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**OPENING TESTIMONY OF WILLIAM EHRLICH ON BEHALF OF TESLA, INC IN  
THE MATTER OF THE PETITION OF PUBLIC SERVICE ELECTRIC AND GAS  
COMPANY FOR APPROVAL OF ITS CLEAN ENERGY FUTURE-ELECTRIC  
VEHICLE AND ENERGY STORAGE PROGRAM ON A REGULATED BASIS**

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1 **I. INTRODUCTION**

2 **Q. PLEASE STATE FOR THE RECORD YOUR NAME, POSITION, BUSINESS**  
3 **ADDRESS, AND ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS**  
4 **PROCEEDING.**

5 **A.** My name is William Ehrlich. I am Senior Policy Advisor for EV Charging Policy and  
6 Rates at Tesla, Inc. (“Tesla”). My business address is 3500 Deer Creek Rd, Palo Alto,  
7 CA 94304. I am testifying on behalf of Tesla.

8 **Q. PLEASE DESCRIBE TESLA.**

9 **A.** Tesla’s mission is to accelerate the transition to sustainable energy through the  
10 development of all-electric vehicles and clean energy products including photovoltaic  
11 solar and battery storage. Tesla is headquartered in Palo Alto, and all Tesla vehicles sold  
12 in North America are currently manufactured in Fremont, CA. Tesla’s vehicle line-up  
13 includes the Model S sedan, Model X crossover vehicle, Model 3 sedan, and Model Y  
14 crossover vehicle. The vehicles have all-electric range of up to 402 miles per charge  
15 (Model S), and industry leading performance and safety ratings. In 2019, Tesla delivered  
16 more than 365,000 vehicles globally. In the coming months and years, Tesla is also  
17 planning to launch the Cybertruck pickup, Roadster sports car, and a Class 8 Semi truck.  
18 Tesla also owns and operates an extensive Supercharger network of direct current fast  
19 chargers (“DCFC”) with over 2,100 stations and 18,650 Supercharger connectors  
20 deployed globally.

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

1 A. I have ten years of experience in the energy field, my experience spans solar  
2 photovoltaics, traditional electrical construction, energy storage, and electric vehicles  
3 (“EV”) with a specific focus on EV utility rates. Currently I lead Tesla’s electric vehicle  
4 rate design efforts. Previous to Tesla, I provided in-house rate expertise at EVgo for  
5 policy efforts related to their nationwide network of DC fast chargers. My statement of  
6 qualifications is attached as Appendix A.

7 **Q. HAVE YOU TESTIFIED BEFORE THE NEW JERSEY BOARD OF PUBLIC**  
8 **UTILITIES PREVIOUSLY?**

9 A. No, I have not.

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

11 A. I review the EV goals put forth in New Jersey Senate Bill 2252<sup>1</sup> and the level of EV  
12 infrastructure deployment necessary in Public Service Electric and Gas’s (“PSE&G’s”) service territory to support the EV goals laid out in the legislation. More specifically, I  
13 assess what would constitute efficient EV infrastructure investments in PSE&G territory  
14 congruent with the “shared responsibility” model for EV infrastructure laid out in the  
15 Board of Public Utilities (“BPU”) Straw Proposal.<sup>2</sup> I focus on PSE&G’s Clean Energy  
16 Future – Electric Vehicle and Energy Storage Program (“CEF-EVES Program”) EV  
17 subprogram 3 (“Public DCFC subprogram”) related to utility and third-party owned  
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<sup>1</sup> [https://www.njleg.state.nj.us/2018/Bills/S2500/2252\\_U2.PDF](https://www.njleg.state.nj.us/2018/Bills/S2500/2252_U2.PDF)

<sup>2</sup> New Jersey Electric Vehicles Infrastructure Ecosystem 2020 Straw Proposal. Filed 5/18/20 in BPU Docket No. QO20050357: In the Matter of Straw Proposal on Electric Vehicle Infrastructure Build Out.

