# STATE OF NEW YORK PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on July 11, 2019

#### COMMISSIONERS PRESENT:

John B. Rhodes, Chair Diane X. Burman, abstaining James S. Alesi Tracey A. Edwards

CASE 18-E-0138 - Proceeding on Motion of the Commission
Regarding Electric Vehicle Supply Equipment and
Infrastructure.

ORDER MODIFYING INCENTIVE PROGRAM AND GRANTING, IN PART, PETITION FOR REHEARING

(Issued and Effective July 12, 2019)

BY THE COMMISSION:

#### INTRODUCTION

On February 28, 2019, Tesla, Inc. (Tesla) filed a
Petition for Rehearing (Petition) of the Public Service
Commission's (Commission) Order Establishing Framework for
Direct Current Fast Charging Infrastructure Program.¹ The DCFC
Program Order established utility programs that provide for
payments, on a per-plug basis, to developers of new Electric
Vehicle (EV) DCFC chargers. The purpose of these programs is to
incentivize the deployment of a network of "publicly accessible"
chargers, thereby supporting reliable EV travel range and

Case 18-E-0138, Order Establishing Framework for Direct Current Fast Charging Infrastructure Program (issued February 7, 2019) (Direct Current Fast Charing (DCFC) Program Order).

inducing EV sales to meet the State's Zero Emission Vehicle (ZEV) goals.<sup>2</sup>

Tesla's Petition alleges that the DCFC Program Order contained errors of fact and law by defining a "publicly accessible" charger to include "Level 3 stations that utilize both a Society of Automotive Engineers (SAE) Combined Charging System (CCS) plug type commonly in use by American and European manufactures (e.g., Chevrolet, BMW, Mercedes, and Volkswagen) and a CHAdeMO plug type commonly in use by Asian manufactures (e.g., Nissan and Mitsubishi)." As a result, Tesla was only eligible for an incentive where their proprietary technology was coupled with the identified plug types that enable use by American/European and Asian EV charging systems.

By this Order, the Commission grants Tesla's Petition, insofar as the Commission finds that modifications to the definition of "publicly accessible" and the DCFC incentive programs are warranted. In particular, the Commission adopts a technology neutral approach that will better adapt to the rapid technological advancements in EVs, particularly battery-based electric vehicles (BEV), and charging technologies.<sup>4</sup> Therefore, the utility programs will no longer prescribe eligible plug types by specific technology, as the DCFC Program Order did.

On October 24, 2013, Governor Cuomo entered into a Memorandum of Understanding with the Governors of California, Connecticut, Maryland, Massachusetts, Oregon, Rhode Island, and Vermont agreeing to coordinate and collaborate to promote effective and efficient implementation of ZEV regulations. State Zero-Emission Vehicle Programs, Memorandum of Understanding available at: dec.ny.gov/docs/air\_pdf/zevmou.pdf

<sup>&</sup>lt;sup>3</sup> DCFC Program Order, pp. 44-45.

<sup>&</sup>lt;sup>4</sup> New original equipment manufacturers (OEM) are developing both vehicles and batteries, which may result in a technology that is not explicitly included in the per-plug incentive program being deployed.

Instead, the per-plug incentive program will expand eligibility to include proprietary plugs at stations that are co-located with a commonly accepted non-proprietary standardized plug-type of the same or greater kW level as the other plugs being installed.<sup>5</sup> Plugs capable of simultaneous charging at or above 50 kilowatts (kW), but less than 75 kW, will be eligible for a 60 percent incentive payment; and, plugs capable of simultaneous charging at or above 75 kW will be eligible for a full incentive payment.<sup>6</sup> This modification seeks to encourage dual compatibility for all new public DCFC stations. The Commission expects this approach will promote broader utilization of public EV charging stations and further the State's ZEV goals.

#### THE PETITION

Tesla claims that the Commission committed various errors in the DCFC Program Order. In particular, Tesla argues that the Commission's decision to adopt a definition of "publicly accessible," which differed from the Consensus Proposal, lacked a rational basis, was arbitrary and capricious, discriminatory, and unlawful. Tesla suggests that the DCFC Program Order should be "reversed and remanded."

Specifically, Tesla asserts that there was inadequate public notice that the Commission might make a determination regarding such term. Tesla states that the Notice Soliciting Comments regarding the Consensus Proposal, which the Secretary

<sup>&</sup>lt;sup>5</sup> An example of a commonly accepted non-proprietary standardized plug type is the SAE CCS. The use of such a plug type, on a stand-alone basis, would be eligible for the incentive.

<sup>&</sup>lt;sup>6</sup> Simultaneous charging capability is defined as the nameplate rating of the charger divided by the number of plugs on the charger.

