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Appalachian
Mountain
Advocates

West Virginia
Post Office Box 507
Lewisburg, WV 24901
(304) 645-9006

Virginia
415 Seventh Street NE
Charlottesville, VA 22902
(434) 529-6787

www.appalmad.org

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Mr. Joel H. Peck, Clerk
c/o Document Control Center
STATE CORPORATION COMMISSION
Tyler Building — First Floor
1300 East Main Street
Richmond, Virginia 23219

RE: Petition of Virginia Electric & Power Company

For approval of a plan for electric distribution grid transformation projects pursuant to Virginia Code § 56-585.1 A 6, and for approval of an addition to the terms and conditions applicable to electric service

Case No. PUR-2019-00154

Dear Mr. Peck,

Please find attached for filing in the above-captioned case Sierra Club's Post-Hearing Brief. Should you have any questions or concerns regarding this filing, please do not hesitate to contact me directly.

Thank you,

Evan D. Johns (Virginia State Bar No. 89285)
APPALACHIAN MOUNTAIN ADVOCATES
Post Office Box 507
Lewisburg, West Virginia 24901
Telephone: (434) 738 - 1863
Facsimile: (304) 645 - 9008
E-Mail: ejohns@appalmad.org

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**COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION**

PETITION OF

VIRGINIA ELECTRIC & POWER COMPANY

Case No. PUR-2019-00154

For approval of a plan for electric distribution grid transformation projects pursuant to Virginia Code § 56-585.1 A 6, and for approval of an addition to the terms & condition applicable to electric service.

SIERRA CLUB'S POST-HEARING BRIEF

Under Rule 200 of the Rules of Practice and Procedure of the State Corporation Commission,¹ the Sierra Club submits this Post-Hearing Brief urging the Commission to approve the Electric Vehicle (EV) Pilot Program (the Program) component of Virginia Electric and Power Company's pending grid transformation plan (the Plan). In accordance with the Commission's directive at the hearing in this case,² the Club also appends to this brief a matrix reflecting its position on the various components of the plan.

LEGAL FRAMEWORK

Virginia Code § 56-585.1 A 6 allows an electric utility to "petition the Commission, not more than once annually, for approval of a plan for electric distribution grid transformation projects" that includes both "measures to facilitate integration of distributed energy resources and measures to enhance physical electric distribution grid reliability and security."³ The

1 20 VAC § 5-20-200.

2 Transcript at 674:19-675:8.

3 Virginia Code § 56-585.1 A 6.

statutory definition of a “grid transformation project” includes, among other things, projects to facilitate “infrastructure necessary to support electric vehicle charging systems.”⁴

The General Assembly has declared grid transformation projects “in the public interest” as a matter of law.⁵ The legal standard for approval of grid transformation plan components is thus “whether the utility’s plan for such projects, and the projected costs associated therewith, are reasonable and prudent.”⁶ As Consumer Counsel Witness Norwood explains in his direct testimony, a number of factors can guide the Commission in evaluating whether a project is reasonable and prudent. Those factors include:

- (1) whether the proposed new investments are needed to ensure reliable service;
- (2) whether the proposed new investments represent the lowest reasonable cost alternatives available for supplying the identified needs;
- (3) whether the new investments help meet other economic and/or public policy objectives, such as fuel diversity, emissions reductions, enhanced reliability or security, or economic development;
- (4) whether the construction costs of the investment are reasonably incurred; and
- (5) whether the investment is necessary to demonstrate the feasibility or cost-effectiveness of a new technology.⁷

4 *Id.* § 56-576 (definition of “electric distribution grid transformation project”).

5 *Id.* § 56-585.1 A 6.

6 *Id.*; see also *Petition of Virginia Electric & Power for approval of a plan for electric distribution grid transformation projects pursuant to Virginia Code § 56-585.1 A 6*, Case No. PUR-2018-00100, Final Order at 4 (January 17, 2019), available at <https://bit.ly/37OwWIY> (“[T]he statutory requirement that the costs of a grid transformation plan must be reasonable and prudent is neither nullified by, nor subordinated to, the statutory declaration elsewhere that grid transformation projects are in the public interest.”).

7 Exhibit No. 16 (Norwood Direct) at 13:7–13:15.

Finally, although a grid transformation plan can—and to some extent *must*⁸—include multiple components, “the Commission may approve or disapprove the Plan in whole or in part.”⁹

ARGUMENT

1. The Company’s EV Pilot Program is reasonable and prudent.

Widespread deployment of electric vehicles will be an integral part of meeting the Commonwealth’s statutory goals of building a cleaner, more efficient, and more resilient energy system.¹⁰ In addition to reduced emissions of greenhouse gases and conventional air pollutants,¹¹ EVs can provide significant fuel cost savings for EV owners¹² and, as Dr. Camp explains in her testimony, lower electric rates for all customers.¹³ EVs also have the potential to provide a range of grid services, including voltage and frequency regulation.¹⁴ The Sierra Club generally supports

8 See Virginia Code § 56-585.1 A 6 (requiring mandatory grid transformation plan include both “measures to facilitate integration of distributed energy resources and measures to enhance physical electric distribution grid reliability and security”).

