

VIA ELECTRONIC FILING

May 12, 2020

Hon. Michelle L. Phillips
Secretary to the Commission
New York State Public Service Commission
Empire State Plaza
Agency Building 3
Albany, NY 12223-1350

*RE: Whitepaper Reply Comments by ChargePoint – Case No. 18-E-0138: Proceeding on
Motion of the Commission Regarding Electric Vehicle Supply Equipment and
Infrastructure*

Dear Secretary Philips,

Attached for electronic filing in the above-referenced matter, please find comments by
ChargePoint, Inc.

Respectfully,



Kevin George Miller
Director, Public Policy
ChargePoint

I. Introduction

On January 13, the New York Department of Public Service (“DPS”) Staff (“Staff”) released its *Whitepaper Regarding Electric Vehicle Supply Equipment and Infrastructure Deployment* (“Whitepaper”). The Whitepaper was developed at the direction of the Public Service Commission (“Commission”). Comments on the Whitepaper were filed on April 27, 2020.

In summary, ChargePoint’s Reply Comments are as follows:

- The Make-ready Program (“MRP”) will catalyze electric vehicle supply equipment investment in New York.
- MRP participation rules must remain consistent with REV Framework Order.
- Revisions to MRP cost assumptions by the Joint Utilities are consistent with ChargePoint’s experience in the electric vehicle supply equipment market.
- The MRP will better achieve State goals by planning for real-world variability and allowing from programmatic flexibility.
- Additional incentives should be targeted and open-ended.
- Establish sustainable C&I rate design process to advance MRP goals

II. Reply Comments on General Program Design

A. The Make-ready Program will catalyze EVSE investments in New York

1. The Make-ready Program is consistent with the REV Framework Order

The Make-Ready Program (“MRP”) was designed “to foster a competitive environment and drive down EV customer costs.”¹ Staff asserted that competitive ownership of EVSE, which “is a core REV principle,” would ensure that New York avoids the “several significant downsides” of “utility ownership of charging...including limiting market competition and innovation.”² Staff suggested that the principles of utility ownership of distributed energy resource (“DER”) also apply to electric vehicle supply equipment (“EVSE”).

In the REV Framework Order, the Commission articulated its policy that DER development should occur through competitive markets as opposed to ratepayer funding, and only in limited circumstances would utility ownership of DER be allowed. Those limited circumstances included aiding underserved communities, market failure, and for demonstration purposes.³

2. Widespread support for utility make-ready investment

¹ Whitepaper at 55.

² Id. at 21

³Whitepaper at 21.

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Commenters generally supported the MRP's proposed utility provision of make-ready infrastructure.⁴ A subset of commenters also argued to allow utility ownership of EVSE.⁵ The Joint Utilities ("JU") stated that "the primary utility role should be the provision of make-ready infrastructure in support of third-party developers," while also noting that "in the current pandemic-driven economic circumstances, the Commission should not preclude utility ownership of charging infrastructure in situations where it could be beneficial to the general public, as well as for LMI customers, during the next few years."⁶

3. If the Commission allows EVSE ownership by utilities, establishing clear operational guidance could offset potential market impacts

ChargePoint appreciates that the JU, Staff, and stakeholders agree that, as a general rule, the primary utility role in the MRP should be the provision of make-ready infrastructure. We believe that this approach will significantly contribute to the achievement of New York statewide goals.

However, and as noted by ATE,⁷ ChargePoint has supported different types of investments by utilities, including ownership. Should the Commission decide to allow utility ownership of EVSE, it would be essential to establish consistent standards of review that appropriately consider the competitive EVSE market. If the Commission would prefer to develop a new unique standard of review, we recommend soliciting an additional round of comments.⁸

The REV Framework Order could serve as a standard of review if the Commission prefers to leverage clear precedent. While the REV Framework Order does not perfectly align with EVSE market dynamics, it would serve as an important primary evaluation of whether an EVSE investment is consistent with (i) aiding underserved communities or (ii) addressing market failure.

ChargePoint also recommends that the Commission adopt clear operational guidance to ensure that utility EVSE investments are implemented in a manner that supports the competitive market. The criteria below are consistent with those used by regulators in California, Massachusetts, and Connecticut, and have been applied to programs designed as rebates, make-ready, and utility-owned EVSE:

- Will the proposed investment provide site hosts with two or more choices of EV charging equipment and software?
- Will the proposed investments allow for site host control of EVSE?
- Will the investment leverage private site host investment, where possible?

