

**BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

APPLICATION OF ROCKY MOUNTAIN )  
POWER FOR APPROVAL OF ITS ELECTRIC ) Docket No. 20-035-34  
VEHICLE INFRASTRUCTURE PROGRAM )

**DIRECT TESTIMONY OF  
SARA RAFALSON  
ON BEHALF OF EVGO SERVICES, LLC**

**OCTOBER 19, 2021**

I. INTRODUCTION, PURPOSE, AND SUMMARY OF RECOMMENDATIONS

**Q. PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.**

A. My name is Sara Rafalson. I am the Vice President of Market Development and Public Policy at EVgo Services, LLC (“EVgo”). My business address is 11835 W. Olympic Blvd. Suite 900E Los Angeles, CA 90064.

**Q. PLEASE DESCRIBE YOUR EXPERIENCE AND QUALIFICATIONS.**

A. As the Vice President of Market Development and Public Policy at EVgo, I manage EVgo’s policy team, which works with public utilities commissions, state legislatures, state agencies, and other entities across the country to advise on program design and rate design solutions to encourage transportation electrification in the 35 states in which EVgo has a presence. In addition to our state policy work, EVgo has been active in Washington, D.C. advancing complementary policies to both increase electric vehicle (“EV”) sales and associated EV charging infrastructure investments.

Most recently, I served as an expert witness for EVgo in transportation electrification cases filed by Arizona Public Service (“APS”),<sup>1</sup> Public Service Company of Colorado,<sup>2</sup> Ameren Illinois,<sup>3</sup> Pacific Gas & Electric (“PG&E”),<sup>4</sup> and San Diego Gas & Electric (“SDG&E”).<sup>5</sup> Prior to joining EVgo in early 2018, I spent seven years working in the solar industry advocating for

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<sup>1</sup> See Arizona Corporation Commission, Docket No. E-01345A-19-0236.

<sup>2</sup> See Colorado Public Utilities Commission, Proceeding No. 20A-0204E.

<sup>3</sup> See Ameren Illinois, Proceeding No. 20-0710.

<sup>4</sup> See California Public Utilities Commission, Application 18-11-003.

<sup>5</sup> See California Public Utilities Commission, Application 19-07-006.

renewable energy policy, with a focus on the Mid-Atlantic, Midwest, and the Northeast solar markets, as well as engagement on Capitol Hill.

**Q. ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

A. I am appearing on behalf of EVgo. EVgo owns and operates America’s largest public EV fast charging network, with more than 800 direct current fast charging (“DCFC”) locations across the nation. The owner-operator model aligns charging network interests with those of the customers, as reliability is key to the network’s economics and the driver’s ability to receive a convenient, reliable charge. EVgo is also the first public EV charging network in the U.S. powered by 100% renewable energy. EVgo is currently in the process of tripling its DCFC network across 40 metropolitan areas over the coming years through a partnership with General Motors (“GM”). This will result in more than 2,700 new fast chargers across the country, focused largely in metropolitan and suburban markets. EVgo also works with other automakers, such as Nissan, to expand charging to important EV markets.<sup>6</sup>

**Q. WHAT IS EVGO’S INTEREST IN THIS PROCEEDING?**

A. EVgo believes that the outcome of this proceeding will have a substantial impact on the nature, growth, and economics of the competitive market for DCFC in Utah, a market in which EVgo is currently an active participant. EVgo currently owns and operates 15 chargers in the Rocky Mountain Power (“RMP” or “the Company”) service territory, with interest in expansion. Therefore, in this proceeding, I aim to provide suggestions that will help the Commission ensure that deployment of DCFC stations in Utah is undertaken in a way that complements and encourages, rather than hinders, the private market’s ability to expand and compete in RMP’s

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<sup>6</sup> See <https://www.evgo.com/about/news/were-working-with-general-motors-to-triple-the-size-of-our-fast-chargingnetwork/> and see <https://www.evgo.com/about/news/nissan-and-evgo-expand-charging-network-with-200-new-ev-fastchargers/>

service territory. This will assist the Public Service Commission of Utah (“Commission”) in making decisions that increase the public policy benefits from ratepayer funds.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. The purpose of my testimony on the Electric Vehicle Infrastructure Program (“EVIP”) is to provide the Commission, the utility, and stakeholders with the unique perspective of a successful, private sector owner-operator of electric vehicle charging with experience in 35 states across the U.S. My testimony will focus on recommendations to improve RMP’s Company-owned charger program to ensure RMP is filling in gaps not being met by the private market, and to improve the Electric Service Schedule No. 60–Company Operated Electric Vehicle Charging Station Service (“Schedule 60”) rate proposal. I also support the make-ready and incentive programs, all of which will grow private sector investments in RMP’s service territory.

**Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS FOR THE COMMISSION IN THIS PROCEEDING.**

A. I recommend the Commission:

1. Approve RMP’s proposal to develop Company-owned chargers to fill corridor gaps across the state in rural areas not currently served by DCFC.
2. Direct RMP to postpone the development of Company-owned DCFC in populated, metropolitan locations<sup>7</sup> for 2.5 years from the effective date of the program. This will allow the private market time to leverage the make-ready and incentive programs in the

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<sup>7</sup> This includes all identified locations not designated as filling corridor gaps or serving rural areas by RMP in Table 2 “Location Selection Criteria” in Attachment JAC-1: Ogden, Clearfield, Farmington, Woods Cross, Salt Lake City, South Salt Lake, West Valley City, Millcreek City, Taylorsville, Midvale, South Jordan, Bluffdale, American Fork, and Orem.

EVIP, as well as leveraging potential federal funding, to address charging needs at the identified urban locations without expending ratepayer dollars. Following that timeframe, RMP should be allowed to develop Company-owned stations to fill the remaining public charging gaps, maximizing the distance between Company-owned and existing DCFC through a quantifiable metric (e.g. at least 10 miles from an existing privately owned DCFC).

3. Direct RMP to modify the RMP customer rate at its chargers to be set at a level that is competitive with the private market as a whole. In designing this rate, the utility should consider the pricing of all privately-owned chargers in its service territory, not only one provider, and should take into account all costs, including operations and maintenance costs.

## II. BACKGROUND

### **Q. WHY HAS RMP’S EVIP BEEN BROUGHT BEFORE THE COMMISSION?**

A. Utah House Bill 396 (“HB 396”), enacted in 2020, requires the Commission to authorize a large-scale electric utility’s vehicle charging infrastructure program that allows for a \$50,000,000 investment and provides for amendments to that program; and provides for a large-scale electric utility to recover the utility’s investment in vehicle charging infrastructure. An approved program must include “a transportation plan that promotes: (i) the deployment of utility-owned vehicle charging infrastructure in the public interest; and (ii) the availability of utility vehicle charging service.”<sup>8</sup>

### **Q. HOW DOES HB 396 DEFINE “PUBLIC INTEREST?”**

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<sup>8</sup> HB 396

A. The bill states “[t]he commission shall find a charging infrastructure program to be in the public interest if the commission finds that the charging infrastructure program: (a) increases the availability of electric vehicle battery charging service in the state; (b) enables the significant deployment of infrastructure that supports electric vehicle battery charging service and utility-owned vehicle charging infrastructure in a manner reasonably expected to increase electric vehicle adoption; (c) includes an evaluation of investments in the areas of the authority jurisdictional land... and the point of the mountain state land... (d) enables competition, innovation, and customer choice in electric vehicle battery charging services, while promoting low-cost services for electric vehicle battery charging customers; and (e) provides for ongoing coordination with the Department of Transportation...”<sup>9</sup>

My testimony focuses on the role of the private market in increasing electric vehicle adoption by enabling competition, innovation, and customer choice in EV charging services.

**Q. PLEASE DESCRIBE THE DIFFERENT EV CHARGING BUSINESS MODELS.**

A. The EV charging sector is comprised of companies whose purposes and business models vary, but fundamentally there are two different types of entities: vendors and operators. Vendors are the equipment manufacturers and information technology providers who design, produce, and sell hardware and software to enable the charging of EVs. Operators typically own, develop, finance, build, operate, and manage charger networks. In the U.S., the owner-operator model is responsible for close to two-thirds of DCFC stations.<sup>10</sup> At this nascent stage of market development, some companies focus on a single piece of that value chain—provision of network

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<sup>9</sup> HB 396.

<sup>10</sup> US Department of Energy, Alternative Fuels Data Center October 2021 Data; [https://afdc.energy.gov/stations/#/analyze?country=US&fuel=ELEC&ev\\_levels=dc\\_fast](https://afdc.energy.gov/stations/#/analyze?country=US&fuel=ELEC&ev_levels=dc_fast).

management software, for example—while others cover multiple pieces (e.g. hardware sales and network management services).<sup>11</sup>

As mentioned earlier, EVgo is an owner-operator. In addition to developing, financing, owning, and operating the charging network, EVgo works with site host partners, such as grocery stores, convenience stores, and restaurants across the country to deploy EV charging solutions at retail locations that are already part of customers' daily routines. EVgo installs the public fast chargers it owns at no cost to the host partner. EVgo maintains the customer relationship with the EV driver, providing a call center that is available to customers 24/7. EVgo is also responsible for operations and maintenance of its EV charging network, which has best-in-class uptime and reliability.

**Q. PLEASE DESCRIBE THE DIFFERENT TYPES OF VEHICLE CHARGING.**

A. It is worth recognizing the different types of charging infrastructure and distinguishing the capabilities of each:

- Level 1 chargers deliver electricity through a 120 volt plug and are most often used in homes through an existing conventional outlet.
- Level 2 charging typically provides a full charge in 4 to 8 hours and is sought in longer duration, long dwell-time locations such as at workplaces, homes, amusement parks, or other destinations where drivers may spend several hours.
- Public DCFC is suited for quick charge needs both in and around cities and suburbs and along high-traffic transit corridors. DCFC stations are located at or near places where

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<sup>11</sup> “The Costs of EV Fast Charging Infrastructure and Economic Benefits to Rapid Scale-Up.” May 18, 2020. By Jonathan Levy, Isabelle Riu, Cathy Zoi. EVgo. [https://www.evgo.com/wpcontent/uploads/2020/05/2020.05.18\\_EVgo-Whitepaper\\_DCFC-cost-and-policy.pdf](https://www.evgo.com/wpcontent/uploads/2020/05/2020.05.18_EVgo-Whitepaper_DCFC-cost-and-policy.pdf)

drivers live, drive, and shop, including retail locations, restaurants, grocery stores, and other locations where an EV driver will be for an hour or less of time.