9 *Petition of Virginia Electric & Power for approval of a plan for electric distribution grid transformation projects pursuant to Virginia Code § 56-585.1 A 6*, Case No. PUR-2018-00100, Final Order at 4 (January 17, 2019), available at <https://bit.ly/37OwWlY>.

10 Virginia Code § 67-101 (enumerating the Commonwealth’s “objectives pertaining to energy issues” including, among other things, “[u]sing energy resources more efficiently,” avoiding “the emissions of greenhouse gases produced in connection with the generation of energy,” and averting any “disproportionate adverse impact on economically disadvantaged or minority communities”); see also *id.* § 67-102 A (declaring it “the policy of the Commonwealth to . . . [p]romote cost-effective conservation of energy and fuel supplies; . . . [p]romote the use of motor vehicles that utilize alternate fuels and are highly energy efficient; . . . [and e]nsure that development of new, or expansion of existing, energy resources or facilities does not have a disproportionate adverse impact on economically disadvantaged or minority communities”).

11 Exhibit No. 4 (Hulsebosch Direct) at 13:12–13:13, 20:14–20:16.

12 *Id.* at 13:14–13:21.

13 Exhibit No. 22 (Camp Direct) at 7:1–7:9.

14 Alexandra B. Klass, *Public Utilities & Transportation Electrification*, 104 IOWA LAW REVIEW 545, 558 (2019).

measures that will help Virginia capitalize on those potential environmental, technologic, and economic benefits of EV adoption.

The record in this case demonstrates that the EV Pilot Program will, in fact, help to increase EV adoption within the Company's service territory. Market research indicates that among the most significant impediments to EV adoption are so-called "range anxiety and lack of access to Level 3 DC fast chargers."¹⁵ Company Witness Hulsebosch, for example, cites research from the Institute of Physics indicating that increased access to charging infrastructure alone can improve EV sales by 7.2%.¹⁶ Multiple witnesses in this case testified that the EV Pilot Program is properly designed to address those concerns and is therefore expected to actually increase EV adoption throughout the Commonwealth.¹⁷

By all accounts, the EV Pilot Program is a prudent and cost-effective means of capturing the benefits of EV adoption. The Commission's Staff notes that the cost estimates behind the Program's relatively modest price tag¹⁸ are "detailed and based on an RFP process and other

15 *Id.* at 561.

16 Exhibit No. 4 (Hulsebosch Direct) at 14:16–15:8 (citing Easwaran Narassimhan & Caley Johnson, *The Role of Demand-Side Incentives and Charging Infrastructure on Plug-In Electric Vehicle Adoption: Analysis of U.S. States*, 13 ENVIRONMENTAL RESEARCH LETTERS 74032 (2018), available at <https://bit.ly/3a15ToZ>).

17 *Id.* at 14:16–15:8; Exhibit No. 20 (Ancel Direct) at 4:23–5:3 ("Rebates for EV charging hardware and installation . . . will encourage . . . electric vehicle adoption, long term."); Exhibit No. 21 (Young Direct) at 8:6–8:7 ("[I]ncentives, including those offered by utilities, increase the deployment of charging infrastructure, and thus encourage greater EV adoption by consumers."); Exhibit No. 22 (Camp Direct) at 6:19–6:21.

18 The total cost of the Company's transportation electrification programs—including the EV Pilot Program—is \$7.3 million over ten years, approximately 0.26% of the total plan budget. *See* Exhibit No. 18 (O'Donnell Direct) at 11:12–11:13, 14:1–14:2.

price solicitations and studies.”¹⁹ The cost-benefit analysis supporting the Company’s Plan estimates the Pilot Program’s net present value at nearly \$47 million.²⁰ Although Appalachian Voices Witness O’Donnell provides some reason to doubt the reliability of that analysis,²¹ the concerns he identifies are less troublesome for programs, like the EV Pilot, whose value does not depend in large part (if at all) on the implementation of “other projects that are economically infeasible.”²² In fact, Dr. Camp’s testimony suggests that the Company’s analysis significantly *undervalues* the potential benefits of transportation electrification because it does not appear to include the effect that increased electricity purchases from EV users may have on lowering rates for all customers—EV owners and non-EV owners alike.²³

A diverse array of stakeholders expressed support for the EV Pilot in this proceeding. Of the seven respondents in this case, five support the Program,²⁴ and another joins the Commission’s Staff in taking no position.²⁵ While the Club agrees with Appalachian Voices that

19 Exhibit No. 27 (Myers Direct) at 26:21–27:1; *see also* Exhibit No. 7 (Frost Direct) at 47:14–49:4 and Attachment C.

20 Exhibit No. 18 (O’Donnell Direct) at 23:3 (citing data from Attachment Set 1-02(TGH)).

21 *See generally id.* at 19:1–34:9.

22 *Id.* at 24:3–24:19; *see also* Exhibit No. 29 (Hulsebosch Rebuttal) at 24:10–25:1 (testifying that the EV Pilot Program’s functionality is affected only by some parallel cyber security investments “related to the Pilot Program”).

23 *Compare* Exhibit No. 22 (Camp Direct) at 7:1–7:9, *with* Exhibit No. 4 (Hulsebosch Direct) at 13:1–15:13 (describing EV-related benefits as including fuel cost savings for EV owners and reduced greenhouse gas emissions), Exhibit No. 29 (Hulsebosch Rebuttal) at 24:8–25:3 (also including avoided/deferred capital and energy and demand savings as benefits of the Transportation Electrification segment of the Company’s Plan).

