach since the 2014 REPS Order, the Company has  
5 allocated the regulated portion of EMA system costs between Virginia and  
6 North Carolina because the EMA system will also be used for REC  
7 management in the Company's Virginia jurisdiction. Company Witness  
8 Merritt supports the two-state factor 3 allocation approach, which allocates  
9 5.1786 percent of the regulated portion of the EMA system costs and  
10 maintenance fees to the North Carolina jurisdiction. Company Witness  
11 Moore presents the EMA costs included for recovery on Page 2 of his  
12 Schedule 1 for the Rate Period Rider RP revenue requirement, and Page 3 of  
13 his Schedule 2 for the True-Up Period EMF Rider RPE revenue requirement.

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

17 A. No. The incremental REPS costs presented in my Schedules 1 and 2 are net  
18 of the REC costs incurred by the Company for the Town of Windsor's REPS  
19 compliance. As I have noted previously, the Company is uniquely situated in  
20 that it is statutorily authorized to use 100 percent out-of-state RECs to achieve  
21 REPs compliance. In most instances, the Company has found purchasing out-  
22 of-state RECs to be more cost effective than almost all other REPS  
23 compliance options, even including using its utility-owned renewable

1 generating facilities for North Carolina REPS compliance.<sup>16</sup> In contrast to the  
2 Company, the Town of Windsor is required to obtain 75% of its RECs from  
3 in-state renewable resources. Thus, the Company has been required to  
4 purchase in-state RECs that are specifically designated for the Town of  
5 Windsor's REPS compliance. For this reason, the Company has directly  
6 assigned specific REC costs to the Town of Windsor that may be used for its  
7 REPS compliance, and has excluded them from the REPS costs that the  
8 Company is requesting to recover from the North Carolina retail jurisdiction  
9 in this proceeding.

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

12 **A. Yes.**

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

16 **A. No.** The Company's Other Incremental Costs requested to be recovered in  
17 this proceeding do not include non-REC costs reasonably attributable to the  
18 Town of Windsor. While the Town of Windsor's compliance obligation  
19 accounts for a very small percent of Dominion Energy North Carolina's non-  
20 REC costs of REPS compliance, the Town of Windsor is still responsible for

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

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

17 **A.** Yes. The Company has incurred and also projects to incur all of its costs  
18 associated with REPS compliance in a prudent manner. For example,  
19 Dominion Energy North Carolina has effectively evaluated its options and  
20 negotiated with counter-parties to procure reasonably-priced out-of-state  
21 RECs for compliance with the Swine Waste and Poultry Waste Set-Asides.  
22 This also holds true for the General Requirements RECs. Dominion Energy  
23 North Carolina has significant experience and expertise within the national

1 REC market, and the Company has taken full advantage of its statutory ability  
2 to procure its full REC requirements from out-of-state facilities. As noted  
3 above, this strategy has resulted in very reasonable compliance costs for our  
4 customers.

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

6 **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 was marked for identification as  
3 prefiled and received into  
4 evidence.)

5 (WHEREUPON, the prefiled direct  
6 testimony of ALAN J. MOORE is  
7 copied into the record as if given  
8 orally from the stand.)  
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**DIRECT TESTIMONY  
OF  
ALAN J. MOORE  
ON BEHALF OF  
DOMINION ENERGY NORTH CAROLINA  
BEFORE THE  
NORTH CAROLINA UTILITIES COMMISSION  
DOCKET NO. E-22, SUB 544**

- 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 calendar year 2018 rate  
17 period ("Rate Period") to be recovered through the Company's updated REPS  
18 rider, Rider RP; and (ii) the Company's revenue requirement for the  
19 Company's experience modification factor ("EMF") true-up period of July 1,  
20 2016, through June 30, 2017 ("EMF True Up Period"), to be recovered  
21 through the Company's updated REPS EMF rider, Rider RPE. The  
22 Company's Application and the pre-filed direct testimony of Company  
23 Witness George E. Hitch supports 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 calendar year  
3 2018 Rate Period.

