

COMMONWEALTH OF VIRGINIA  
STATE CORPORATION COMMISSION  
AT RICHMOND, DECEMBER 17, 2021

SCC CLERK'S OFFICE  
REGULATORY CONTROL CENTER

2021 DEC 17 P 2:13

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APPLICATION OF

RAPPAHANNOCK ELECTRIC COOPERATIVE

CASE NO. PUR-2020-00001

For Approval of an Electric Vehicle  
Smart Charging Pilot Program

FINAL ORDER

On April 12, 2021, Rappahannock Electric Cooperative ("REC" or "Cooperative"), pursuant to Rule 40 of the State Corporation Commission's ("Commission") Rules Governing Cost/Benefit Measures Required for Demand-Side Management Programs,<sup>1</sup> filed an amended application ("Amended Application") for approval of an electric vehicle smart charging pilot program ("EV Pilot").<sup>2</sup> REC seeks approval of its EV Pilot "to encourage off-peak electric vehicle charging," which REC anticipates would help the Cooperative, among other things, to manage its related capacity costs, load factor, and the upward pressure on residential rates that could occur when charging is done during on-peak hours.<sup>3</sup>

The Cooperative specifically requests a voluntary experimental two-year EV Pilot that would provide a fixed monthly bill credit of \$7.00 for the charging of electric vehicles during off-peak hours.<sup>4</sup> The EV Pilot initially would be limited in scope to 200 residential customers

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<sup>1</sup> 20 VAC 5-304-10 *et seq.*

<sup>2</sup> The Amended Application replaces the application filed by REC on January 2, 2020. Amended Application at 1.

<sup>3</sup> *Id.* at 2.

<sup>4</sup> *Id.* at 5-6.

the first year and up to 400 residential customers the second year.<sup>5</sup> REC states that it plans to introduce the EV Pilot to customers through REC's website, social media outlets, *Cooperative Living Magazine*, and other promotional methods.<sup>6</sup> As proposed by REC, to be eligible to participate in the EV Pilot, customers must: (i) be served on one of the Cooperative's residential rate schedules other than Schedule R-TOU; (ii) own or lease an all-electric plug-in or plug-in hybrid vehicle; and (iii) be enrolled as a MyRECSmartHub user via smartphone or computer.<sup>7</sup> Per the Cooperative, participation in the EV Pilot would be voluntary, and there would be no fees to enroll or participate in the EV Pilot.<sup>8</sup> Participants could elect to withdraw from the EV Pilot at any time without penalty.<sup>9</sup>

Through its proposed EV Pilot, REC states that it seeks to avoid what it perceives as two drawbacks to introducing a rate for a yet-to-exist load using separate metering and a new rate: (i) the additional cost incurred by the utility and participating customers for the separate metering; and (ii) the risk that the presumed load profile is incorrect and thus the new rate is insufficient to recover costs, or is overly burdensome or punitive.<sup>10</sup> REC states that the EV Pilot avoids these drawbacks by providing a fixed monthly bill credit for off-peak electric vehicle charging.<sup>11</sup> REC further states that the EV Pilot should allow all electric vehicle owners to

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<sup>5</sup> *Id.* at 2.

<sup>6</sup> *Id.* at 3.

<sup>7</sup> *Id.* at 12.

<sup>8</sup> *Id.*

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

<sup>10</sup> *Id.* at 5-6.

<sup>11</sup> *Id.* at 6.

participate in the EV Pilot regardless of the make or model of the electric vehicle or the type of charger used.<sup>12</sup>

REC represents in its Amended Application that the EV Pilot would not harm non-participating customers because: (i) the avoidance of increased capacity-related costs resulting from charging during the EV Pilot's designated Smart Hours would offset the cost of bill credits REC plans to pay participants; and (ii) each participant would pay the full distribution rate, Electricity Supply Service rate, and all applicable riders for all electricity consumed at their residence.<sup>13</sup> The Cooperative states that its proposed bill credit amount will effectively remove demand-related wholesale costs from the amount billed for electric charging while still fully recovering the energy-based wholesale power costs.<sup>14</sup> However, REC further represents that it plans to analyze wholesale power costs annually to determine if the bill credit amount for the EV Pilot is appropriate.<sup>15</sup>

The Cooperative believes the EV Pilot will provide an opportunity for REC to monitor both the volume of energy consumed by electric vehicle chargers and the time it was consumed, and to integrate that consumption data into the design of future rate offerings.<sup>16</sup> In addition, REC believes the EV Pilot will assist the Cooperative in: (i) developing and testing an innovative

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<sup>12</sup> *Id.*

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

<sup>14</sup> *Id.* The Cooperative states that "[t]he intent is for the bill credits to be recovered through avoided or reduced wholesale power costs. To the extent they are not, the costs of the bill credits will be recovered through annual adjustments in the PCA [Power Cost Adjustment] factor." Direct Testimony of Thomas P. Handley at 10.

