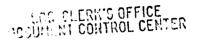
# COMMONWEALTH OF VIRGINIA STATE CORPORATION COMMISSION

#### APPLICATION OF

#### VIRGINIA ELECTRIC AND POWER COMPANY

CASE NO. PUR-2017-00157

For approval of 100 percent renewable energy tariffs for residential and non-residential customers pursuant to §§ 56-577 A 5 and 56-234 of the Code of Virginia



2018 DEC 14 P 2: 41

## REPORT OF ALEXANDER F. SKIRPAN, JR., SENIOR HEARING EXAMINER

# December 14, 2018

Dominion Energy seeks approval of Rate Schedules CRG-S by which it proposes to provide 100 percent renewable energy at a fixed price for generation of 9.627 ¢/kWh for residential and 8.608 ¢/kWh for non-residential customers. Case participants included Staff, Consumer Counsel, Walmart, Environmental Respondents, and Direct Energy. I find that to produce just and reasonable rates, the fixed rates should be adjusted to eliminate non-administrative related margin. In addition, rates should be adjusted to reflect a balancing standard, with separate rates calculated for hourly, daily, monthly, and annual balancing. I recommend the use of a monthly balancing standard, which produces a residential rate of 6.894 ¢/kWh, and a non-residential rate of 6.342 ¢/kWh. Among other things, I further recommend that: (i) Rate Schedules CRG-S not be adopted as an experiment; (ii) Staff's reporting requirements be adopted; and (iii) a 90-day sunset provision be adopted.

### HISTORY OF THE CASE

On November 17, 2017, Virginia Electric and Power Company d/b/a Dominion Energy Virginia ("Dominion Energy" or "Company") filed with the State Corporation Commission ("Commission") an application for two 100 percent renewable energy tariffs for residential and non-residential customers, designated Continuous Renewable Generation (Subscription) Rate Schedules ("Application") pursuant to §§ 56-577 A 5 ("Subsection A 5") and 56-234 of the Code of Virginia ("Code"), and Rule 80 A of the Commission's Rules of Practice and Procedure ("Rules"), 5 VAC 5-20-80 A. More specifically, Dominion Energy seeks approval of Rate Schedule CRG-S Residential and Rate Schedule CRG-S Non-residential, whereby new and existing residential and non-residential customers with peak demand of less than one megawatt voluntarily can elect to purchase 100 percent of their energy needs from renewable energy resources.

On December 19, 2017, the Commission issued its Order for Notice and Hearing in which, among other things, the Commission docketed the Application; scheduled a public hearing in Richmond to begin on April 17, 2018; and appointed a Hearing Examiner to conduct all further proceedings in this matter on behalf of the Commission and to file a final report.

On December 22, 2017, Direct Energy Services, LLC ("Direct Energy"), filed its Notice of Participation. On January 3, 2018, the Office of the Attorney General's Division of Consumer Counsel ("Consumer Counsel") filed its Notice of Participation. On January 31, 2018, Wal-Mart

Stores East, LP and Sam's East, Inc. (collectively "Walmart") filed its Notice of Participation. Also on January 31, 2018, Appalachian Voices ("Environmental Respondents") filed their Notice of Participation. On February 13, 2018, the Board of Supervisors of Culpeper County ("Culpeper County") filed its Notice of Participation.

On January 25, 2018, Dominion Energy filed its Motion for Entry of a Protective Ruling and Additional Protective Treatment for Extraordinarily Sensitive Information. A Hearing Examiner's Protective Ruling and Additional Protective Treatment for Extraordinarily Sensitive Information was entered on January 30, 2018.

On January 25, 2018, Dominion Energy filed its Proof of Notice as directed by Paragraphs (5) through (7) of the Commission's Order for Notice and Hearing.

On January 31, 2018, Environmental Respondents filed their Motion for Admission *Pro Hac Vice* of Hannah C. Coman. Hannah C. Coman, Esquire, was admitted *pro hac vice* for this proceeding in a Hearing Examiner's Ruling dated February 2, 2018.

On February 22, 2018, Dominion Energy filed its Second Motion for Entry of Additional Protective Treatment for Extraordinarily Sensitive Information in which it requested additional protections for the Company's comprehensive analytical model for developing the rates proposed in this proceeding. A Hearing Examiner's Ruling Granting Additional Protective Treatment for Extraordinarily Sensitive Information was entered on March 1, 2018.

During the course of this proceeding, Andrew Stith filed three public comments in support of 100 percent renewable energy, including for residential and low-income areas. Sherrie Good filed a public comment criticizing Dominion Energy for blocking customers from purchasing energy from other suppliers or from producing their own energy. Linda J. Down filed a comment asking for 60 additional days to file comments and for a hearing in Augusta County.

On March 7, 2018, Environmental Respondents filed their Motion to Certify Material Issue and for Stay of Proceedings asking, among other things, that the question of whether the electricity provider must balance the participating customer's load on an hourly basis. A prehearing conference was held on March 13, 2018, as scheduled in a Hearing Examiner's Ruling dated March 9, 2018. The request to certify questions to the Commission was denied, and Dominion Energy was directed to file rate calculations, as requested in Staff Interrogatory 1-20, based on matching load with renewable generation on a (i) daily, (ii) monthly, and (iii) annual basis in a Hearing Examiner's Ruling dated March 14, 2018. In addition, this Ruling directed the Company to file the rate calculations by April 18, 2018, and continued the procedural schedule pending further ruling. A new procedural schedule was established in a ruling dated March 27, 2018, which, among other things, retained the hearing scheduled for April 17, 2018, for the purpose of receiving the testimony of public witnesses, and scheduled a public hearing for this matter for September 18, 2018.

On April 17, 2018, a hearing was convened to receive the testimony of public witnesses. Joseph K. Reid, III, Esquire, and Elaine S. Ryan, Esquire, of McGuireWoods, LLP; and Lisa S. Booth, Esquire, of Dominion Energy Services, Inc., appeared on behalf of Dominion Energy. C. Mitchell Burton, Jr., Esquire, and Katherine C. Creef, Esquire, appeared on behalf of Consumer Counsel. Ashley B. Macko, Esquire, and K. Beth Clowers, Esquire, appeared on behalf of Staff. One public witness presented testimony.

On September 18, 2018, a hearing was convened to receive evidence from Staff and the parties. Joseph K. Reid, III, Esquire, Sarah R. Bennett, Esquire, and Elaine S. Ryan, Esquire, of McGuireWoods, LLP; and David J. DePippo, Esquire, of Dominion Energy Services, Inc., appeared on behalf of Dominion Energy. C. Mitchell Burton, Jr., Esquire, and Katherine C. Creef, Esquire, appeared on behalf of Consumer Counsel. Carrie M. Harris, Esquire, appeared on behalf of Walmart. Michael J. Quinan, Esquire, of Christian and Barton, L.L.P., appeared on behalf of Direct Energy. William C. Cleveland, IV, Esquire, and Hannah Coman, Esquire, appeared on behalf of Environmental Respondents. Ashley B. Macko, Esquire, appeared on behalf of Staff.

#### SUMMARY OF THE RECORD

Dominion Energy seeks approval of Rate Schedule CRG-S Residential and Rate Schedule CRG-S Non-residential (together, "Rate Schedules CRG-S"), by which new and existing residential and non-residential customers with peak demand of less than one megawatt voluntarily can elect to purchase 100 percent of their energy needs from renewable energy resources. In its Order for Notice and Hearing, the Commission stated:

If the Commission approves the Rate Schedules CRG-S as 100% renewable energy tariffs under Code § 56-577 A 5, such approval will impact the Company's obligation to allow retail choice to certain customers seeking to purchase renewable energy. <sup>1</sup>

The Company affirmed that it will serve Rate Schedules CRG-S customers from a portfolio of renewable energy resources ("CRG-S Portfolio") consisting of a combination of hydroelectric, wind, and new solar (*i.e.*, constructed after 2017) resources to ensure that electric generation provided on a continuous hourly basis is 100 percent renewable.<sup>2</sup> Dominion Energy proposed to cap customer enrollment in Rate Schedules CRG-S at 25 megawatts ("MW") of customer peak load.<sup>3</sup>

Dominion Energy requested a fixed rate of 9.627 ¢ per kilowatt-hour ("kWh") for Rate Schedule CRG-S Residential, and 8.608 ¢ per kWh for Rate Schedule CRG-S Non-residential.<sup>4</sup>

Order for Notice and Hearing at 1.

<sup>&</sup>lt;sup>2</sup> Exhibit No. 2, at 5.

<sup>&</sup>lt;sup>3</sup> *Id.* at 6.

<sup>&</sup>lt;sup>4</sup> *Id.* at 7.

The Company stated that these rates will be charged in lieu of the customers' generation component of electricity supply service billed under their standard tariffs.<sup>5</sup> The Company advised that its requested rates will be fixed for a period of three years from receiving Commission approval, and subject to change, with Commission approval, to reflect any changes in market conditions.<sup>6</sup>

The Company advised that Rate Schedule CRG-S customers will be subject to any existing and future distribution and transmission riders, including Riders C1A, C2A, U, and T1.<sup>7</sup> Dominion Energy also maintained that Rate Schedule CRG-S customers will not be subject to Fuel Charge Rider A, and Riders B, BW, GV, R, S, US-2, and W.<sup>8</sup>

The Company stated that it will assign the costs and revenues associated with the CRG-S Portfolio directly to customers taking service under the applicable Rate Schedules CRG-S "such that no other Virginia jurisdictional customers, or customers in the Company's other jurisdictions . . . will bear any responsibility for costs and expenses incurred to provide service thereunder." Dominion Energy maintained that the CRG-S Portfolio will be "ring-fenced." On the other hand, the Company confirmed that customers taking service under Rate Schedules CRG-S will not be allocated the costs and expenses of facilities or power purchase not included in the CRG-S Portfolio. The Company affirmed that it would use the accounting controls used for rider projects to ensure that the CRG-S Portfolio is captured on the Company's books and records on a stand-alone basis. 12

Dominion Energy advised that the initial enrollment period will be not more than 90 days. <sup>13</sup> The Company will begin providing 100 percent continuous renewable generation to all Rate Schedule CRG-S customers within 60 days after the end of the enrollment period. <sup>14</sup> Rate Schedule CRG-S customers will be subject to a minimum one-year term, and may terminate after the initial one-year term on 30 days' notice. <sup>15</sup> Dominion Energy affirmed that it will initiate a new enrollment period on an annual basis. <sup>16</sup>

Dominion Energy asserted that the rates in its proposed Rate Schedules CRG-S "are just and reasonable because they are designed to recover the Company's actual costs to serve the

<sup>&</sup>lt;sup>5</sup> *Id*.

<sup>&</sup>lt;sup>6</sup> *Id.* at 8.

<sup>&</sup>lt;sup>7</sup> *Id.* 

<sup>&</sup>lt;sup>8</sup> *Id.* at 8-9.

<sup>&</sup>lt;sup>9</sup> *Id.* at 9.

<sup>&</sup>lt;sup>10</sup> Id.

<sup>&</sup>lt;sup>11</sup> *Id.* at 9-10.

<sup>&</sup>lt;sup>12</sup> *Id.* at 10.

<sup>13</sup> *Id.* at 11.

<sup>&</sup>lt;sup>14</sup> *Id.* 

<sup>&</sup>lt;sup>15</sup> *Id.* at 11-12.

<sup>&</sup>lt;sup>16</sup> *Id.* at 12.

participating customers as calculated using the ratemaking formula, inclusive of an appropriate margin, and do not require the participating customers to pay for, or subsidize, the costs of other generation resources or power purchases not used to serve such customers." In addition, Dominion Energy contended that Rate Schedules CRG-S "are in the public interest because they further the Commonwealth Energy Policy stated in [Code] §§ 67-101 and 67-102." The Company also pointed to the Virginia Energy Plan, Governor McAuliffe's Executive Order 57, and § 56-577 A 5 of the Code in support of its public interest assertion. <sup>19</sup>

# **Dominion Energy's Direct Testimony**

In support of its Application, Dominion Energy filed the direct testimony of Gregory J. Morgan, director of customer rates and regulation for the Company; J. Scott Gaskill, director of power generation regulated operations for the Company; and Brett A. Crable, director of new technology and energy conservation for the Company. A summary of the testimony of each witness is provided below.

Gregory J. Morgan explained the reasons for the Company's tariff offerings, introduced Rate Schedules CRG-S, addressed the eligibility requirements for participation, and described the Company's proposed cost allocation and accounting protocols that ensure non-participating customers bear no responsibility for costs related to providing service to participating customers. Mr. Morgan also provided proposed Rate Schedule CRG-S Residential, Rate Schedule CRG-S Non-residential, and a summary of how typical customers' bills may differ if they choose to take service under the Rate Schedules CRG-S.

Mr. Morgan stated that the proposed Rate Schedules CRG-S are designed to serve eligible customers who wish to displace 100 percent of their electric supply with the supply of renewable energy provided by the Company on a continuous hourly basis ("[e]xcept for interruptions due to force majeure, transmission or distribution directed curtailments, or de

<sup>&</sup>lt;sup>17</sup> *Id*.

<sup>&</sup>lt;sup>18</sup> *Id.* at 13.

<sup>&</sup>lt;sup>19</sup> *Id.* at 13-14.

<sup>&</sup>lt;sup>20</sup> Exhibit No. 3, at 2.

<sup>&</sup>lt;sup>21</sup> *Id.* at 3.

minimis operational issues.").<sup>22</sup> Mr. Morgan pointed to §§ 56-577 A 5<sup>23</sup> and 56-234<sup>24</sup> as authority for the Company's Application.<sup>25</sup> Specifically, Mr. Morgan maintains "that an incumbent electric utility may offer its retail electric customers 'electric energy provided 100 percent from renewable energy' pursuant to an approved tariff."<sup>26</sup>

Mr. Morgan testified that a customer taking the generation component of electric supply service under the applicable Rate Schedule CRG-S would no longer receive generation component of electric supply service under the Company's existing rate schedule, but would

A. Retail competition for the purchase and sale of electric energy shall be subject to the following provisions:

5. After the expiration or termination of capped rates, individual retail customers of electric energy within the Commonwealth, regardless of customer class, shall be permitted:

a. To purchase electric energy provided 100 percent from renewable energy from any supplier of electric energy licensed to sell retail electric energy within the Commonwealth, other than any incumbent electric utility that is not the incumbent electric utility serving the exclusive service territory in which such a customer is located, if the incumbent electric utility serving the exclusive service territory does not offer an approved tariff for electric energy provided 100 percent from renewable energy; and b. To continue purchasing renewable energy pursuant to the terms of a power purchase agreement in effect on the date there is filed with the Commission a tariff for the incumbent electric utility that serves the exclusive service territory in which the customer is located to offer electric energy provided 100 percent from renewable energy, for the duration of such agreement.

<sup>24</sup> The relevant portions of § 56-234 are as follows:

A. It shall be the duty of every public utility to furnish reasonably adequate service and facilities at reasonable and just rates to any person, firm or corporation along its lines desiring same. Notwithstanding any other provision of law:

B. It shall be the duty of every public utility to charge uniformly therefor all persons, corporations or municipal corporations using such service under like conditions. . . .

<sup>&</sup>lt;sup>22</sup> Id. at 4 n.1.

<sup>&</sup>lt;sup>23</sup> Section 56-577 A 5 states:

<sup>&</sup>lt;sup>25</sup> Exhibit No. 3, at 4.

<sup>&</sup>lt;sup>26</sup> *Id.*, quoting § 56-577 A 5.

have all of its energy and capacity supply needs met by the selected renewable energy resources.<sup>27</sup>

Mr. Morgan advised that the eligibility requirement for a customer who wishes to receive service under one of the Rate Schedules CRG-S is that the customer must have a peak demand of less than 1 MW in the most recent 12-month billing period prior to electing service on the applicable Rate Schedule CRG-S.<sup>28</sup> Mr. Morgan stated that participating customers will be charged a fixed rate of 9.627 ¢ per kWh for residential customers, and 8.608 ¢ per kWh for nonresidential customers.<sup>29</sup> Mr. Morgan also confirmed that the Rate Schedule CRG-S rates will be fixed for a three-year period, and subject to change, with Commission approval, to reflect changes in market conditions.<sup>30</sup> Mr. Morgan testified that customers on the Rate Schedules CRG-S will continue to be subject to distribution service charges, transmission demand and energy charges, Riders C1A and C2A for the recovery of peak-shaving and energy efficiency program costs, Rider U for the recovery of strategic underground program costs, and Rider T1 for recovery of transmission costs.<sup>31</sup> On the other hand, Mr. Morgan affirmed that customers on the Rate Schedules CRG-S will not be subject to the following riders: Fuel Charge Rider A; Rider B: Biomass Conversions; Rider BW: Brunswick County Power Station; Rider GV: Greensville County Power Station; Rider R: Bear Garden Generating Station; Rider S: Virginia City Hybrid Energy Center; Rider US-2: 2016 Solar Projects for the Scott, Woodland, and Whitehouse Solar Facilities; and Rider W: Warren County Power Station.<sup>32</sup>

Mr. Morgan testified that Rate Schedule CRG-S customers will receive the generation component of electric supply from the CRG-S Portfolio, and that the cost of the CRG-S Portfolio will be "ring-fenced" and not included in the revenues, costs, or investments of Dominion Energy's Virginia jurisdiction, Virginia non-jurisdiction, Federal Energy Regulatory Commission ("FERC") jurisdiction, or North Carolina jurisdiction.<sup>33</sup> Mr. Morgan advised that adjustments will be made to the production demand and energy allocation factors used in the cost of service to remove the demand-related and energy-related components associated with Rate Schedule CRG-S customers.<sup>34</sup> In addition, Mr. Morgan stated that Dominion Energy will use the same basic accounting controls that it uses for rider projects to capture revenues, costs, and investments on a stand-alone basis.<sup>35</sup>

<sup>&</sup>lt;sup>27</sup> *Id.* at 5.