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

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

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

14 A. The testimony of Company Witness Hitch provides the forecasted Rate Period  
15 incremental costs related to the Company's compliance with the REPS  
16 requirements of N.C.G.S. § 62-133.8(b), (d), (e) and (f), and projected  
17 maintenance and fuel costs associated with the Company's microgrid research  
18 demonstration project located at the Company's Kitty Hawk District Office  
19 ("NC Microgrid Project"). I have used these cost projections to calculate the  
20 forecasted revenue requirement for the REPS Rider RP during the Rate Period  
21 in this proceeding.

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

6 **A. Yes. Although the Company does provide REPS compliance services for the**  
7 **Town of Windsor, as described by Company Witness Hitch in his pre-filed**  
8 **direct testimony, his Exhibit 2, Schedules 1 and 2 present the Company's**  
9 **retail incremental REPS compliance costs, net of the costs assigned or**  
10 **allocated to the Town of Windsor. Consistent with previous REPS rider**  
11 **filings, the Company is not allocating any research costs associated with the**  
12 **NC Microgrid Project to the Town of Windsor.**

13 **Q. Are there specific components of the Rate Period revenue requirement**  
14 **that you would like to explain further?**

15 **A. Yes. In order to calculate the Rate Period REPS Rider RP revenue**  
16 **requirement, I incorporated the following cost components: (1) projected**  
17 **renewable energy credit ("REC") costs associated with REPS compliance year**  
18 **2018 and other REPS compliance-related expenses projected to be incurred**  
19 **during the Rate Period; and (2) qualifying projected research maintenance and**  
20 **fuel costs associated with the Company's NC Microgrid Project, inclusive of**  
21 **the continued annual amortization of one-fifth of the North Carolina**  
22 **Renewable Energy Tax Credit ("RETC").**

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

3    **A.    Yes. Consistent with the revenue requirement approved in the Company's**  
4           **2013 – 2016 REPS cost recovery proceedings in Docket No. E-22, Subs 503,**  
5           **514, 525, and 535 respectively, the current Rider RP revenue requirement**  
6           **includes the fifth and final 20% amortization of the North Carolina RETC net**  
7           **of the Federal effect of State RETC in the projected 2018 Rate Period and will**  
8           **be passed through to the North Carolina retail customers. The total projected**  
9           **Rate Period tax credit benefits included in the Company's current Rider RP**  
10          **revenue requirement (grossed up to a revenue requirement level) equals**  
11          **(\$35,617). This amount reflects the final one-fifth of the accrued North**  
12          **Carolina RETC amount.<sup>1</sup>**

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

16   **A.    As noted above, the Company is requesting to fully recover its reasonable and**  
17          **prudently-incurred incremental REPS compliance costs incurred during the**  
18          **July 1, 2016, through June 30, 2017 EMF True Up Period. As described by**  
19          **Company Witness Hitch, the EMF True Up Period costs proposed to be**  
20          **recovered include: (i) incremental REPS costs incurred during the current**

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

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

7 A. As summarized on Page 1 of my Schedule 1, through Rider RP, the Company  
8 is requesting recovery of projected REPS compliance costs of \$716,429. In  
9 addition, the Company's EMF Rider RPE is presenting a revenue requirement  
10 in the amount of \$469,296. The combined revenue requirements for the two  
11 riders, Rider RP and Rider RPE, for the Rate Period totals \$1,185,725,  
12 representing a (\$724,226) decrease over the rates currently in effect.

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

14 A. Yes, it does.

## APPENDIX A

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Aug 23 2017

**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.

1 (WHEREUPON, Company Exhibit JDM-1  
2 was marked for identification as  
3 prefiled and received into  
4 evidence.)  
5 (WHEREUPON, the prefiled direct  
6 testimony of JAMES D. MERRITT is  
7 copied into the record as if given  
8 orally from the stand.)  
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**DIRECT TESTIMONY  
OF  
JAMES D. MERRITT  
ON BEHALF OF  
DOMINION ENERGY NORTH CAROLINA  
BEFORE THE  
NORTH CAROLINA UTILITIES COMMISSION  
DOCKET NO. E-22, SUB 544**

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 James D. Merritt. I am a Regulatory Analyst II 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 calendar year 2018 rate  
2 period ("Rate Period"). Proposed Rider RPE is designed to recover the  
3 Company's reasonable and prudent incremental REPS costs incurred during  
4 the July 1, 2016, to June 30, 2017 EMF true up period ("EMF True Up  
5 Period"), as described in the Company's Application and the prefiled direct  
6 testimony of Company Witness George Hitch. The Company is requesting  
7 that the proposed Rider RP and Rider RPE become effective for usage on  
8 January 1, 2018.