24 *See* Exhibit No. 16 (Norwood Direct) at 22:13–22:17; Exhibit No. 17 (Perry Direct) at 19:2–19:6; Exhibit No. 20 (Ancel Direct) at 4:19; Exhibit No. 21 (Young Direct) at 4:22–4:23; Exhibit No. 22 (Camp Direct) at 6:18.

25 *See* Exhibit No. 27 (Myers Direct) at 27. Respondent Appalachian Power did not file testimony or participate in the public hearing.

the Commission must carefully evaluate the cost-effectiveness of the Plan's various components,²⁶ it believes the testimony of EV policy experts in this case more than sustains the relatively minor costs of the EV Pilot Program. As Dr. Camp observes, "this modest upfront investment will support the expected adoption of EVs and thereby increase electricity sales during the Pilot Program and the years beyond . . . [with] the eventual result of lowering utility costs and electricity prices for all customers, so long as a well-designed TOU rate [is] in place."²⁷

2. Expanding the EV Pilot Program in accordance with Dr. Camp's recommendations would bring far greater benefits to ratepayers and the Commonwealth.

The only problems with the Company's EV Pilot Program are those areas in which it does not go far enough. Dr. Camp identifies two significant ways in which the EV Pilot Program should be improved in order to ensure that the benefits of increased EV adoption reach all ratepayers, including those who do not drive an EV:

(a) Additional Rebate Offerings

The Company designed its EV Pilot Program around a forecast of EV adoption prepared by Navigant.²⁸ To calculate the number of chargers needed to support the EV fleet anticipated within its service territory, the Company fed the results of the Navigant forecast into the Department of Energy's EVI-Pro Lite online tool,²⁹ which uses "detailed data on personal

26 Exhibit No. 18 (O'Donnell Direct) at 17:8–17:10; *see also* *Petition of Virginia Electric & Power for approval of a plan for electric distribution grid transformation projects pursuant to Virginia Code § 56-585.1 A 6*, Case No. PUR-2018-00100, Final Order at 4 (January 17, 2019), available at <https://bit.ly/37OwWIY> (holding that "the Commission may approve or disapprove [a grid transformation] Plan in whole or in part").

27 Exhibit No. 22 (Camp Direct) at 18:17–18:21.

28 *See generally id.* at Exhibit EC-2.

29 *Id.* at 16:3–16:4.

vehicle travel patterns, electric vehicle attributes, and charging station characteristics . . . to estimate the quantity and type of charging infrastructure necessary to support regional adoption of electric vehicles.”³⁰

Dr. Camp testifies, however, that Navigant’s forecast “drastically underestimates the likely number of EVs in the Company’s service territory in the coming decade”³¹ and is an outlier among five other, nationally recognized EV sales forecasts.³² Dr. Camp recommends that the Company look instead to a forecast prepared by Bloomberg New Energy Finance (BNEF) that aligns most closely with Virginia’s historical EV sales, includes the most recently available data (including the cost of lithium ion batteries), and represents “a reasonable consensus estimate” among the five other forecasts Dr. Camp reviewed.³³ The Company, for its part, “does not dispute the results of the forecasts presented by Ms. Camp,”³⁴ nor does it “oppose[] including additional rebates should the Commission deem them reasonable and prudent.”³⁵

Table 1 of Dr. Camp’s testimony, reproduced below, shows that using the results of the BNEF forecast in the EVI-Pro Lite tool more-than-doubles the amount of workplace and DC fast chargers needed to support EV owners in the Company’s service territory:³⁶

30 United States Department of Energy, *Electric Vehicle Infrastructure Projection Tool (EVI-Pro) Lite*, <https://afdc.energy.gov/evi-pro-lite> (last accessed February 25, 2020).

31 Exhibit No. 22 (Camp Direct) at 10:7–10:12.

32 *Id.* at 10:20–10:23.

33 *Id.* at 13:9–14:5.

34 Exhibit No. 34 (Frost Rebuttal) at 23:10.

35 *Id.* at 23:13–23:15.

36 Dr. Camp also recommends two other minor adjustments to the EVI-Pro Lite tool to account for (1) the declining ratio of plug-in hybrid electric vehicles (PHEVs) relative to battery electric vehicles (BEVs) and (2) the results of a Carnegie Mellon University study

Table 1: Comparison of necessary workplace and DC fast chargers for the Pilot Program.

	The Company's Proposal	Recommendations from Dr. Camp's Testimony
Workplace L2 Chargers	400	948
DC Fast Chargers	30	94

Source: Exhibit No. 22 (Camp Direct) at 17:16–18:1.

Accordingly, Dr. Camp recommends the Company more than double the number of rebates available for workplace L2 chargers and DC fast chargers.³⁷ Although she acknowledges that expanding the rebate program will increase the overall cost of the EV Pilot, she explains that hastening the transition to EVs will be well worth “this modest upfront investment.”³⁸

(b) Time-of-Use Rates

A well-designed time-of-use rate is essential to encouraging EV adoption and ensuring that system-wide rate benefits from increased electricity sales are realized. Dr. Camp's testimony cites multiple studies illustrating that time-of-use rates help “ensure that electricity is primarily being consumed at off-peak times of the day, which helps to minimize the marginal costs associated with EV charging.”³⁹ Time-of-use rates can also reduce the operational costs for EV

indicating that only 56% of vehicles in the United States have a dedicated off-space parking space. *See id.* at 16:15–17:4.