<sup>&</sup>lt;sup>28</sup> *Id*.

<sup>&</sup>lt;sup>29</sup> *Id.* at 5-6.

<sup>&</sup>lt;sup>30</sup> *Id*. at 6.

<sup>&</sup>lt;sup>31</sup> *Id.* at 6-7.

<sup>&</sup>lt;sup>32</sup> *Id.* at 7.

<sup>&</sup>lt;sup>33</sup> *Id.* at 7-8.

<sup>&</sup>lt;sup>34</sup> *Id.* at 8.

<sup>&</sup>lt;sup>35</sup> *Id.* at 9.

Mr. Morgan confirmed that Dominion Energy is proposing an initial enrollment limit of up to 25 MW of customer peak load ("Initial Participation Cap") for the combined Rate Schedules CRG-S.<sup>36</sup>

Mr. Morgan calculated that for typical residential customers with monthly usage of 1,000 kWh, enrolling in Rate Schedule CRG-S Residential will increase the monthly bill by \$20.68.<sup>37</sup> Mr. Morgan maintained that the Rate Schedules CRG-S advance the policy objectives of § 56-577 A 5 "by providing customers access to 100 percent renewable energy supplied directly from the Company, by assembling a portfolio of qualifying renewable resources to meet 100 percent of the generation component of participating customers' electricity supply service energy and capacity needs on a continuous basis at just and reasonable rates." Mr. Morgan contended that the rates were just and reasonable because "they are designed to recover the Company's expected actual costs to serve the participating customers as calculated using the ratemaking formula, inclusive of an appropriate margin, and do not require the participating customers to pay for, or subsidize, the costs of other generation resources or power purchases not used to serve such customers." <sup>39</sup>

Mr. Morgan also argued that the Rate Schedules CRG-S further the Commonwealth Energy Policy stated in §§ 67-101 and 67-102 of the Code and are in the public interest.<sup>40</sup>

J. Scott Gaskill described the CRG-S Portfolio and addressed the calculation of the fixed rates for the generation component of electricity supply service under Rate Schedules-CRG-S.<sup>41</sup>

Mr. Gaskill testified that Dominion Energy issued a Request for Information ("RFI") on July 21, 2017, to solicit renewable energy pricing information from market participants interested in providing 100 percent renewable energy purchase options to the Company. In addition, the Company released a Request for Proposal ("RFP") on September 11, 2017, for its Community Solar Pilot Program. Mr. Gaskill confirmed that the Company based its proposed fixed rates on the results of the RFI and RFP. Mr. Gaskill advised that the Company may also solicit the renewable energy market within the PJM Interconnection, L.L.C. ("PJM") footprint and enter into power purchase agreements ("PPAs") or develop new Company-owned renewable energy resources for its CRG-S Portfolio. Mr. Gaskill stated that the Company will retire the

<sup>&</sup>lt;sup>36</sup> Id. at 9, Attached Schedule 1, at 2, and Attached Schedule 2, at 2.

<sup>&</sup>lt;sup>37</sup> *Id.* at 10.

<sup>&</sup>lt;sup>38</sup> *Id.* at 11.

<sup>&</sup>lt;sup>39</sup> *Id*.

<sup>&</sup>lt;sup>40</sup> *Id.* at 12-13.

<sup>&</sup>lt;sup>41</sup> Exhibit No. 7, at 2.

<sup>&</sup>lt;sup>42</sup> *Id.* at 2-3.

<sup>&</sup>lt;sup>43</sup> *Id.* at 3.

<sup>&</sup>lt;sup>44</sup> *Id*.

<sup>&</sup>lt;sup>45</sup> Id.

renewable energy certificates ("RECs") associated with the renewable energy generated and used to serve Rate Schedule CRG-S customers.<sup>46</sup>

Mr. Gaskill affirmed that the proposed rates for Rate Schedule CRG-S were produced by the same ratemaking formula the Company proposed for continuous renewable generation service for large customers in Case No. PUR-2017-00060.<sup>47</sup> Mr. Gaskill testified that Dominion Energy examined the relevant hourly load data for residential and non-residential customers and applied this data to the estimated enrollment levels and the intended renewable energy portfolio.<sup>48</sup> Mr. Gaskill pointed out the proposed rates include a PJM settlement, administrative, and ancillary charge, as well as an operating margin equal to the Company's most recently-approved return on equity.<sup>49</sup> Mr. Gaskill maintained that the operating margin compensates the Company for "financial risks and incremental internal labor costs associated with implementing the CRG-S Portfolio."<sup>50</sup>

Mr. Gaskill testified that the fixed rates of 9.627 ¢ per kWh for residential customers and 8.608 ¢ per kWh for non-residential customers reflect the cost of providing continuous renewable energy to these customers. Mr. Gaskill confirmed that the rates for Rate Schedules CRG-S will be fixed for the first three years from receiving Commission approval, and after that, subject to change, with Commission approval, to reflect changes in market conditions. <sup>52</sup>

Brett A. Crable addressed the Company's education, marketing, and enrollment process for Rate Schedules CRG-S.<sup>53</sup> Mr. Crable noted that Dominion Energy offers or has sought approval for other renewable energy options for residential and small commercial customers such as replacement of Schedule RG, which will allow commercial customers to offset a portion of their energy needs with their choice of renewable facilities.<sup>54</sup> Mr. Crable advised that in early 2018, the Company plans to file for approval of a Community Solar Pilot Program that will allow residential and small commercial customers to purchase solar energy and the associated RECs for up to 100 percent of their energy use.<sup>55</sup> Mr. Crable described other renewable energy options to include: (i) the Dominion Green Power Program® that allows residential, commercial, and industrial customers to purchase RECs in fixed amounts or to match their energy usage; (ii) Third-Party PPA (Renewable Energy) Pilot Program that allows customers to

<sup>&</sup>lt;sup>46</sup> *Id.* at 4.

<sup>&</sup>lt;sup>47</sup> Id.; See Application of Virginia Electric and Power Company, For approval of 100 percent renewable energy tariffs pursuant to §§ 56-577 A 5 and 56-234 of the Code of Virginia, Case No. PUR-2017-00060, filed May 9, 2017("CRG-L Case").

<sup>&</sup>lt;sup>48</sup> *Id*.

<sup>&</sup>lt;sup>49</sup> Id.

<sup>&</sup>lt;sup>50</sup> Id. at 4-5.

<sup>&</sup>lt;sup>51</sup> *Id.* at 5.

<sup>&</sup>lt;sup>52</sup> Id.

<sup>&</sup>lt;sup>53</sup> Exhibit No. 8, at 2.

<sup>&</sup>lt;sup>54</sup> *Id*. at 3.

<sup>&</sup>lt;sup>55</sup> *Id*.

enter into a PPA with a third-party renewable energy supplier for solar or wind between 50 kilowatts and 1 MW located on the customer's premise; (iii) net metering, agricultural net metering, and the Solar Purchase Program that enable customers to produce renewable energy to either offset their usage or sell to the Company; and (iv) the Solar Partnership Program in which the Company constructs and operates Company-owned solar distributed generation on leased customer property.<sup>56</sup>

Mr. Crable stated that to educate customers, the Company plans to have a dedicated webpage on its website for each new program and will use new releases, direct mail, email, and social media.<sup>57</sup> In addition, Mr. Crable pointed to customer service representatives and key account managers that will provide information about each program.<sup>58</sup>

Regarding enrollment, Mr. Crable testified that Dominion Energy will solicit interest in Rate Schedules CRG-S by the means listed above, and will establish an initial enrollment period of not more than 90 days.<sup>59</sup> Mr. Crable stated that enrollment will be available online and by phone.<sup>60</sup> Mr. Crable affirmed that the Company will begin providing 100 percent continuous renewable generation to Rate Schedules CRG-S customers within 60 days after the end of the enrollment period.<sup>61</sup> Mr. Crable verified that subscribing customers to Rate Schedules CRG-S will be subject to a minimum one-year term and after the initial one-year term, customers may terminate with 30 days' notice.<sup>62</sup> Finally, Mr. Crable advised that the Company will initiate a new enrollment period on an annual basis.<sup>63</sup>

# Walmart's Direct Testimony

On March 6, 2018, Walmart filed the Direct Testimony and Exhibits of Steve W. Chriss, director, energy and strategy analysis for Walmart. The Direct Testimony and Exhibits of Steve W. Chriss are summarized below:

Steve W. Chriss stated that Walmart operates 152 retail units, four distribution centers, and employs over 44,000 people in the Commonwealth.<sup>64</sup> Mr. Chriss specified that Walmart operates 96 stores and two distribution centers in Dominion Energy's service territory and is primarily served under the Company's Large General Service Secondary Voltage ("GS-3") schedule, but also served under the Company's Small General Service ("GS-1") schedule and

<sup>&</sup>lt;sup>56</sup> *Id.* at 4.

<sup>&</sup>lt;sup>57</sup> *Id.* at 5.

<sup>&</sup>lt;sup>58</sup> *Id*.

<sup>&</sup>lt;sup>59</sup> *Id*.

<sup>&</sup>lt;sup>60</sup> *Id*.

<sup>&</sup>lt;sup>61</sup> *Id.* at 6.

<sup>&</sup>lt;sup>62</sup> *Id*.

<sup>&</sup>lt;sup>63</sup> *Id*.

<sup>&</sup>lt;sup>64</sup> Exhibit No. 14, at 2.

Intermediate General Service ("GS-2") schedule.<sup>65</sup> Mr. Chriss advised that Walmart has established the following goals: (i) to be supplied 100 percent by renewable energy; (ii) by 2025, to be supplied by 50 percent renewable energy; and (iii) by 2025, reduce emissions by 18 percent through the deployment of energy efficiency and consumption of renewable energy.<sup>66</sup>

Because approval of the Company's proposed Rate Schedules CRG-S will eliminate non-utility suppliers of renewable energy from the Virginia market, Mr. Chriss maintained that the Commission "should carefully scrutinize whether the Company's proposed [Rate Schedules CRG-S] produce just and reasonable rates, adequately protect the public interest, and enhance renewable opportunities for customers." In addition Mr. Chriss recommended that if the Commission approves the Company's proposed Rate Schedules CRG-S, the Commission "should approve [them] solely under the experimental rate authority of [Code] § 56-234 B." 68

Mr. Chriss noted that Dominion Energy asserted that if Rate Schedules CRG-S are approved as an experimental rate, such tariffs would qualify as approved tariffs for electric energy provided 100 percent from renewable energy as defined by § 56-577 A 5 of the Code.<sup>69</sup>

Mr. Chriss pointed out that Dominion Energy requested a 100 percent renewable energy tariff for customers with peak demand of 1,000 kilowatts ("kW") or greater ("CRG Tariffs") in Case No. PUR-2017-00060. Mr. Chriss observed that as of March 2, 2018, the Commission had not approved the CRG Tariffs. Mr. Chriss advised that the Hearing Examiner in that proceeding issued a Report recommending that the Commission deny the CRG Tariffs as proposed, and approve the CRG Tariffs only as an experiment. The commission deny that the CRG Tariffs only as an experiment.

Mr. Chriss acknowledged that Walmart has not sought to obtain 100 percent renewable energy from a non-utility electric supplier and is unaware of any competitive offerings from such entities. The chriss expressed concern that approval of the proposed Rate Schedules CRG-S in this proceeding would limit options for purchasing 100 percent renewable energy. Mr. Chriss maintained that the rate proposed by the Company "could result in uneconomic opportunities versus those that could be developed in a competitive environment . . . ." Mr. Chriss asserted

<sup>&</sup>lt;sup>65</sup> *Id.* at 3.

<sup>66</sup> Id.

<sup>&</sup>lt;sup>67</sup> *Id.* at 4.

<sup>&</sup>lt;sup>68</sup> *Id*.

<sup>&</sup>lt;sup>69</sup> *Id.* at 6.

<sup>70</sup> Id. at 9; See CRG-L Case.

<sup>&</sup>lt;sup>71</sup> *Id*.

<sup>&</sup>lt;sup>72</sup> Id.; See Application of Virginia Electric and Power Company, For approval of 100 percent renewable energy tariffs pursuant to §§ 56-577 A 5 and 56-234 of the Code of Virginia, Case No. PUR-2017-00060, Report of A. Ann Berkebile, Hearing Examiner (March 2, 2018).

<sup>73</sup> Exhibit No. 14, at 9.

<sup>74 - 1 - 10</sup> 

<sup>&</sup>lt;sup>74</sup> *Id.* at 10.

<sup>&</sup>lt;sup>75</sup> *Id*.

that "[f]rom Walmart's perspective, reducing renewable opportunities is not in the public interest." 76

## **Direct Energy's Direct Testimony**

On March 6, 2018, Direct Energy filed the direct testimony of John R. Hanger, president of Hanger Consulting LLC; and Frank Lacey, independent consultant. A summary of the testimony of each witness is provided below:

John R. Hanger stated that Direct Energy is licensed as a Virginia Competitive Service Provider ("CSP") and is one of the largest competitive retail and wholesale providers of electricity, natural gas, and energy management services. The Mr. Hanger advised that Direct Energy provides natural gas service to residential and non-residential customers in Virginia, but is not yet active in Virginia with electricity offerings. Mr. Hanger opposed approval of the Rate Schedules CRG-S and contended that the Rate Schedules CRG-S are not just and reasonable and violate the public interest for the following reasons: 79

- 1. The cap of 25 MWs is too small to make a material difference in the diversity of Virginia's power supplies.
- 2. All, most, or some of the renewable energy provided under the proposed tariffs could be located outside Virginia.
- 3. All, most, or some of the renewable energy provided under the proposed tariffs would come from existing renewable energy resources.
- 4. None, most, or some of the renewable energy provided under the proposed tariffs will not be supplied from new renewable energy resources.
- 5. Residential customers served on the proposed tariffs would be treated unequally compared to all other residential customers because they would be required to take service under the tariffs for a minimum of one year.
- 6. The Company's proposed tariffs restrict renewable energy service to a product that is purported to be continuous on an hourly basis.
- 7. The Company's proposed tariffs do not make it possible for customers to buy renewable energy in amounts that are less than 100 percent of their needs.
- 8. The proposed rates violate the public interest by including a 9.4 percent return.
- 9. Approval of the Company's proposed tariffs would block competition from CSPs and would end the right of its residential and small commercial customers to purchase renewable energy supplied from CSPs, regardless of whether any customers are served under the proposed tariffs.

<sup>&</sup>lt;sup>76</sup> Id.

<sup>&</sup>lt;sup>77</sup> Exhibit No. 13, at 3.

<sup>&</sup>lt;sup>78</sup> *Id*.

<sup>&</sup>lt;sup>79</sup> *Id.* at 4-5.

Mr. Hanger referred to the proposed cap of 25 MW as an inconsequential amount of renewable energy that "violates the public interest in building substantial amounts of new renewable energy to serve [Dominion Energy's] customers so as to diversify the generation resources of [Dominion Energy], reduce air and water pollution caused by traditional energy sources, and decrease pollution that causes climate change."<sup>80</sup>

Mr. Hanger testified that customers on the Rate Schedules CRG-S would be paying more while having more limited rights to end service than traditional customers.<sup>81</sup> Mr. Hanger maintained that the Company's proposal "is not a reasonable offer to customers," and the proposed tariffs are "discriminatory, unequal, certainly not just and reasonable and violate the public interest for those reasons."<sup>82</sup>

Mr. Hanger maintained that providing continuous hourly renewable supply as the only renewable energy option is not just and reasonable for two reasons. The first reason is that Dominion Energy is unable to meet this standard and does not have the necessary metering to validate its claims. The second reason is that the "hourly" standard is arbitrary, will undermine Virginia's official energy policy, and increases the cost consumers must pay for a renewable energy supply tariff. Mr. Hanger argued that Dominion Energy could reduce the rates of Rate Schedules CRG-S by balancing supply and demand on a basis longer than an hourly basis and by allowing customers to buy less than 100 percent renewable energy.

Mr. Hanger stated that ending the right of customers of Dominion Energy to buy renewable energy from CSP would undermine Virginia Energy Policy by limiting the deployment of renewable energy.<sup>87</sup> In addition, Mr. Hanger asserted that ending competition for the supply of renewable energy undermines the goal of controlling costs of renewable energy.<sup>88</sup> Finally, Mr. Hanger weighed the costs and benefits of approving the Company's Application and found:

The benefits of the proposed tariffs are at best inconsequential and at worst non-existent, as no consumers may select this unattractive product, no new renewable energy generation may be built, and no generation in Virginia may be selected for the program. Furthermore, [Dominion Energy] will not install the metering necessary to measure whether or not [Dominion Energy] is

<sup>&</sup>lt;sup>80</sup> *Id.* at 5.