⁴ See, e.g., NYC at 1; EVSE Industry Stakeholder Coalition at 2; Enel X at 1; ATE at 1; Greenlots at 2;

⁵ See, e.g., EVBox at 3; ATE at 14; Greenlots at 5.

⁶ JU at 27

⁷ ATE at 9.

⁸ The Commission last received comments on standards of review for utility EVSE investments in 2018

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Allowing site hosts the choice of multiple EVSE network is essential, regardless of which entity holds title to the station. EVSE networks are cloud-based platforms that connect to hardware, collect data, and enable advanced features to manage charging stations. Just like a customer chooses the smart phone that they want and chooses the carrier that they want, the choice of both EV charging hardware and network makes for a cohesive customer experience.

Providing site hosts with control of EVSE is similarly important. Site hosts are ideally situated to balance utility price signals, understand on-site conditions (*e.g.*, parking), and meet the needs of their customers, employees, and tenants. Site hosts are also best positioned to consider both charging and parking needs when setting a price for EV charging services. For example, an EV fleet owner requires operational control to optimize charging, and a DCFC operator requires pricing control to set competitive pricing in a sustainable way that attracts drivers.

B. MRP participation rules must remain consistent with REV Framework Order

Staff designed the MRP around competitive ownership of EVSE. The New York Power Authority (“NYPA”) requested that MRP participation rules be changed to “enable participation by NYPA as an EVSE... developer.”⁹ NYPA stated that it plans to use up to \$250 million to deploy 800 DCFC throughout New York by 2025 through its EVolveNY Program,¹⁰ a more than 500 percent increase over the non-proprietary public ports available today. NYPA claimed its projects are consistent with MRP goals to deploy EVSE and would “develop private market expertise”¹¹ in New York because projects are installed by private contractors selected through a competitive process.¹²

ChargePoint appreciates the significant contributions and unique role played by NYPA to advance electric transportation in New York. NYPA’s unique characteristics, which have been put to good use in helping to achieve a variety of State goals, would unfortunately render its participation in the MRP inappropriate.

NYPA explained that it had requested this change because the MRP participation rules exclude “entities that are not private developers.”¹³ NYPA noted that, unlike private developers, it is able to ignore economics when identifying potential sites.¹⁴ Changing participation rules to allow participation by NYPA would create an unlevel playing field in which “existing utility program”¹⁵ investments (*i.e.*, EVolveNY) can be stretched further with ratepayer funds. The Commission can “re-level” the playing field by ensuring that MRP funds are invested in a manner that is consistent with the REV Framework Order and Operational Guidelines.

⁹ NYPA at 2.

¹⁰ *Id.* at 11.

¹¹ *Id.* at 15.

¹² *Id.* at 12-13.

¹³ *Id.* at 4.

¹⁴ *Id.* at 16-17.

¹⁵ NRDC-SC at 15.

Should the Commission approve the request to change MRP participation rules, ChargePoint recommends that NYPA's participation in the MRP be contingent on its adhering to:

- **The Whitepaper's technology-neutral specifications.** This would bring NYPA technology specifications in line with, but not exceeding, those established in the MRP. Examples of the Whitepaper's technology-neutral specifications include payment types and DCFC power level. This would only apply to stations that NYPA deploys through the MRP.
- **REV Framework Order & Operational Guidance:** NYPA site hosts will have (i) choice of two or more options of DCFC hardware and software and (ii) the option to determine the appropriate price for EV charging services to attract drivers, as well as encourage the use of stations in a way that aligns with grid needs and activities onsite. This would only apply to NYPA stations deployed through the MRP.

III. MRP Cost Assumptions and Design

A. Revisions to MRP cost assumptions by the Joint Utilities are consistent with ChargePoint's experience in the EVSE market

Commenters were generally in favor of greater programmatic flexibility to allow for a wider range of capital costs in the MRP. The JU analyzed Staff's capital cost assumptions and proposed two potential alternatives to the originally proposed MRP budget of \$582 million.

- The first scenario identified expected capital costs to deploy all of the L2 and DCFC ports proposed in the Whitepaper, which the JU estimated to be \$1.4 billion.¹⁶
- The second scenario identified the number of ports that could be deployed by maintaining make-ready incentive funding at \$582 million. The JU estimated that the second scenario would deploy 54,595 L2 and 1,895 DCFC, with additional costs for implementation and future-proofing increasing baseline MRP budget to \$730 million.¹⁷

ChargePoint agrees that the original MRP capital assumptions were significantly below what can be expected in the market. Our previously-filed comments included a recommendation for Staff to use more conservative budget estimates (between 125% and 200% of the average capital cost per site),¹⁸ which is consistent with the revised funding levels proposed by the JU.