<sup>&</sup>lt;sup>7</sup> A remand of the DCFC Program Order is not available because the Commission is deciding these issues in the first instance.

to the Commission issued on November 23, 2018, gave no indication that the Commission may entertain a definition of the phrase "publicly accessible" different than that contained in the Consensus Proposal. Elaborating, Tesla points out that the Commission's Order Instituting Proceeding identified nine topics for discussion at the July 18th and 19th, 2018 Technical Conference, excluding "publicly accessible." Additionally, Tesla claims that there was no notice that such a definition was being considered in the August 16, 2018 Notice of Working Group Meeting and Request for Post-Conference Comments, which identified fourteen topics.

Tesla further points out that the Commission was aware that both the Consensus Proposal and the Joint Petition<sup>10</sup> defined "publicly accessible stations" as meaning stations that are physically accessible, and argues that the Commission was bound to notify the public if it was intending to redefine "public availability" and thus eligibility. Tesla emphasizes that the Commission previously highlighted the importance of public accessibility to increasing customer acceptance and use of EVs in Case 13-E-0199.

According to Tesla, the public is entitled to assume that the Commission will behave consistently, and potential commenters did not have reason to believe that presenting a case regarding "technological availability" was necessary. Tesla

<sup>8</sup> Case 18-E-0138, Consensus Proposal to Encourage Statewide Deployment of Direct Current Fast Charging Facilities for Electric Vehicles, (filed November 21, 2018) (Consensus Proposal).

Ocase 18-E-0138, Order Instituting Proceeding (issued April 24, 2018).

Case 18-E-0138, Joint Petition for Immediate and Long-Term Rate Relief to Encourage Statewide Deployment of Direct Current Fast Charging Facilities for Electric Vehicles, (filed April 13, 2018) (Joint Petition).

notes that two commenters address "technological availability" in an agnostic way, arguing that these commenters' statements indicate a far more pressing need to enlist all potential investors in charging stations. Furthermore, Tesla points out that the United States Department of Energy (DOE) charging station database includes Tesla Superchargers as "Public Stations" and that the DOE tool that the Consensus Proposal parties used to develop the 1,500 DCFC station estimate does not specify connector type.

Additionally, Tesla asserts that there was no rational basis or record support for the Commission to adopt an alternative definition of "publicly available" to the one set forth in the Consensus Proposal. According to Tesla, the DCFC Program Order contains no analysis or citations to any evidence showing that changing the definition would spur more private sector investment in charging station infrastructure than using the Consensus Proposal's proposed definition. Furthermore, Tesla argues that the re-definition is unlawful because it supposedly results in a rate that is discriminatory in violation of PSL §65(2) and PSL § 65(3).

Tesla believes that the Commission did not adequately consider its market share, which it claims comprised 80 percent of the DCFC capable vehicle sales in 2018, and 60 percent since 2012. Tesla explains that it does not view its charging network as a "walled garden," and goes on to state that it has discussed opening their extensive charging network with other OEMs. Tesla notes, however, that these conversations are still ongoing. Tesla submits that disqualifying it from incentive eligibility will impede the State's goal for 800,000 zero emissions vehicles by 2025.

Further, Tesla asserts that the Commission failed to explain whether the program is a prudent investment of ratepayer

funds. Tesla also reiterates its claim that the DCFC Program Order creates a discriminatory program that violates PSL §65(2) and PSL §65(3) because Tesla provides its charging services to members of the public under the same circumstances and conditions as other charging operators that are eligible for the program. According to Tesla, given the special incentive method, it will be paying significantly more for electricity than other network operators. Tesla asserts that the DCFC Program Order will subject Tesla to electricity costs more than double that of other DCFC providers, or will require Tesla to deploy significantly more costly equipment for non-Tesla EVs in order to qualify for the program. Tesla explains that this is an undue and unreasonable prejudice that puts Tesla at a disadvantage compared to other charging operators.

Tesla also asserts that the Commission violated five of the ten rate principles adopted in the Reforming the Energy Vision (REV) proceeding. 11 According to Tesla, the principles violated include: encourage outcomes; policy transparency; decision-making; customer-orientation; and, economic sustainability. Tesla explains that the DCFC Program Order is distinctly not technology neutral, that it fails to explicitly or transparently explain the math of how disqualifying Tesla will support the goal of reducing range anxiety, and that the order contravenes market-enabled decision-making and customer choice by disqualifying the one OEM that is serving the bulk of EV drivers on the road today.