37 *Id.* at 18:14–18:15. Dr. Camp also explains that the Company's proposal to offer rebates for “up to 25” charging stations at multi-family dwelling units should be increased as a means to “increase access to home charging for low- and moderate-income customers.” *Id.* at 18:1–18:10.

38 *Id.* at 18:15–18:21.

39 Exhibit No. 22 (Camp Direct) at 8:6–8:12 (citing Jason Frost *et al.*, *Electric Vehicles are Driving Electric Rates Down* (June 2019), available at <https://bit.ly/2w1ZPOn>; Stephen

owners capable of charging off-peak and thereby reduce financial barriers to EV adoption for transit buses, municipal fleets, and residential customers who drive during the day.⁴⁰ While time-of-use rates—like the Company’s proposed Schedule 1G, currently pending before the Commission—have benefits beyond the EV context, experts agree that “there has rarely been a situation that so clearly calls for the adoption of time-of-use rates as the impending growth in [EV] ownership.”⁴¹

Although the Company anticipates proposing an EV-specific time-of-use rate in 2021, Dr. Camp explains that the “delay represents a wasted opportunity to educate customers regarding optimal charging time[,] to encourage customers to adopt charging habits that align with grid needs,” and “to test customer adoption and effectiveness of the Company’s specific time-varying rates.”⁴² Moreover, the absence of a time-of-use rate can result in sub-optimal pricing at third-party charging stations.⁴³

Given the statutory deadline for a ruling on the Company’s proposed grid transformation plan,⁴⁴ the Commission will have to evaluate the Company’s EV Pilot Program without the benefit of a corresponding time-of-use rate. The Company has, however, expressed its

Schey *et al.*, *A First Look at the Impact of Electric Vehicle Charging on the Electric Grid in the EV Project*, 5 WORLD ELECTRIC VEHICLE JOURNAL (September 2012), available at <https://bit.ly/2vZ3JYl>).

40 *Id.* at 20:22–20:26.

41 Jake Seligman, *Electric Vehicles & Time-of-Use Rates: The Impending Role of the New York State Public Service Commission in Regulating Our Transportation Future*, 28 PACE ENVIRONMENTAL LAW REVIEW 568, 576 (2011).

42 Exhibit No. 22 (Camp Direct) at 20:1–20:7.

43 *Id.* at 21:22–22:7.

44 See Virginia Code § 56-585.1 A 6 (“The Commission’s final order regarding any such petition for approval of an electric distribution grid transformation plan shall be entered by the Commission not more than six months after the date of filing such petition.”).

commitment to developing time-variant rate programs informed by the data and stakeholder input it receives through the EV Pilot Program.⁴⁵ As explained further below, the Company's upcoming triennial review provides an opportunity to revisit time-of-use pricing for EV owners and the EV charging market.

3. The Virginia Code authorizes the Commission to consider and approve time-varying rates either “in the context of or apart from” a triennial rate review under Section 56-585.1 A 1.

At the evidentiary hearing in this case, the Commission asked the parties to address in their post-hearing briefs four related questions about the Commission's authority to consider and approve time-of-use rates:

- (1) Can the Commission consider and approve a time-of-use rate in a triennial rate review under Virginia Code § 56-585.1 A?⁴⁶
- (2) Is there another regulatory vehicle to consider and approve time-of-use rates?⁴⁷
- (3) Can the Commission approve a time-of-use rate other than as a pilot program?⁴⁸
- (4) Can the Commission approve a system-wide time-of-use pilot program?⁴⁹

After reviewing the relevant provisions of Title 56 and the Commission's ratemaking precedent, the Club answers each of those questions in the affirmative.

45 Transcript at 622:19–623:5, 627:18–628:20.

46 *Id.* at 514:7–514:9.

47 *Id.* at 514:13–514:14.

48 *Id.* at 514:16–514:20.

49 *Id.* at 514:23–514:24.

A. The Commission has authority to consider and approve a time-of-use rate in a triennial rate review under Virginia Code § 56-585.1 A.

Traditionally, Chapter 10 of Title 56⁵⁰ governed electric utility ratemaking.⁵¹ In 2007, the Virginia Electric Utility Regulation Act (the Regulation Act), now encoded in Chapter 23 of that Title, altered the status quo by imposing certain new procedures and methodologies for fixing the rates of investor-owned electric utilities like the Company. Most relevant here, Section 56-585.1 of the Regulation Act requires the Commission to convene triennial reviews of “the rates, terms and conditions for the provision of generation, distribution and transmission services by each investor-owned incumbent electric utility.”⁵²

In a triennial review, Section 56-585.1 modifies the Commission’s general Chapter 10 authority to, for example, evaluate the prudence of certain costs⁵³ or determine a fair rate of return on capital investments.⁵⁴ But the proceeding still retains many “characteristics of [a] Chapter 10 base rate proceeding,”⁵⁵ and the Act specifically provides that, “[e]xcept as otherwise provided [therein], the Commission shall exercise authority over the rates, terms and conditions of investor-owned incumbent electric utilities for the provision of generation, transmission and distribution services to retail customers in the Commonwealth pursuant to the provisions of Chapter 10.”⁵⁶ In other words, the provisions of Chapter 10 are applicable to triennial review

50 Virginia Code §§ 56-232—56-249.5.

51 *Old Dominion Committee for Fair Utility Rates v. State Corporation Commission*, 294 Va. 168, 172 (2017).