Commenters diverged on whether, and how, to future-proof MRP deployments. ChargePoint respectfully urges Staff and the Commission to adopt the JU suggestion that these types of costs "be recognized as a separate line item inside the MRP budget...[as] future-proofing expenditures represent additional utility costs that are not tied to the quantity or charging

¹⁶ JU at 11.

¹⁷ Id at 11-12.

¹⁸ ChargePoint Comments at 4.

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capacity of plugs initially installed at a location.”¹⁹ This will allow for program costs to be more effectively tracked and evaluated over the course of each utility’s individual program.

B. The MRP will better achieve State goals by planning for real-world variability and allowing from programmatic flexibility

1. MRP will benefit from earlier midpoint review

Several parties identified the value in establishing an inclusive processes for program oversight.²⁰ ChargePoint would support these, or other, formats, which would allow for regular programmatic review with stakeholder participation and ensure that a midpoint review would take place well in advance of October 1, 2023, as proposed in the Whitepaper.

2. Open recruiting of site host and locations will optimize deployment

Parties were largely in agreement about the best way to determine on-site EVSE needs. The JU noted that, “while utilities will consider load serving capacity and the strategic location ...when assessing a proposal, it should be up to the charging station operators, site hosts, and developers to evaluate their own business opportunities and workable business cases.”²¹ Enel X and the EVSE Industry Stakeholder Coalition provided similar recommendations.²²

ChargePoint agrees that allowing for broad customer engagement by third-party vendors, utilities and by independent site hosts themselves, would be in both customers’ and the public interest. We concur with the JU that, ultimately, charging providers and site hosts are in the best position to determine market opportunities and business cases.

3. Fiscal control mechanisms can improve both transparency and flexibility.

A handful of commenters discussed fiscal control mechanisms in the MRP, namely the maximum incentive level (“MIL”), minimum and maximum ports-per-site, and bundling.

The JU suggested replacing the MIL “with a more flexible program framework, including an overall budget and performance incentives”.²³ We support the JU recommendation, which would allow utilities and developers more leeway in identifying locations that will best meet driver, site host, and grid needs.

ATE recommended relaxing minimum and maximum ports-per-site to allow “developers to do the often-challenging work in finding suitable sites and configuring installations and numbers of

¹⁹ JU at 24.

²⁰ AEEI-ACE at 16; Enel X at 5; Tesla at 6-7

²¹ JU at 31-32

²² Enel X at 4 and EVSE Industry Stakeholder Coalition at 9.

²³ JU at 18.

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ports.”²⁴ The JU proposed an alternative “minimum requirement of two DCFC plugs at a given location [to] better enable multiple kinds of sites with diverse business models to access make-ready incentives.”²⁵ ChargePoint also proposed reducing the minimum deployment to two ports, combined with sufficient make-ready for two additional ports in the future.

Greenlots suggested that, while bundling may not work for all parties, it should remain an option for developers.²⁶ The JU suggested that bundling might more easily be applied at the “utility portfolio level” rather than as a fundamental consideration for every MRP participant.²⁷ While we had expressed concerns that bundling would inadvertently favor certain business models, those concerns would be alleviated by allowing for site-specific capital cost variability.

4. Removing public accessibility requirement will achieve incentive parity.

The Whitepaper identified that 90% of make-ready costs would be covered for publicly-accessible sites and 50% of costs for non-public sites. Commenters broadly agree that aligning incentive levels would better achieve the intended goals of the MRP.

EVBox and AEEI-ACE noted that limiting EVSE incentives based on public accessibility would limit MRP success in reaching workplace and multi-unit dwelling (“MUD”) use cases.²⁸ The City of New York (“NYC”) identified the concern that “free parking does not (and should not) exist in New York City.”²⁹ The JU stated that eliminating the public accessibility restriction “will enable opportunities for a greater range of potential EV drivers and EVSE market participants.”³⁰

Commenters identified that public access restrictions would limit medium- and heavy-duty (“MHD”) fleet electrification. The EVSE Industry Stakeholder Coalition explained that “transforming all classes of vehicles” will be necessary for New York to “meet its climate mandates [and] clean air and environmental justice goals.”³¹ MTA also observed that treating fleet EVSE deployments “the same as publicly accessible Level 2 plugs is further justified by the beneficial cost recovery economics for the utilities.”

ChargePoint agrees the public accessibility requirement will hinder deployment in key use cases. Eliminating public accessibility requirements will provide parity between use cases would align better align incentives with program goals and help to create widespread grid benefits.