According to Tesla, it is an unreasonable burden to require installation of a charging technology other than its

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<sup>11</sup> Case 14-M-0101, <u>Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision</u>, Order Adopting a Ratemaking and Utility Revenue Model Policy Framework (Track Two Order) (issued May 19, 2016).

own. While Tesla has worked with other network operators to colocate stations, it advises that opportunities like this are likely limited. Tesla advises that the DCFC Program Order essentially imposes a requirement for it to change its business model, and is inconsistent with the Declaratory Ruling in Case 13-E-0199, where the Commission declined to extend its jurisdiction over publicly available electric vehicle charging stations. 12

Finally, Tesla alleges that the Commission made a factual error by assuming that Tesla drivers will be able to avail themselves of non-Tesla plugs. Tesla explains that the Model 3, which is the best-selling EV in 2018 and comprised approximately 60 percent of all DCFC capable vehicle sales, cannot currently utilize the CHAdeMO adapter. Only the Model S and Model X vehicles, it notes, are capable of using an optional CHAdeMO adapter. Tesla maintains that only a small percentage of its customers have purchased this optional equipment that costs \$450.

#### PUBLIC NOTICE

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), a Notice of Proposed Rulemaking (SAPA Notice) was published in the <u>State Register</u> on March 27, 2019 [SAPA No. 18-E-0138SP2]. The time for submission of comments pursuant to the SAPA Notice expired on May 28, 2019.

The Secretary to the Commission issued a separate public notice on March 27, 2019, advising that the Petition would be treated as a timely request filed within the 30-day

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Case 13-E-0199, <u>In the Matter of Electric Vehicle Policies</u>, Declaratory Ruling on Jurisdiction Over Publicly Available Electric Vehicle Charging Stations (Declaratory Ruling) (issued November 22, 2013).

period prescribed in Public Service Law (PSL) §22 and 16 NYCRR §3.7(a).<sup>13</sup> The Secretary's Notice also extended the 15-day time period, which is otherwise applicable under 16 NYCRR §3.7(c), so that responses to the Petition were due May 28, 2019.<sup>14</sup>

Numerus comments were received in response to the SAPA and Secretary's Notices. These comments are summarized in the following section and addressed, as appropriate, in the Discussion section below.

## COMMENTS

More than 580 public comments were received. Most of these comments were a form letter sent on behalf of Tesla owners in support of the Petition. The commenters suggest that the DCFC Program Order sends the wrong signal and harms innovative companies like Tesla, which make up the majority of the EVs on the road. According to one commenter, Tesla fast charging stations out number SAE CCS and CHAdeMO stations by a factor of ten. Many commenters point out that allowing all charging operators to participate under the same terms and conditions puts everyone on a level playing field. Several commenters suggest that it is unreasonable and discriminatory to provide discounted electric rates for all but Tesla, the earliest fast charging network developer.

Most of the comments in support of Tesla's Petition assert that the Commission is unfairly blocking Tesla from

Case 18-E-0138, Notice with Respect to Petition for Rehearing (issued March 27, 2018) (Secretary's Notice).

The statute of limitations in which a petitioner for rehearing can seek review by filing an Article 78 proceeding should ordinarily be tolled by a timely petition for rehearing under PSL §22. Civil Practice Law and Rules §7801(1). The fourmonth period in which Tesla can seek review under CPLR §217 therefore commences by this Commission decision regarding the Petition.

participating in a state-wide program. Many commenters also state that the Commission is discriminating against Tesla such that its Supercharger network will have electricity costs more than double that of other DCFC providers. Many individual comments argue that it will be much harder for Tesla to compete with others who follow in their footsteps and build their own networks if Tesla's Petition is not granted. One Tesla driver, with nearly 140,000 miles of all-electric miles driven, states that he should benefit from any rate reduction. Another commenter suggests that the Commission should make the lower electric rates available if the charging station is non-proprietary, and is open to all.

On May 28, 2019, ChargePoint, Inc. (ChargePoint) filed comments supporting the Petition and requesting that the Commission: (1) revoke the DCFC Program Order; (2) establish a schedule for submission of evidence by all interested stakeholders with respect to the creation of a non-discriminatory incentive program before issuing a new order; (3) reverse the definition of "publicly accessible;" and, (4) allow existing charging stations to participate in the incentive program. ChargePoint alleges that the Commission adopted an order that violates the basic REV principles, discriminates against participants in the EV charging supply equipment market, is inflicted with errors of fact, and lacks evidentiary support.

According to ChargePoint, the Commission misunderstood charging station technology and the interplay between charging stations and EV limitations. They further allege that the tiered incentives ignore key determinants of the maximum charge rate at a given EV charging station, and therefore discriminates against innovative Electric Vehicle Supply Equipment (EVSE) manufacturers who produce a product better-equipped to serve and proliferate the existing EV market. ChargePoint cites the New

York Power Authority's (NYPA) prior comments in this proceeding to explain that each EV make and model has a unique "charge curve" that describes how its accepted charging speed changes based on the battery percentage, or "state of charge." ChargePoint argues that focusing on kW charging capacity, without considering whether the EV market can take advantage of that capacity, resulted from an error of fact. The structure of the incentive program, ChargePoint alleges, evinces the Commission's errors of fact and misunderstanding of the relationship between the maximum charging rate of an EV and the EV market in New York.