<sup>&</sup>lt;sup>81</sup> *Id.* at 8.

<sup>82</sup> *Id.* at 8-9.

<sup>83</sup> *Id.* at 9.

<sup>&</sup>lt;sup>84</sup> *Id*.

<sup>85</sup> *Id.* at 9-10.

<sup>&</sup>lt;sup>86</sup> *Id.* at 10.

<sup>&</sup>lt;sup>87</sup> *Id.* at 12.

<sup>88</sup> Id.

delivering hourly renewable energy to customers, as it represents. Yet, the cost of approval is certain and high. Approval ends the ability of Virginia and customers to benefit from competition to provide 100 [percent] renewable energy to at least those customers in the program and possibly to all customers eligible for service under the proposed tariffs. This high cost outweighs any benefit produced by the proposed tariffs and requires a conclusion that the tariffs are not just and reasonable and violate the public interest.<sup>89</sup>

Frank Lacey affirmed that Direct Energy is a licensed CSP in Virginia, with licenses to provide 100 percent renewable energy to residential, commercial, industrial, and governmental customers. Mr. Lacey contended that the proposed Rate Schedules CRG-S "cannot be deemed to be just and reasonable, nor in the public interest." Furthermore, Mr. Lacey asserted that the proposed Rate Schedules CRG-S "are nothing more than an effort to eliminate CSPs from the market, which will dramatically reduce customers' access to renewable energy products."

Mr. Lacey provided the following formula used by the Company to calculate its rates:93

Rate = 
$$[(A - B + C + F)/Q_{load}] * (1 + r)$$

Where:

A = Cost of Renewable Generation Procured =  $\Sigma i$  [Pppa \* Qppa] i

B = Credit for Generation Procured =  $\Sigma i$  [Pnode \* Qppa] i + PQrecs

C = Cost of Load in PJM = Pdom \* Qload

F = PJM Admin Fees = Load Ratio Share of PJM Administrative and Ancillary Charges

Pppa = Price of PPA for renewable generation including energy, capacity, and RECs

Pnode = Forecasted price of energy and capacity at generator node

PQrecs = Forecasted price and quantity of excess REC sales.

Pdom = Forecasted price of energy and capacity at Dom Zone

Qppa = Quantity of renewable generation procured through PPA

Qload = Forecasted quantity of customer load

r = Operating margin equal to the Company's most recently approved return on equity

i = Number of PPAs in renewable generation portfolio for customer

Mr. Lacey pointed out that the only known variable in Dominion Energy's formula is the Company's most recently approved return on equity of 9.4 percent.<sup>94</sup> All other variables are

<sup>&</sup>lt;sup>89</sup> *Id.* at 12-13.

<sup>&</sup>lt;sup>90</sup> Exhibit No. 11, at 4.

<sup>&</sup>lt;sup>91</sup> *Id.* at 5.

<sup>&</sup>lt;sup>92</sup> *Id*.

<sup>&</sup>lt;sup>93</sup> *Id.* at 6-7, Attached Exhibit FL-3.

<sup>&</sup>lt;sup>94</sup> *Id.* at 8.

based on "indicative" numbers and internal "forecasts." Mr. Lacey stated that such variables have not been presented in this proceeding, and as in the *CRG-L Case*, the Commission should find that because such forecasts may not reflect actual market prices, the use of the ratemaking formula may not result in just and reasonable rates. More specifically, Mr. Lacey questioned whether the Company's cost estimates were for pricing at some point in the future in light of expectations of future declines in the cost of renewable energy. Mr. Lacey also raised concern for a forecasted annual escalation of 2 percent per year for a solar facility disclosed in response to a Staff Interrogatory 1-15.98

Mr. Lacey testified that the proposed Rate Schedules CRG-S are not just and reasonable because Dominion Energy has failed to support its proposed rates with any costs, and the proposed rates include a profit margin that is two or more times the level normally considered to be just and reasonable. Mr. Lacey pointed out that if Dominion Energy sources renewable energy form companies earning a return on capital of 10 percent, the total margin charged to the customer will by 19.4 percent. Moreover, Mr. Lacey contended that if the Company has assumed solar will increase by 2 percent every year, and if cost actually decrease by 5 percent, Dominion Energy would earn a return of over 15 percent. Dominion Energy would earn a return of over 15 percent.

Mr. Lacey maintained that a return of 9.4 percent was not just and reasonable given the lack of risk associated with the PPAs that will be used to supply the renewable energy. <sup>102</sup> Among other things, Mr. Lacey testified as follows concerning the proposed 9.4 percent return:

This cost element is not tied to any real expense, real exposure or real risk of the [Company]. It is not tied to equity deployed, working capital utilized, credit consumed, debt, or any other financial metric. It simply aggregates hypothetical costs and adds 9.4 [percent] to that total to arrive at a "regulated rate." 103

Mr. Lacey disagreed with Dominion Energy that the proposed margin is appropriate to compensate the Company for price supply and other risks it is assuming, as well as incremental internal labor costs associated with implementing the CRG-S Portfolio. <sup>104</sup> Mr. Lacey asserted that "[u]tilities generally pass PPA costs through to their customers at cost with no margin

<sup>95</sup> Id.

<sup>&</sup>lt;sup>96</sup> *Id.* at 8-9.

<sup>&</sup>lt;sup>97</sup> *Id.* at 9-10.

<sup>&</sup>lt;sup>98</sup> *Id.* at 11.

<sup>&</sup>lt;sup>99</sup> *Id.* at 13.

<sup>&</sup>lt;sup>100</sup> *Id.* at 14.

<sup>&</sup>lt;sup>101</sup> *Id*.

<sup>&</sup>lt;sup>102</sup> *Id.* at 16-18.

<sup>&</sup>lt;sup>103</sup> *Id.* at 18.

<sup>&</sup>lt;sup>104</sup> *Id.* at 19.

added."<sup>105</sup> Further, Mr. Lacey argued that the price supply and other risks assumed by Dominion Energy in regard to the Rate Schedules CRG-S "are *de minimis* relative to the risks inherent in running a fully integrated utility . . . for which the [Company] is allowed to earn a return on equity of 9.4 [percent]"<sup>106</sup>

Mr. Lacey also took issue with Dominion Energy's proposed 25 MW cap on participation. Mr. Lacey maintained that the proposed cap would harm "customers who might wish to participate but would otherwise be unable to." Among other things, Mr. Lacey asserted that the Company failed to provide details on how it will choose which customers participate and how it will evaluate raising the cap. Finally, Mr. Lacey contended that the 25 MW cap demonstrates that Dominion Energy "is acting in a manner designed merely to thwart competitive forces from entering the market." 110

Mr. Lacey questioned the Company's unexplained exclusion of net metering customers from the Rate Schedules CRG-S, and argued that net metering customers are more likely than others to seek 100 percent renewable energy.<sup>111</sup>

Mr. Lacey asserted that Dominion Energy's proposed ring-fencing plan is flawed, and indicates that the Company's proposal "is more like a special contract or an experimental rate proposal than a tariff." <sup>112</sup>

Mr. Lacey noted that Dominion Energy is not proposing to require advanced metering for customers taking service under Rate Schedules CRG-S. Mr. Lacey maintained that advanced metering was not required to manage load to meet the "every hour" requirement because meters only reveal "after the fact" results. If In addition, Mr. Lacey stated that "if PJM settles and bills each hour independently, and the [Company] is not requiring an hourly meter, then it is simply impossible for the [Company] to manage to the 100 [percent] renewable energy in every hour standard." Mr. Lacey asserted that the "every hour" requirement is not achievable, cannot be verified without advanced metering, and is not required or used anywhere for any renewable resource product or tariff. Is

<sup>105</sup> Id

<sup>&</sup>lt;sup>106</sup> *Id*.

<sup>&</sup>lt;sup>107</sup> Id.

<sup>&</sup>lt;sup>108</sup> *Id*.

<sup>&</sup>lt;sup>109</sup> *Id.* at 19-20.

<sup>&</sup>lt;sup>110</sup> Id. at 20.

<sup>&</sup>lt;sup>111</sup> *Id.* at 21-23.

<sup>112</sup> Id. at 24.

<sup>&</sup>lt;sup>113</sup> *Id.* at 24.

<sup>114</sup> *Id*.

<sup>&</sup>lt;sup>115</sup> Id. at 25-26.

<sup>116</sup> *Id.* at 27.

Mr. Lacey testified that a CSP would be in a better position than Dominion Energy to meet 100 percent renewable energy goals because it would have other renewable customers with different goals and could "move" renewable energy between customers to cover shortfalls. Mr. Lacey also contended that multi-state CSPs have an enormous amount of flexibility in procuring renewable resources in real-time. On the other hand, Mr. Lacey asserted that "[t]he size of the ring-fenced portfolio will not provide the same scale benefits that can be achieved by a multi-state CSP."

Mr. Lacey strongly recommended against the Commission adopting an hourly settlement of renewable energy standard. 120

Mr. Lacey affirmed that CSPs could enroll a customer onto a 100 percent renewable product on their "next meter-read date." <sup>121</sup>

Mr. Lacey argued that while Dominion Energy's proposal in this case is not inconsistent with Executive Order 57, by eliminating CSPs from the Virginia renewable market, Dominion Energy's proposal is inconsistent with the responsive Secretary of Natural Resources Report and Final Recommendations that includes a recommendation to develop a comprehensive plan to increase corporate access to renewable energy as an economic development tool. 122

Mr. Lacey recommended that the Commission reject Dominion Energy's proposal in its entirety. 123

# Public Witness Hearing of April 17, 2018

A hearing to receive testimony from public witnesses was held on April 17, 2018, in the Commission's courtroom. One public witness appeared and his testimony is summarized below.

Andrew Stith of Norfolk testified that based on his military experience, the Commonwealth is backward regarding the deployment of wind and solar generation. Mr. Stith maintained that Norfolk is a good area for residential solar. Mr. Stith challenged Dominion Energy to establish plans for lower income residential customers to use solar energy to reduce utility bills. Mr. Stith also referred to his church being interested in using wind and solar power to reduce utility bills. Mr. Stith contended that as in North Carolina, windmills should be built in Virginia. Mr. Stith indicated that he wants to someday own a solar company.

<sup>&</sup>lt;sup>117</sup> Id. at 28-29.

<sup>&</sup>lt;sup>118</sup> *Id.* at 29.

<sup>&</sup>lt;sup>119</sup> *Id.* at 30.

<sup>&</sup>lt;sup>120</sup> Id.

<sup>&</sup>lt;sup>121</sup> *Id*.

<sup>&</sup>lt;sup>122</sup> *Id.* at 31-32.

<sup>&</sup>lt;sup>123</sup> Id. at 33.

## Dominion Energy's Supplemental Direct Testimony

On April 18, 2018, Dominion Energy filed the Supplemental Direct Testimony of Gregory J. Morgan. Mr. Morgan's supplemental testimony is summarized below.

Gregory J. Morgan presented alternative rate calculations for Rate Schedules CRG-S in response to Staff Interrogatory No. 1-20, as directed by a Hearing Examiner's Ruling dated March 27, 2018. 124 Mr. Morgan noted that the Company continues to support the use of a continuous hourly standard to closer match a utility's serving a customer's needs, including summer afternoon and winter morning peaks. 125 Mr. Morgan affirmed that there are no "daily-only," "monthly-only," or "annual-only" settlement options for energy in PJM. 126 Mr. Morgan also advised that the fundamental premise that at no time will customers of Rate Schedules CRG-S use the capacity or fuel associated with the Company's existing generation resources, will not be true under a daily, monthly, or annual balancing standard. 127 That is, Mr. Morgan argued that "the Company would be offsetting the customers' energy consumption with renewable generation, but would not be completely serving the customers usage with renewable generation." 128

Mr. Morgan proposed an alternative formula that uses the customers' standard generation tariff for its full requirements service, and supplements that with an incremental charge or credit to reflect the acquisition of renewable resources to offset the customers' load. 129 Thus, Mr. Morgan advised that customers of Rate Schedules CRG-S would continue to pay the Company's standard tariff rate, including fuel, base rates, and riders, plus the incremental cost of procuring renewable energy resources to offset 100 percent of their energy consumption, based on the settlement standard of daily, monthly, or annually. Mr. Morgan stated that the proposed rate design is fundamentally the same as offered for revised Schedule RG, and for the Company's proposed Community Solar offering. 131

Mr. Morgan reported the results as follows:

<sup>&</sup>lt;sup>124</sup> Exhibit No. 4, at 1.

<sup>&</sup>lt;sup>125</sup> *Id.* at 2.

<sup>&</sup>lt;sup>126</sup> *Id.* at 3.

<sup>&</sup>lt;sup>127</sup> *Id.* at 4.

<sup>&</sup>lt;sup>128</sup> *Id.* (emphasis in original).

<sup>&</sup>lt;sup>129</sup> *Id*.

<sup>130</sup> Id. at 5.

<sup>131</sup> Id.

| Residential       | Standard Tariff<br>Rate<br>(¢/kWh) | Renewable Net<br>Charge Rate<br>(A-B) | Customer All-in<br>Generation Rate<br>(¢/kWh) | Hours per<br>Year Served<br>by System |
|-------------------|------------------------------------|---------------------------------------|---|---------------------------------------|
| Hourly (proposed) | n/a                                | n/a                                   | 9.627   | n/a                                   |
| Daily             | 7.559                              | 3.253                                 | 10.812  | 127                                   |
| Monthly           | 7.599                              | 1.759                                 | 9.318   | 1179                                  |
| Annual            | 7.559                              | 0.835                                 | 8.394   | 3453                                  |

| Small<br>Commercial | Standard Tariff<br>Rate<br>(¢/kWh) | Renewable Net<br>Charge Rate<br>(A-B) | Customer All-in<br>Generation Rate<br>(¢/kWh) | Hours per<br>Year Served<br>by System |
|---------------------|------------------------------------|---------------------------------------|---|---------------------------------------|
| Hourly (proposed)   | n/a                                | n/a                                   | 8.608   | n/a                                   |
| Daily               | 6.719                              | 2.730                                 | 9.449   | 129                                   |
| Monthly             | 6.719                              | 1.504                                 | 8.223   | 1572                                  |
| Annual              | 6.719                              | 0.691                                 | 7.410   | 4505                                  |

Mr. Morgan testified that Dominion Energy does not support the daily, monthly, or annual alternatives. <sup>132</sup> Mr. Morgan stated that the Company has not yet considered all of the necessary design features that could result in additional costs. <sup>133</sup> Mr. Morgan advised that the Company continues to believe that having load served by the Company is not what was envisioned in Subsection A 5 as electric energy provided 100 percent from renewable energy. <sup>134</sup>

### **Environmental Respondents' Supplemental Testimony**

On June 19, 2018, Environmental Respondents filed the Direct Testimony of William Matthew Cox, Ph.D., co-founder and chief executive officer of The Greenlink Group, Inc. ("Greenlink"). Dr. Cox's testimony is summarized below.

William Matthew Cox, Ph.D., maintained that Dominion Energy's proposed Rate Schedules CRG-S are not just and reasonable. Dr. Cox recommended that if approved, the Rate Schedules CRG-S should be approved as an experiment so as to permit customers the option of purchasing 100 percent renewable energy from CSPs. 136

<sup>&</sup>lt;sup>132</sup> *Id.* at 6.

<sup>&</sup>lt;sup>133</sup> *Id*.

<sup>&</sup>lt;sup>134</sup> *Id.* at 7.

<sup>135</sup> Exhibit No. 9, at 4.

<sup>&</sup>lt;sup>136</sup> *Id.* at 5.

Dr. Cox contended that the formula proposed by the Company "results in a premium for participating customers." In addition, Dr. Cox found the proposed rates to be flawed because the rates would be fixed for three years regardless of the ultimate generation mix. Dr. Cox asserted that it is unlikely that actual costs will be higher than the indicative CRG-S Portfolio because any shortfall could be made up with lower cost renewable alternatives. Dr. Cox asserted that Dominion Energy would benefit if it made up any shortfall with the least expensive renewable generation available and that the Company has retained flexibility in the composition of the generation portfolio. Finally, Dr. Cox stated that "the current market rate in PJM for renewable energy is less than the rates proposed in the [Rate Schedules CRG-S]." Thus, Dr. Cox maintained that if Dominion Energy made up a shortfall by purchasing renewable energy from the PJM market, "it would still recover more than [its] actual costs from participating customers."