**Q. WHAT TYPES OF DRIVERS' NEEDS DOES DCFC SEEK TO SERVE?**

A. Based on EVgo's experience in the DCFC sector, EVgo has found that DCFC serves a variety of drivers' needs. In the earliest stages of EV infrastructure deployment, DCFC was viewed as purely a solution to assuage the range anxieties of single-family homeowners, especially on trips between cities or across the country. However, as the market grows, DCFC offers more than just a corridor use-case. Fast chargers now also play an important role in dense, urban and suburban areas where not every home has a driveway, attached garage, or in many cases, any dedicated parking. In fact, according to the International Council on Clean Transportation, apartment-dwelling EV drivers, living in multifamily housing rely on public charging for 50-80% of their charging,<sup>12</sup> as they typically do not have access to dedicated parking or home charging. Siting fast chargers in community locations near multifamily housing and around existing amenities allows for charging to be integrated into everyday activities. As a result, EVgo has largely focused its development to date in denser metropolitan and suburban areas.

**Q. WHAT FACTORS ARE CONSIDERED IN THE EVALUATION AND DEVELOPMENT OF PUBLIC FAST CHARGING INFRASTRUCTURE BY PRIVATE SECTOR OWNER-OPERATORS?**

A. Several elements are taken into account in identifying markets in which to develop DCFC. First, policies and regulations are taken into consideration. Enabling market mechanisms

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<sup>12</sup> International Council on Clean Transportation, *Quantifying the Electric Vehicle Charging Infrastructure Gap Across U.S. Markets* (January 2019), p. 9, [https://theicct.org/sites/default/files/publications/US\\_charging\\_Gap\\_20190124.pdf](https://theicct.org/sites/default/files/publications/US_charging_Gap_20190124.pdf)



such as policies and regulatory initiatives that aim to promote EV adoption, in combination with make-ready infrastructure and incentives, and EV-friendly tariffs that minimize demand charges in favor of volumetric charges provide a supportive framework for third-party DCFC deployment. Further, state and federal funding programs<sup>13</sup> can impact the growth of EV charging and support market transformation in the electric vehicle charging space. Fundamentally, to maximize ratepayer benefit, it is important that utility programs are designed to complement, and not duplicate, private market activities.

Second, there are many factors that are taken into account in identifying particular locations to site DCFC, including but not limited to traffic patterns; density of EV owners; proximity to amenities; proximity to other fast chargers; and distance to, or location of, major roadways. Dense urban and suburban areas with communities of all income levels can support and benefit from competitive DCFC investment. Third-party electric vehicle service providers like EVgo have developed sophisticated tools and models to support thoughtful siting of EV charging, based on years of experience in DCFC deployment. Such tools are utilized in network planning to assess where the greatest opportunities are to maximize fast charger utilization, while considering customer convenience.

**Q. GIVEN THESE SITING CONSIDERATIONS, WHERE DOES EVGO TEND TO FOCUS ITS INVESTMENTS IN DCFC?**

A. Under the owner-operator model,<sup>14</sup> providers like EVgo are aligned with consumers' interests, as usage of its charging network is the primary source of revenue. Accordingly, the

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<sup>13</sup> The Bipartisan Federal Infrastructure Bill passed in August in the Senate and would direct up to \$7.5 billion to electric vehicle supply equipment.

<sup>14</sup> The owner/operator model is responsible for close to three quarters of charging stations. US Department of Energy, Alternative Fuels Data Center July 2020 Data; [https://afdc.energy.gov/stations/#/analyze?country=US&fuel=ELEC&ev\\_levels=dc\\_fast](https://afdc.energy.gov/stations/#/analyze?country=US&fuel=ELEC&ev_levels=dc_fast)

owner-operator is motivated to maintain maximum uptime and reliability to serve customers that need reliable and convenient charging. For these reasons, to date, EVgo has built mostly in metro and suburban areas where charger usage is typically much higher given EV driver density, traffic patterns, a preponderance of residents of multifamily housing that do not have access to home charging, and other factors.