According to ChargePoint, the DCFC Program Order will result in an excess capacity problem and will fail to incentivize the technology that is most needed to serve the State's existing EV fleet. ChargePoint frames the incentive program as creating both an artificial floor and ceiling (of 75 kW), which it says will be a barrier to deploying EVSE with capabilities that exceed 75 kW just as it discourages installing stations capable of charging at less than 75 kW.

ChargePoint further explains that the tiered incentive program demonstrates errors of fact because the program fails to consider limitations on maximum charging rates, does not reflect EV charging best practices, and negatively impacts the development of New York markets. According to ChargePoint, the incentive program does not necessarily provide the public with access to the Tier 2 charging capabilities that the Commission elected to provide a full incentive for, nor does it reflect industry-specific best practices. ChargePoint concludes this point by stating that the Commission is providing a full incentive for DCFC installations that are overbuilt for the current market.

ChargePoint argues that the DCFC Program Order has unnecessarily discriminatory effects that will result in a disparate impact. ChargePoint explains that the DCFC Program Order discriminates against current EV charging station market participants because it limits the incentive to only newly-built charging stations. According to ChargePoint, the Commission did not explain its determination to limit the incentive, nor did the record provide a rational basis to do so. ChargePoint claims that this will discourage EV developers (like ChargePoint and its customer site hosts) from the maintenance and upkeep of their existing EVSE fleet. ChargePoint adds that the DCFC Program Order could incentivize companies to remove existing charging stations and install new, incentive-eligible stations in locations already situated to support an early-stage EV market. ChargePoint alleges that the segmentation between existing and future installations is unnecessarily discriminatory and amounts to an error of law.

On June 13, 2019, the International Brotherhood of Electrical Workers, Natural Resources Defense Council, New York City Environmental Justice Alliance, New Yorkers for Clean Power, Sierra Club, and Tri-State Transportation Campaign filed a letter (Joint Letter) taking no position on the Petition, but urging the Commission to resolve outstanding issues and prioritize completion of an EV whitepaper.

One individual, David Davidson, states his support for the DCFC Program Order, explaining that Tesla drivers in the United States can buy an adapter sold by Tesla and use CHAdeMO chargers. He also states that Tesla sells an adapter for the European version of the CCS charger, and asserts that it is therefore likely that a similar version will be available at some point in the United States. Mr. Davidson concludes that although Tesla does make adapters for CHAdeMO and CCS stations,

there is no adapter available or planned that will allow any vehicle other than a Tesla to utilize a Tesla Supercharger.

## LEGAL AUTHORITY

The Commission's authority to grant or refuse a request for rehearing of an order is established by PSL §22, and is governed by the Commission's Rules of Procedure, 16 NYCRR §3.7, implementing that statute. The legislature has granted authority to the Commission to direct utilities to formulate and carry out long-range programs, individually or cooperatively, with economy, efficiency, and care for the public safety, the preservation of environmental values and the conservation of natural resources. The Commission has broad discretion and judgment in choosing the means of achieving statutory mandates, and has the authority to adopt different methodologies or combinations of methodologies in balancing ratepayer and investor interests. The decisions made in the DCFC Program Order and in this Order fall squarely within the Commission's authority.

#### DISCUSSION

## Petition for Rehearing

As Tesla points out, it is a leading developer and manufacturer of EVs, as well as other clean energy products and services. Tesla has significant BEV sales in the United States and a very visible and robust fast charge network to support its

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<sup>&</sup>lt;sup>15</sup> PSL §5(2).

Multiple Intervenors v. Public Service Commission of the State of New York, 154 A.D.2d 76 (3d Dept. 1991).

vehicles.<sup>17</sup> The Commission recognizes Tesla's commitment to increasing BEV sales in New York and to raising consumer awareness that long distance BEV travel is possible and convenient. The fact that Tesla customers are engaged and satisfied with their vehicles and driving experiences is evident by the numerous public comments in support of Tesla's Petition.

Tesla, however, is unlike other automotive OEMs and other EV supply equipment providers because it builds and operates its own network of charging stations and operates them as a service to its customers. Tesla customers invest in both their BEV and the proprietary Tesla charging network when they purchase a vehicle.

While New York is in the early stages of EV adoption, Tesla is not. According to Tesla, its network of charging stations was being developed as early as 2012. Of the 13 DCFC compatible vehicle types available today, Tesla vehicles comprised 80 percent of the sales in 2018, and 60 percent since 2012, indicating its strong market share is growing.