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

11 A. Yes. Company Exhibit No. JDM-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, Docket  
18 No. E-22, Sub 535, and prior cases. For purposes of developing the per-  
19 account REPS charges, the Company has defined a "customer account" as a  
20 "service point" or "application of a tariff." The following rate schedules are  
21 not considered "accounts" for purposes of the per-account charge because  
22 these rate schedules are generally secondary accounts and customers on these

1 rate 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 is  
12 notified by the customer. Upon written notification from the customer,  
13 accounts meeting these criteria will be coded in the billing system to allow the  
14 customer to be charged only a single monthly REPS charge at the customer's  
15 primary service point. A governmental customer for purposes of the  
16 application of the REPS charge is considered a commercial account.

17 **Q. In determining the Company's incremental REPS compliance costs to be**  
18 **recovered through its REPS Riders, has the Company addressed**  
19 **allocation of any system-level costs to the North Carolina jurisdiction?**

20 **A.** Yes. While incremental REPS compliance costs are generally assigned to and  
21 fully recoverable from the Company's North Carolina jurisdiction, the  
22 Company has also recognized that, in certain unique circumstances, capital  
23 investments made by the Company at a system level that are allocated  
24 between the Company's respective jurisdictions and are incremental to North  
25 Carolina REPS compliance should also be allocated between the Company's

1.        respective jurisdictions. The Company has determined that allocation of the  
2        costs of its investment in the EMA system represents an instance where such  
3        allocation is appropriate.

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

7        A.    Consistent with the approach first approved by the Commission in Docket  
8        E-22, Sub 503, and followed in the Company's most recent cost recovery  
9        proceeding, Docket No. E-22, Sub 535, the Company has used its two-state  
10       factor 3 allocation approach to determine the proper amount of EMA system  
11       costs to be allocated to the North Carolina jurisdiction. This is an allocation  
12       factor based upon relative energy sales between the customers served in  
13       Virginia and customers served in North Carolina and is based on the twelve  
14       months ending December 31, 2016. The North Carolina energy sales  
15       component excludes the Town of Windsor. Using this approach, the  
16       Company's Rider RP revenue requirement for the forecasted Rate Period  
17       includes an allocated 5.1786% share of the regulated portion of EMA costs for  
18       recovery from the Company's North Carolina jurisdictional customers.

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

21       A.    Rider RPE is calculated using the Rider RPE revenue requirement provided  
22       by Company Witness Alan J. Moore, as shown in my Schedule 1. My  
23       Schedule 2 presents the allocation of the Rider RPE revenue requirement

1 amongst the Company's residential, commercial, and industrial customer  
2 classes. In 2017, House Bill 589 revised the residential 2015 and thereafter  
3 REPS cost cap from \$34 to \$27 effective July 1, 2017. There were no  
4 changes to the commercial or industrial cost caps. The annual revenue cap  
5 was calculated by multiplying the revised applicable cost caps for each  
6 customer class by the Company's forecasted average adjusted number of  
7 customer accounts for the 2018 rate year. A cost cap allocation factor was  
8 then calculated by dividing the annual REPS revenue cap for each class by the  
9 total annual revenue cap established for all classes. This allocation factor was  
10 then used to allocate the Company's REPS compliance requirement to each of  
11 the three customer classes.

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

1 **Q. How does the recent legislative change to the residential cost cap impact**  
2 **the cost allocation factor for the True Up Period and the Rate Period?**

3 A. Based upon the July 1, 2017 effective date of the change, the adjusted  
4 residential class cost cap does not affect the EMF True Up Period cost  
5 allocation but will be used for allocating Rate Period REPS costs between the  
6 customer classes.