1 DCFC charging infrastructure since robust DCFC coverage allows travel for EV drivers  
2 across the state and also enables new segments of the population to become EV drivers  
3 who might not otherwise have access to charging at home.

4 Based on Tesla’s experience as a DCFC network operator, a provider of Level 2 (“L2”) charging equipment, and Tesla’s involvement in utility programs across the country I  
5 recommend several modifications to the Public DC Fast Charging Subprogram. These  
6 modifications will make Subprogram more effective at spurring private investment in  
7 DCFC infrastructure in PSE&G’s service territory and can reduce the cost burden on  
8 PSE&G’s ratepayers by applying the principles of the BPU’s “shared responsibility”  
9 model. In the Public DC Fast Charging Subprogram, PSE&G proposes two different  
10 ownership models. The “Third-Party Ownership Model” and “The Utility Ownership  
11 Model”<sup>3</sup> which seeks approval for utility investment and ownership of DCFCs under  
12 certain circumstances. As the DC Fast Charging market matures, PSE&G anticipates that  
13 the Third-Party Ownership Model will be the predominant model.  
14

15 **Q. WHAT IS THE THIRD-PARTY OWNERSHIP MODEL?**

16 A. In the Third-Party Ownership Model, PSE&G will deploy Make-Ready Infrastructure,  
17 while a third party will install, own, maintain and operate the DC Fast Charging stations.

18 **Q. WHAT IS THE UTILITY-OWNERSHIP MODEL?**

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<sup>3</sup> Testimony of Karen Reif, p. 19.

1 A. In the Utility-Ownership Model, PSE&G will deploy Make-Ready Infrastructure and  
2 install, own, maintain and operate the DC Fast Charging stations. This model will only be  
3 utilized if the competitive market is unable to support the DC Fast Charging station  
4 development using the Third-Party Ownership Model.

5 **Q. WHAT ARE YOUR RECOMMENDATIONS FOR THE PUBLIC DC FAST**  
6 **CHARGING SUBPROGRAM?**

7 A. I have five primary recommendations related to the Public DC Fast Charging  
8 subprogram:

- 9 • First, the eligibility for off-bill rebates to offset electricity bill expenses should be  
10 extended to existing charging station accounts and should not be capped to a  
11 specific number of chargers, a specific capacity of chargers, a specific number of  
12 sites, nor a specific number of chargers per site.
- 13 • Second, the “target rate” is an imperfect mechanism and as proposed, is at the  
14 discretion of PSE&G. If a target rate mechanism is desired, I recommend the  
15 value be set to the commercial customer class average price of electricity, or at  
16 least the commercial customer class average cost per kilowatt hour (“kWh”) of  
17 rate components billed on a demand basis (i.e. per kW or per kVA).
- 18 • Third, the target rate mechanism and the make-ready program should be  
19 disassociated from each other. Both should remain optional and it is appropriate  
20 for the make-ready program to only apply to new stations whereas any

1 commercial charging rate mechanism developed as part of this docket should be  
2 available to all DCFC stations, existing and new.

- 3 • Fourth, in the absence of a permanent commercial EV rate created in this docket,  
4 a term limited pilot mechanism should be adopted in order to collect data that can  
5 inform the creation of a permanent rate option in the future. In particular, PSE&G  
6 should commit to designing a permanent EV rate after data has been collected  
7 over the six-year CEF-EVES program period. The permanent EV rate should be  
8 available to all separately metered commercial EV charging infrastructure,  
9 including public DCFC stations, medium- and heavy-duty fleets, and workplaces.
- 10 • Finally, if the target rate mechanism proposal is approved as the interim EV rate  
11 substitute, the rebate should be provided as an “on-bill” credit rather than an “off-  
12 bill” rebate check.