### III. RMP'S ELECTRIC VEHICLE IMPLEMENTATION PROGRAM

#### **Q. WHAT DOES THE EVIP INCLUDE AT A HIGH LEVEL?**

A. The Company's EVIP has two stated goals: (1) increasing EV adoption in the state of Utah, and (2) operating an efficient and low-cost infrastructure program that adds revenue to the system.<sup>15</sup> RMP proposes to achieve these program goals through four core program elements: (1) Company-owned chargers, (2) make-ready infrastructure, (3) incentives, and (4) innovative projects and partnerships.<sup>16</sup> The Company intends to develop and administer the EVIP over a 10-year period, starting in 2022 and operating through the end of 2031.<sup>17</sup>

#### A. COMPANY-OWNED CHARGERS AND RATE PROPOSAL

#### **Q. WHAT DID RMP PROPOSE WITH REGARD TO THE DEVELOPMENT OF COMPANY-OWNED CHARGERS IN ITS SERVICE TERRITORY?**

A. RMP proposes to deploy Company-owned chargers at 20-25 locations aimed at both (1) filling corridor gaps across the state in rural areas, and (2) increasing capacity, accessibility, and

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<sup>15</sup> RMP Campbell JAC-1, at 3.

<sup>16</sup> *Id.* at 5.

<sup>17</sup> *Id.* at 14.

convenience in populated areas.<sup>18</sup> “The Company-owned chargers will be comprised primarily of DC fast chargers but may include Level 2 chargers for specific circumstances.”<sup>19</sup>

**Q. PLEASE EXPLAIN THE RATE THE COMPANY PLANS TO CHARGE EV DRIVERS AT UTILITY-OWNED DCFC STATIONS.**

A. RMP’s rate for EV drivers at Company-owned stations is proposed in Schedule 60. The Schedule 60 rate for RMP customers at DCFC includes an energy charge of 15 cents per kWh with an off-peak credit of 5 cents and a session fee of 1 dollar, which is assessed each time a user plugs in. For non-customers, RMP proposes a rate of 40 cents per kWh, also with an off-peak credit of 5 cents and a session fee of 1 dollar.<sup>20</sup> The Company states that its goal is to “reflect current market prices for comparable charging while sending price signals that encourage individuals to use the stations in a way that reflects the Company’s costs to provide this service.”<sup>21</sup> The Company based its non-customer pricing off Electrify America’s pricing, as it states that Electrify America’s chargers “are most like those the Company plans to own and operate.”<sup>22</sup>

**Q. WHAT POTENTIAL CHALLENGES DO YOU FORESEE WITH RESPECT TO RMP’S UTILITY-OWNERSHIP PROPOSAL COMBINED WITH THE PRICING PROPOSAL?**

A. RMP’s proposal, while well-intentioned, has the potential to have unintended consequences on the private market for EVSE, especially in metro areas where the private sector business case is strongest, as well in places where utility-owned DCFC would be in close

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<sup>18</sup> Campbell testimony, at 2:44-46.

<sup>19</sup> JAC-1 at 6.

<sup>20</sup> Meredith testimony, at 3:57-4:81.

<sup>21</sup> Meredith 3:51-53.

<sup>22</sup> *Id.* at 3:59-62

proximity to those installed by the competitive market. While utilities can and do have a critically important role to play in supporting EV adoption, including potentially owning infrastructure in gap areas not being met by the private market, it is important to ensure that utility activities are complementary to private market activities.

Therefore, one potential challenge with a utility-owned and operated DCFC network in close proximity to a third-party operator's DCFC network is the utility chargers consuming the usage that the private market relies on to sustain its economics. If a third-party operator like EVgo does not see adequate utilization to sustain its network, it may be discouraged from future investments. Further, it may jeopardize the economics of first-movers with existing assets already in close proximity to the contemplated utility-owned chargers.

This challenge can be compounded by utilities pricing EV charging at rates too low for the private market to compete, not recognizing the full cost stack for DCFC,<sup>23</sup> which includes not only electricity, but also operations and maintenance, a customer call center, and other development and operations costs. This is the case with RMP's proposed DCFC pricing for RMP customers within Schedule 60, which is well below market rates. While private sector DCFC providers must charge a price that reflects all their development and maintenance costs, utilities are able to charge a lower price because they can recover a large portion of their costs through ratepayers, even those not charging at their EV stations. Because private sector DCFC providers do not have that ability, a below-market pricing proposal like RMP's creates an uneven playing field, which can impact both existing assets deployed by the competitive market as well as future

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<sup>23</sup> EVgo, The Costs of EV Fast Charging Infrastructure and Economic Benefits to Rapid Scale-Up, available at <https://www.evgo.com/white-papers/costs-ev-fast-charging-infrastructure-economic-benefits-rapid-scale-up/>

investments. Low rates can be particularly problematic if Company-owned DCFC are located in close proximity to privately-owned DCFC.

While the Company also offers make-ready and incentive programs,<sup>24</sup> which can be helpful to the private market, utility-ownership of chargers with below-market pricing can unintentionally negate the benefits of these programs. If private DCFC providers are unable to compete on pricing in this market, they may be less likely to apply for make-ready or incentive programs since they would be less likely to recover their costs having to compete with the utility at artificially subsidized prices.

Therefore, when utilities propose to enter the DCFC space, it is important for Commissions to ensure that there is a balance between utility activities and private market activities and that utilities are not using their monopoly advantage to unfairly compete with the private market. RMP ratepayers would benefit from thriving, private market competition and innovation. However, rather than “enabling competition, innovation, and customer choice in electric vehicle battery charging services...”<sup>25</sup> in line with HB 396, proposed aspects of the EVIP are likely to hinder competition and innovation. However, this is not only a competition issue—it is also a matter of cost-efficiency.