Based on these factors, the Commission finds that Tesla is unique among EV OEMs, and that ratepayer support may not be needed to build new Supercharger stations for Tesla, in the same way it is needed for non-Tesla stations. Although Tesla has not provided station utilization rates, Tesla Superchargers may have sufficient utilization rates to make demand charge rates more cost effective than stations that service other vehicle types and presently have low utilization

A map of Tesla's 1,441 Supercharger Stations with 12,888 Superchargers in North America may be viewed at:

https://www.tesla.com/supercharger.

rates. 18 Non-Tesla EV owners will greatly benefit from ratepayer support to build out a network of publicly accessible DCFC stations, whereas Tesla owners already have exclusive access to a robust charging network.

Regardless, the Commission recognizes that an approach that is technology-specific, such as the definition of publicly accessible in the DCFC Program Order, may hinder the goals of deploying a robust network of DCFC stations. Accordingly, the Commission adopts a technology-neutral approach going forward that will allow Tesla to be eligible for the per plug incentive programs, provided they comply with the same eligibility requirements that will apply equally to all developers.

While the Commission finds that Tesla's Petition does not raise any errors of fact or law that necessitate granting rehearing, the Petition is granted to the extent that modifications to the definition of publicly accessible and program eligibility are warranted to address concerns similar to those raised in the Petition. As discussed further below, these modifications of the eligibility requirements will treat all developers of DCFC stations in a non-discriminatory manner by subjecting them to uniform criteria.

Before turning to the DCFC program modifications, the Commission will address the merits of several claims raised by Tesla and ChargePoint. As an initial matter, the Commission did not confine this proceeding to rate design issues, as suggested by Tesla and ChargePoint. The Commission's Order Instituting Proceeding outlined a set of issues ranging from utility roles in supporting EVSE deployment and charging services,

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<sup>&</sup>lt;sup>18</sup> While Tesla states that the DCFC Program Order will subject Tesla to electricity costs more than double that of other providers of DCFC services, it provides no evidence for this assertion.

technological requirements to enable grid services and system value, utility roles in encouraging EV adoption, regional compatibility, and other enumerated topics or issues that stakeholders may raise. 19

Tesla and ChargePoint are incorrect in their assertion that the Commission excluded the definition of "publicly accessible" from its decision-making process. Defining "publicly accessible" was a necessary requirement to establishing an incentive program for eligible charging stations. Despite Tesla and ChargePoint's assertions, the Commission was not bound to accept the terms of the Joint Petition<sup>20</sup> nor the Consensus Proposal.<sup>21</sup> The Commission properly considered the Consensus Proposal's definition and rejected it as insufficient to ensure that public benefits are maximized from the ratepayer funds directed at the DCFC per-plug incentive program. For example, sites that require a separate charge for parking are properly excluded from the program as not publicly accessible, as incentivizing chargers at these sites does not motivate site developers or municipalities to lower barriers for station developers. Considering pay-to-park lots as "publicly

<sup>19</sup> Order Instituting Proceeding pp. 4-5.

The Joint Petition refers to DCFC in "public places," identifies "public" Level 1 and 2 plugs based on the U.S. Department of Energy Alternative Fuels Data Center, and identifies the need for public DCFC plugs without defining "public".

The Consensus Proposal defines "publicly accessible" as having access without site specific physical access restrictions (i.e., radio-frequency identification ("RFID"), security badge, or otherwise limited access). Publicly accessible sites may include sites such as supermarkets, malls, retail outlets, rest stops, visitor centers, train stations, hotels, restaurants, and parking garages or lots where DCFC stations are open to the general public and will be used by a wide variety of users. These may include sites that require a separate charge for parking. Consensus Proposal, p. 10.

accessible" would divert ratepayer funds to plugs located in areas where some of the EV driving community may not be able to afford to park. 22

The record in this proceeding contains many references to open standards and protocols, open access, interoperability, vehicle-to-grid communications, and all parties were on notice that technological standards and differences are major issues. 23 To the extent any deficiencies may have existed in providing adequate notice of matters under deliberation by the Commission, they have been cured by the SAPA Notice and Secretary's Notice noted above, which formed the basis of the action in this Order.

With respect to claims that the Commission is asserting jurisdiction over owners and operators of charging stations, the Commission notes that its action only relates to establishing eligibility requirements in order to qualify for a ratepayer subsidized incentive program that is voluntary to participants. The Commission continues to decline to exercise jurisdiction over (1) publicly available electric vehicle charging stations; (2) the owners or operators of such charging stations, so long as the owners or operators do not otherwise fall within the PSL's definition of "electric corporation;" or, (3) the transactions between the owners or operators of publicly available electric vehicle charging stations, which do not

This is particularly problematic in Manhattan, where parking garages must charge a premium to recover real estate costs.