Dr. Cox took the position that the hourly standard proposed by Dominion Energy "is arbitrary" and artificially increases rates. <sup>143</sup> Dr. Cox contended that the hourly standard forces Dominion Energy to a CRG-S Portfolio of 87.1 percent of hydro power, 3.7 percent of solar, and 9.2 percent of wind. <sup>144</sup> Dr. Cox disagreed with the rate calculations presented in the Company's supplemental testimony and pointed out that the Company failed to use the same formula to calculate the rates on a daily, monthly, and annual basis. <sup>145</sup> Using the same data and formulas as Dominion Energy, Dr. Cox recalculated the hourly, daily, monthly, and annual standards as follows: <sup>146</sup>

|                   | Cox's<br>Res Rate<br>(¢/kWh) | Co's Res<br>Rate<br>(¢/kWh) | Diff.<br>(¢/kWh) | Cox's<br>Res Rate<br>(¢/kWh) | Co's Res<br>Rate<br>(¢/kWh) | Diff.<br>(¢/kWh) |
|-------------------|------------------------------|-----------------------------|------------------|------------------------------|-----------------------------|------------------|
| Hourly (proposed) | 9.627                        | 9.627                       | 0                | 8.608                        | 8.608                       | 0                |
| Daily             | 8.872                        | 10.812                      | -1.94            | 8.030                        | 9.449                       | -1.419           |
| Monthly           | 7.238                        | 9.318                       | -2.08            | 6.689                        | 8.223                       | -1.534           |
| Annual            | 6.227                        | 8.394                       | -2.167           | 5.800                        | 7.410                       | -1.61            |

<sup>&</sup>lt;sup>137</sup> *Id.* at 6.

<sup>&</sup>lt;sup>138</sup> *Id.* at 8.

<sup>139</sup> *Id.* at 9-10.

<sup>&</sup>lt;sup>140</sup> *Id*. at 10.

<sup>&</sup>lt;sup>141</sup> *Id.* at 11.

<sup>&</sup>lt;sup>142</sup> *Id*.

<sup>&</sup>lt;sup>143</sup> *Id.* at 11-12.

<sup>&</sup>lt;sup>144</sup> *Id*. at 12.

<sup>&</sup>lt;sup>145</sup> *Id.* at 14.

<sup>&</sup>lt;sup>146</sup> *Id.* at 15.

Dr. Cox testified that the hourly standard is a roadblock for third parties wanting to participate in this market, such as solar developers. <sup>147</sup> In addition, Dr. Cox pointed out that Dominion Energy estimated that it will not meet its hourly standard for 12 hours per year for the Rate Schedule CRG-S Residential customers and 10 hours per year for the Rate Schedule CRG-S Non-residential customers. <sup>148</sup>

Dr. Cox noted that Dominion Energy will not require hourly metering equipment for participation in Rate Schedules CRG-S, but will use hourly metering when available and historical information for other customers. Dr. Cox questioned the accuracy of using historical load profiles and counted this as another way that the Company is unable to meet the hourly standard. Dr. Cox recommended the use of a monthly standard and the customers' existing monthly settlements.

In addition, Dr. Cox testified that in an attempt to meet its proposed hourly standard, Dominion Energy will procure an aggregate of 3.9 times more renewable energy than what participating residential customers will need and 3.2 times more renewable energy than what participating non-residential customers will need. Dr. Cox acknowledged that the Company credits participating customers with the market value of the over-procurement, but maintained that the cost of the renewable energy is currently higher than the PJM market price. Dr. Cox argued that the Company's "proposal shifts all the risk from [Dominion Energy] to the participating customers." 154

# **Staff Direct Testimony**

On July 17, 2018, Staff filed the direct testimony of Patrick W. Carr, Deputy Director with the Commission's Division of Utility Accounting and Finance; and Allison F. Samuel, principal utilities analyst in the Commission's Division of Public Utility Regulation. A summary of the testimony of each witness is provided below.

Patrick W. Carr discussed the ring-fencing controls proposed by the Company and concluded that such controls should be adequate to shield non-participating customers from direct costs associated with the CRG-S Portfolio.<sup>155</sup>

<sup>&</sup>lt;sup>147</sup> *Id.* at 16.

<sup>&</sup>lt;sup>148</sup> *Id.* at 17.

<sup>&</sup>lt;sup>149</sup> *Id.* at 18-19.

<sup>&</sup>lt;sup>150</sup> Id. at 19.

<sup>&</sup>lt;sup>151</sup> Id.

<sup>152</sup> *Id.* at 20.

<sup>153</sup> Id. at 21.

<sup>&</sup>lt;sup>154</sup> Id.

<sup>155</sup> Exhibit No. 16, at 4.

With regard to the indirect financial risks associated with the CRG-S Portfolio, Mr. Carr explained that the CRG-S Portfolio's output will rarely match the Rate Schedules CRG-S customers' load. <sup>156</sup> He noted that the Company plans to minimize the hours in which the CRG-S Portfolio's output will be less than load, which will result in the output being greater than load the majority of the time. <sup>157</sup> Mr. Carr explained that the Company would sell the excess energy in PJM and that the prices for those energy sales may be higher or lower than the contracted PPA price of that energy. <sup>158</sup> As a result, the Company will incur losses or gains on energy sales in nearly all hours. <sup>159</sup> Mr. Carr stated that an estimate of those gains/losses is factored into the formulas the Company used to develop its Rate Schedules CRG-S rates and noted that the participating customers will bear much of this risk and cost. <sup>160</sup> Mr. Carr further explained that because the estimated gains/losses will inevitably be different from the estimates, the Company will bear some of the market-related risk; however, the Company will not pass those actual-versus-estimated gains/losses on to the non-participating customers. <sup>161</sup> Mr. Carr explains that those gains/losses will accrue to shareholders. <sup>162</sup>

While Mr. Carr did not take issue with the Company's proposal, he noted that non-participating customers are not fully insulated from indirect financial risks associated with potential losses or the costs associated with the Company taking on these added risks. <sup>163</sup> Mr. Carr explained that one potential effect of these risks on costs for non-participating customers could be a higher cost of capital for the Company. <sup>164</sup>

As a result of those concerns, Mr. Carr recommended the following reporting requirements:

- 1. The quantity and cost of the CRG-S Portfolio's PPA capacity and energy purchased;
- 2. The quantity and cost of the CRG-S Portfolio's owned capacity and energy produced;
- 3. The quantity and price of sales to CRG-S customers;
- 4. The quantity and price of excess CRG-S Portfolio capacity and energy sold in PJM;
- 5. The quantity and price of the cost of CRG-S load in PJM;
- 6. The quantity and price of excess REC sales (i.e., RECs associated with excess CRG-S generation not needed to serve Rate Schedules CRG-S customers);
- 7. The quantity and cost of energy and RECs purchased to serve Rate Schedule CRG-S customers for the hours during which the CRG-S Portfolio's generation is insufficient to serve the Rate Schedules CRG-S customers' load;

<sup>&</sup>lt;sup>156</sup> *Id.* at 5.

<sup>&</sup>lt;sup>157</sup> *Id*.

<sup>&</sup>lt;sup>158</sup> *Id*.

<sup>&</sup>lt;sup>159</sup> *Id*.

<sup>&</sup>lt;sup>160</sup> *Id.* at 6.

<sup>&</sup>lt;sup>161</sup> *Id*.

<sup>&</sup>lt;sup>162</sup> *Id*.

<sup>&</sup>lt;sup>163</sup> *Id*.

<sup>&</sup>lt;sup>164</sup> *Id.* at 6-7.

- 8. The contract length and expected annual megawatt hours of each of the CRG-S Portfolio's PPAs;
- 9. The service lives, capacity, and expected capacity factor of each of the CRG-S Portfolio's owned generation facilities; and
- 10. The expected load of Rate Schedules CRG-S customers. 165

Next, Mr. Carr opposed the Company's proposal to include a margin in the Rate Schedules CRG-S rates. <sup>166</sup> Mr. Carr noted that the CRG-S Portfolio requires no up-front investment of capital from the Company. <sup>167</sup> Next, Mr. Carr explained that although the Company does bear some risk related to the offering of the CRG-S tariff, so do non-participating customers. <sup>168</sup> Mr. Carr pointed out that the Company's proposal appears to be inequitable as the Company would be compensated for its risks while non-participating customers would not be compensated. <sup>169</sup> Mr. Carr advised that the Company's decision to serve the Rate Schedules CRG-S through PPAs could result in over-recovery or under-recovery and asserts that the potential for gains serves as compensation for the Company for the risk of losses. <sup>170</sup> Mr. Carr stated that, even if some level of margin is appropriate, the Company has not presented any evidence supporting its assertion that its cost of equity is the appropriate level. <sup>171</sup>

Lastly, Mr. Carr noted that another purpose the Company stated for its proposed margin was to recover the incremental labor costs of supporting and managing the CRG-S tariff. Mr. Carr noted that the Company's ROE bears no relationship to such costs and "[i]f the Company wishes to recover support costs through the formula, it should be done through an explicit input, not an unrelated margin adder." Lastly, Mr. Carr indicated that the Company made a virtually identical proposal in the *CRG-L Case*, and the Commission denied that request. Mr. Carr concluded that the Commission's Final Order in the *CRG-L Case* supports Staff's recommendation in this case. 173

Allison F. Samuel summarized the Company's Application and provided guidance on whether the Rate Schedules CRG-S meet the 100 percent renewable standard in

<sup>&</sup>lt;sup>165</sup> *Id.* at 7-8

<sup>&</sup>lt;sup>166</sup> *Id.* at 10.

<sup>&</sup>lt;sup>167</sup> *Id*.

<sup>&</sup>lt;sup>168</sup> *Id*.

<sup>&</sup>lt;sup>169</sup> *Id*.

<sup>&</sup>lt;sup>170</sup> Id.

<sup>&</sup>lt;sup>171</sup> *Id*.

<sup>&</sup>lt;sup>172</sup> *Id.* at 11.

<sup>&</sup>lt;sup>173</sup> Id.

Subsection A 5<sup>174</sup> and whether the proposed rates are just and reasonable.<sup>175</sup> Ultimately, Staff did not take a position on either issue.<sup>176</sup>

Ms. Samuel also discussed several cases previously filed pursuant to Subsection A 5 and noted the Commission's decisions in those cases. Additionally, Ms. Samuel compared the Application to the Company's proposal in the *CRG-L Case* and concluded that the Company's proposal in this case may have addressed some of the Commission's concerns in the *CRG-L Case*. The Case is the company's proposal in this case may have addressed some of the Commission's concerns in the *CRG-L Case*.

Regarding the Company's proposal to provide renewable energy on a continuous hourly basis, Ms. Samuel noted that the Company chose "not to require hourly metering equipment for participation in the [Rate Schedules CRG-S]." Therefore, Ms. Samuel recommended that, should the Commission find that the hourly standard meets the 100 percent renewable energy requirement, and that actual hourly data is necessary to meet the hourly standard, the Commission could consider requiring the Company to use: (1) actual hourly load data for customers who already have the appropriate metering equipment; and (2) for customers who do not have the appropriate metering equipment, estimated hourly data until the metering equipment has be upgraded through the Grid Modernization Plan. 180

Ms. Samuel discussed the Company's proposal to utilize RECs to offset renewable energy shortfalls in circumstances where the energy supplied to Rate Schedules CRG-S customers is not entirely met from the CRG-S Portfolio on a continuous hourly basis. While Ms. Samuel did not find this proposal unreasonable, she pointed out that the Company's purchase of RECs under those circumstances might not constitute "renewable energy" according to prior Commission precedent. 182

Ms. Samuel discussed the bill impact for customers participating in Rate Schedules CRG-S and pointed out that the proposed rates are estimates that the Company proposes to modify through future proceedings based on actual costs.<sup>183</sup> Ms. Samuel advised that the

<sup>&</sup>lt;sup>174</sup> Exhibit No. 15, at 3-7.

<sup>&</sup>lt;sup>175</sup> *Id.* at 18.

<sup>&</sup>lt;sup>176</sup> Id. at 3,18,19.

<sup>&</sup>lt;sup>177</sup> Id. at 5-7.

<sup>&</sup>lt;sup>178</sup> *Id.* at 11-14.

<sup>&</sup>lt;sup>179</sup> *Id.* at 16.

<sup>&</sup>lt;sup>180</sup> Id. at 17. The Company's Grid Modernization Plan petition was filed on July 24, 2018. Among other things, the Company proposed deployment of over 1.4 million smart meters to be installed between 2019 and 2021. See Petition of Virginia Electric and Power Company, For approval of a plan for electric distribution grid transformation projects pursuant to § 56-585.1 A 6 of the Code of Virginia, Case No. PUR-2018-00100.

<sup>&</sup>lt;sup>181</sup> Exhibit No. 15, at 17-18.

<sup>&</sup>lt;sup>182</sup> Id.

<sup>183</sup> Id. at 18.

Commission could also require the Company to file an update to the CRG-S rates at the end of the three-year period, to ensure their accuracy. 184

In order for Staff to analyze the accuracy of the fixed rates, Ms. Samuel recommended the following reporting requirements be provided by the Company at the end of the three-year period, regardless of whether the Company seeks an adjustment:

- 1. Customer data, including number of customers enrolled, their standard rate schedule, and the combined load profile of all enrolled customers.
- 2. Portfolio data, including the actual resources selected for the portfolio, the cost data associated with the selected resources, and the generation profile of the selected resources.
- 3. PJM Pricing data, including the actual annual credit for generation procured from PJM, the actual annual cost of load in PJM, and the actual annual PJM fees.
- 4. Number of hours the Company had to purchase renewable energy from PJM, or purchase RECs, because the portfolio was unable to meet customers' loads and all costs associated with these purchases. 185

Ms. Samuel also suggested that the Commission may want to consider placing a three-year sunset provision on Rate Schedules CRG-S. <sup>186</sup> Under the sunset provision, if no customers enroll in either the CRG-S Residential Rate Schedule or the CRG-S Non-residential Rate Schedule, that rate schedule would be closed for three years from the date of the Final Order in this proceeding. <sup>187</sup>

Lastly, Ms. Samuel recommended proposed language providing additional information about the rate be added to the Company's proposed Rate Schedules CRG-S. 188

# **Dominion Energy's Rebuttal Testimony**

On August 14, 2018, Dominion Energy filed the rebuttal testimony of Gregory J. Morgan; J. Scott Gaskill; Abhijit Rajan, manager of market analytics for the Company; and Brett A. Crable. A summary of the testimony of each witness is provided below.

Gregory J. Morgan did not oppose Staff's: (i) proposed reporting requirements, (ii) required filing of an update to the CRG-S rates at the end of a three-year period, and (iii) recommended sunset provision that if no customers enroll in either the Rate Schedule CRG-S Residential or the Rate Schedule CRG-S Non-residential, then that rate schedule would be

<sup>&</sup>lt;sup>184</sup> *Id*.

<sup>&</sup>lt;sup>185</sup> *Id.* at 19-20.

<sup>186</sup> Id. at 20.

<sup>&</sup>lt;sup>187</sup> Id.

<sup>188</sup> Id.

closed.<sup>189</sup> Mr. Morgan testified that the sole area of disagreement with Staff concerns Dominion Energy's proposal to include a margin in the calculation of the CRG-S rates.<sup>190</sup> Mr. Morgan advised that the Company is seeking to include a reasonable margin to compensate for additional risks and for administrative costs associated with implementation of Rate Schedules CRG-S.<sup>191</sup> Mr. Morgan continued to support a rate of 9.627 ¢ per kWh for Rate Schedule CRG-S Residential, but stated that "the Company would not be opposed to establishing a rate of 8.516 ¢ per kWh for non-residential customers." <sup>192</sup>

Mr. Morgan pointed to the Commission's Final Order in the *CRG-L Case*<sup>193</sup> and asserted that policy issues raised by the Respondents regarding the inability of customers to purchase 100 percent renewable energy from a CSP are not moot.<sup>194</sup>

Mr. Morgan responded to Staff witness Samuel's testimony that Dominion Energy's proposal would increase the monthly bill by \$20.68 or by 17.87 percent, which is similar to Appalachian Power Company's ("Appalachian") proposed Rider REO that the Commission found was not just and reasonable. Mr. Morgan maintained that because Dominion Energy's proposal is on an hourly standard rather than the monthly standard used by Appalachian, this is not an "apples-to-apples" comparison. Mr. Morgan also pointed out that Dominion Energy has proposed a three-year fixed price and the CRG-S rates compare favorably to other Company renewable tariff offerings. 197

Mr. Morgan acknowledged the finding in the Commission's Final Order of the *CRG-L Case* concerning the proposed margin, and advised that Company witness Rajan will present a risk analysis and Company witness Gaskill will address modifying the administrative costs. <sup>198</sup> Mr. Morgan disagreed with Staff witness Carr's elimination of a margin and contended that Rate Schedules CRG-S are not traditional ratemaking offerings with direct capital investment in tangible property. <sup>199</sup> Nonetheless, Mr. Morgan asserted that its proposed program requires capital for entry into the commodity markets and to offer purchase power agreements on a fixed price basis. <sup>200</sup>

<sup>&</sup>lt;sup>189</sup> Exhibit No. 19, at 4.

<sup>&</sup>lt;sup>190</sup> *Id*.

<sup>&</sup>lt;sup>191</sup> *Id.* at 5.

<sup>&</sup>lt;sup>192</sup> Id.

<sup>&</sup>lt;sup>193</sup> Application of Virginia Electric and Power Company, For approval of 100 percent renewable energy tariffs pursuant to §§ 56-577 A 5 and 56-234 of the Code of Virginia, Case No. PUR-2017-00060, Final Order (May 7, 2018) ("CRG-L Order").