**Q. PLEASE EXPLAIN HOW THIS IS A MATTER OF COST-EFFICIENCY.**

A. Third-party owner-operators are already undertaking efforts to assess, plan and develop fast charging stations across the state of Utah and metro areas in RMP’s service territory are already largely being served by the private market. By seeking to increase utility-owned charging in populated areas, RMP is proposing the development of a network that may be redundant to,

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<sup>24</sup> Campbell direct at 15:297-300.

<sup>25</sup> HB 396

and in direct competition with, the private sector. The primary business of owner-operators of DCFC is to deploy DCFC in areas that are most convenient for drivers and where maximum opportunity for utilization exists. Over a decade of deploying EVSE across the country, the industry has developed expertise as well as sophisticated tools that make it particularly suited to understanding and addressing this market. Thus, it is beneficial to ratepayers to leverage this expertise and encourage the private sector to address the market they are designed to serve. This approach results in a more effective use of ratepayer funding, allowing it to stretch farther in areas that will not be served by the private market.

Furthermore, utility-ownership that overlaps with private market investment could burden ratepayers even more if utilization is lower than expected. Utah State University (“USU”) has provided a charging station revenue forecast in this proceeding that estimates RMP’s potential revenue from public DCFC.<sup>26</sup> In presenting this forecast, RMP stated that “[t]he projected annual revenue at typical Company-owned charger locations, is expected to range between \$78,000 at 10 percent utilization and \$309,000 at 40 percent utilization. It is anticipated that by 2027 there will be between 20-25 locations operating. The combined annual revenue at all Company locations is estimated to range between \$1,560,000/year 355 (20 locations at 10 percent utilization) and \$7,725,000/year (25 locations at 40 percent utilization).”<sup>27</sup> However, this presentation of the USU results does not appear to take into account that the utilization of utility-owned stations is likely to be significantly lower than 10%, particularly in the early years of deployment. For reference, in a recent study, Rocky Mountain Institute (“RMI”) detailed three utilization levels that it used in modeling rates for public DCFC, explaining that 5% utilization is

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<sup>26</sup> JAC-5 at 7.

<sup>27</sup> Campbell direct at 18:352-357.

representative of many DCFCs today; 10% utilization is representative of the utilization rates that a public DCFC might experience in a maturing EV market within five years or so, and 30% utilization is representative of the utilization rates that a public DCFC might experience in a mature EV market.<sup>28</sup> The Commission should consider this in reviewing the revenue forecast. If revenue from Company-owned chargers is lower than RMP anticipates, then the EVIP’s ability to meet the HB 396 goals of “provid[ing] net benefits to customers”<sup>29</sup> and “provid[ing] the large-scale electric utility’s customers significant benefits that may include revenue from utility vehicle charging service that offsets the large-scale electric utility’s costs and expenses”<sup>30</sup> could be compromised.

**Q. HOW HAVE OTHER COMMISSIONS AND UTILITIES ACHIEVED AN EFFECTIVE BALANCE BETWEEN PRIVATE MARKET AND UTILITY INVOLVEMENT IN DCFC DEPLOYMENT?**

A. Both utility programs and private investment are important for creating a robust competitive market for EV charging that will lead to increased EV adoption over the long term. As I will discuss later in more detail, many commissions have approved a framework wherein utilities support the competitive market through make-ready infrastructure investments and incentives. However, in some cases, limited utility-ownership can also be compatible with private market activities—for example, if utility ownership is deployed to serve rural or other gaps in coverage not being met by the private market. This is being tried in several other jurisdictions. For example, the Colorado Public Utilities Commission (“PUC”) recently approved

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<sup>28</sup> RMI, DCFC Rate Design Study for the Colorado Energy Office, at 5, available at [https://rmi.org/wp-content/uploads/2019/09/DCFC\\_Rate\\_Design\\_Study.pdf](https://rmi.org/wp-content/uploads/2019/09/DCFC_Rate_Design_Study.pdf).

<sup>29</sup> HB 396 at 15:400.

<sup>30</sup> HB 396 at 15:417.

a plan wherein Public Service Company of Colorado (“PSCo”) will open a make-ready program and later be allowed to own EV charging infrastructure in gap areas after at least one round of make-ready solicitations have been completed. The goal is to ensure that utility-owned DCFC stations are sited in areas unlikely to be served by the private market.<sup>31</sup> The Commission also required that PSCo work collaboratively with stakeholders to identify and develop siting metrics for utility-owned DCFC, including metrics related to a stated distance from other public charging stations.<sup>32</sup> In the final Decision, The Colorado PUC agreed with parties that “the purpose of Company-owned DCFCs is to support areas the market is not serving and that it would be a wasted opportunity if ratepayer dollars were used to build utility-owned stations in places private investment would have eventually reached,”<sup>33</sup> and that “the regulated monopoly and competitive market sit in a critical balance, and in a rapidly evolving market like EV charging services and EV supply infrastructure, this balance is vulnerable.”<sup>34</sup>

APS also recently brought a proposal before the Arizona Corporation Commission to own chargers at three to five locations in rural areas outside of the Phoenix Metro area in gap areas not being met by the private market. The proposed locations are along interstate corridors or highways that were from 31 to 80 miles from the nearest privately owned DCFC locations, and the average distance from a utility-owned DCFC from a privately-owned DCFC (and not part of Tesla’s Supercharger network) was 63 miles. EVgo supported this proposal.<sup>35</sup>

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<sup>31</sup> See CO Proceeding No. 20A-0204E, Decision No. C21-0117 at paragraph 40.