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

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

15 **Q. Would you please discuss the calculation of the proposed Rider RP to**  
16 **collect for the Rate Period?**

17 A. My Schedule 4 shows the total projected REPS compliance calculation for  
18 Rider RP during the Rate Period. The methodology is the same as the  
19 calculations for Rider RPE that I have just described, but uses forecasted EEC  
20 savings, as well as a forecasted revenue requirement. My Schedule 1 shows  
21 the forecasted Rider RP revenue requirement. My Schedule 5 then calculates

1 the monthly per-account customer charge for each customer class. This  
2 charge is then adjusted for the North Carolina regulatory fee to calculate the  
3 final per-account customer charges that will be shown in the Rider RP.

4 **Q. Have you confirmed that the Company's proposed total monthly REPS**  
5 **per-account customer charges to be recovered through Riders RP and**  
6 **RPE do not exceed the per-account cost caps established in N.C.G.S. § 62-**  
7 **133.8(h)(4)?**

8 A. Yes. My Schedule 6 presents the total monthly REPS per-account customer  
9 charges to be recovered through Riders RP and RPE. These per-account  
10 charges do not exceed the caps on allowable per-account annual charge  
11 established in N.C.G.S. § 62-133.8(h)(4), as amended by Session Law 2017-  
12 192, and satisfy the requirements of Commission Rule R8-67(e)(9).

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

15 A. Yes. Schedule 7 comprises the tariff sheets showing the proposed Riders RP  
16 and RPE, which, if approved as proposed, would be applicable for usage on  
17 and after January 1, 2018.

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

20 A. Per my Schedule 6, customers served on a residential rate will see a total  
21 REPS charge on their bill of \$0.49 which is a decrease of \$0.39 per month  
22 from the previous monthly REPS charge. Commercial customers will see a

1       \$2.71 charge per month on their bills resulting in a decrease of \$1.16 per  
2       month from the previous monthly REPS charge, and an industrial customer  
3       will see a charge of \$18.12 per month resulting in a decrease of \$7.70 per  
4       month from the previous monthly REPS charge. Monthly billing schedules  
5       will be prorated only if the number of days in the billing month is less than 26  
6       or greater than 40.

7   **Q.    Does this conclude your prefled direct testimony?**

8   **A.    Yes, it does.**

**BACKGROUND AND QUALIFICATIONS  
OF  
JAMES D. MERRITT**

James D. Merritt graduated from Virginia Commonwealth University in 2008 with a Bachelor of Arts degree in Political Science. He received his Master of Public Administration from Virginia Polytechnic and State University in 2014. He was hired by Virginia Electric and Power Company in January 2009. From 2009 to 2010, he worked in the PJM/LSE/Wholesale Data Management Group. In 2010, he served in Customer Relations, assisting with regulatory policy and customer service analytics. In 2011, he moved to the Regulatory Case Management group, coordinating many of the Company's rate cases and other regulatory filings. In 2013, Mr. Merritt moved to the Customer Rates group, performing rate design, the large industrial manual bill process, typical bills, rate design software implementation and programming, and communication. He has also assisted with multiple rate case filings in Virginia and North Carolina.

Mr. Merritt has previously presented testimony before the North Carolina Utilities Commission in Docket No. E-22, Sub 535 and before the Virginia State Corporation Commission.

1 (WHEREUPON, the prefiled affidavit  
2 of SONJA R. JOHNSON is copied into  
3 the record as if given orally from  
4 the stand.)  
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STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH

DOCKET NO. E-22, SUB 544

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  
SONJA R. JOHNSON

Oct 23 2017

STATE OF NORTH CAROLINA

COUNTY OF WAKE

I, Sonja R. Johnson, first being duly sworn, do depose and say:

I am a Staff Accountant with 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.

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, 2016 through June 30, 2017 (REPS EMF period or test period).