<sup>&</sup>lt;sup>194</sup> Exhibit No. 19, at 6.

<sup>&</sup>lt;sup>195</sup> *Id.* at 7.

<sup>&</sup>lt;sup>196</sup> *Id*.

<sup>&</sup>lt;sup>197</sup> *Id.* at 8.

<sup>&</sup>lt;sup>198</sup> *Id.* at 9.

<sup>&</sup>lt;sup>199</sup> *Id.* at 11.

<sup>&</sup>lt;sup>200</sup> *Id.* at 12.

Mr. Morgan responded to Staff witness Samuel's characterization of the Company's supplemental response to Staff Interrogatory No. 1-20 as being counterintuitive that the daily rate would be higher than the hourly rate, by pointing out that deviation from the hourly balancing fundamentally changes the nature of the offering and requires a different rate design.<sup>201</sup>

Mr. Morgan testified that the continuous hourly standard recognizes that a utility must provide all of a customer's power needs. Furthermore, Mr. Morgan pointed out that Dominion Energy has other renewable programs that are on a non-hourly basis, including its approved Rider G, and a proposed 100 percent distributed solar Rider VCS. 203

Mr. Morgan defended the one-year term for Rate Schedules CRG-S as consistent with the majority of the Company's rate schedules.<sup>204</sup>

Mr. Morgan compared the proposed rates for Rate Schedules CRG-S with other utility green pricing program premiums to support that its proposal was just and reasonable. For this comparison, Mr. Morgan relied upon a 2017 report produced by the National Renewable Energy Laboratory ("NREL"). 206

Mr. Morgan responded to Direct Energy witness Lacey's assertion that the Company's hourly standard would require advanced metering for participating customers by stating that Dominion Energy will use hourly metering information where available and profiles for each customer class for identifying hourly load for customers that do not have hourly metering equipment.<sup>207</sup>

Mr. Morgan disagreed with Walmart witness Chriss that the proposed Rate Schedules CRG-S should be approved as an experimental rate.<sup>208</sup> However, Mr. Morgan argued that even if the rates are approved as an experiment, they would qualify as an approved tariff under Subsection A 5.<sup>209</sup>

Mr. Morgan disagreed with Environmental Respondents witness Cox's recalculation of the Rate Schedules CRG-S rates using a daily, monthly, and hourly standard. Mr. Morgan contended that use of those standards required a new rate design because the Company would be

<sup>&</sup>lt;sup>201</sup> *Id.* at 12-14.

<sup>&</sup>lt;sup>202</sup> *Id.* at 14-15.

<sup>&</sup>lt;sup>203</sup> *Id.* at 15.

<sup>&</sup>lt;sup>204</sup> Id. at 17.

<sup>&</sup>lt;sup>205</sup> Id.

<sup>&</sup>lt;sup>206</sup> Id.

<sup>&</sup>lt;sup>207</sup> *Id.* at 18.

<sup>&</sup>lt;sup>208</sup> *Id*. at 19.

<sup>&</sup>lt;sup>209</sup> Id.

<sup>&</sup>lt;sup>210</sup> Id. at 20.

providing partial requirements service from renewables and using other Company resources to provide complete service.<sup>211</sup>

J. Scott Gaskill supported the Company's use of an hourly standard to meet the definition of 100 percent renewable energy. Mr. Gaskill maintained that to meet a 100 percent renewable standard requires sufficient generating capacity to ensure that a customer's electric needs are fulfilled at all times. Nonetheless, Mr. Gaskill advised that any excess generation can be sold into the PJM market to minimize the rate impact of any over-procurement. <sup>214</sup>

Mr. Gaskill testified that Dominion Energy will be able to meet a 100 percent hourly standard. Mr. Gaskill stated that historical data showed that the CRG-S Portfolio would meet residential needs in all but 12 hours per year or 99.8 percent of the hours. In addition, Mr. Gaskill affirmed that the Company would serve this shortfall with renewable resources "through bilateral contracts, short-term market origination activity, as well as day-ahead and real-time market purchases." 217

Mr. Gaskill listed the costs associated with administering the CRG-S program including: "(i) [RFPs] for renewable generation; (ii) contract negotiation and origination; (iii) PPA administration (e.g., billing, invoicing); (iv) day-ahead, real-time, and capacity market bidding of the renewable generation and CRG-S load[;] (v) daily/hourly CRG-S load estimation and forecasting; and (vi) PJM settlement review and invoicing." Mr. Gaskill estimated that these costs will be approximately \$200,000 per year. Mr. Gaskill proposed adding a specific component in the Company's rate formula to recover administrative labor cost, which would be approximately 0.278 ¢ per kWh for residential customers, and 0.228 ¢ per kWh for non-residential customers. Mr. Gaskill reported that the Company also proposes lowering its requested margin to 6.04 percent for the residential rate, and 6.32 percent for the non-residential rate.

Mr. Gaskill responded to respondent testimony that the CRG-S Portfolio was not in the public interest because it included existing renewable resources and renewable resources outside

<sup>&</sup>lt;sup>211</sup> *Id.* at 21.

<sup>&</sup>lt;sup>212</sup> Exhibit No. 21, at 2.

<sup>&</sup>lt;sup>213</sup> *Id.* at 3.

<sup>&</sup>lt;sup>214</sup> Id.

<sup>&</sup>lt;sup>215</sup> *Id.* at 4.

<sup>&</sup>lt;sup>216</sup> *Id*.

<sup>&</sup>lt;sup>217</sup> *Id.* at 4-5.

<sup>&</sup>lt;sup>218</sup> *Id.* at 6.

<sup>&</sup>lt;sup>219</sup> *Id*.

<sup>&</sup>lt;sup>220</sup> *Id.* at 6-7.

<sup>&</sup>lt;sup>221</sup> *Id.* at 7.

of Virginia by pointing to the Commission's *CRG-L Order* and contending that the Code makes no distinction between existing and new resources or those located in or outside of Virginia.<sup>222</sup>

Mr. Gaskill maintained that safeguards for Rate Schedules CRG-S customers include a fixed price for three years.<sup>223</sup> Mr. Gaskill also noted that Dominion Energy does not oppose Staff's recommendations to file an update to the Rate Schedules CRG-S rates at the end of the three-year period, and to require a sunset provision from the date of the final order in this proceeding if no customers enroll.<sup>224</sup>

Mr. Gaskill defended the Company's costs and generation from solar by stating that the PPA prices used by the Company and the capacity factor assumptions were based on actual proposals received and project-specific data provided by developers.<sup>225</sup>

Abhijit Rajan provided a risk analysis quantifying the additional risks associated with administering the CRG-S program. Mr. Rajan used a Risk Adjusted Return on Capital ("RAROC") framework that "recognizes that projects involving risk, even those without capital expenditure requirements, result in capital needs." Mr. Rajan advised that the RAROC framework measures risks to establish appropriate reserves. Both upside and downside risks help in the quantification of expected outcome, which is the numerator of the framework's ratio, and high-magnitude adverse outcome serves as the denominator of the framework's ratio. 229

Mr. Rajan identified the additional risks associated with Rate Schedules CRG-S to include: (i) excess renewable generation during nonpeak hours; and (ii) accuracy of projected customer load, generation volume, spot market power prices, and PPA prices. Mr. Rajan determined the magnitude of additional risk based on an analysis performed to generate 10,000 paired simulation of additional risk factors. Mr. Rajan stated that the simulations represented random samplings of four major risk factors:

• Power Price Risk – consists of a two-factor stochastic model used to generate simulations of two-years out future hourly spot market prices. 232

<sup>&</sup>lt;sup>222</sup> *Id.* at 7-8.

<sup>&</sup>lt;sup>223</sup> *Id.* at 8.

<sup>&</sup>lt;sup>224</sup> Id. at 8-9.

<sup>&</sup>lt;sup>225</sup> *Id.* at 9.

<sup>&</sup>lt;sup>226</sup> Exhibit No. 23, at 2.

<sup>&</sup>lt;sup>227</sup> *Id.* at 3.

<sup>&</sup>lt;sup>228</sup> Id.

<sup>&</sup>lt;sup>229</sup> *Id.* at 3-4.

<sup>&</sup>lt;sup>230</sup> *Id.* at 4.

<sup>&</sup>lt;sup>231</sup> *Id.* at 5.

<sup>&</sup>lt;sup>232</sup> Id.

- Customer Load Risk consists of customer load levels and customer load shapes.<sup>233</sup>
- PPA Generation Volume Risk covers the uncertainty in PPA volumes and is based on 13 years of available historical hydroelectric generation data, as the CRG-S Portfolio is supplied largely by hydroelectric assets.<sup>234</sup>
- PPA Price Risk captures the variance between actual executed PPA prices and the assumed PPA prices used to calculate the rates for Rate Schedules CRG-S.<sup>235</sup>

Mr. Rajan calculated Net Operating Margin for each simulation as follows:<sup>236</sup>

Net Operating Margin = (Customer Revenue + PPA Generation Wholesale Market
Revenue + Risk Adder + Administrative Adder - PPA Cost Wholesale Market Load Cost - Administrative Costs)

Mr. Rajan then sorted the Net Operating Margins from low to high to establish percentile risk outcomes or two-year Value-at Risk ("VaR").<sup>237</sup> Mr. Rajan testified that "[t]he absolute values of negative Net Operating margin at these higher percentiles represent the amount of capital that will be needed to overcome these potential bad outcomes and continue operations."<sup>238</sup>

Mr. Rajan testified that RAROC is determined mathematically as:<sup>239</sup>

RAROC = Expected Net Operating Margin (including Risk Adder) / VaR

Mr. Rajan advised that he calculated a Risk Adder "such that the RAROC equals the Company's weighted average cost of capital" of 8.51 percent.<sup>240</sup>

The results of Mr. Rajan's analysis is provided in the tables below.

<sup>&</sup>lt;sup>233</sup> Id.

<sup>&</sup>lt;sup>234</sup> *Id.* at 6.

<sup>&</sup>lt;sup>235</sup> *Id*.

<sup>&</sup>lt;sup>236</sup> *Id.* at 7.

<sup>&</sup>lt;sup>237</sup> Id.

<sup>&</sup>lt;sup>238</sup> Id.

<sup>&</sup>lt;sup>239</sup> *Id.* at 8.

<sup>&</sup>lt;sup>240</sup> Id.

Rate Schedule CRG-S Residential<sup>241</sup>

| VaR<br>Metric           | Calculated<br>Rate Before<br>Application | Administrative<br>Adder<br>(¢/kWh)<br>(b) | Risk Adder |              | Customer<br>Rate       |
|-------------------------|--|---|------------|--------------|------------------------|
| /Filed<br>Rate          | of Margin<br>(¢/kWh)<br>(a)              |   | (¢/kWh)    | % of (a)+(b) | (¢/kWh)<br>(a)+(b)+(c) |
| 90% 2-<br>year<br>VaR   | 8.800                                    | 0.278                                     | 0.541      | 5.96%        | 9.619                  |
| CRG-<br>S Rate<br>filed | 8.800                                    |   | 0.548      | 6.04%        | 9.627                  |
| 95% 2-<br>year<br>VaR   | 8.800                                    | 0.278                                     | 0.603      | 6.64%        | 9.681                  |
| 98% 2-<br>year<br>VaR   | 8.800                                    | 0.278                                     | 0.670      | 7.38%        | 9.748                  |
| 99% 2-<br>year<br>VaR   | 8.800                                    | 0.278                                     | 0.727      | 8.00%        | 9.805                  |

*Id.* at 10 (footnote omitted).

Rate Schedule CRG-S Non-Residential<sup>242</sup>

| VaR<br>Metric  | Calculated<br>Rate Before<br>Application | Administrative<br>Adder |         | k Adder      | Customer<br>Rate       |  |
|----------------|--|-------------------------|---------|--------------|------------------------|--|
| /Filed<br>Rate | of Margin<br>(¢/kWh)                     | (¢/kWh)<br>(b)          | (¢/kWh) | % of (a)+(b) | (¢/kWh)<br>(a)+(b)+(c) |  |
|                | (a)                                      |                         | (c)     |              |                        |  |
| 90% 2-         |  |                         |         |              |                        |  |
| year           | 7.868                                    | 0.228                   | 0.372   | 4.59%        | 8.468                  |  |
| VaR            |  |                         |         |              |                        |  |
| 95% 2-         |  |                         |         |              |                        |  |
| year           | 7.868                                    | 0.228                   | 0.420   | 5.19%        | 8.516                  |  |
| VaR            |  |                         |         |              |                        |  |
| 98% 2-         |  |                         | }       |              |                        |  |
| year           | 7.868                                    | 0.228                   | 0.474   | 5.85%        | 8.570                  |  |
| VaR            |  |                         |         |              |                        |  |
| CRG-           |  |                         |         |              |                        |  |
| S Rate         | 7.868                                    |                         | 0.512   | 6.32%        | 8.608                  |  |
| filed          |  |                         |         |              |                        |  |
| 99% 2-         |  |                         |         |              |                        |  |
| year           | 7.868                                    | 0.228                   | 0.514   | 6.35%        | 8.610                  |  |
| VaR            |  |                         |         |              |                        |  |

Mr. Rajan recommended use of the two-year VaR at or near the 95% metric as reasonable and appropriate. Mr. Rajan noted that the Company's as-filed rates for Rate Schedules CRG-S are within the range indicated by the risk analysis. Nonetheless, based on the results of the risk analysis, Mr. Rajan stated that Dominion Energy would not be opposed to lowering the rate for Rate Schedule CRG-S Non-residential to 8.516 ¢ per kWh. Page 18.54 per kWh.

**Brett A. Crable** defended the initial 25 MW participation cap as a means of allowing the Company and Commission "to get acclimated to the program, including establishing and managing the [CRG-S Portfolio]."<sup>246</sup> In addition, Mr. Crable maintained that 25 MW is a reasonable estimate of customer enrollment.<sup>247</sup>

<sup>&</sup>lt;sup>242</sup> Id. at 11 (footnote omitted).

<sup>&</sup>lt;sup>243</sup> Id.

<sup>&</sup>lt;sup>244</sup> *Id.* at 12.

<sup>&</sup>lt;sup>245</sup> *Id*.

<sup>&</sup>lt;sup>246</sup> Exhibit No. 25, at 2.

<sup>&</sup>lt;sup>247</sup> Id.

Mr. Crable affirmed that Dominion Energy has used historical data to develop hourly customer load forecasts.<sup>248</sup> Mr. Crable advised that the Company does not oppose Staff witness Samuel's recommendation to use actual hourly load data for customers that have the necessary hourly metering equipment, and use the Company's hourly customer load forecasts for customers that do not have the necessary hourly metering equipment.<sup>249</sup>

Mr. Crable testified that Rate Schedules CRG-S are not available to net metering customers because the "netting" of surplus energy from one hour to service a deficit of energy in another hour "would not have the effect of supplying the customer with renewable energy 100 percent of the time as required by [Subsection A 5]."<sup>250</sup>

Mr. Crable testified that the Company will educate customers concerning Rate Schedules CRG-S through direct mail, e-mail, social media, the Company's customer contact center, web content, and presentations and speaking engagements.<sup>251</sup> Mr. Crable confirmed that Rate Schedules CRG-S will have a dedicated webpage that will describe the program, answer frequently asked questions, and information on how to request more information and enroll.<sup>252</sup>

#### DISCUSSION

Dominion Energy seeks approval of Rate Schedules CRG-S, by which residential and non-residential customers with peak demand of less than one megawatt voluntarily can elect to purchase 100 percent of their energy needs from renewable energy resources. Dominion Energy seeks approval of proposed Rate Schedules CRG-S pursuant to Subsection A 5 and § 56-234 of the Code.

Subsection A 5 states the following:

After the expiration or termination of capped rates, individual retail customers of electric energy within the Commonwealth, regardless of customer class, shall be permitted:

a. To purchase electric energy provided 100 percent from renewable energy from any supplier of electric energy licensed to sell retail electric energy within the Commonwealth, other than any incumbent electric utility that is not the incumbent electric utility serving the exclusive service territory in which such a customer is located, if the incumbent electric utility serving the exclusive service territory does not offer an

<sup>&</sup>lt;sup>248</sup> *Id.* at 2-3.

<sup>&</sup>lt;sup>249</sup> *Id.* at 3.

<sup>&</sup>lt;sup>250</sup> *Id.* at 3-4.

<sup>&</sup>lt;sup>251</sup> *Id.* at 4.

<sup>&</sup>lt;sup>252</sup> Id.

- approved tariff for electric energy provided 100 percent from renewable energy; and
- b. To continue purchasing renewable energy pursuant to the terms of a power purchase agreement in effect on the date there is filed with the Commission a tariff for the incumbent electric utility that serves the exclusive service territory in which the customer is located to offer electric energy provided 100 percent from renewable energy, for the duration of such agreement.

Section 56-576 of the Code defines "renewable energy" in part as:

energy derived from sunlight, wind, falling water, biomass, sustainable or otherwise, (the definitions of which shall be liberally construed), energy from waste, landfill gas, municipal solid waste, wave motion, tides, and geothermal power, and does not include energy derived from coal, oil, natural gas, or nuclear power.