5. Greater coordination will strengthen technical specification.

²⁴ ATE at 19

²⁵ JU at 20-21

²⁶ Greenlots at 30.

²⁷ JU at 22.

²⁸ EVBox at 2; AEEI-ACE at 9

²⁹ NYC at 6.

³⁰ JU at 21

³¹ EVSE Industry Stakeholder Coalition at 6.

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a) *Communication protocols*

Staff recommended that “the Commission encourage open communications protocols, open access networks, and interoperability without penalizing proprietary technology types.”³² Staff proposed that a working group would be an appropriate venue evaluate industry standards before incorporating any given standard as baselines for infrastructure programs.

Commenters provided a wide variety of responses to Staff’s recommendation. AEEI-ACE and Enel X generally supported Staff’s proposal.³³ ATE and Greenlots urged the Commission to bypass Staff’s working group and immediately adopt OCPP as a baseline standard, though each provides a conflicting recommendation about the “right” version of OCPP to adopt. NRDC-SC recommended against Staff’s working group and urged the PSC to mandate that all EVSE “actively utilize open access standards for communication of data between the EVSE and the back-end network.”³⁴ (emphasis added).

We agree with AEEI-ACE and Enel X that Staff’s proposed working group would be the appropriate venue to evaluate whether, and when, to adopt standards as baselines for infrastructure programs. The disagreement between Greenlots and ATE about which version of OCPP should be required clearly demonstrates the importance of establishing a thorough vetting in advance of adopting baseline standards, or versions thereof.

ChargePoint disagrees with NRDC-SC, whose proposal reflects a fundamental misunderstanding of the complexity of communication protocols. ChargePoint is a strong supporter of open protocols and we look forward to participating in a New York industry standard working group, should the Commission accept Staff’s proposal. Unfortunately, NRDC-SC’s overly-simplistic suggestion to “direct” every EVSE to “actively utilize” open access standards would raise issues in implementation that are neither identified nor meaningfully addressed in NRDC-SC’s comment. For example, in addition to its various forms, OCPP offers the optionality of *extensions* that have nothing to do with NRDC-SC’s ominously described scenario in which EVSEs are being abandoned by providers that “leave the market.” It would be premature, at best, to accept NRDC-SC’s proposal.

b) *Payment Options*

Stakeholders are largely in agreement with Staff’s proposed requirement that site hosts “enable commonly used forms of payment with a kiosk, a card reader, a site business accepting payment, or a phone number that enables 24-hour card payments without a fee.”³⁵ NRDC-SC emphasize that these types of requirements allow for drivers to access stations regardless of

³² Whitepaper at 53.

³³ AEEI-ACE at 19-20; Enel X at 12.

³⁴ NRDC-SC at 16.

³⁵ Id. at 32.

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membership to a particular charging network.³⁶ AEEI-ACE suggested that the purpose of open access payment requirements is to ensure that anyone who pulls up to a charger can use the charger.³⁷ Greenlots framed open access in terms of (1) no charges for “membership fees” and (2) providing “point-of-sale payment options for charging services.”³⁸

ChargePoint agrees with NRDC-SC, AEEI-ACE, and Greenlots about the importance for EVSE to accept multiple forms of payment without assessing a membership fee. This approach is consistent with Open Access statutes that have been adopted in Connecticut, Massachusetts, New Hampshire, and Vermont.

6. Additional incentives should be targeted and open-ended.

Several commenters recommended that the MRP be amended to support additional incentives for participants that would supplement make-ready installation costs. MTA proposed that MHD garages and depots that are located in Environmental Justice (EJ) areas should receive the same “Strategic Location” designation that Staff proposed for Upstate New York DCFC locations.³⁹ NRDC-SC recommended that 20% of all DCFC in the MRP be deployed within one mile of an EJ community.⁴⁰ Enel X recommended against site preselection for the four Upstate New York REDC deployments to allow for developers to identify best-fit, least-cost solutions.⁴¹ The JU proposed an approach for the Upstate New York REDC deployments that would be jointly administered by utilities and include minimum kW levels based on the Commissions demand charge incentive tiers.⁴²

ChargePoint agrees with MTA’s recommendation to include MHD and fleet electrification components into the MRP, which will increase greater access to the benefits of transportation electrification for customers and residents who do not own EVs. The NRDC-SC proposal could also significantly greatly access to the benefits of the MRP, provided that these deployments were eligible for both public-access (e.g., to support MUD residents) and private-access (e.g., to support passenger fleet vehicles).