13 **Q. WHY ARE YOU MAKING THESE RECOMMENDATIONS?**

14 A. As previously noted, Tesla’s mission is to accelerate the world’s transition to sustainable  
15 energy. A key part of that transition is to electrify the transportation sector. Access to  
16 convenient and affordable charging infrastructure that provides a great customer  
17 experience is a critical component necessary for that transition. The addition of an EV  
18 rate option in PSE&G’s territory will allow for the sustainable operation of EV charging  
19 infrastructure as well as signal to the marketplace that PSE&G territory provides near  
20 term rate certainty for private investments in EV charging infrastructure. EV rates for  
21 DCFC and Level 2 charging are the foundational piece to encourage private investment

1 in public infrastructure. The other recommended modifications seek to provide equal  
2 access to an EV rate option for all commercial DCFC customers which can help  
3 encourage additional charging investments in PSE&G's territory while providing a fair  
4 playing field for all EV charging station developers, owners, and operators. My  
5 recommendations are relatively straightforward and are intended to ensure that charging  
6 operators, charging site hosts, and fleet customers can quickly and confidently scale EV  
7 infrastructure deployments.

## 8 **II. ABOUT TESLA'S DCFC SUPERCHARGER NETWORK**

### 9 **Q. CAN YOU PLEASE DESCRIBE TESLA'S SUPERCHARGER NETWORK?**

10 A. Tesla Superchargers are DCFC stations conveniently located near desirable amenities like  
11 restaurants, shops and WiFi hot spots. Each station contains multiple Superchargers to get  
12 customers back on the road quickly. Currently, the Supercharger network is primarily  
13 composed of two types of customer facing hardware. The first are stations often referred  
14 to as V2 Superchargers that currently operate up to 150 kW per charge stall.

15 The second are stations typically referred to as Urban Superchargers because of their  
16 compact design with reduced clearance requirements. Urban Superchargers can deliver  
17 up to approximately 75 kW per stall. For both of the aforementioned applications, two  
18 charge stalls are connected to a single charging cabinet capable of 150 kW of direct  
19 current output, and the two stalls share the power. For example, an 8 stall V2  
20 Supercharger station has a maximum DC output of 600 kW (4 charging cabinets  
21 multiplied by 150 kW per cabinet).



1 Since March 2019, Tesla has started deploying its V3 Supercharger product that supports  
2 up to 250 kW charge rates per car and can power share across all of the stalls on the site  
3 rather than in pairs like the V2 product. At 250 kW, a Model 3 can recover up to 172  
4 miles of charge in 15 minutes, and charge at rates up to 1,000 miles per hour. A  
5 customer's time charging is expected to be cut by 50 percent to about 15 minutes on a V3  
6 Supercharger.

7 **Q. DOES TESLA OWN AND OPERATE THE SUPERCHARGERS?**

8 A. Yes, Tesla owns and operates the Supercharging equipment and is the customer of record  
9 with the electric utility.

10 **Q. HOW MANY PUBLICLY ACCESSIBLE SUPERCHARGERS ARE**  
11 **OPERATIONAL IN PSE&G'S TERRITORY?**

12 A. There are currently seventeen Supercharger locations with a total of 132 Supercharger  
13 stalls in PSE&G's territory.

14 **III. EV GOALS OF SENATE BILL 2252 AND BPU STRAW PROPOSAL**

15 **Q. HOW MANY ELECTRIC VEHICLES DOES NEW JERSEY PLAN TO HAVE**  
16 **ON THE ROAD IN 2025?**

1 A. The State goal from Senate Bill 2252 (“SB 2252”) is for “at least 330,000 of the total  
2 number of registered light duty vehicles in the State shall be plug-in electric vehicles by  
3 December 31, 2025.”<sup>4</sup>

4 **Q. HOW MANY DC FAST CHARGERS ARE NEEDED IN THE STATE TO**  
5 **SUPPORT THE 330,000 PLUG-IN ELECTRIC VEHICLES IN 2025**  
6 **ACCORDING TO SB 2252?**

7 A. The stated goal in Senate Bill 2252 is “By December 31, 2025, at least 400 DC Fast  
8 Chargers shall be available for public use at no fewer than 200 charging locations in the  
9 State.”<sup>5</sup>