52 Virginia Code § 56-585.1 A.

53 *Id.* § 56-585.1 A 4.

54 *Id.* § 56-585.1 A 2.

55 *Appalachian Power v. State Corporation Commission*, 284 Va. 695, 700 (2012).

56 Virginia Code § 56-585.1 C.

proceedings except where Section 56-585.1 affirmatively requires different procedures or legal standards.

Chapter 10 authorizes the Commission to approve at least two different kinds of rate schedules:

- (i) The first are standard, “reasonable and just” rate schedules—general, cost-based⁵⁷ rates containing “reasonable classifications of customers.”⁵⁸ Factors the Commission considers in exercising this “general ratemaking authority”⁵⁹ include “the cost of providing the service, the relationship between classes of customers, value of the service, marketability, encouragement of efficient use of facilities, broad availability of service and a fair distribution of charges among the users.”⁶⁰
- (ii) Two other provisions in Chapter 10 authorize the Commission to consider and approve so-called “special rates,” subject to a different legal standard:
 - (a) Section 56-234 B clarifies that nothing in Chapter 10 precludes the Commission from considering and approving “voluntary rate or rate design tests or experiments, or other experiments involving the use of special rates.”⁶¹ The

57 *Id.* § 56-235.2 A 1 (requiring that rates “in the aggregate provide revenues not in excess of the aggregate actual costs incurred by the public utility in serving customers”—including reasonable “normalization for nonrecurring costs and annualized adjustments for future costs”—plus a “fair return on the public utility’s rate base used to serve those jurisdictional customers, which return shall be calculated in accordance with § 56-585.1 for utilities subject to such section.”).

58 *Id.* § 56-235.2 A 2.

59 *See City of Alexandria v. State Corporation Commission*, 296 Va. 79, 95 (2018).

60 *Secretary of Defense v. Chesapeake & Potomac Telephone*, 217 Va. 149, 153 (1976) (quoting with approval Commission’s decision below).

61 Virginia Code § 56-234 B.

statute further provides that the Commission may approve experimental rates “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.”⁶²

(b) Section 56-235.2 A authorizes the Commission to “approve, either in the context of or apart from a rate proceeding after notice to all affected parties and hearing, special rates, contracts or incentives to individual customers or classes of customers where it finds such measures are in the public interest.”⁶³ In addition to “protect[ing] the public interest,” the statute goes on to require that special rates “not unreasonably prejudice or disadvantage any customer or class of customers” or “jeopardize the continuation of reliable electric service.”⁶⁴

The Supreme Court of Virginia recently described the statutes authorizing both normal and special rates as “broadly written” and imposing little “limitation as to the type of rate mechanism set.”⁶⁵ And in the context of ratemaking statutes, Virginia law “presume[s] that any limitation on the Commission’s discretionary authority by the General Assembly will be clearly expressed in the language of the statute.”⁶⁶

Nothing in Section 56-585.1 or Chapter 10 itself indicates that the provisions above are inapplicable to a triennial review proceeding. Consistent with the presumption that limits on

62 *Id.*

63 *Id.* § 56-235.2 A.

64 *Id.* § 56-235.2 B.

65 *City of Alexandria*, 296 Va. at 96.

66 *Virginia Electric & Power v. State Corporation Commission*, 284 Va. 726, 741 (2012).

ratemaking authority will be clearly expressed by statute, whenever the General Assembly intended elements of Section 56-585.1 to supersede those of Chapter 10, it generally included language within Chapter 10 to that effect. Provisions within Chapter 10 itself expressly note that Section 56-585.1 modifies, for example, general Chapter 10 requirements regarding the timing of periodic rate reviews,⁶⁷ the treatment of off-system sales margins,⁶⁸ or the calculation of the utility's return on equity.⁶⁹ The Chapter 10 provisions regarding voluntary or special rates, however, do not include language of that sort. Nor does Section 56-585.1 include language evincing any intent to supersede those statutes. In fact, Section 56-585.1 does not appear to address rate design or customer classification at all. As such, the Commission's general discretion in those areas is unaffected by the Regulation Act.

Directing regulated utilities to file for approval of time-of-use rates is entirely within the Commission's traditional "reasonable and just" ratemaking authority. The fact that those rates may be voluntary (or would accompany a voluntary opt-out) is inapposite, as the Commission's general ratemaking authority includes the authority to approve voluntary rate schedules that are reasonable and not unduly discriminatory.⁷⁰ And more importantly, there is nothing intrinsically

67 Virginia Code § 56-234.2 ("The Commission shall review the rates of any public utility on an annual basis when, in the opinion of the Commission, such annual review is in the public interest, provided that *the rates of a public utility subject to § 56-585.1 shall be reviewed in accordance with subsection A of that section.*") (emphasis added).

68 *Id.* § 56-249.6 D 1.