See, e.g., Order Instituting Proceeding; Greenlots PSC Technical Slides (filed July 20, 2018); NRDC Panel (filed July 20, 2018); Siemens Standards Slides Panel (filed July 20, 2018); UDel Panel (filed July 20, 2018); and, Notice of Working Group Meeting and Request for Post-Conference Comments (filed August 16, 2018).

otherwise fall within the PSL's definition of "electric corporation," and members of the public. 24

The Department of Agriculture and Markets, Bureau of Weights and Measures (Weights & Measures) will regulate these EV charging stations to ensure customers are receiving the benefits that they pay for. 25 Where ratepayer-collected funds are being directed towards incentivizing charging station development, the Commission will continue to ensure prudent expenditures of such funds.

Regarding the assertion that the Commission's DCFC incentive program results in a harm to existing owners and operators of charging stations, the Commission rejects these claims. For example, ChargePoint claims that the incentive program "victimizes already-existing EV charging infrastructure" and is an error of law. As the Commission clearly stated in the DCFC Program Order, while existing infrastructure has great value in promoting EV adoption, the Commission declines to retroactively incent those developers. 26 The Commission is not persuaded by ChargePoint's argument that removing existing infrastructure and replacing it with incentive-eligible DCFC stations is a bad outcome. NYSERDA's Charge Ready New York (Charge Ready NY) program encourages the replacement of existing infrastructure by providing equipment owners replacing charging equipment that is more than five years old with an incentive payment of up to \$1,500 per existing charging port replaced with

<sup>&</sup>lt;sup>24</sup> Declaratory Ruling, p. 5.

Presently, Weights & Measures is following the Electric Vehicle Fueling Systems- Tentative Code, Handbook 44, developed by the National Institute of Standards and Technology, available at: https://www.nist.gov/pml/weightsand-measures/publications/nist-handbooks/handbook-44.

<sup>&</sup>lt;sup>26</sup> DCFC Program Order, p. 38.

new qualified charging equipment.<sup>27</sup> The Commission notes that any equipment owner receiving an incentive through the Charge Ready NY, must operate the charging equipment for at least four years from the installation date.<sup>28</sup>

Many of the commenters, Tesla, and ChargePoint mistake the per-plug incentive for a modified rate design and argue that the Commission is acting in a discriminatory fashion. By the DCFC Program Order, the Commission explicitly declined to provide a demand charge holiday, preserved existing cost-based rates, and declined to modify the rate design applicable to DCFC stations.<sup>29</sup> The Commission did not modify electricity rates or rate structures applicable to DCFC customers, as Tesla claims. No existing charging infrastructure may receive this per-plug incentive, and Tesla's electricity rates are not impacted by the per-plug incentive program. The Commission's per-plug incentive is intended to provide the needed support for DCFC stations during the early stages of adoption through incentive payments, instead of a technology-specific rate design that may depart from the utilities' cost-based rate structures. 30 The Commission notes that Con Edison's Business Incentive Rate (BIR) offers an

See Charge Ready NY Program Opportunity Notice (PON) 3923 Implementation Manual (Charge Ready NY Program Manual) (issued March 26, 2019), p. 8. Accessible at: https://portal.nyserda.ny.gov/CORE\_Solicitation\_Document\_Page?documentId=a0lt000000180lcAAE.

<sup>&</sup>lt;sup>28</sup> See Charge Ready NY Program Manual, p. 10.

<sup>29</sup> DCFC Program Order, p. 34.

<sup>30</sup> DCFC Program Order, p. 36.

electric rate delivery reduction to EV quick charging stations. 31 The DCFC Program Order did not modify the BIR Program Order, which Tesla is eligible to apply for and receive independent of the per-plug incentive program. 32

As to consistency with REV principles, the Commission explained that a transparent annual incentive is consistent with REV rate design principles adopted by the Track Two Order, and adopted the per station delivery cost cap as proposed by NYSEG and RG&E instead of a demand charge exemption. 33 In claiming that the Commission is violating REV rate design principles, Tesla and ChargePoint present inconsistent arguments that technology-specific incentives are inappropriate while again requesting a modified rate design for EV charging infrastructure. By offering a time and value-limited incentive instead of modifying the rate design applicable to DCFC stations, the Commission preserved technology neutral rate structures while directing ratepayer support to meet the State's ZEV objectives.

As Tesla noted in prior written comments, "competition can help improve customer access to charging, charging network reliability, and ultimately provide EV owners with a great user experience." 34 In order to reach the state's

Of New York, Inc. to Modify its Electric Tariff Schedule,
P.S.C. No. 10, to Expand the Scope of its Economic Development
Business Incentive Rate to Include an Electric Vehicle Quick
Charging Station Program, Order Approving Tariff Amendments
(BIR Program Order) (issued April 24, 2018).

The Commission expects that Tesla is pursuing this incentive, as Tesla's prior written comments were addressed in the BIR Program Order.

<sup>33</sup> DCFC Program Order, p. 37.

<sup>34</sup> Case 18-E-0138, Comments of Tesla, Inc. (filed September 21, 2018), p. 4.