ChargePoint agrees with Enel X’s suggestion that REDC deployments would be strengthened by leverage the expertise of the EVSE industry. In response to the JU proposal to establish minimum kW level. We respectfully encourage the JU to allow for flexibility in setting minimum kW thresholds for REDC deployments because setting an arbitrarily high kW power level will increase both capital and operating costs without providing a materially different driving experience

³⁶ NRDC-SC at 3-4

³⁷ AEEI-ACE at 9.

³⁸ Greenlots at 8

³⁹ MTA at 4.

⁴⁰ NRDC-SC at 14.

⁴¹ Enel X at 8.

⁴² JU at 28; Enel X at 8.

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7. Align data sharing requirements with industry best practices

Several parties addressed the need to streamline the Whitepaper's proposed data reporting requirements. Tesla suggested, the as a best practice, to limit "data sharing requirements to categories that inform grid planning and general usage trends," which would provide the Commission and utilities with valuable data without the cost and burden of reporting session-level data.⁴³ Enel X observed that Staff's proposed "data reporting requirements would represent a significant burden...and would go above and beyond the level of information needed to inform program design changes."⁴⁴ The EVSE Industry Stakeholder Coalition suggested an alternative dataset, including number of charging events; number of unique vehicles connected; total kWh dispensed; average kWh per charging event; and average duration of charging events.⁴⁵

ChargePoint appreciates the concerns identified by Tesla, Enel X, and the EVSE Industry Stakeholder Coalition. Data reporting requirements should be sufficiently robust to support meaningful program evaluation and analysis by the Commission, Staff, utilities, and stakeholders. We recommend that the Commission amend MRP reporting requirements to align with the dataset proposed by the EVSE Industry Stakeholder Coalition. This dataset would be detailed analysis, minimize the cost and burden of compliance, and ensure robust protection for sensitive and personally-identifiable information.

IV. Reply Comments on Rate Design and Regulatory Issues

A. Establish sustainable C&I rate design process to advance MRP goals

Many commenters identified New York's commercial and industrial ("C&I") electricity rates as a significant barrier to the deployment of DCFC and greater electrification of the State's vehicle fleets. MTA expressed concern that "current electric rates do not fairly reflect costs associated with the new electric load from electrified fleets."⁴⁶ The EVSE Industry Stakeholder Coalition and Enel X pointed out that optional electricity rates could both mitigate the impact of non-coincident demand charges, which are a significant market barrier, while still reflect cost causation.⁴⁷ NRDC-SC identified time of use energy rates as a potential part of a sustainable solution, whereas AEEI-ACE pointed to "technology neutral low load factor rates" by Dominion Energy and Xcel Colorado as examples for approaches to sustainable rate design that align with the cost to serve DCFC customers.⁴⁸ Finally, Tesla emphasized the urgent need to address rate design in order to ensure the successful implementation of the MRP.⁴⁹

⁴³ Tesla at 7.

⁴⁴ Enel X at 13.

⁴⁵ EVSE Industry Stakeholder Coalition at 13

⁴⁶ MTA at 7

⁴⁷ EVSE Industry Stakeholder Coalition at 5; Enel X at 9.

⁴⁸ NRDC-SC at 9; AEEI-ACE at 24.

⁴⁹ Tesla at 11.

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We share the collective concerns about the impact of C&I electricity rates on the EV charging market and would welcome action by Staff and the Commission to identify sustainable rate design as a near-term priority in this proceeding. In the event that the Commission defers consideration of rate design issues at this time, we respectfully request that the Commission accept ChargePoint's immediate-term recommendation to modify the definition of the Tier 1 incentive in the DCFC per-plug incentive.

Specifically, ChargePoint recommended that the Commission modify the Tier 1 incentive to include "plugs capable of simultaneously charging at or above 75 kW, or plugs capable of independently charging at or above 62.5kW and sharing power to charge one vehicle at or above a combined 125kW."

In our comments, ChargePoint explained that there is little-to-no material difference in the time to charge at a 125kW and 175kW DCFC.⁵⁰ By adopting this recommendation, Staff and the Commission will incentivize DCFC that decrease average MRP deployment costs, accelerate the deployment of a greater number of high-value plugs, and deliver a substantially similar charging experience to drivers.

V. Conclusion

Thank you for the opportunity to provide Reply Comments on Staff's Whitepaper. ChargePoint appreciates Staff's ongoing efforts on the Whitepaper, and in this proceeding, and we look forward to continued collaboration on New York's ambitious Make-Ready Program.

⁵⁰ ChargePoint Comments at 10-11.