10 **Q. HOW MANY PLUG-IN ELECTRIC VEHICLES ARE CURRENTLY IN**  
11 **OPERATING IN NEW JERSEY?**

12 A. At the end of 2019 there were 30,017 Plug-in electric vehicles (PIVs) operating in New  
13 Jersey.<sup>6</sup>

14 **Q. OUT OF THOSE PLUG-IN ELECTRIC VEHICLES HOW MANY ARE**  
15 **CAPABLE OF FAST CHARGING?**

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<sup>4</sup> Senate Bill 2252 Section 3(1).

<sup>5</sup> Ibid Section 3(4)a.

<sup>6</sup> New Jersey Department of Environmental Protection: Alternative Fuel Vehicle Report.  
<https://www.drivegreen.nj.gov/dg-electric-vehicles-basics.html>

1 A. At the end of 2019, out of 30,017 PIVs there were 11,519 Plug-in Hybrid Electric  
2 Vehicles (PHEVs) and 18,498 Zero Emission Vehicles (ZEVs).<sup>7</sup> With the exception of  
3 the Mitsubishi Outlander PHEV, only ZEVs are capable of DC fast charging. There were  
4 only 107 Mitsubishi PHEVs included in the count.

5 **Q. OUT OF THOSE DC FAST CHARGE CAPABLE ELECTRIC VEHICLES,**  
6 **WHAT PERCENT ARE TESLA MODELS?**

7 A. Of the 18,498 ZEVs in New Jersey, 15,380 are Tesla vehicles for 83% of the total ZEVs  
8 in New Jersey.<sup>8</sup>

9 **Q. WHAT IS THE APPROPRIATE MODEL FOR COLLABORATION BETWEEN**  
10 **ELECTRIC DISTRIBUTION COMPANIES AND PRIVATE INVESTMENT TO**  
11 **BUILD OUT EV CHARGING INFRASTRUCTURE IN NEW JERSEY?**

12 A. The “shared responsibility” model for EV infrastructure as laid out in the BPU Straw  
13 Proposal<sup>9</sup> promotes appropriate roles for both the electric distribution company (“EDC”)  
14 and private investors. Under this framework Tesla would be considered an electric  
15 vehicle service equipment (“EVSE”) infrastructure company and would be primarily  
16 responsible for installing, owning, operating, and marketing EVSE using private capital.  
17 EDCs, like PSE&G, will invest in, and earn on, the wiring and backbone infrastructure

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<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

<sup>9</sup> New Jersey Electric Vehicles Infrastructure Ecosystem 2020 Straw Proposal. Filed 5/18/20 in BPU Docket No. QO20050357: In the Matter of Straw Proposal on Electric Vehicle Infrastructure Build Out, page 2.

1 necessary to make locations Charger Ready as well as on any Board-approved EVSE  
2 owned by the EDCs.

3 **Q. DO YOU OPPOSE UTILITY OWNERSHIP OF EVSE INFRASTRUCTURE?**

4 A. I do not oppose utility ownership of EVSE infrastructure in principle, but utility  
5 ownership warrants scrutiny and the development of appropriate guardrails that ensure  
6 that private EVSE owners are not at an unfair disadvantage to utility owned stations. The  
7 “shared responsibility” framework provides initial “guard-rails” to utility ownership and  
8 provides guidelines for specific circumstances whereby utility ownership may be the  
9 most efficient way to provide charging infrastructure in certain geographic locations.

10 **Q. UNDER WHAT CONDITIONS WOULD UTILITY OWNERSHIP OF EVSE**  
11 **INFRASTRUCTURE BE INAPPROPRIATE?**

12 A. There may be several scenarios under which utility ownership of EVSE should be  
13 scrutinized and evaluated further. However, it is clear that any situation where a utility is  
14 setting their own price for charging services while simultaneously setting the price for  
15 third-party charging networks above the commercial customer class average cost of  
16 electricity raises concerns about uncompetitive behavior and the potential for there to be  
17 an uneven playing field which would stymy private investment. Placing EV charging  
18 load on existing commercial tariffs can see third-party charging networks paying far  
19 above other commercial customers due to the low load factor of separately metered EV  
20 charging load when compared to commercial customer class average load factors.