ZEV and carbon dioxide (CO<sub>2</sub>) reduction goals, New York State needs an open and competitive EV charging marketplace. This time and value limited per-plug incentive is intended to encourage development in a lagging market, not to direct ratepayer funds to an already successful proprietary network.

With respect to alleged errors of fact, the Petition argues that the Commission erred by recognizing that Tesla customers may use CHAdeMO or SAE CCS plug types. According to Tesla, the Commission's sole effort to justify its exclusion of Tesla rests on an assumption that Tesla EV drivers will be able to avail themselves of non-Tesla plugs. Tesla's argument is unpersuasive given that the Commission accurately stated in the DCFC Program Order that "some Tesla vehicles can connect to CHAdeMO DCFC plugs with an adaptor."35 As stated in Tesla's Petition, Model S and Model X vehicles may utilize an optional adapter, and a small percentage of Tesla customers have purchased the \$450 adapter that facilitates CHAdeMO charging. Furthermore, Tesla's Model 3 Support Videos do not support the Petition's claim, as they indicate the Model 3 may also utilize an adapter to charge at any electric vehicle station. 36 The Commission accurately characterized some of Tesla vehicles' ability to utilize a non-proprietary charging network, and therefore rejects Tesla's alleged error of fact warranting rehearing.

Tesla also alleges that the Commission incorrectly placed an unreasonable burden on the company by requiring it to deploy another technology other than its own. DCFC stations typically utilize a number of hardware and software systems to provide charging services, unlike Tesla's proprietary network

<sup>35</sup> DCFC Program Order, p. 45.

<sup>36 &</sup>lt;u>See</u> Model 3 Support Videos, Charging Adapters, available at: https://www.tesla.com/support/model-3-videos#charging-adapter.

where the Tesla vehicle and the Tesla application seamlessly utilize the Tesla charger. The Commission excluded all networks that require memberships as a condition of station use to ensure maximum accessibility of stations eligible for an incentive under this program.<sup>37</sup> The goal of the DCFC Program Order is to increase the number of publicly accessible chargers to address the range anxiety of potential EV drivers, thereby inducing EV sales to meet the State's ZEV goals.<sup>38</sup> The Commission was correct in encouraging standardized technologies,<sup>39</sup> and will continue to promote standardization with ratepayer funds.

Tesla notes that it does not sign exclusive arrangements with site hosts that would bar other network operators from deploying stations at the same location, and that conversations are ongoing with other OEMs to open the Supercharger network. The per-plug incentive could be used to motivate this type of collaboration, but the Commission is not making Tesla's development contingent upon changing its business Tesla may continue to develop in New York under model. unchanged circumstances and, as described more fully below, will be eligible for the per-plug DCFC incentive if a standardized plug type is co-located at the station. Tesla may also choose to forgo this limited incentive to continue to develop its proprietary network in New York. The Commission is not imposing a requirement for Tesla to change its business model through the DCFC per-plug incentive program, and does not expect Tesla to do so unless the company determines it is in its best interest.

<sup>37</sup> DCFC Program Order, p. 45.

<sup>38</sup> DCFC Program Order, p. 37.

<sup>&</sup>lt;sup>39</sup> The Alliance of Automobile Manufacturers regularly adopts the recommended practices of the Society of Automotive Engineers.

#### DCFC Per-Plug Incentive Program Modifications

While Tesla and ChargePoint's arguments are unpersuasive, the Commission recognizes that the evolving charging landscape requires an approach that is technology neutral. The Commission's objective to support New York's ZEV goals would best be achieved with the minimum number of prescriptive requirements, particularly given the reality of rapidly changing technologies. Other EV manufacturers may develop business models more like Tesla's than the traditional OEMs, and the Commission does not want to preclude nor unduly influence market-based technological innovation.<sup>40</sup>

The Commission's goals would not be best achieved by specifically incentivizing both SAE CCS and CHAdeMO plug types, particularly since CHAdeMO plug types are currently used by only two OEMs and is not a standardized technology. 41 By removing the technology-type specifics directed by the DCFC Program Order, the Commission hopes to future-proof the incentive program, encourage standardization without excluding proprietary technology types, and direct ratepayer funds to areas that provide maximum benefits.

By this Order, the Commission modifies the DCFC perplug incentive program such that it will define an eligible plug as a plug capable of simultaneous charging at or above 50 kilowatts (kW), but less than 75 kW (which will be eligible for a 60 percent incentive payment); and, plugs capable of simultaneous charging at or above 75 kW (which will be eligible for a full incentive payment) so long as there is a new commonly

<sup>&</sup>lt;sup>40</sup> For example, electric truck and sport utility vehicle start-up Rivian recently filed for patents related to increased charging rates. <u>See</u> https://www.trucks.com/2019/05/07/rivian-truck-battery-patent-faster-charging/.