<sup>32</sup> Public Service Company of Colorado, Transportation Electrification Plan 2021-2023, available [https://www.xcelenergy.com/staticfiles/xcelresponsive/Company/Rates%20&%20Regulations/Regulatory%20Filings/20A-0204E-2021-2023\\_TEP\\_Updated.pdf](https://www.xcelenergy.com/staticfiles/xcelresponsive/Company/Rates%20&%20Regulations/Regulatory%20Filings/20A-0204E-2021-2023_TEP_Updated.pdf), at 39.

<sup>33</sup> See CO Proceeding No. 20A-0204E, Decision No. C21-0117 at paragraph 40.

<sup>34</sup> *Id.*

<sup>35</sup> 10-2-20 EVgo's Direct Testimony of Sara Rafalson - APS Docket No. E-01345A-19-0236



In addition, recently, the New Jersey Board of Public Utilities (“BPU”) endorsed a “shared responsibility” model, whereby the utilities’ role would primarily be to “make-ready” a site for publicly-accessible EV infrastructure. Electric utilities will be able to apply for BPU permission to own and operate charging stations in areas of “Last Resort.”<sup>36</sup> To do so, a pre-determined time must pass during which no make-ready applications have been received. The utility must also make the private sector aware that it seeks to deploy charging infrastructure at a specific location and offers up an incentive of up to 50% of the expected capital cost of the charging station for an approved Last Resort location to encourage third-party investment. After the ownership application is filed with the Board, but prior to the installation of a charger, a private owner may opt to become the owner-operator of the equipment, under comparable terms and conditions to those that the utility had negotiated. Alternatively, the private owner may notify the Board that it intends to request make-ready support in a comparable location such that the utility-ownership is obviated.<sup>37</sup> The BPU has also approved a \$166 million make-ready program in Public Service Electric and Gas (“PSE&G”) service territory, with \$62 million allocated to DCFC.<sup>38</sup> Under this program, the utility will be permitted to apply for specific locations for utility ownership as a provider of last resort in a separate proceeding if they can demonstrate a lack of private sector interest in those areas.<sup>39</sup>

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<sup>36</sup> New Jersey Board of Public Utilities Docket No. QO20050357, p. 18, <https://www.nj.gov/bpu/pdf/boardorders/2020/20200923/.pdf>.

<sup>37</sup> State of New Jersey Board of Public Utilities, Docket No. QO20050357, ORDER ADOPTING THE MINIMUM FILING REQUIREMENTS FOR LIGHT-DUTY, PUBLICLY ACCESSIBLE ELECTRIC VEHICLE CHARGING, October 20, 2020, available at <https://www.nj.gov/bpu/pdf/boardorders/2020/20200923/8F%20-%20ORDER%20Electric%20Vehicle%20MFRs.pdf>, at 21-22.

<sup>38</sup> State of New Jersey Board of Public Utilities, Docket No. EO18101111, DECISION AND ORDER APPROVING STIPULATION, January 30, 2021, available at <https://www.state.nj.us/bpu/pdf/boardorders/2021/20210127/8A%20-%20ORDER%20PSEG%20EV%20Filing.pdf>, at 2.

<sup>39</sup> *Id.* at 22.

Additionally, Connecticut provides for initial unencumbered support for the private sector to lead in the deployment of DCFC stations, with a provision to evaluate the status of development with a particular attention to underserved communities and determine whether programmatic changes are necessary at the three-year mark of the state’s nine-year program.<sup>40</sup>

Finally, while the proceeding is still underway, National Grid in Massachusetts has proposed a make-ready program with \$96.77 million allocated to the public and workplace segment, along with long-term commercial EV rates. The utility proposed that at the mid-point of the four-year program, if no DCFC have been installed or are planned within its identified communities, it will build, own, and operate up to 20 DCFC ports during the final two years of its program.<sup>41</sup>

These examples illustrate some of the ways that Commissions and utilities are effectively balancing the deployment of utility-owned DCFC with the deployment of privately-owned DCFC to accelerate transportation electrification in a way that enable competition, innovation, and customer choice in EV charging services.

**Q. WHAT RECOMMENDATIONS DO YOU HAVE TO MAKE RMP’S DCFC OWNERSHIP PROPOSAL MORE COMPLEMENTARY TO PRIVATE MARKET ACTIVITIES?**

A. To encourage private investment in DCFC and thereby allow RMP’s authorized funding to stretch farther in other areas, I recommend the Commission:

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<sup>40</sup> Public Utilities Regulatory Authority (PURA), Docket No. 17-12-03RE04, Decision, July 14, 2021.