The Commission has stated that "[a]Ithough this statute requires the tariff to be 'approved' by the Commission, it does not include an express standard of review for the Commission's approval, nor does it include any express limitations on what the Commission may determine is relevant to such review."<sup>253</sup>

Section 56-234 A of the Code provides that "[i]t shall be the duty of every public utility to furnish reasonably adequate service and facilities at reasonable and just rates to any person, firm or corporation along its lines desiring same." Furthermore, § 56-234 B of the Code states:

It shall be the duty of every public utility to charge uniformly therefor all persons, corporations or municipal corporations using such service under like conditions. However, no provision of the law shall be deemed to preclude voluntary rate or rate design tests or experiments, or other experiments involving the use of special rates, where such experiments have been approved by order of the Commission after notice and hearing and a finding that such experiments are necessary in order to acquire information which is or may be in furtherance of the public interest.

In its Application, Dominion Energy proposed a three-year fixed rate of 9.627 ¢ per kWh for Rate Schedule CRG-S Residential and 8.608 ¢ per kWh for Rate Schedule CRG-S Non-

<sup>&</sup>lt;sup>253</sup> Petition of Appalachian Power Company, For approval of a 100% renewable energy rider, Case No. PUE-2016-00051, 2017 S.C.C. Ann. Rep. 339, 341, Final Order (Sept. 13, 2017).

residential.<sup>254</sup> After enrolling customers into Rate Schedules CRG-S, the Company will enter into new purchased power agreements for hydroelectric, wind, and solar resources, and will not include any existing Company-owned assets.<sup>255</sup> Thus, existing source requirements of § 56-585.2 F of the Code are not at issue in this proceeding.

The issues raised by Staff and the parties in this proceeding include: (i) the balancing standard required for 100 percent renewable energy; (ii) whether the proposed rates are just and reasonable; (iii) approval as an experiment; (iv) Staff's proposed reporting requirements; (v) proposed limitations on the availability of the tariffs; and (vi) a sunset provision. Each of these issues is addressed separately below.

# Balancing

While the Commission has not previously decided the question of whether an hourly balancing standard for providing 100 percent renewable energy is required by § 56-577 A 5,<sup>256</sup> Dominion Energy contended that the "plain language of the statute and the operating realities of service support the reading of Subsection A 5 to require a tariff that operates as a full requirements tariff supplying customers' needs provided 100 percent from renewable energy on a continuous hourly basis." Therefore, the Company proposes to build a portfolio of qualifying renewable energy resources to serve Rate Schedules CRG-S customers on a continuous hourly basis.

In support of its proposal, the Company asserted that "the phrase 'electric energy provided 100 percent from renewable energy'... requir[es] an electricity supplier to meet a customer's requirements on a continuous hourly basis – 24 hours a day, 365 days a year." The Company further contended that "[a]dopting a non-hourly standard – such as daily, monthly, or annually – would not comply with the 100 percent renewable energy requirement because such standards would require non-renewable resources to serve customers' full requirements." In support of its position, Dominion Energy asserted that the General Assembly "presumably" was aware when it enacted Subsection A 5 that utilities must provide for customers' full energy requirements and must join or establish a regional transmission organization. Further, Dominion Energy noted that the regional transmission organization within which it participates, PJM, settles on an hourly basis. <sup>261</sup>

<sup>&</sup>lt;sup>254</sup> Company Brief at 5. The Company noted that it would not be opposed to a rate of 8.516 ¢ per kWh for Rate Schedule CRG-S Non-residential based on its risk analysis presented on rebuttal. Company Brief at 5, n.4.

<sup>&</sup>lt;sup>255</sup> Staff Brief at 4-5.

<sup>&</sup>lt;sup>256</sup> CRG-L Order at 9, n. 22.

<sup>&</sup>lt;sup>257</sup> Company Brief at 3.

<sup>&</sup>lt;sup>258</sup> *Id*.

<sup>&</sup>lt;sup>259</sup> Id.

<sup>&</sup>lt;sup>260</sup> *Id.* at 13.

<sup>&</sup>lt;sup>261</sup> *Id*.

Consumer Counsel, Environmental Respondents, Walmart, and Direct Energy disagreed with Dominion Energy's assertion that Subsection A 5 requires an hourly balancing standard, <sup>262</sup> opposed Dominion Energy's proposed hourly balancing standard, and noted that the hourly balancing standard results in higher rates than other balancing standards. <sup>263</sup> In support of their position, Environmental Respondents utilized Dominion Energy's data and formulas and calculated what the Rate Schedules CRG-S rates would be if Dominion Energy were to bill customers on a monthly balancing basis. <sup>264</sup> No participant submitted contrary evidence or asserted that the rates presented by Environmental Respondents' utilization of a monthly balancing methodology were erroneous.

Further, Environmental Respondents argued that an hourly standard would require the Company to over-procure renewable energy, <sup>265</sup> whereas a non-hourly standard would allow for a more diversified generation mix and more flexibility to meet customers' demand. <sup>266</sup> Direct Energy shared those concerns and asserted that an hourly balancing standard would prevent the development of a diversified generation mix and deny customers flexible renewable energy offerings. <sup>267</sup>

Consumer Counsel, Environmental Respondents, and Direct Energy took issue with Dominion Energy's lack of advanced metering infrastructure<sup>268</sup> and asserted that without such infrastructure, Dominion Energy would be unable to match customer load on an hourly basis<sup>269</sup> or "poorly equipped to handle the practical realities of such a standard."<sup>270</sup>

Environmental Respondents stressed that in providing a 100 percent renewable product to customers, the Company is merely off-setting that customer's aggregate load and obtaining sufficient renewable energy to cover that customer's usage. On cross-examination, Dominion Energy witness Morgan acknowledged that the Company does not "have the ability to steer individual electrons to individual customers." Environmental Respondents argued that, because Dominion Energy is proposing to acquire the energy for Rate Schedules CRG-S through

<sup>&</sup>lt;sup>262</sup> See Consumer Counsel Brief at 4; Environmental Respondents Brief at 17; Walmart Brief at 8; and Direct Energy Brief at 9.

<sup>&</sup>lt;sup>263</sup> See Consumer Counsel Brief at 5; Environmental Respondents Brief at 18; Walmart Brief at 8; and Direct Energy Brief at 9.

<sup>&</sup>lt;sup>264</sup> Exhibit No. 9, at 15.

<sup>&</sup>lt;sup>265</sup> Environmental Respondents Brief at 18.

<sup>&</sup>lt;sup>266</sup> *Id.* at 19.

<sup>&</sup>lt;sup>267</sup> Direct Energy Brief at 9.

<sup>&</sup>lt;sup>268</sup> Consumer Counsel Brief at 5; Environmental Respondents Brief at 20; and Direct Energy Brief at 9.

<sup>&</sup>lt;sup>269</sup> Consumer Counsel Brief at 5; and Direct Energy Brief at 10-11.

<sup>&</sup>lt;sup>270</sup> Environmental Respondents Brief at 20.

<sup>&</sup>lt;sup>271</sup> Morgan, Tr. at 64.

PJM, participating "customers would receive electrons from undifferentiated energy sources."<sup>272</sup> According to Environmental Respondents, this would be true regardless of the balancing standard used by the Company.<sup>273</sup>

I find that the plain language of Subsection A 5 does not mandate the use of an hourly balancing standard for providing 100 percent renewable energy. Indeed, the Commission has previously found that "[Subsection A 5] does not include an express standard of review for the Commission's approval, nor does it include any express limitations on what the Commission may determine is relevant to such review."<sup>274</sup> While the Commission has not decided the question of whether an hourly matching standard for providing 100 percent renewable energy is required by statute,<sup>275</sup> the Commission has addressed another issue concerning 100 percent renewable energy for which explicit guidance was not provided by Subsection A 5. 276 In English Biomass, the Commission held that in the absence of a mandate, the Commission must resolve the issue "as part of its duty to implement the relevant provisions of the Code." The Commission cited to the Supreme Court's finding in Virginia Elec. and Power Co. v. State Corp. Comm'n, 278 and noted that "Code § 56-577 contemplates exercise of such discretion in the implementation of the retail access provisions therein, directing the Commission to 'promulgate such rules and regulations as may be necessary to implement the provisions of [Code § 56-577]."<sup>279</sup> Therefore, I find that it is within the Commission's discretion to determine the appropriate balancing standard for a 100 percent renewable energy tariff.

Dominion Energy emphasized the Commission's *Rider G Order*,<sup>280</sup> and noted that the Commission determined that a tariff offering RECs alone did not constitute 100 percent renewable energy under Subsection A 5.<sup>281</sup> The Company argued that adopting a non-hourly standard would require non-renewable resources to serve customers' full requirements and that if

<sup>&</sup>lt;sup>272</sup> Environmental Respondents Brief at 16.

<sup>&</sup>lt;sup>273</sup> *Id.* at 16-17.

<sup>&</sup>lt;sup>274</sup> See Petition of Appalachian Power Company, For approval of a 100% renewable energy rider, Case No. PUE-2016-00051, 2017 S.C.C. Ann. Rep. 339, 341, Final Order (Sept. 13, 2017).

<sup>&</sup>lt;sup>275</sup> CRG-L Order at 9, n.22.

<sup>&</sup>lt;sup>276</sup> See Petition of English Biomass Partners-Ferrum, LLC, For a declaratory judgment, Case No. PUR-2017-00117, Final Order (April 20, 2018) ("English Biomass").

<sup>&</sup>lt;sup>277</sup> English Biomass at 6.

<sup>&</sup>lt;sup>278</sup> Virginia Electric and Power Co. v. State Corp. Comm'n, 284 Va. 726, 741 (2012) ("[W]e presume that where the General Assembly has not placed an express limitation in a statutory grant of authority, it intended for the Commission, as an expert body, to exercise sound discretion.")

<sup>&</sup>lt;sup>279</sup> English Biomass at 6, n.18.

<sup>&</sup>lt;sup>280</sup> Application of Virginia Electric and Power Company D/B/A Dominion Virginia Power, For approval of its Renewable Energy Tariff, Case No. PUE-2008-00044, 2008 S.C.C. Ann. Rep. 539 ("Rider G Order").

<sup>&</sup>lt;sup>281</sup> Company Brief at 3-4.

customers were served solely from intermittent resources the customers would not be served 100 percent renewable energy 100 percent of the time. 282

I agree with Dominion Energy that to be consistent with the Commission's Rider G Order, that the 100 percent renewable energy standard of Subsection A 5 cannot be met solely by a portfolio of intermittent renewable resources, but requires the inclusion of dispatchable renewable resources (or storage) that would permit renewable energy service 100 percent of the time. However, the balancing standard merely prescribes the precision with which the 100 percent renewable energy is measured. In this case, Dominion Energy has proposed a portfolio that can provide renewable energy service 100 percent of the time, but the Company lacks the infrastructure to accurately apply its hourly standard. That is, as proposed, Dominion Energy will not be collecting CRG-S Rate Schedules customer usage data and billing participating customers on an hourly basis because Dominion Energy does not have the infrastructure in place to do so. Furthermore, as noted by Direct Energy, "[e]ven with advanced meters, the type of hourly matching that Dominion [Energy] seems to think is required would not be possible because meters do not predict what is going to happen in the next hour; they only report what happened in the prior hour."283 Since Dominion Energy currently engages with PJM to meet customer demands and issues bills monthly, it is reasonable for the Company to follow the same process in implementing Rate Schedules CRG-S. Finally, even under Dominion Energy's proposed hourly standard, some non-renewable resources may be used to serve Rate Schedules CRG-S customers. This is true because Dominion Energy is unable to "steer any individual electrons"<sup>284</sup> to a participating customers location. Thus, participating customers would receive electrons from undifferentiated energy sources, regardless of whether Dominion Energy employed an hourly, daily, monthly, or annual balancing standard. For these reasons, I recommend that the Commission find that a monthly balancing standard for Dominion Energy's proposed Rate Schedules CRG-S meets the requirements of Subsection A 5 for 100 percent renewable energy.

## Just and Reasonable Rates

The parties and Staff generally agree that the standard to be applied to the proposed Rate Schedules CRG-S is the just and reasonable standard. While Subsection A 5 includes no express standard, in another tariff filed under Subsection A 5, the Commission has held that it has the authority to consider if the rate to be charged to customers is just and reasonable. Moreover, the Company's Application in this proceeding is also filed pursuant to § 56-234 of the Code, which makes it "the duty of every public utility to furnish reasonably adequate service and facilities at reasonable and just rates . . . ."<sup>286</sup> Section 56-235.2 of the Code provides the following standard for just and reasonable rates:

<sup>&</sup>lt;sup>282</sup> Id.

<sup>&</sup>lt;sup>283</sup> Direct Energy Brief at 10-11.

<sup>&</sup>lt;sup>284</sup> Tr. at 60.

<sup>&</sup>lt;sup>285</sup> Petition of Appalachian Power Company, For approval of 100% renewable energy rider, Case No. PUE-2016-00051, 2017 S.C.C. Ann. Rep. 339.

<sup>&</sup>lt;sup>286</sup> Section 56-234 A of the Code.

Any rate . . . shall be considered to be just and reasonable only if: (1) the public utility has demonstrated that such rates . . . in the aggregate provide revenues not in excess of the aggregate actual costs incurred by the public utility in serving customers . . . including such normalization for nonrecurring costs and annualized adjustments for future costs as the Commission finds reasonably can be predicted to occur during the rate year, and a fair return on the public utility's rate base used to serve those jurisdictional customers . . . and (2) the public utility has demonstrated that such rates . . . contain reasonable classifications of customers.

In the *CRG-L Case*, Dominion Energy sought approval of 100 percent renewable energy tariffs, Rate Schedules CRG-L, for non-residential customers with peak demands greater than 1,000 kW, pursuant to Subsection A 5 and § 56-234 of the Code. The Company proposed to negotiate and execute a separate requirements contract with each participating customer, with rates determined for each customer based on a rate formula substantially the same as the one underlying the Company's originally proposed rates in this proceeding. The Commission denied the Company's Application based on a finding that Dominion Energy failed to establish that its proposed tariffs would result in just and reasonable rates.

The combination of factors – when taken together – that inform this decision include: the extraordinary discretion delegated to the utility; the magnitude of combined uncertainty and subjectivity in the formula's variables and resulting rates; the proposed use of ROE; unknown administrative fees on a customer-by-customer basis; unknown negotiated contract terms on a customer-by-customer basis; and the inability to ensure that the resulting charges will be uniform for customers taking service under like conditions.<sup>287</sup>

In this proceeding, Dominion Energy proposed a rate of 9.627 ¢ per kWh for Rate Schedule CRG-S Residential, and 8.608 ¢ per kWh for Rate Schedule CRG-S Non-residential, with such rates to remain fixed for a three-year period. The Company maintained that these rates are just and reasonable "because they reflect the estimated, actual cost of providing continuous renewable generation service to participating customers based on current market prices." The Company stated that it determined the proposed rates "by applying a ratemaking

<sup>&</sup>lt;sup>287</sup> CRG-L Order at 9.

<sup>&</sup>lt;sup>288</sup> Company Brief at 5. The Company noted that it would not be opposed to a rate of 8.516 ¢ per kWh for Rate Schedule CRG-S Non-residential based on its risk analysis presented on rebuttal. Company Brief at 5, n.4.

<sup>&</sup>lt;sup>289</sup> Company Brief at 22.

formula to a group of typical residential and non-residential customers using indicative prices for renewable energy obtained from recent RFI and RFP."<sup>290</sup> Dominion Energy further advised that its proposed rates included "a component to compensate the Company for the costs to administer the [Rate Schedules CRG-S] and a component to compensate the Company for the financial risk associated with implementing the [Rate Schedules CRG-S]."<sup>291</sup>

The Company contended that its proposed rates are consistent with other renewable tariffs. Dominion Energy maintained that the proposed Rate Schedules CRG-S compares favorably to rates approved for Rider G, by which customers purchase RECs up to 100 percent of their usage for a 1.30 ¢ per kWh premium, and Rider VCS, by which customers purchase energy and RECs up to 100 percent of their usage from solar facilities in the community for a 2.01 ¢ per kWh premium. The Company stated that the proposed Rate Schedules CRG-S "reflect an estimated premium of 2.036 ¢ per kWh for a typical residential customer, and as low as 0.324 ¢ per kWh for certain non-residential customers." In addition, the Company contended that the Rate Schedules CRG-S premiums are consistent with national averages and are within the range of premiums for other utility green pricing programs. Dominion Energy pointed to a report from the NREL, which reported utility green pricing premiums range from 1.0 ¢ per kWh to 5.0 ¢ per kWh, with an average residential premium of 1.8 ¢ per kWh.

Dominion Energy asserted that non-participating customers will be held harmless from the direct costs associated with Rate Schedules CRG-S as such costs will be "ring-fenced."<sup>297</sup> For indirect costs, the Company acknowledged if the Rate Schedules CRG-S are approved:

<sup>&</sup>lt;sup>290</sup> Id.

<sup>&</sup>lt;sup>291</sup> *Id.* at 24.