1 **Q. WHAT IS THE SOLUTION TO ALLOW FOR A FAIR PLAYING FIELD**  
2 **BETWEEN UTILITY OWNED EV CHARGING INFRASTRUCTURE AND**  
3 **THIRD-PARTY OWNED EV CHARGING INFRASTRUCTURE WHEN**  
4 **EVALUATING COMMERCIAL EV RATES?**

5 A. In the context of public charging infrastructure, the solution is commercial EV tariffs  
6 developed based on the unique load characteristics of separately metered EV charging  
7 load which can have characteristically lower load factor than an average commercial  
8 customer. In PSE&G’s proposal, the Public DCFC subprogram includes their version of a  
9 commercial EV tariff and it takes the form of a target rate, off-bill rebate mechanism.

10 **Q. DO YOU HAVE ANY RECOMMENDATIONS ABOUT HOW TO IMPROVE**  
11 **THE PUBLIC DCFC SUBPROGRAM TARGET RATE MECHANISM AS A**  
12 **COMMERCIAL EV TARIFF SOLUTION?**

13 A. Yes.

14 **IV. RECOMMENDED MODIFICATIONS TO THE PUBLIC DCFC SUBPROGRAM**

15 **A. PUBLIC DCFC SUBPROGRAM ELIGIBILITY RECOMMENDATION**

16 **Q. WHAT IS THE CURRENT ELIGIBILITY REQUIREMENT FOR THE PUBLIC**  
17 **DCFC SUBPROGRAM?**

18 A. As proposed, only new sites would be eligible for the benefits of the Public DCFC  
19 subprogram and would be required to go through an application process subject to final

1 approval or disapproval by PSE&G. Additionally, all of the program benefits, make-  
2 ready infrastructure, equipment rebates, and target rate rebate mechanism are all tied  
3 together into an all-or-nothing offer without the ability to receive one of these three  
4 benefits individually.

5 **Q. WHAT IS YOUR RECOMMENDATION FOR THE PUBLIC DCFC**  
6 **SUBPROGRAM ELIGIBILITY?**

7 A. I recommend all separately metered EV charging stations, existing and new, made up  
8 predominantly of DCFC chargers be eligible for the target rate mechanism and all new  
9 separately metered EV charging stations made up predominantly of DCFC chargers  
10 should be eligible for the make-ready benefit. The application process is understandable  
11 and appropriate in the context of direct equipment and installation rebate incentives.

12 **Q. DO YOU RECOMMEND SETTING LIMITS ON THE NUMBER OF**  
13 **CHARGERS ELIGIBLE FOR THE PUBLIC DCFC SUBPROGRAM?**

14 A. No, I recommend the target rate mechanism specifically be made available on an ongoing  
15 basis to DCFCs until a permanent commercial EV rate is developed for all separately  
16 metered non-residential EV charging load. Third-party EV charging providers should be  
17 able to build stations of whatever size is needed to support EV drivers in PSE&G's  
18 territory and third-party EV charging companies work very hard to optimally site and  
19 "right-size" stations to adequately serve drivers.

1 **Q. DO YOU RECOMMEND A DIFFERENT LIMIT PLACED ON THE PUBLIC**  
2 **DCFC SUBPROGRAM?**

3 A. If a limit is to be used, I recommend using the budgeted amount of \$62,000,000<sup>10</sup> as the  
4 cap for the Public DCFC subprogram and allowing as many DCFCs to be built within the  
5 budgeted amount over the six-year period following commencement of the CEF-EVES  
6 program. The caveat to this limit is an additional recommendation of using the data and  
7 experience gained in the CEF-EVES program to design a permanent commercial EV  
8 tariff for DCFCs to switch onto at the end of the six-year CEF-EVES program period  
9 which would provide needed certainty to charging operators.