<sup>15</sup> Amended Application at 7. REC indicates that it will submit any necessary changes to the Commission Staff ("Staff") for administrative review and approval. *Id.*

<sup>16</sup> *Id.* at 12.

program that further utilizes the Cooperative's existing Customer Information System, Advanced Metering Infrastructure, and Meter Data Management systems; (ii) determining the effect of residential charging on REC's distribution system; and (iii) encouraging beneficial electrification.<sup>17</sup>

REC asserts that once it has implemented the EV Pilot, the Cooperative may need to adjust certain EV Pilot features.<sup>18</sup> REC proposes that the Commission allow the Cooperative to submit to Staff, for administrative review and approval, necessary adjustments to features such as hours designated as Smart Hours, the amount of the bill credit, the term of the EV Pilot, adjustments to specific tariff terms and conditions, as well as other adjustments that may be necessary for the EV Pilot.<sup>19</sup>

REC also proposes to provide Staff with a report at the end of 12 months of operation of the EV Pilot, to include certain metrics of the EV Pilot for each month of the reporting period.<sup>20</sup>

On April 27, 2021, the Commission issued an Order for Notice and Comment ("Scheduling Order") that, among other things, directed REC to provide notice to the public of its Amended Application; provided interested persons an opportunity to comment and request a hearing on the Cooperative's Amended Application; and directed Staff to conduct an investigation of the Amended Application and file a report ("Staff Report"). On July 30, 2021, the Cooperative filed proof of notice and proof of service in accordance with the Scheduling

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<sup>17</sup> *Id.* at 12-13.

<sup>18</sup> *Id.* at 15.

<sup>19</sup> *Id.*

<sup>20</sup> *Id.* at 13.

Order. The Board of Supervisors of Culpeper County, Virginia filed a Notice of Participation. No comments or requests for hearing on the Cooperative's Amended Application were filed.

On September 13, 2021, Staff filed its Staff Report summarizing the results of its investigation of the Amended Application. In its Staff Report, Staff recommended that the Commission approve the EV Pilot with certain revisions and additional information, including:<sup>21</sup>

- That REC begin to educate customers on the impact increased EV charging during on-peak hours may have on capacity costs and the potential impact on electric rates.
- That the Cooperative train customer service representatives on the benefits of off-peak EV charging and the EV Pilot by using existing training procedures including in-person meetings, presentations, and job aids;
- That REC perform and include, in its proposed annual report, an analysis of load profiles for participating customers who have purchased an EV and have load data for the year prior to participation in the EV Pilot. Individual participant load profile data pre- and post-participation in the Pilot may then be analyzed and compared. Additionally, Staff recommended REC determine the amount of participant EV charging that occurred during Smart Hours for the year prior to participation in the EV Pilot; and
- That the Cooperative continue to investigate cost-effective methods of using metrology, such as meter disaggregation or collection of consumption data directly from EVs, to more accurately measure EV charging load and energy consumption in the future.

Staff did not support REC's proposal to recover costs of bill credits through an adjustment of the Cooperative's Power Cost Adjustment Factor.<sup>22</sup>

On October 4, 2021, the Cooperative filed its Response to the Staff Report ("Response"). Therein, REC stated that it is in agreement with Staff regarding most aspects of the EV Pilot.<sup>23</sup>

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<sup>21</sup> Staff Report at 15.

<sup>22</sup> *Id.*

<sup>23</sup> Response at 9.

The Cooperative agreed with Staff's recommendation to educate customers by publicizing the benefits of the EV Pilot, including the reduction of the Cooperative's wholesale power costs, on its website, through social media, and in *Cooperative Living* magazine.<sup>24</sup> Further, REC agreed to educate its member service representatives about the benefits of electric vehicle ownership, off-peak charging, and the EV Pilot, and to conduct Staff's recommended load profile analysis in addition to its participant survey.<sup>25</sup> The Cooperative noted that, should the amount of participating customers' bill credits exceed the Cooperative's net savings in power costs, REC will absorb the difference as a distribution expense for this EV Pilot.<sup>26</sup> Additionally, REC stated that, although data collection methods using metrology are too expensive to be cost effective at this time, the Cooperative will continue investigating these and other methods of data collection.<sup>27</sup> The Cooperative also agreed to track any incremental labor expense to the implementation or administration of the EV Pilot with a distinct code.<sup>28</sup> Finally, REC requested that the Commission approve its proposal to submit any adjustments to the components of the EV Pilot to Staff for administrative review and approval.<sup>29</sup>

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<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

<sup>26</sup> *Id.*

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

<sup>28</sup> *Id.* at 9-10.