69 *Id.* § 56-235.2 (requiring that "just and reasonable" rates include "a fair return on the public utility's rate base used to serve [its] jurisdictional customers, *which return shall be calculated in accordance with § 56-585.1 for utilities subject to such section*") (emphasis added).

70 *See Application of Virginia Electric & Power for approval of a voluntary renewable energy rate designated Rider REC, pursuant to Virginia Code § 56-234 A*, Case No. PUR-2019-00081, Order Approving Tariff (October 31, 2019), available at <https://bit.ly/38TLP7L>; *see also Application of Virginia Electric & Power for a 2013 biennial review of the rates, terms and*

unreasonable or unjust about setting an alternate rate for a class of customers who wish (or do not wish) to participate in time-variant pricing. To the contrary, directing utilities to implement time-of-use rate is the best way to ensure that retail rates reflect “the cost of providing [electric] service” and “encourage[] efficient use of facilities”—two important considerations in designing “reasonable and just” rates.⁷¹ Accordingly, courts have upheld various forms of time-of-use pricing, including mandatory programs, under similarly general statutory authority to fix just and reasonable rates.⁷²

Alternatively, the Commission could approve an opt-in time-of-use rate (or a voluntary opt-out from default time-of-use rates) as a “special rate” to a class of eligible customers under Section 56-235.2 A. While the term “special rate” is sometimes used more narrowly to refer to a favorable rate provided to a single customer,⁷³ Section 56-235.2 A plainly contemplates special

conditions for the provision of generation, distribution and transmission services pursuant to Virginia Code § 56-585.1 A, Case No. PUE-2013-00020, Final Order at 29 (November 26, 2013), available at <https://bit.ly/32pbMKk> (affirming the propriety of an existing voluntary rate schedule in the context of a biennial review proceeding).

71 *See Secretary of Defense*, 217 Va. at 153.

72 *See, e.g., State ex rel. Utilities Commission v. Carolina Utilities Customers Association*, 333 S.E.2d 259, 274 (N.C. 1985) (“[I]t is clear that time of use rates are not discriminatory.”); *New York State Council of Retail Merchants v. New York Public Service Commission*, 384 N.E.2d 1282 (N.Y. 1978) (upholding mandatory time-of-use pricing in light of “questions as to the efficacy and desirability of introduction of time-of-day rate fixing in any voluntary manner.”); *see also In re Public Service Company of Colorado*, Docket No. 00A-008E, Initial Commission Decision Regarding the Demand Side Management & Renewables Segment of the Public Service Company of Colorado’s 1999 Integrated Resource Plan, 2000 WL 1913730 (Colo. P.U.C. December 26, 2000) (Gifford, Chairman, concurring in part and dissenting in part) (arguing that, even though generic statutory authority to fix fair and reasonable rates did not alone allow approval of demand-side management programs, it *did* permit time-varying rates).

73 *See, e.g., Massaponax Sand & Gravel v. Virginia Electric & Power*, 166 Va. 405, 414 (1936) (quoting with approval appellant’s concession that an “agreement by the Power Company [to] furnish [a customer] with current at a special rate would not be enforced by the

rates that are generally available to “classes of customers.”⁷⁴ The Commission’s rules on special rate applications anticipate that special rates will be based on the characteristics of the eligible customer class—including, specifically, peak demand.⁷⁵ Time-of-use rates would, in any case, also qualify as an “incentive” to customers willing to curtail their load during peak hours.⁷⁶

Finally, Staff Witness Myers expressed some uncertainty at the hearing over the Commission’s ability to consider time-of-use rates in the Company’s 2021 triennial review specifically. Witness Myers explains that “[i]f base rates aren’t fully reset going forward on a new cost of service,” Section 56-585.1 A 3 permits the Commission to approve only “rate changes that are revenue-neutral to the utility.”⁷⁷ That restriction alone would not alter the Commission’s authority to consider and approve time-of-use rates—which are typically designed to be revenue neutral for each customer class. Company Witness Morgan testifies, in fact, that the Company

courts.”); *Application of Virginia Electric & Power for approval to establish voluntary rate designated Rider CRC, pursuant to Virginia Code § 56-234 B*, Case No. PUR-2018-00133, Final Order at 11 (February 8, 2019), available at <https://bit.ly/2uhY1QM> (reciting Company’s argument that “unlike special rate contracts that are generally offered to a single customer whose needs cannot be met by existing tariffs,” a proposed voluntary rider subject to Section 56-234 B is generally “available to all eligible . . . customers”).

74 See Virginia Code § 56-235.2 A. The context in which the General Assembly uses the term “special rate” in Section 56-234 B could indicate that it considers both voluntary and design-forward rates as a subset of “special rates.” See *id.* § 56-234 B (allowing Commission to consider and approve “voluntary rate or rate design tests or experiments, or other experiments involving the use of special rates, . . . in furtherance of the public interest”) (emphasis added). This is further reinforced by the fact that Section 56-234 B allows the Commission to approve special rate experiments in order to “acquire information which is or may be in furtherance of the public interest,” tracking the legal standard in Section 56-235.2 A for approval of special rates determined to be actually “in the public interest.”

75 20 VAC § 5-310-10 3.

76 As both opt-in and opt-out time-of-use rates provide an “incentive” for load-shifting, the statutory language appears broad enough to cover both regimes.