10 **B. TARGET RATE VALUE RECOMMENDATION**

11 **Q. IS THE TARGET RATE AN APPROPRIATE MECHANISM FOR A**  
12 **COMMERCIAL EV TARIFF AS PROPOSED IN THE PUBLIC DCFC**  
13 **SUBPROGRAM?**

14 A. The target rate mechanism is not inappropriate as a rate mechanism but it is imperfect as  
15 a commercial EV charging tariff solution. There was insufficient information provided in  
16 the proposal to assess the actual value of the target rate and limited detail was provide on  
17 the methodology about how the target rate would be set, and whether it would be  
18 different per site or operator because it would partially be based on “local DC Charging  
19 economics.”<sup>11</sup> It would not be appropriate for utilities to seek information from third

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<sup>10</sup> Testimony of Karen Reif, p. 25.

<sup>11</sup> Testimony of Karen Reif, p. 23.

1 party charging stations about the economics of their stations, especially if the utility  
2 intends to own and operate their own charging stations and compete in the space.

3 **Q. HAS THE TARGET RATE MECHANISM BEEN USED ELSEWHERE AS A**  
4 **COMMERCIAL EV TARIFF SOLUTION?**

5 A. A version of “target rate” has been implemented successfully in Eversource Connecticut  
6 in their Electric Vehicle Rate Rider<sup>12</sup> (tariff sheet provided in Attachment 1) where if “*a*  
7 *rate component of such schedule is priced on a demand basis (i.e., per kW or per kVA),*  
8 *the EV customer under this Rider will be subject to a charge determined on an equivalent*  
9 *per kWh basis using the corresponding average price of such rate component.*” The  
10 benefit of Eversource Connecticut’s EV Rate Rider is that it is converting rate  
11 components billed on a demand basis to a customer average kWh value (based on what  
12 an average customer would pay per kWh for these demand components) and then  
13 applying the customer average value kWh value to the EV charging customer.

14 **Q. DO YOU SUPPORT THIS TYPE OF METHODOLOGY FOR A TARGET RATE**  
15 **MECHANISM?**

16 A. Yes.

17 **Q. IS THIS DIFFERENT THAN WHAT PSE&G HAS PROPOSED?**

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<sup>12</sup> <https://www.eversource.com/content/ct-c/business/my-account/billing-payments/about-your-bill/rates-tariffs/electric-vehicle-rate-program>



1 A. Yes.

2 **Q. WHAT IS THE DIFFERENCE?**

3 A. My concern with the target rate proposed by PSE&G, is that it could be a somewhat  
4 arbitrary value above the average commercial customer cost of electricity in PSE&G's  
5 territory which was \$0.1211/kWh for year-end 2018.<sup>13</sup>

6 **Q. WOULD YOU SUPPORT PSE&G USING A TARGET RATE MECHANISM**  
7 **EQUIVALENT TO THEIR COMMERCIAL CUSTOMER CLASS AVERAGE**  
8 **PRICE OF ELECTRICITY UNTIL A PERMANENT EV TARIFF IS**  
9 **DEVELOPED?**

10 A. Yes, if PSE&G desires to use the target rate mechanism this would be a more appropriate  
11 solution for the Public DCFC subprogram. There are a variety of factors beyond  
12 electricity prices that impact underlying charging station economics. It would be more  
13 appropriate to focus on setting a target effective electricity price based on the average  
14 commercial class cost of service, rather than trying to control all factors and optimize to a  
15 specific level of economic viability for each station. The singular focus on the electricity  
16 component would allow charging operators to continue to innovate and explore different  
17 business models or practices in order to offer an economically viable and sustainable  
18 service.