<sup>29</sup> *Id.* at 10.

On October 27, 2021, Staff and REC filed a Joint Motion to Approve Stipulation ("Joint Motion") with an attached Stipulation.<sup>30</sup> The Stipulation purports to resolve all issues between REC and Staff for purposes of this case.<sup>31</sup> According to the Stipulation, REC and Staff agree as follows:<sup>32</sup>

1. Staff recommends approval of the Cooperative's EV Pilot Program subject to the findings and recommendations in its Staff Report as clarified in the Stipulation.
2. The Cooperative agrees to withdraw its request for Staff's administrative approval of certain design changes to its EV Pilot Program.
3. The Cooperative agrees to track all credits and administrative costs directly related to the administration and execution of the EV Pilot Program, including internal labor.
4. The Cooperative agrees to educate its members on the impact of electric vehicle charging during on-peak hours and during off-peak hours, including the effect on the Cooperative's wholesale power costs and members' bills.

NOW THE COMMISSION, upon consideration of the matter, is of the opinion and finds that the Joint Motion and the Stipulation are approved. The Commission hereby adopts the recommendations made by Staff in its Staff Report as modified and added to by the agreements contained in the Stipulation. Based on the foregoing, REC's EV Pilot is approved as modified herein.

Accordingly, IT IS ORDERED THAT:

- (1) The Cooperative's Amended Application, as modified herein, is approved.

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<sup>30</sup> *Rappahannock Electric Cooperative, For Approval of a Smart Charging Electric Vehicle Pilot Program*, Case No. PUR-2020-00001, Doc. Con. Cen. No. 211040210, Joint Motion to Approve Stipulation and Stipulation (Oct. 27, 2021).

<sup>31</sup> Stipulation at 1.

<sup>32</sup> *Id.*

(2) REC is authorized to begin offering the EV Pilot to member-consumers as of March 1, 2022, up to and through February 29, 2024.

(3) Within thirty (30) days of the date of this Order, REC shall file with the Clerk of the Commission tariffs that conform to this Order. REC shall provide copies of such tariffs to the Commission's Division of Public Utility Regulation ("PUR").

(4) REC shall file an annual report on the EV Pilot as described in the Staff Report. Such annual report shall be filed with the Clerk of Commission, with a copy to the Division of PUR, no later than June 1 of each year that follows a full year of EV Pilot implementation, or when the Company files for any amendment(s) to its EV Pilot, whichever occurs first. REC's annual report shall include, but not be limited to, all reporting items agreed to by REC and Staff, as listed in the Amended Application,<sup>33</sup> the Staff Report,<sup>34</sup> REC's Comments<sup>35</sup> and the Stipulation.<sup>36</sup>

(5) The EV Pilot is approved for a period of two (2) years, after which it shall cease, unless extended by written order of this Commission. REC shall make any filing requesting extension and/or any other modifications to the EV Pilot no less than eight (8) months prior to the EV Pilot's February 29, 2024 cessation date.

(6) This matter is continued.

A COPY hereof shall be sent electronically by the Clerk of the Commission to:  
Garland S. Carr, Esquire, Williams Mullen, 200 South 10th Street, Suite 1600, Richmond,

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<sup>33</sup> Amended Application at 13-14.

<sup>34</sup> Staff Report at 12-15.

<sup>35</sup> REC's Comments at 7.

<sup>36</sup> Stipulation at 1.



Virginia 23219-4074, [gcarr@williamsmullen.com](mailto:gcarr@williamsmullen.com); Bobbi Jo Alexis, Culpeper County Attorney, 306 N. Main Street, Culpeper, Virginia 22701, [bjalexis@culpepercounty.gov](mailto:bjalexis@culpepercounty.gov); and C. Meade Browder, Jr., Senior Assistant Attorney General, Division of Consumer Counsel, Office of the Attorney General, 202 N. 9th Street, 8th Floor, Richmond, Virginia 23219-3424, [mbrowder@oag.state.va.us](mailto:mbrowder@oag.state.va.us).

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