On August 23, 2017, DENC filed its application, testimony and exhibits related to the incremental costs incurred for compliance with the REPS. On Company Exhibit No. JDM-1, Schedule 3, DENC witness Merritt 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) incremental REPS compliance costs of \$239,162 for the residential class, \$224,893 for the commercial class, and \$5,241 for the industrial class, and (2) customer counts totaling 102,840 for the residential class, 17,548 for the commercial class, and 61 for the industrial class. The proposed annual EMF increment riders are \$2.33, \$12.82, and \$85.92 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 monthly EMF increment riders are \$0.19, \$1.07, and \$7.16 per retail customer account, excluding the regulatory fee, and \$0.19, \$1.07, and \$7.17 per

retail customer account, 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 filing 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 required the review of responses to written data requests.

Based upon the Public Staff's investigation, I am recommending that DENC's proposed annual and monthly REPS EMF increment riders for each customer class, as set forth in Company Exhibit No. JDM-1, Schedule 3, be approved. These amounts produce annual increment REPS EMF riders of \$2.33, \$12.82, and \$85.92 per customer account, excluding the regulatory fee, and proposed monthly riders of \$0.19, \$1.07, and \$7.16 per customer account, excluding the regulatory fee, and \$0.19, \$1.07, and \$7.17 per customer account, including the regulatory fee for the residential, commercial, and industrial classes, respectively.

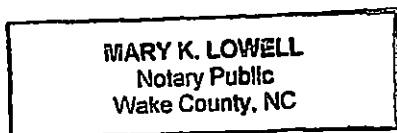
This completes my affidavit.

  
Sonja R. Johnson

Sworn to and subscribed before me  
On this the 23<sup>rd</sup> day of October, 2017.

Mary K. Lowell  
(Printed Name)  
Mary K. Lowell  
Notary Public

My Commission Expires: 3/18/2021



## APPENDIX A

## SONJA R. JOHNSON

I am a graduate of North Carolina State University with a Bachelor of Science and Master of Science degree in Accounting. I was initially an employee of the Public Staff from December 2002 until May 2004, and rejoined the Public Staff in January 2006.

I am responsible for analyzing testimony, exhibits, and other data presented by parties before this Commission. I have the further responsibility of performing and supervising the examinations of books and records of utilities involved in proceedings before the Commission, and summarizing the results into testimony and exhibits for presentation to the Commission.

Since initially joining the Public Staff in December 2002, I have filed testimony or affidavits in several water and sewer general rate cases. I have also filed testimony in applications for certificates of public convenience and necessity to construct water and sewer systems and noncontiguous extension of existing systems. My experience also includes filing affidavits in several fuel clause rate cases and Renewable Energy and Energy Efficiency Portfolio Standard (REPS) cost recovery cases for the utilities currently organized as Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, and Virginia Electric and Power Company d/b/a Dominion North Carolina Power.

While away from the Public Staff, I was employed by Clifton Gunderson, LLP. My duties included the performance of cost report audits of nursing homes, hospitals, federally qualified health centers, intermediate care

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facilities for the mentally retarded, residential treatment centers and home health agencies.

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(WHEREUPON, the prefiled affidavit  
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 544

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

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

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 2017 REPS Compliance Report filed by Virginia Electric and Power Company d/b/a Dominion Energy North Carolina (DENC or Company) on August 23, 2017.

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.

To achieve REPS compliance during calendar year 2016, 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.

#### 2017 REPS Compliance Report

The 2017 REPS Compliance Report was filed as Company Exhibit No. GEH-1 in DENC's application and includes REPS compliance activities for the calendar year 2016. For 2016, each electric power supplier needed to retire enough RECs to equal six percent (6%) of jurisdictional retail megawatt-hour (MWh) sales for 2015.<sup>1</sup> To reach compliance DENC and Windsor were required to retire 262,654 and 3,043 RECs, respectively.

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<sup>1</sup> 2015 North Carolina jurisdictional retail sales for DENC were 4,377,561 MWh. 2015 retail sales for Windsor were 50,704 MWh.