<sup>&</sup>lt;sup>292</sup> Id. at 29.

<sup>&</sup>lt;sup>293</sup> Id.

<sup>&</sup>lt;sup>294</sup> *Id*.

<sup>&</sup>lt;sup>295</sup> *Id*. at 30.

<sup>&</sup>lt;sup>296</sup> Id.

<sup>&</sup>lt;sup>297</sup> *Id.* at 30-31.

<sup>&</sup>lt;sup>298</sup> *Id.* at 32-33.

Staff concurred with the Company's "ring-fencing," and proposed reporting requirements to existing customers from certain indirect risks. Staff took no position on whether Dominion Energy's proposed Rate Schedules CRG-S are just and reasonable, but opposed the Company's requested margin and risk assessment. Consumer Counsel, Walmart, Environmental Respondents, and Direct Energy pointed to the Company's use of hourly balancing, and the Company's requested margin and risk assessment as increases in cost that rendered the proposed Rate Schedules CRG-S as unjust and unreasonable. Walmart, Environmental Respondents, and Direct Energy also contended that the uncertainty and staleness of Dominion Energy's projected costs and hypothetical portfolio produced rates that are unjust and unreasonable.

Balancing – As discussed above, Dominion Energy based its proposed Rate Schedules CRG-S rates on hourly balancing. Consumer Counsel, Walmart, Environmental Respondents, and Direct Energy all point to the higher costs associated with hourly balancing as a reason for finding that the proposed rates fail to meet the just and reasonable standard. However, in this proceeding Environmental Respondent witness Cox provided rate calculations using the same data and formulas as Dominion Energy. Dr. Cox recalculated the hourly, daily, monthly, and annual standards as follows: 304

|                    | Rate Schedule<br>CRG-S Residential<br>(¢/kWh) | Rate Schedule<br>CRG-S Non-residential<br>(¢/kWh) |
|--------------------|---|---|
| Hourly<br>(Company | 9.627   | 8.608   |
| Proposed)          |   |   |
| Daily              | 8.872   | 8.030   |
| Monthly            | 7.238   | 6.689   |
| Annual             | 6.227   | 5.800   |

Dominion Energy opposed the use of its proposed formula for daily, monthly, or annual balancing because it believed that service with such balancing would no longer provide full requirements service.<sup>305</sup> Thus, to protect existing customers, the Company proposed a different

<sup>&</sup>lt;sup>299</sup> Staff Brief at 16-18.

<sup>&</sup>lt;sup>300</sup> *Id.* at 12.

<sup>&</sup>lt;sup>301</sup> Consumer Counsel Brief at 4-12; Walmart Brief at 7-10; Environmental Respondents Brief at 16-21; and Direct Energy Brief at 5-15.

<sup>&</sup>lt;sup>302</sup> Walmart Brief at 9-10; Environmental Respondents Brief at 11-16; and Direct Energy Brief at 3-5.

<sup>&</sup>lt;sup>303</sup> Consumer Counsel Brief at 4-8; Walmart Brief at 7-9; Environmental Respondents Brief at 16-20; and Direct Energy Brief at 9-15.

<sup>&</sup>lt;sup>304</sup> Exhibit No. 9, at 15.

<sup>&</sup>lt;sup>305</sup> Exhibit No. 4, at 4-5.

rate formula for daily, monthly, and annual balancing, which would use the customer's standard generation tariff plus an incremental charge for the cost of procuring renewable energy to offset energy consumption.<sup>306</sup> Nonetheless, Dominion Energy did not dispute that Dr. Cox accurately applied the Company's proposed rate for hourly balancing to the daily, monthly, and annual balancing.<sup>307</sup>

I disagree with the Company's contention that only hourly balancing provides full requirements and that use of an alternative balancing standard would cause existing ratepayers would be supporting Rate Schedules CRG-S customers. The Company's proposed CRG-S Portfolio is approximately 87 percent hydro power, 4 percent solar, and 9 percent wind. Such a portfolio should be able to provide continuous renewable energy to Rate Schedule CRG-S customers. More importantly, by balancing on either an hourly or monthly basis, any additional amounts of energy needed by the Rate Schedules CRG-S customers should be offset by energy generated by the CRG-S Portfolio in other instances that is in excess of the energy needed by the Rate Schedules CRG-S customers. In other words, from a ratemaking perspective, whether customers are receiving 100 percent renewable energy depends on the balancing standard determined by the Commission. Consequently, I find that the Company's hourly rate formula can be applied to alternative balancing standards. Therefore, the rates calculated by Dr. Cox for daily, monthly, and annual balancing can be used to determine just and reasonable rates.

Margin and Risk Assessment – in its *CRG-L Order*, the Commission rejected applying Dominion Energy's authorized ROE to purchased power costs.<sup>309</sup> However, the Commission noted:

To the extent the Company projected that it would incur additional risks under these tariffs for which it is not already compensated, then any proposed return should be based thereon. Similarly, to the extent the Company projected that it would incur specific incremental costs to administer these tariffs for which it is not already compensated, then any proposed administrative fees should likewise be based thereon.<sup>310</sup>

In this proceeding, Dominion Energy proposed an operating margin equal to the Company's most recently-approved ROE. On rebuttal, the Company identified administrative costs of \$200,000, with a rate impact of 0.278 ¢ per kWh for Rate Schedule CRG-S Residential and 0.228 ¢ per kWh for Rate Schedule CRG-S Non-residential.<sup>311</sup> Staff, Consumer Counsel, Walmart, Environmental Respondents, and Direct Energy did not oppose inclusion of the

<sup>&</sup>lt;sup>306</sup> *Id*.

<sup>&</sup>lt;sup>307</sup> Gaskill, Tr. at 120-21.

<sup>&</sup>lt;sup>308</sup> *Id.* at 297.

<sup>&</sup>lt;sup>309</sup> CRG-L Order at 7.

<sup>&</sup>lt;sup>310</sup> *Id.* at 7-8.

<sup>&</sup>lt;sup>311</sup> Exhibit No. 21, at 6-7.

specified administrative costs in Rate Schedules CRG-S.<sup>312</sup> I find that by identifying specific incremental costs to administer these tariffs, the Company's identified administrative costs are consistent with the *CRG-L Order* and should be included in Rate Schedules CRG-S.

As for the remaining margin, Company witness Rajan provided a risk analysis on rebuttal that was designed to estimate the magnitude of extreme and adverse outcomes "so the risks can be measured and appropriate reserves can be put in place to sustain or absorb such outcomes." The analysis consisted of multiple simulations to calculate the net operating margin based on random samplings from a range of possible outcomes for: (i) future hourly spot market power prices; (ii) customer load levels and load shapes; (iii) PPA generation volumes; and (iv) variance between actual executed PPA prices and the PPA prices used to calculate Rate Schedules CRG-S.<sup>314</sup> The results show that in approximately half of the outcomes, the Company has a net operating loss (or under-recovers its costs), and in the other half of the outcomes the Company has a net operating gain (or over-recovers its costs). The Company sorted the outcomes from low to high and determined the absolute negative value that "represent[ed] the amount of capital that will be needed to overcome these potential bad outcomes and continue operations." In other words, if a \$2.3 million loss was lower than 95% of the outcomes, then under the Company's analysis, using a 95% VaR, the Company would earn a return on \$2.3 million.<sup>317</sup>

Dominion Energy asserted that its proposed margin provides compensation for its risks.<sup>318</sup> The Company responded to contentions that Rate Schedules CRG-S do not require capital, by maintaining that capital is required to operate in commodity markets, to enter into PPAs, to join PJM, and to market fixed-price products to customers.<sup>319</sup> Moreover, as Company witness Morgan testified, "it [is] unreasonable for any competitive business to operate on essentially a coin flip type risk profile."<sup>320</sup>

Staff, Consumer Counsel, Walmart, Environmental Respondents, and Direct Energy opposed inclusion of any margin in Rate Schedules CRG-S in this proceeding.<sup>321</sup> Staff opposed

<sup>&</sup>lt;sup>312</sup> Staff Brief at 20; Consumer Counsel Brief at 8-12; Walmart Brief at 9-10; Environmental Respondents Brief at 20-21; and Direct Energy Brief at 5-8.

<sup>&</sup>lt;sup>313</sup> Exhibit No. 23, at 3.

<sup>&</sup>lt;sup>314</sup> *Id.* at 5-6.

<sup>&</sup>lt;sup>315</sup> *Id.* at Attached Rebuttal Schedules 6-7. Moreover, it appears that the outcomes with over-recovery of costs are slightly larger than the absolute value of outcomes with under-recovery of costs.

<sup>&</sup>lt;sup>316</sup> *Id.* at 7.

<sup>&</sup>lt;sup>317</sup> Id. at 7-9, Attached Rebuttal Schedules 6-7.

<sup>&</sup>lt;sup>318</sup> Company Brief at 26.

<sup>&</sup>lt;sup>319</sup> *Id.* at 27.

<sup>&</sup>lt;sup>320</sup> *Id.* at 28; Morgan, Tr. at 250-51.

<sup>321</sup> Staff Brief at 18-25; Consumer Counsel Brief at 8-12; Walmart Brief at 9-10; Environmental Respondents Brief at 20-21; and Direct Energy Brief at 5-8.

inclusion of any margin in Rate Schedules CRG-S because: (i) Dominion Energy has made no investment; <sup>322</sup> (ii) there is an equal risk of gain and loss for the Company and its customers, but only the Company is compensated for such risk; <sup>323</sup> (iii) with a specific estimate for incremental internal labor costs associated with implementing Rate Schedules CRG-S, there is no longer a need for a margin to recover such costs; <sup>324</sup> (iv) rates without a margin will be lower and more likely to be found to be just and reasonable; <sup>325</sup> and (v) pursuant to the *CRG-L Order*, because Rate Schedules CRG-S result in an equal risk of gains and losses, "[Dominion Energy] has not established that a margin is necessary to recover any actual, incremental costs that will be reasonably incurred." Staff also pointed out that while other provisions of the Code provide for a margin equal to the Company's authorized ROE, no such provision is contained in Subsection A 5.<sup>327</sup> Staff argued:

The lack of such an express directive in [Subsection] A 5 as compared to statutes for similar programs shows that the General Assembly did not specifically require or expect a margin to be approved in cases arising under that statute and the Commission has discretion to approve or deny a requested margin and establish the amount of the margin in this proceeding.<sup>328</sup>

The other parties made similar arguments. Nonetheless, Consumer Counsel pointed out that the Company's financial risk analysis reflects its self-imposed hourly balancing standard and that the potential gains and losses would decrease by use of a monthly balancing standard.<sup>329</sup>

I find that in this case, Dominion Energy has expended no capital or even established a reserve to sustain or absorb possible losses. Company witness Morgan testified that Dominion Energy will manage such risks as part of its working capital.<sup>330</sup> In addition, I find that Company witness Rajan's analysis demonstrates that there is an equal likelihood that the Company will experience gains or rather, over-recover its costs. Thus, it is unclear that Dominion Energy will ever actually require the use of such capital.

As for Dominion Energy's contention that it is unreasonable for any competitive business to operate on a 50/50 risk profile, the Company can: (i) invest in renewable facilities and earn a return on that investment; and/or (ii) restructure its proposal to limit risk, which in this case as modeled by Company witness Rajan, relates the accuracy of the Company's own forecasts.

<sup>322</sup> Staff Brief at 20.

<sup>&</sup>lt;sup>323</sup> *Id.* at 21-22.

<sup>324</sup> Id. at 22.

<sup>&</sup>lt;sup>325</sup> Id.

<sup>&</sup>lt;sup>326</sup> *Id.* at 23.

<sup>&</sup>lt;sup>327</sup> *Id.* at 24.

<sup>&</sup>lt;sup>328</sup> *Id.* at 24-25.

<sup>&</sup>lt;sup>329</sup> Consumer Counsel Brief at 11; Cox, Tr. at 158.

<sup>&</sup>lt;sup>330</sup> Morgan, Tr. at 254.

Therefore, I agree with Staff, Consumer Counsel, Walmart, Environmental Respondents, and Direct Energy that Rate Schedules CRG-S should not include any margin.

Adjusting the Rate Schedules CRG-S rates to eliminate the margin<sup>331</sup> and to include the identified administrative costs<sup>332</sup> produces the following results:

|         | Rate Schedule<br>CRG-S Residential<br>(¢/kWh) | Rate Schedule<br>CRG-S Non-residential<br>(¢/kWh) |
|---------|---|---|
| Hourly  | 9.078   | 8.096   |
| Daily   | 8.388   | 7.568   |
| Monthly | 6.894   | 6.342   |
| Annual  | 5.970   | 5.530   |

Staff also proposed that if the Commission found that a margin is appropriate in this proceeding, then the margin should be set no higher than the cost of Dominion Energy's short-term debt. 333 Staff maintained that any need for capital due to temporary losses related to Rate Schedules CRG-S would be met with short-term capital. Dominion Energy disagreed and emphasized that the Company does not source capital for particular projects. While I agree with Staff that any loss associated with Rate Schedules CRG-S is likely to be funded with short-term debt, I agree with the Company that capital should not be assigned to specific projects. Thus, if the Commission finds a margin is appropriate, I do not recommend using the cost of Dominion Energy's short-term debt.

Uncertainty and Staleness - Walmart, Environmental Respondents, and Direct Energy also contended that the uncertainty and staleness of Dominion Energy's projected costs and hypothetical portfolio produced rates that are unjust and unreasonable. Walmart pointed out that the RFI and RFP, the underlying basis for Dominion Energy's proposed Rate Schedules CRG-S, were closed on August 21, 2017, and October 23, 2017. Walmart argued that the RFI and RFP pricing is stale and fails to reflect the current market for renewables, which Walmart asserted is "nearly 25 to 30 percent below the prices produced by [Dominion Energy's] RFP and

Following the methodology employed by Company witnesses Gaskill and Rajan, the rates derived by the Company's proposed formula were divided by 1.094. Exhibit No. 7, Schedule 1; Exhibit No. 23, at 9-12.

<sup>332 0.278 ¢</sup> per kWh for Rate Schedule CRG-S residential customers and 0.228 ¢ per kWh for Rate Schedule CRG-S non-residential customers. Exhibit No. 21, at 6-7; Exhibit No. 23, at 9-12. 333 Staff Brief at 25.

<sup>&</sup>lt;sup>334</sup> *Id.* 

<sup>335</sup> Company Brief at 28-29.

<sup>&</sup>lt;sup>336</sup> Walmart Brief at 9-10; Environmental Respondents Brief at 11-16; and Direct Energy Brief at 3-5.

<sup>&</sup>lt;sup>337</sup> Walmart Brief at 9; Exhibit No. 7, at 3.

RFI....<sup>338</sup> Walmart stated that Company witness Gaskill confirmed that prices for new solar resources have declined over time. Walmart emphasized that while customers would receive a fixed price under Rate Schedules CRG-S, "there is no evidence in the record to show that the fixed cost is just and reasonable."

Similarly, Environmental Respondents argued that proposed Rate Schedules CRG-S do not reflect just and reasonable rates because they are based on forecasts and assumptions the do not reflect the price of the renewable energy the customers are buying.<sup>341</sup> Environmental Respondents maintained that Rate Schedules CRG-S are based on a proxy generation portfolio and that the generation mix in reality could be very different.<sup>342</sup> Environmental Respondents also asserted that the prices on new wind and solar were trending lower.<sup>343</sup> Finally, Environmental Respondents took issue with the rate comparisons provided by the Company and pointed out that Rider VCS was filed under a different statute, which, among other things, includes an explicit directive to include a margin, than Rate Schedules CRG-S, which are filed under Subsection A 5, which does not include language mandating a margin.<sup>344</sup>

Direct Energy also contented that Dominion Energy's hypothetical generation portfolio is based on stale data that fails to recognize that prices are declining for new solar and wind.<sup>345</sup> On brief, Direct Energy stated that "[t]he fact that the current wind and solar costs meeting PJM's clearing price are lower than the hydro costs in [Dominion Energy's] hypothetical portfolio is simply indicative of the fact that the proposed [Rate Schedules CRG-S] are not reasonable and just."<sup>346</sup>

Company witness Gaskill distinguished between the price of PJM power and the cost of renewable PPAs in PJM.<sup>347</sup> Based on Mr. Gaskill's testimony, I am not convinced that the PJM clearing prices referenced by Walmart, Environmental Respondents, and Direct Energy are relevant to reviewing the reasonableness of renewable PPAs. A PJM market for renewables would be helpful, but currently, such a market does not exist.

Mr. Gaskill further testified that the generation portfolio is predominantly hydro, because its dispatchable and because it the "cheapest" renewable resource.<sup>348</sup> Indeed, Dominion Energy based its proposed Rate Schedules CRG-S on a portfolio containing 87 percent hydro.<sup>349</sup> I find

<sup>&</sup>lt;sup>338</sup> *Id.*; Cox, Tr. at 179-80.

<sup>339</sup> Id. at 10; Gaskill, Tr. at 116.

<sup>340</sup> Id

<sup>&</sup>lt;sup>341</sup> Environmental Respondents Brief at 12.

<sup>&</sup>lt;sup>342</sup> *Id*.