77 Transcript at 513:9–513:16.

specifically designed its proposed Rate Schedule 1G, which is currently pending before the Commission, to be revenue neutral with existing Rate Schedule 1.⁷⁸ Schedule 1G is far from an anomaly in that respect: the Commission has previously considered and approved revenue-neutral time-of-use rates proposed by other electric utilities.⁷⁹

B. The Commission has authority to consider time-of-use rates in a separately filed proceeding “apart from a rate proceeding.”

The Commission’s authority under Section 56-235.2 to approve “special rates, contracts or incentives to individual customers or classes of customers” may be exercised “*either* in the context of or apart from a rate proceeding”—so long as it first convenes a hearing “after notice to all affected parties.”⁸⁰ Similarly, Section 56-234 B appears to assume experimental rates will be evaluated in a separate proceeding initiated by a “petition filed by an investor-owned electric utility for approval” and subject to specific time limits.⁸¹ The Commission has approved

78 Exhibit No. 12 (Morgan Direct) at 9:13–9:18.

79 See, e.g., *Application of Craig-Botetourt Electric Cooperative for a general increase in electric rates*, Case No. PUE-2009-00065, Order Nunc Pro Tunc, Attachment at 2–3 (December 15, 2009), available at <https://bit.ly/32mVVvL> (describing time-of-use rates designed to be revenue-neutral for each customer class); *Application of Craig-Botetourt Electric Cooperative for a general increase in electric rates*, Case No. PUE-2009-00065, Final Order at 3–5 (June 16, 2010), available at <https://bit.ly/2PjZ8qE> (approving those rates).

80 Virginia Code § 56-235.2 A (emphasis added).

81 *Id.* § 56-234 B (“The Commission’s final order regarding any petition filed by an investor-owned electric utility for approval of a voluntary rate or rate design test or experiment shall be entered the earlier of not more than six months after the filing of the petition or not more than three months after the date of any evidentiary hearing concerning such petition.”).

experimental rates in stand-alone proceedings,⁸² and is currently considering the Company's residential time-of-use pilot as a stand-alone request.⁸³

The Commission also has the authority to approve any new "reasonable and just" rate in a stand-alone proceeding and has done so previously. By allowing utilities to petition for "new rate schedules for service not offered under existing rate schedules or for expansion . . . of existing services" in the same year that their regulated operating revenues are increased in a separate case, Section 56-235.4 suggests that those new rate schedules can be considered apart from an omnibus rate case.⁸⁴ Accordingly, the Commission has previously evaluated and approved new "reasonable and just" rate schedules in a stand-alone proceeding.⁸⁵

C. The Commission has authority to approve a system-wide time-of-use pilot program.

Virginia Code § 56-234 B allows the Commission's to evaluate and approve experimental pilot programs "necessary in order to acquire information which is or may be in furtherance of the public interest." At least two justices of the Supreme Court of Virginia have concluded that an experimental rate under Section 56-234 B must be "limited in duration."⁸⁶ Without a

82 See *Application of Virginia Electric & Power for approval to modify experimental companion tariff, designated Schedule RF, pursuant to Virginia Code § 56-234 B*, Case No. PUR-2019-00016, Order Approving Tariff (July 22, 2019), available at <https://bit.ly/2PgRGws>.

83 See generally *Application of Virginia Electric & Power for approval to establish an experimental residential rate schedule, designated Time-of-Use Rate Schedule 1G (Experimental)*, Case No. PUR-2019-00214, Order for Notice & Hearing (December 23, 2019), available at <https://bit.ly/2wzM2ie>.

84 Virginia Code § 56-235.4 A iii.

85 See *Application of Virginia Electric & Power for approval of a voluntary renewable energy rate, designated Rider REC, pursuant to Virginia Code § 56-234 A*, Case No. PUR-2019-00081, Order Approving Tariff (October 31, 2019), available at <https://bit.ly/38TLP7L>.

86 *Virginia Citizens Consumer Council v. Chesapeake & Potomac Telephone*, 247 Va. 333, 335 (1994) (Lacy, J., dissenting).

temporal limitation, a rate cannot “meet the definition of experimental” — “even if participation [is] voluntary,” and even if information gathered from the experiment is “to be used as the basis for future action.”⁸⁷ While that conclusion is expressed only in a dissenting opinion, it is not inconsistent with the majority’s unsigned order summarily dismissing the case on other grounds.⁸⁸

By contrast, there does not appear to be any statutory limit on the geographic, numeric, or systemic scope of an experimental rate. In fact, the Commission has previously approved an industry-wide, voluntary rate regulation structure under Section 56-234 B.⁸⁹ The Commission could therefore approve a system-wide, experimental time-of-use pilot so long as it is limited in duration.

D. The Commission has authority to approve permanent, system-wide time-of-use rates.

As detailed above, the statutes authorizing the Commission to approve normal “reasonable and just” rates and special “public interest” rates are, taken together, “broadly written” and impose little “limitation as to the type of rate mechanism set.”⁹⁰ General “reasonable and just” rates under Sections 56-234 A and 56-235 can include permanent time-of-use rates, so long as they are based on cost of service—as that term is modified by Section 56-585.1⁹¹—and contain “reasonable classifications of customers.”⁹² And unlike “experiments

87 *Id.* (Lacy, J., dissenting).