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<sup>13</sup> EIA 2018 Utility Bundled Retail Sales – Commercial. Table T7 Commercial Sector:  
[https://www.eia.gov/electricity/sales\\_revenue\\_price/](https://www.eia.gov/electricity/sales_revenue_price/)

1 **Q. ARE THERE ALTERNATIVE COMMERCIAL EV RATE DESIGNS THAT**  
2 **COULD ALSO SERVE AS APPROPRIATE MODIFICATIONS OR**  
3 **REPLACEMENTS TO THE TARGET RATE MECHANISM?**

4 A. Yes, there are a variety of different rate designs that effectively deal with the issue of low  
5 load factors and high demand charges causing electricity cost distortions specifically for  
6 separately metered DCFC charging stations. One popular EV rate model is the all-  
7 volumetric, time-of-use (“TOU”) rate. Another rate mechanism that is sometimes used to  
8 modify existing commercial tariffs to make them more “EV charging friendly” is that of a  
9 demand limiter. A demand limiter is a value of hours that serves to limit the billed  
10 demand on low load factor meters. If the demand limiter is “200 hours,” then a site that  
11 only uses 20,000 kWh per month will effectively have a cap placed on their billed  
12 demand in the amount of 20,000 kWh / 200 hours = 100 kW. Another variation on this  
13 idea is Dominion Virginia’s GS-2 tariff<sup>14</sup> which is billed as a non-demand rate for  
14 monthly usage below 200 kWh per kW of billed demand and billed as a demand rate for  
15 usage above 200 kWh per kW of billed demand. A more simplified solution would be to  
16 offer a 50% demand charge credit on billed demand for all separately metered EV  
17 charging stations. All of these modifications and rate options are intended to prevent low  
18 load factor EV charging stations from paying extreme prices for electricity on a \$/kWh  
19 basis.

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<sup>14</sup> <https://cdn-dominionenergy-prd-001.azureedge.net/-/media/pdfs/virginia/business-rates/schedule-gs2.pdf>

1 **C. OTHER RECOMMENDATIONS FOR THE PUBLIC DCFC SUBPROGRAM**

2 **Q. SHOULD THE TARGET RATE MECHANISM, MAKE-READY, AND**  
3 **EQUIPMENT REBATES IN THE PUBLIC DCFC SUBPROGRAM BE TIED**  
4 **TOGETHER AS A SINGLE OFFERING?**

5 A. No, all three offerings should be offered separately and separately metered DCFC  
6 charging stations should have the option to use one or all three of the program benefits as  
7 their eligibility allows. The target rate mechanism should be made available to all  
8 separately metered EV charging stations made up predominantly of DCFCs, existing and  
9 new, and should not require application or use of the make-ready incentive. An  
10 enrollment process is understandable for the target rate mechanism but it should not be  
11 subject to approval or disapproval by PSE&G in the same way if a customer is eligible  
12 for a regular commercial rate, that customer is allowed to enroll in the rate without fear of  
13 rejection. The make-ready incentive only makes sense to apply to new stations but also  
14 should not be tied to the application for equipment rebates as a requirement for eligibility.  
15 Ideally the make-ready incentive would function like the existing line extension policy  
16 for new customers where if the new service is a separately metered DCFC station, the  
17 customer would be eligible for the make-ready incentive without application and fear of  
18 rejection. The application process adds an administrative burden but is understandable  
19 and appropriate for equipment rebates which should be offered separately from both the  
20 target rate mechanism and the make-ready incentive. All three offerings should remain  
21 optional to all eligible customers.

1 **Q. WHAT WOULD BE AN APPROPRIATE OUTCOME OF THE PUBLIC DCFC**  
2 **SUBPROGRAM?**

3 A. The Public DCFC subprogram should result in the design of a permanent commercial EV  
4 charging tariff following the six-year program period.

5 **Q. IS IT APPROPRIATE TO PROVIDE THE TARGET RATE ADJUSTMENT**  
6 **MECHANISM AS AN OFF-BILL MONTHLY REBATE?**

7 A. No, this type of administration is unduly burdensome for EV charging providers and an  
8 on-bill credit would be a more appropriate way to administer this type of target rate  
9 adjustment mechanism. Eversource Connecticut provides an on-bill credit with its EV  
10 Rate Rider which is simple and allows EV charging providers to accurately track costs  
11 without unnecessary administrative and accounting work.