<sup>&</sup>lt;sup>343</sup> *Id*.

<sup>&</sup>lt;sup>344</sup> *Id.* at 14-15.

<sup>&</sup>lt;sup>345</sup> Direct Energy Brief at 3-5.

<sup>&</sup>lt;sup>346</sup> *Id.* at 5.

<sup>&</sup>lt;sup>347</sup> Gaskill, Tr. at 279.

<sup>&</sup>lt;sup>348</sup> *Id.* at 282.

<sup>&</sup>lt;sup>349</sup> *Id.* at 297.

that using a high percentage of the lowest cost renewable resource blunts criticism on the portfolio's uncertainty and staleness. Accordingly, I do not find that basing Rate Schedules CRG-S on a hypothetical portfolio and on an RFI and RFP, completed a few months before the filing of this case, render Rate Schedules CRG-S as unjust and unreasonable.

In summary, I find that that after adjusting for the appropriate balancing standard and to eliminate the non-administrative portion of the margin, the Rate Schedules CRG-S will meet the just and reasonable standard of §§ 56-234 and 56-235.2 of the Code as these schedules should provide revenues not in excess of the costs incurred by the Company to provide such services. Indeed, these rates are based on the estimated market costs of PPAs. Moreover, existing customers will be protected from direct financial costs by the Company's proposed "ringfencing." Existing customers should also be protected from indirect financial risks by Staff's proposed reporting requirements, which are discussed below. Overall, existing customers may benefit from reduced fuel costs and will be in the same position they would have been had the participating customers taken service from a CSP instead of the Company.

## Experiment

Walmart, Environmental Respondents, and Direct Energy maintained that Dominion Energy's proposed Rate Schedules CRG-S are uncertain and limited, and should only be approved as an experimental rate. Walmart argued that because of the unknowns, such as the actual portfolio of resources and the number of customers taking service, the Commission should take a wait-and-see approach and approve Rate Schedules CRG-S as an experiment. Environmental Respondents contended that Rate Schedules CRG-S are fatally flawed and should be approved as an experiment to gauge customer interest and to gain insight into what prices customers are willing to pay for 100 percent renewable energy. Direct Energy emphasized the limited duration, size, and availability of the Company's proposal, and noted that an experiment can be approved without meeting the just and reasonable rate standard. Walmart, Environmental Respondents, and Direct Energy recommended that if Rate Schedules CRG-S are approved as an experiment, that they be approved solely pursuant to § 56-234 B of the Code, to allow customers to continue to have the right to purchase 100 percent renewable energy from CSPs.

Dominion Energy asserted that its proposed Rate Schedules CRG-S meet the public interest standard of § 56-234 B, but would also constitute an approved tariff providing

<sup>&</sup>lt;sup>350</sup> Walmart Brief at 11-12; Environmental Respondents Brief at 22-23; and Direct Energy Brief at 24-26.

<sup>351</sup> Walmart Brief at 11-12.

<sup>352</sup> Environmental Respondents Brief at 22.

<sup>&</sup>lt;sup>353</sup> Direct Energy Brief at 24-25.

<sup>&</sup>lt;sup>354</sup> Walmart Brief at 12; Environmental Respondents Brief at 22; and Direct Energy Brief at 25-26.

100 percent renewable energy pursuant to Subsection A 5.<sup>355</sup> Consumer Counsel agreed that if Rate Schedules CRG-S are approved as an experiment under §§ 56-234 B and Subsection A 5 of the Code, CSPs will be prohibited from providing 100 percent renewable energy to customers in Dominion Energy's service territory. <sup>356</sup>

Rate Schedules CRG-S were not proposed as experiments and I do not believe that they should be approved as an experiment. Subsection A 5 is not a new Code provision and Dominion Energy has provided customers with several options for purchasing renewable energy. Furthermore, unless the Commission makes a finding that the Rate Schedules CRG-S do not constitute the provision of 100 percent renewable energy, then, the experimental rates would meet the "approved tariff" language of Subsection A 5, and CSPs would be prohibited from marketing 100 percent renewable energy to customers in Dominion Energy's service territory.

# Reporting Requirements

As discussed above, Staff had concerns regarding indirect financial risks associated with the CRG-S Portfolio and the accuracy of the proposed fix rates.

To address the concerns associated with the indirect financial risks that would be placed upon non-participating customers should the Application be approved, Mr. Carr recommended the following reporting requirements:

- 1. The quantity and cost of the CRG-S Portfolio's PPA capacity and energy purchased;
- 2. The quantity and cost of the CRG-S Portfolio's owned capacity and energy produced;
- 3. The quantity and price of sales to CRG-S customers;
- 4. The quantity and price of excess CRG-S Portfolio capacity and energy sold in PJM;
- 5. The quantity and price of the cost of CRG-S load in PJM;
- 6. The quantity and price of excess REC sales (i.e., RECs associated with excess CRG-S generation not needed to serve Rate Schedules CRG-S customers);
- 7. The quantity and costs of energy and RECs purchased to serve Rate Schedule CRG-S customers for the hours during which the CRG-S Portfolio's generation is insufficient to serve the Rate Schedules CRG-S customers' load;
- 8. The contract length and expected annual megawatt hours of each of the CRG-S Portfolio's PPAs;
- 9. The service lives, capacity, and expected capacity factor of each of the CRG-S Portfolio's owned generation facilities; and
- 10. The expected load of Rate Schedules CRG-S customers. 357

In order for Staff to analyze the accuracy of the fixed rates, Ms. Samuel recommended the following reporting requirements be provided by the Company at the end of the three-year period:

<sup>355</sup> Company Brief at 33-35.

<sup>356</sup> Consumer Counsel Brief at 12.

<sup>&</sup>lt;sup>357</sup> Exhibit No. 16, at 8.

- 1. Customer data, including number of customers enrolled, their standard rate schedule, and the combined load profile of all enrolled customers.
- 2. Portfolio data, including the actual resources selected for the portfolio, the cost data associated with the selected resources, and the generation profile of the selected resources.
- 3. PJM Pricing data, including the actual annual credit for generation procured from PJM, the actual annual cost of load in PJM, and the actual annual PJM fees.
- 4. Number of hours the Company had to purchase renewable energy from PJM, or purchase RECs, because the portfolio was unable to meet customers' load and all costs associated with these purchases.<sup>358</sup>

Ms. Samuel also recommended that the Company be required to file an update to its CRG-S rates at the end of the three-year period, to ensure their accuracy.<sup>359</sup>

The Company did not oppose Staff's recommended reporting requirements.<sup>360</sup>

The recommended reporting requirements are reasonable and unopposed. Therefore, I find that the Company should be required to file a report containing the information requested by Staff.

#### **Tariff Limitations**

These issues include (i) the Company's proposed 25 MW cap for Rate Schedules CRG-S; (ii) the Company's proposal to freeze Rate Schedules CRG-S for three years; and (iii) the Company proposed 90-day enrollment period. Each issue is discussed below.

25 MW Cap – Dominion Energy proposed to cap customer enrollment in Rate Schedules CRG-S at 25 MW of customer peak load. According to the Company, based on its estimates of customer participation in Rates Schedules CRG-S and the composition of the CRG-S Portfolio, it determined that the 25 MW cap would be appropriate. 362

Environmental Respondents, Direct Energy, Walmart, and Consumer Counsel all pointed out that such a cap would limit renewable options available to customers.<sup>363</sup> Direct Energy characterized 25 MW as "insignificant in comparison to the load of [the Company's] eligible

<sup>&</sup>lt;sup>358</sup> Exhibit No. 15, at 19-20.

<sup>&</sup>lt;sup>359</sup> *Id.* at 18.

<sup>&</sup>lt;sup>360</sup> Exhibit No. 19, at 4.

<sup>&</sup>lt;sup>361</sup> Exhibit No. 2, at 6.

<sup>362</sup> Id

<sup>&</sup>lt;sup>363</sup> Environmental Respondents Brief at 24; Direct Energy Brief at 17; Walmart Brief at 3; Consumer Counsel Brief at 13.

customers..."<sup>364</sup> Environmental Respondents acknowledged that the Company has discretion to include such restrictions, but asserted that the Company's self-imposed restrictions should not infringe on customers' access to renewable energy.<sup>365</sup>

At the hearing, Company witness Morgan testified that once the cap was met, a customer interested in receiving service pursuant to the CRG-S tariff would be unable to do so.<sup>366</sup> When asked a similar question, Company witness Crable testified that the Company would consider expanding the programs, but did not commit to do so.<sup>367</sup> However, on brief, the Company clarified its position and acknowledged that "[i]f the CRG-S Rate Schedules reach the initial participation cap, the Company would no longer be 'offering' the CRG-S Rate Schedules, so CSPs could then offer 100 percent renewable products to eligible customers. In other words, by operation of statute, retail access would be closed to eligible customers until CRG-S Rate Schedules reach the initial participation cap."<sup>368</sup>

I agree with the Company's position as stated in its brief. Once the initial participation cap is met, the Company, without further approval from the Commission, would no longer be able to offer 100 percent renewable products to customers; therefore, CSPs could then offer such products. Further, I find that the estimates used by the Company to determine the 25 MW cap and 25 MW cap are reasonable.

Three-Year Fixed Rate – In addition to the 25 MW cap for Rate Schedules CRG-S, the Company proposed fixed rates for a period of three years from the date the Company receives Commission approval. At the hearing, Company witness Morgan testified that, if Rate Schedules CRG-S become fully subscribed, the Company might offer another 100 percent renewable energy tariff and the rates for that tariff might be different from Rate Schedules CRG-S. Direct Energy asserts that the Company's plan to potentially offer two 100 percent renewable energy tariffs at two different rates would violate § 56-234 B of the Code. 369

The Company could not offer a new 100 percent renewable rate schedule or expand Rate Schedules CRG-S without first requesting approval from the Commission. At that time, the Commission could review the application before it and make the appropriate determination based on the facts presented in that case.

90-Day Enrollment Period – The Company proposed an annual 90-day enrollment period for Rate Schedules CRG-S. Company witness Gaskill testified that the Company proposed the 90-day enrollment period for operational and practical purposes, since the

<sup>&</sup>lt;sup>364</sup> Direct Energy Brief at 15.

<sup>&</sup>lt;sup>365</sup> Environmental Respondents Brief at 24.

<sup>&</sup>lt;sup>366</sup> Tr. at 84-85.

<sup>&</sup>lt;sup>367</sup> Tr. at 127-128.

<sup>&</sup>lt;sup>368</sup> Company Brief at 37-38.

<sup>&</sup>lt;sup>369</sup> Direct Energy Brief at 21; Tr. at 40-41.

Company would need to procure the resources to serve the participating customers' needs.<sup>370</sup> However, Mr. Gaskill advised that the Company would be open to more frequent enrollment periods, if the Commission so directed.<sup>371</sup>

Environmental Respondents, Direct Energy, Walmart, and Consumer Counsel all challenged the proposed 90-day enrollment period. Environmental Respondents argued that, during the window outside of the enrollment period, the Company would not be "offering" a tariff for 100 percent renewable energy, therefore customers should be allowed to purchase it from a CSP. Dominion Energy maintains that "[t]o determine the effects of an approved utility tariff under Subsection A 5, the relevant question under the plain language of the statute is when the utility 'offers' such a tariff."<sup>374</sup>

While I believe that the language of Subsection A 5 permits an enrollment period such as that proposed by the Company, the Company has indicated that it would be open to more frequent enrollment periods. Therefore, I find that the Company should offer the Rate Schedules CRG-S on a more frequent basis. Specifically, I recommend that the Company conduct the 90-day enrollment period as proposed in the Application; however, during the period when the enrollment window is closed, the Company should maintain a list of customers who inquire about Rate Schedules CRG-S. If the Company receives a termination request from a participating customer, the Company should notify customers on the list and provide those customers an opportunity to receive service under the CRG-S tariff. Such a process would balance the Company's operational requirements with the customers' ability to receive service provided 100 percent from renewable energy. Further, by allowing new customers to participate in Rate Schedules CRG-S when a customer exits the rate schedule, the Company can avoid the need to sell the excess energy on PJM. In doing so, this could reduce the Company's risk.

#### **Sunset Provision**

Staff witness Samuel recommended a three-year sunset provision on both Rate Schedules CRG-S. Noting the 90-day enrollment period, I requested that the participants consider including in their briefs a discussion of their position on a 90-day sunset provision on Rate Schedules CRG-S, should no customers enroll in them.<sup>375</sup>

Consumer Counsel and Environmental Respondents supported a 90-day sunset provision if the Commission approves the Rate Schedules CRG-S pursuant to Subsection A 5.<sup>376</sup>

<sup>&</sup>lt;sup>370</sup> Tr. at 283.

<sup>&</sup>lt;sup>371</sup> *Id.* 

<sup>&</sup>lt;sup>372</sup> Environmental Respondents Brief at 24; Direct Energy Brief at 15; Walmart Brief at 3; Consumer Counsel Brief at 13.

<sup>&</sup>lt;sup>373</sup> Environmental Respondents Brief at 24.

<sup>&</sup>lt;sup>374</sup> Company Brief at 37.

<sup>&</sup>lt;sup>375</sup> Tr. at 298, 309.

<sup>&</sup>lt;sup>376</sup> Consumer Counsel Brief at 14; Environmental Respondents Brief at 24.

Dominion Energy stated that "if no customers enroll in either Rate Schedule CRG-S Residential or Rate Schedule CRG-S Non-residential by the end of the initial enrollment period, the Company would not oppose closing that specific rate schedule."<sup>377</sup>

With the 90-day sunset provision in place, Dominion Energy will still have 90 days to enroll customers in Rate Schedules CRG-S, as proposed in its Application. However, if no customers enroll, then the schedules will be closed, and CSPs will be able to resume offering service in Dominion Energy's service territory. For those reasons, and because the 90-day sunset provision is unopposed, I find that a 90-day sunset provision should be placed on Rate Schedules CRG-S.

## FINDINGS AND RECOMMENDATIONS

In conclusion, based on the record developed in this proceeding, I find that Rate Schedules CRG-S should be approved subject to the following findings and recommendations:

- (1) The rates for Rate Schedules CRG-S should be adjusted to reflect monthly balancing and the elimination of non-administrative related margin. Such adjustments reduce the Company's originally proposed residential rate of 9.627 ¢ per kWh to 6.894 ¢ per kWh, and the Company's originally proposed non-residential rate of 8.608 ¢ per kWh to 6.342 ¢ per kWh;
- (2) If the Commission were to adopt an hourly, daily, or annual balancing standard and the elimination of non-administrative related margin, the residential rates would be as follows: 9.078 ¢ per kWh for hourly balancing; 8.388 ¢ per kWh for daily balancing; and 5.970 ¢ per kWh for annual balancing;
- (3) If the Commission were to adopt an hourly, daily, or annual balancing standard and the elimination of non-administrative related margin, the non-residential rates would be as follows: 8.096 ¢ per kWh for hourly balancing; 7.568 ¢ per kWh for daily balancing; and 5.530 ¢ per kWh for annual balancing;
- (4) The above rates, depending upon the balancing standard adopted by the Commission, are just and reasonable;
- (5) Rate Schedules CRG-S should not be approved as an experiment pursuant to § 56-234 B of the Code;
- (6) If the Commission approves Rate Schedules CRG-S as an experiment, the experimental rates would meet the "approved tariff" language of Subsection A 5, and CSPs would be prohibited from marketing 100 percent renewable energy to customers in Dominion Energy's service territory;
- (7) If the Commission approves Rate Schedules CRG-S, Dominion Energy should be directed to comply with the reporting requirements outlined above;

<sup>&</sup>lt;sup>377</sup> Company Brief at 39.

- (8) The estimates used by the Company to determine the 25 MW cap and the 25 MW cap are reasonable;
- (9) I recommend that the Company conduct the 90-day enrollment period as proposed in the Application and maintain a list of customers who inquire about Rate Schedules CRG-S to be notified and given an opportunity to participate if the Company receives a termination request from a participating customer; and
  - (10) A 90-day sunset provision should be placed on Rates Schedules CRG-S.

Accordingly, I RECOMMEND the Commission enter an order that:

- 1. ADOPTS the findings of this Report;
- 2. APPROVES the Company's Rate Schedules CRG-S, subject to the findings and recommendations contained herein; and
  - 3. **DISMISSES** this case from the Commission's docket of active cases.

## **COMMENTS**

The parties are advised that pursuant to Commission Rule 5 VAC 5-20-120 C of the Commission's Rules of Practice and Procedure, any comments to this Report must be filed with the Clerk of the Commission in writing, in an original and five copies, within 28 days from the date hereof. The mailing address to which any such filing must be sent is Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Any party filing such comments shall attach a certificate to the foot of such document certifying that copies have been mailed or delivered to all counsel of record and any such party not represented by counsel.

Respectfully submitted,

Alexander F. Skirpan, Jr. Senior Hearing Examiner

Document Control Center is requested to mail or deliver a copy of the above Report to all persons on the official Service List in this matter. The Service List is available from the Clerk of

the State Corporation Commission, c/o Document Control Center, 1300 East Main Street, First Floor, Tyler Building, Richmond, VA 23219.