<sup>41</sup> Massachusetts Electric Company and Nantucket Electric Company each d/b/a National Grid D.P.U. 21-91, Exhibit NG-EVPP-1, July 14, 2021, available at <https://portal.ct.gov/-/media/PURA/electric/Final-Decision-Docket-No-17-12-03RE04.pdf>, at 46-47.

1. Approve RMP's proposal to develop Company-owned chargers to fill corridor gaps across the state in rural areas not currently served by DCFC.
2. Direct RMP to postpone the development of Company-owned DCFC in populated, metropolitan locations<sup>42</sup> for 2.5 years from the effective date of the program. This will allow the private market time to leverage the make-ready and incentive programs in the EVIP, as well as leveraging potential federal funding, to address charging needs at the identified urban locations without expending ratepayer dollars. Following that timeframe, RMP should be allowed to develop Company-owned stations to fill the remaining public charging gaps, maximizing the distance between Company-owned and existing DCFC through a quantifiable metric (e.g. at least 10 miles from an existing privately owned DCFC).

**Q. WHY IS 2.5 YEARS AN APPROPRIATE TIME FRAME?**

A. Given that RMP will make its initial investments over the first five years of the program, I believe this timing—halfway through that period—strikes the right balance between allowing the market an opportunity to fill identified gaps and allowing the utility to address remaining gaps in a timely manner. If the utility were to develop additional Company-owned chargers too early, it may develop sites that the private market would have addressed, given a window of opportunity. The proposed approach would result in a careful, pragmatic use of ratepayer moneys, and would be well-aligned with other programs across the country.

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<sup>42</sup> This includes all identified locations not designated as filling corridor gaps or serving rural areas by RMP in Table 2 “Location Selection Criteria” in Attachment JAC-1: Ogden, Clearfield, Farmington, Woods Cross, Salt Lake City, South Salt Lake, West Valley City, Millcreek City, Taylorsville, Midvale, South Jordan, Bluffdale, American Fork, and Orem.

**Q. IS THE APPROACH YOU RECOMMEND ALIGNED WITH STATE PRIORITIES AND LEGISLATION?**

A. Yes. In the Utah Statewide EV Charging Plan, the Utah Department of Transportation (“UDOT”) states that “[g]ap filling in non-urban areas of the EV mobility network is the initial focus priority of this Plan.”<sup>43</sup> UDOT also lists as priority one: “filling EV charging gaps within key corridors to mitigate range anxiety and ensure charging infrastructure is located within reasonable distance from the previous and next EV chargers...”<sup>44</sup> Regarding UDOT’s second priority, “Corridor Capacity / Urban DCFC,” UDOT states “[w]e expect this next priority to be fulfilled by both private sector and strategic government investments as EV ownership increases demand for increased EVSE charging capacity.”<sup>45</sup> This supports EVgo’s recommended strategic approach of directing the utility to focus on Company-owned corridor and rural stations in the early years of the program.

Second, adopting this recommendation would help ensure that the EVIP is complementary to private market activities, and will help enable “competition, innovation, and customer choice in electric vehicle battery charging services...”<sup>46</sup> in line with HB 396.

**Q. DO YOU HAVE ANY RECOMMENDATIONS RELATED TO THE COMPANY-OWNED CHARGER PRICING?**

A. Yes. I recommend the Commission direct RMP to modify the RMP customer rate at its chargers to be set at a level that is competitive with the private market as a whole. In designing this rate, the utility should consider the pricing of all privately-owned chargers in its service

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<sup>43</sup> *Id.* at 10.

<sup>44</sup> JAC-4 at 10.

<sup>45</sup> *Id.*

<sup>46</sup> HB 396

territory, not only one provider, and should take into account all costs, including operations and maintenance costs. This will enable a more level playing field for DCFC and allow space for the competitive market to operate. Furthermore, under this approach, the rate will be more aligned with the cost of charging, while at the same time the cost burden on all ratepayers will be reduced.

**B. MAKE-READY AND INCENTIVE PROGRAMS**

**Q. PLEASE EXPLAIN RMP'S MAKE-READY AND INCENTIVE PROGRAM PROPOSALS.**

A. Regarding make-ready, the Company has proposed to “utilize an application process for interested customers to determine where to provide “make-ready” infrastructure investments.”<sup>47</sup>

The Company has also proposed to continue its Sustainable Transportation and Energy Plan (“STEP”) program, which provides incentives through Schedule 120 to customers to install EV chargers, and to utilize the same process that is currently in place for obtaining EV infrastructure incentives.<sup>48</sup> The incentives for non-residential and multifamily DCFC are \$45,000 per charger for a single port and \$63,000 per charger for multiple ports, both up to 75% of total charger and installation costs.<sup>49</sup>

**Q. WHAT IS EVGO’S POSITION ON THESE PROPOSALS?**

A. EVgo generally supports these proposals and sees them as an important first step in accelerating third party investment in RMP’s service territory. Coupled with RMP’s recently

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<sup>47</sup> JAC-1 at 7.

<sup>48</sup> *Id.* at 8.