<sup>41</sup> CHAdeMO was developed by the Japanese utility Tokyo Electric Power Company and is only utilized by Nissan and Mitsubishi.

accepted non-proprietary standardized plug-type of the same or greater simultaneous charging capability as the other plugs being installed co-located at the station.<sup>42</sup>

The Commission finds that this approach will better achieve the intended goal of promoting broader utilization of public EV charging stations and will further the State's ZEV goals. This is also consistent with opportunities for colocation in many regulated areas. The Commission encourages all entities to participate in this program and to help ensure a robust network of DCFC stations.

The modifications directed by this Order are similar to regulations adopted in Europe, where the interface to charge EVs could include several socket outlets or vehicle connectors as long as one of them complies with the technical specifications set out in the European Union Commission directive. 44 In its Petition, Tesla expressed the opinion that its charging network is not a "walled garden" and that the company would be happy to support other automakers using their Supercharger stations. 45 The Commission appreciates that Tesla has operated with an intent to accelerate EV technology and

While the SAE CCS is currently the only standardized plug, a new plug type developed by a standards body would not be precluded from program participation.

<sup>&</sup>lt;sup>43</sup> For example, utility rights-of-way may provide multiple infrastructure siting opportunities, and attaching entities must coordinate to attach diverse devices to utility poles.

See Directive 2014/94/EU of the European Parliament and of the Council on the deployment of alternative fuels infrastructure (adopted October 22, 2014), paragraph 33. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32014L0094&from=en.

<sup>&</sup>lt;sup>45</sup> Tesla Petition for Rehearing, p. 6.

within the open source movement, 46 and believes that the European model of ensuring interoperability, connectivity, and standardization is appropriate where ratepayer funds are supporting infrastructure development.

ChargePoint's suggestion to replace the tiered incentive program with a site-wide kW target, which would take into account total kW of charging capacity at a deployment with an unspecified number of charging stations and plugs, rather than based on a minimum kW requirement for each plug installed at a given site is not adopted at this time.

ChargePoint correctly indicates that the incentive program provides higher incentive levels for DCFC installations that are overbuilt for the current market and references typical EVs current maximum charging rates. The incentive, however, is designed to stimulate the market, not to maintain existing conditions and capabilities. ChargePoint itself plans to provide Express Plus charging platforms, ultra-fast charging stations with charging speeds of up to 500 kW, which ChargePoint touts as being future-proof.<sup>47</sup> The Express Plus charging platform is capable of power sharing with charging capabilities at each port that qualify for full benefits.<sup>48</sup> Furthermore, while the Commission agrees with ChargePoint that the majority of charging solutions in New York should ensure that DCFC are deployed based on how well driver and site host needs are met, the per-plug incentive is intended to promote the developer's

See, e.g., blog post "All Out Patent Are Belong To You" by Elon Musk (June 12, 2014). Available at: https://www.tesla.com/blog/all-our-patent-are-belong-you.

<sup>47 &</sup>lt;u>See</u> ChargePoint Express Plus: https://www.chargepoint.com/products/commercial/express-plus/.

<sup>&</sup>lt;sup>48</sup> It is unclear what ChargePoint means by site-wide "at a deployment" if such a deployment is not comprised of a specified number of charging stations and plugs.

ability to place an eligible station where the site host and driver will benefit.

## CONCLUSION

The Commission is actively promoting publicly available electric charging stations in order to meet the state's ZEV goals. The purpose of the DCFC Program Order is to provide an economic incentive to build out the infrastructure needed to meet the fast charging demands of 800,000 ZEVs, with approximately 60 percent, or 480,000, of those being BEVs.

Moreover, the core objectives of the Commission's REV initiative include increasing market animation and leveraging third-party contributions to meet public policy goals. Programs such as the per-plug incentive, which was established in the DCFC Program Order, and is modified as discussed herein, are designed to be conservative, fair to third parties and ultimately ratepayers, and result in a more robust EV fast charging system.

## The Commission orders:

- 1. Tesla, Inc.'s Petition for Rehearing is granted to the limited extent discussed in the body of this Order, and is otherwise denied in all other respects.
- 2. Central Hudson Gas & Electric Corporation,
  Consolidated Edison Company of New York, Inc., New York State
  Electric & Gas Corporation, Niagara Mohawk Power Corporation
  d/b/a National Grid, Orange and Rockland Utilities, Inc., and
  Rochester Gas and Electric Corporation are directed to modify
  their Direct Current Fast Charging per-plug incentive programs,
  such that an eligible plug is defined as any plug type capable
  of charging at 50 kilowatts for a 60 percent incentive payment
  and 75 kilowatts or greater for a full incentive payment, if colocated with a commonly accepted non-proprietary standardized

plug-type of the same or greater capacity, and as discussed in the body of this Order.

3. This proceeding shall be continued.

By the Commission,

(SIGNED)

KATHLEEN H. BURGESS Secretary