12 **IV. CONCLUSION**

13 **Q. PLEASE SUMMARIZE YOUR TESTIMONY RECOMMENDATIONS.**

14 A. My recommended modifications to the Public DCFC Subprogram include:

- 15 • Change the eligibility for off-bill rebates to offset electricity bill expenses to  
16 include existing chargers.
- 17 • Adjust the target rate from an unknown and potentially arbitrary value to the  
18 commercial customer class average cost of electricity until data can provide  
19 justification for a different value.

- 1           • Separate the three different proposal offerings: target rate mechanism, make-ready  
2           incentive, and equipment rebates from each other. Make-ready is only needed for  
3           new customers and the equipment rebate is the only benefit that should be subject  
4           to an application process.
- 5           • Provide the target rate mechanism monthly rebate as an on-bill credit rather than  
6           an off-bill payment.
- 7           • PSE&G should commit to designing a permanent EV rate after data has been  
8           collected over the six-year Public DCFC subprogram period. The permanent EV  
9           rate should be available to all separately metered commercial EV charging  
10          infrastructure, including public DCFC stations, medium- and heavy-duty fleets,  
11          and workplaces.

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

13   **A.     Yes it does.**

1 **ATTACHMENT 1 – EVERSOURCE CONNECTICUT EV RATE RIDER**

THE CONNECTICUT LIGHT AND POWER COMPANY, DBA EVERSOURCE ENERGY  
ELECTRIC VEHICLE RATE RIDER

Page 1 of 1

AVAILABILITY AND APPLICABILITY:

This rider is available to serve the entire requirements of electric vehicle (EV) charging stations, which are available to the public. The Company defines public charging stations as those made available and accessible by the public and may include on-street parking spaces and public parking spaces in lots or parking garages. Eligibility and acceptance of a customer for service under this rider is subject to the review and approval by the Company.

Service under this rider shall be separately metered and is available only to the load of an electric vehicle charging station approved by the Company.

MONTHLY RATE:

Rates for electric service provided to a facility under this rider shall be determined in accordance with the Company's general service rate schedule that would otherwise apply to the load being served. Where a rate component of such schedule is priced on a demand basis (i.e., per kW or per kVA) the EV customer under this Rider will be subject to a charge determined on an equivalent per kWh basis using the corresponding average price of such rate component.

TERM:

There is no minimum term for customers electing to receive service under this rider.

Supersedes Electric Vehicle Rate Rider Pilot  
Effective July 1, 2014  
by Decision dated June 4, 2014  
Docket No. 13-12-11  
Revised to Reflect New Trade Name October 1, 2015  
Docket No. 14-05-06

Effective April 1, 2019  
by Decision dated March 6, 2019  
Docket No. 17-10-46RE01

Rider EV.04-01-19

1 **APPENDIX A – STATEMENT OF QUALIFICATIONS FOR WILLIAM EHRLICH**

2 William Ehrlich is Senior Policy Advisor for North America Charging Policy and Rates at Tesla.  
3 William provides expertise for Tesla’s charging infrastructure policy, rate design, energy  
4 procurement and electric utility engagement efforts. He conducts quantitative analysis of  
5 electricity markets and utility rate designs for tariff optimization and to determine opportunities  
6 for electric vehicles, charging infrastructure and distributed energy resources. He serves as an  
7 expert witness in electric vehicle and rate design utility regulatory proceedings. Prior to Tesla, he  
8 was Technology Development Manager at EVgo and previously Senior Analyst at Strategen  
9 Consulting. William began his energy career ten years ago at a commercial solar company. He  
10 has contributed to reports and journal articles about energy topics including utility planning,  
11 energy storage, and renewable energy. William has a bachelor’s degree in finance from the  
12 University of Notre Dame.