<sup>49</sup> RMM-1 at 4.

adopted General Service Time-of-Day rate (Schedule 6A), we believe these programs, if effectively implemented, can help spur the private market to expand in RMP's service territory.

As a framework, EVgo is in favor of make-ready programs, which generally support the competitive DCFC market when administered in a way that is expeditious and mindful of development timelines. In general, utility make-ready investments support the economics of siting DCFC by bringing rate-based distribution upgrades within the utility scope while leaving ownership, marketing, customer service, and charging network operation in the hands of experienced private operators. Across the country, commissions have approved numerous proposals for utility make-ready infrastructure investments to support the competitive charging ecosystem. In Colorado, the PUC recently approved a \$110 million Transportation Electrification Plan for Public Service Company of Colorado with nearly \$37 million allocated to commercial make-ready and more than \$4 million allocated to commercial rebates.<sup>50</sup> In New York, the Public Service Commission approved a \$700 million state-wide make-ready program for all investor-owned utilities to help bolster the development of charging infrastructure across the state. Under the New York order, investor-owned utilities are not permitted to own and operate charging in any market segment.<sup>51</sup> In California, the California Public Utilities Commission ("CPUC") approved Pacific Gas and Electric's \$22.4 million make-ready program for DCFC, which is expected to be a 5-year program.<sup>52</sup> The CPUC also approved Southern

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<sup>50</sup> Public Service Company of Colorado, Transportation Electrification Plan 2021-2023, available [https://www.xcelenergy.com/staticfiles/xcel-responsive/Company/Rates%20&%20Regulations/Regulatory%20Filings/20A-0204E-2021-2023\\_TEP\\_Updated.pdf](https://www.xcelenergy.com/staticfiles/xcel-responsive/Company/Rates%20&%20Regulations/Regulatory%20Filings/20A-0204E-2021-2023_TEP_Updated.pdf), at 36.

<sup>51</sup> Order Establishing Electric Vehicle Infrastructure Make-Ready Program and Other Programs; July 16, 2020. CASE 18-E-0138 - Proceeding on Motion of the Commission Regarding Electric Vehicle Supply Equipment and Infrastructure.

<sup>52</sup> California Public Utilities Commission, Decision 18-05-040, p. 62 <https://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442457607>.

California Edison’s Charge Ready 2 Program, which includes make-ready funding for 205 DCFC ports owned by commercial customers, as well as equipment rebates for certain customer segments.<sup>53</sup>

I also support the continuation of RMP’s DCFC incentive program (Schedule 120). As RMP points out, “[t]hese incentives... have been popular and effective”<sup>54</sup> and have been “successful in getting charging infrastructure in the service territory.”<sup>55</sup> Incentives continue to be an important component to help offset the cost of DCFC development and support a competitive EV charging market, while bringing benefits to EV drivers and utility customers and supporting the policy objectives of HB 396.

While I support the proposed make-ready and incentive programs in concept, the EVIP must be viewed holistically. As I explained earlier, RMP’s utility-ownership proposal has the potential to negatively impact the success of these programs due to the concerns I described about market saturation, which is further compounded by below-market prices being charged to RMP customers at RMP’s utility-owned stations. Therefore, in order to realize the benefits of these programs, I recommend the Commission adopt my recommendations related to the Company-owned charger program and Company-owned charger pricing.

#### IV. SUMMARY OF RECOMMENDATIONS

**Q. PLEASE SUMMARIZE AGAIN YOUR RECOMMENDATIONS FOR THE COMMISSION IN THIS PROCEEDING.**

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<sup>53</sup> California Public Utilities Commission, Decision 20-08-045, p. 22, <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M346/K230/346230115.PDF>.

<sup>54</sup> Campbell testimony, at 8.

<sup>55</sup> *Id.* at 8.

A. I recommend the Commission:

1. Approve RMP's proposal to develop Company-owned chargers to fill corridor gaps across the state in rural areas not currently served by DCFC.
2. Direct RMP to postpone the development of Company-owned DCFC in populated, metropolitan locations<sup>56</sup> for 2.5 years from the effective date of the program. This will allow the private market time to leverage the make-ready and incentive programs in the EVIP, as well as leveraging potential federal funding, to address charging needs at the identified urban locations without expending ratepayer dollars. Following that timeframe, RMP should be allowed to develop Company-owned stations to fill the remaining public charging gaps, maximizing the distance between Company-owned and existing DCFC through a quantifiable metric (e.g. at least 10 miles from an existing privately owned DCFC).
3. Direct RMP to modify the RMP customer rate at its chargers to be set at a level that is competitive with the private market as a whole. In designing this rate, the utility should consider the pricing of all privately-owned chargers in its service territory, not only one provider, and should take into account all costs, including operations and maintenance costs.

**Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

A. Yes.

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<sup>56</sup> This includes all identified locations not designated as filling corridor gaps or serving rural areas by RMP in Table 2 "Location Selection Criteria" in Attachment JAC-1: Ogden, Clearfield, Farmington, Woods Cross, Salt Lake City, South Salt Lake, West Valley City, Millcreek City, Taylorsville, Midvale, South Jordan, Bluffdale, American Fork, and Orem.