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 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,<sup>2</sup> whereas Windsor must obtain at least 75% of its RECs from in-state sources.<sup>3</sup> 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 a DSM 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 253,805 general requirement<sup>4</sup> RECs and EECs during 2016. For itself, DENC included 235,792 RECS and 15,105 EECs from its portfolio of in-state energy efficiency (EE) programs approved pursuant to G.S. 62-133.9, for a total of 250,897. For Windsor, DENC requested retirement of 2,908 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.

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<sup>2</sup> G.S. 62-133.8(b)(2)(e).

<sup>3</sup> G.S. 62-133.8(b)(2)(d).

<sup>4</sup> 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 2015 North Carolina retail sales. DENC retired a total of 6,200 solar RECs, 6,129 for itself and 71 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).<sup>5</sup> 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 17, 2016, in Docket No. E-100, Sub 113.

Based on my review, I recommend that the Commission approve the 2016 REPS Compliance Report for DENC and Windsor.

#### REPS Cost Recovery

I reviewed the estimated incremental costs associated with DENC's proposed REPS Rider (RP) in this case. Those costs are estimated to be \$716,429 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.,

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<sup>5</sup> By Order dated October 17, 2016, in Docket No. E-100, Sub 113, the Commission, exercising the authority granted to it under G.S. 62-133.8(l)(2), reduced the statewide poultry waste requirement for 2016 from 700,000 to 170,000.

administrative costs, broker fees, EMA costs). DENC did not include costs associated with RECs or with its management of REPS compliance for Windsor. The Company either assigned or allocated those costs to Windsor. For any Other Incremental Costs not directly assignable to Windsor, the Company allocated costs based on Windsor's portion of the DENC's total load-ratio share so those costs would not be recovered from North Carolina retail customers.<sup>6</sup> Consistent with its allocation methodology used in the last REPS cost recovery proceeding, DENC allocated 5.1786% of the costs related to the Environmental Management Account (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 Sonja Johnson has reviewed DENC's compliance costs for the test period and its proposed EMF charge, Rider RPE, and finds them to be reasonable.

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<sup>6</sup> The Town of Windsor is approximately 1.2 percent of DENC's total load-ratio share.

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	\$0.30	\$0.19	\$0.49
General	\$1.64	\$1.07	\$2.71
Industrial	\$10.95	\$7.17	\$18.12

Based on my review and the review of Public Staff witness Johnson, I recommend approval of DENC's proposed rates.

This completes my affidavit.

Evan Lawrence  
Evan Lawrence

Sworn to and subscribed before me  
On this the 23 day of October, 2017.

Mary K. Lowell

(Printed Name)

Mary K. Lowell

(Notary Public)

My Commission Expires: 3/18/2021

MARY K. LOWELL  
Notary Public  
Wake County, NC

## 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, and renewable energy portfolio standards compliance.

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Oct 23 2017

1 COMMISSIONER CLODFELTER: Are there any  
2 public witnesses who have come today who want to  
3 testify on this docket?

4 (No response.)

5 Are the parties aware of any other witnesses  
6 whose testimony is to be offered? Yes.

7 MR. BREITSCHWERDT: Commissioner, just one  
8 clarification --

9 COMMISSIONER CLODFELTER: Sure.

10 MR. BREITSCHWERDT: -- since we're not going  
11 through individually. I just want to clarify, when  
12 you had summarized the testimony presented, the  
13 Company's witness is George Hitch and I believe you  
14 had said Hinton. So just one clarification if I  
15 could.

16 COMMISSIONER CLODFELTER: I have George  
17 Hinton in my written materials and so, if that is  
18 incorrect, we'll correct the record accordingly.  
19 Thank you.

20 MR. BREITSCHWERDT: Thank you.

21 COMMISSIONER CLODFELTER: Anything else?

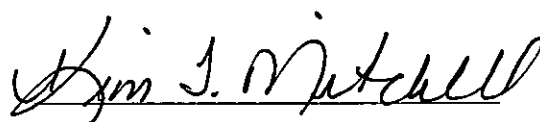
22 (No response.)

23 Okay. If not, then we'll conclude.

24 (WHEREUPON, the proceedings were adjourned.)

## 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 II

**FILED**

**DEC 29 2017**

Clerk's Office  
N.C. Utilities Commission