88 *Id.* at 334 (unsigned order granting motion to dismiss appeal as unripe).

89 *See generally In re Experimental Plan for the Optional Regulation of Telephone Companies*, Case No. PUC880035, Final Order (December 15, 1988), *affirmed sub nom., Virginia Citizens Consumer Council v. Chesapeake & Potomac Telephone*, 247 Va. 333 (1994).

90 *City of Alexandria*, 296 Va. at 96.

91 *See, e.g.,* Virginia Code § 56-585.1 A 4 (declaring certain costs reasonable and prudent as a matter of law).

involving the use of special rates” under Section 56-234 B, no sunset provision or other temporal limitation is required for “special rates” under Section 56-235.2 A.⁹³ As such, the Commission may approve permanent, system-wide time-of-use rates so long as they satisfy either the “reasonable and just” test set forth in Sections 56-235 and 56-235.2 A 1-2 or the “public interest” test set forth in Section 56-235.2 B.

CONCLUSION

The Commission should approve the Company’s EV Pilot Program and expand the rebate offerings under that program in accordance with Dr. Camp’s recommendations, which neither the Company nor any other party has opposed in this case.

Dated: February 28, 2020

Respectfully submitted,



Evan Dimond Johns

(Virginia State Bar No. 89285)
 APPALACHIAN MOUNTAIN ADVOCATES
 Post Office Box 507
 Lewisburg, West Virginia 24901
 Telephone: (434) 738 – 1863
 Facsimile: (304) 645 – 9008
 E-Mail: ejohns@appalmad.org

Nathaniel T. Shoaff

(Admitted *Pro Hac Vice*)
 SIERRA CLUB
 2101 Webster Street, Suite 1300
 Oakland, California 94612
 Telephone: (415) 977 – 5610
 E-Mail: nathaniel.shoaff@sierraclub.org

Counsel for Sierra Club

92 *Id.* § 56-235.2 A 1-2.

93 *Virginia Citizens Consumer Council*, 247 Va. at 337 (Lacy, J., dissenting).

APPENDIX:
SIERRA CLUB'S POSITION ON
GRID TRANSFORMATION PLAN COMPONENTS

Grid Transformation Plan Component	Sierra Club's Position
Advanced Metering Infrastructure (AMI)	No Position
Customer Information Platform (CIP)	No Position
Stakeholder and Customer Education	No Position
Grid Technologies:	No Position
Self-Healing Grid (FLISR)	No Position
Hosting Capacity	No Position
Advanced Analytics	No Position
Locks Campus Microgrid	No Position
Enterprise Asset Management System (EAMS)	No Position
Grid Hardening Measures:	No Position
Mainfeeder Hardening	No Position
Targeted Corridor Improvement	No Position
Proactive Component Upgrades	No Position
Voltage Island Mitigation	No Position
Telecommunications Infrastructure (TIER 3 FAN)	No Position
Cyber Security	No Position
Smart Charging Pilot Program	Supports Approval

2020 FEB 28

CERTIFICATE OF SERVICE

I, Evan D. Johns, certify that, on February 28, 2020, I deposited true copies of the foregoing into the United States mail, postage prepaid and addressed to the following:

Ashley Macko
K.B. Clowers
STATE CORPORATION COMMISSION
OFFICE OF THE GENERAL COUNSEL
Post Office Box 1197
1300 East Main Street — Tenth Floor
Richmond, Virginia 23219

C. Meade Browder, Jr.
Mitchell C. Burton
OFFICE OF THE ATTORNEY GENERAL
DIVISION OF CONSUMER COUNSEL
202 North Ninth Street, Eighth Floor
Richmond, Virginia 23219

Paul E. Pfeffer
Audrey T. Bauhan
DOMINION ENERGY SERVICES
120 Tredegar Street
Richmond, Virginia 23219

James R. Bacha
AMERICAN ELECTRIC POWER
One Riverside Plaza — 29th Floor
Columbus, Ohio 43215

Matthew L. Gooch
William T. Reisinger
REISINGERGOOCH
11 South Twelfth Street
Richmond, Virginia 23219

Derrick Price Williamson
SPILMAN THOMAS & BATTLE
1100 Bent Creek Boulevard, Suite 101
Mechanicsburg, Pennsylvania 17050

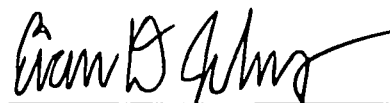
Vishwa B. Link
Joesph K. Reid III
Sarah R. Bennett
Jontille D. Ray
MCGUIRE WOODS
800 East Canal Street
Richmond, Virginia 23219

Nathaniel Benforado
William Cleveland
Hannah Coman
SO. ENVIRONMENTAL LAW CENTER
201 West Main Street, Suite 14
Charlottesville, Virginia 22902

Noelle J. Coates
AMERICAN ELECTRIC POWER
Three James Center
1051 East Cary Street, Suite 1100
Richmond, Virginia 23219

Carrie Harris Grundmann
SPILMAN THOMAS & BATTLE
110 Oakwood Drive, Suite 500
Winston Salem, North Carolina 27103

Brian R. Greene
Eric J. Wallace
GREENEHURLOCKER
1807 Libbie Avenue, Suite 102
Richmond, Virginia 23226



Evan Dimond Johns
(Virginia State Bar No. 89285)