

VIA ELECTRONIC FILING

July 17, 2020

Pennsylvania Public Utilities Commission
Attn: Rosemary Chiavetta, Secretary
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg PA 17120

Re: *Docket Number: P-2020-3019522 – Petition of Duquesne Light Company for Approval of Its Default Service Plan for the Period From June 1, 2021 through May 31, 2025*

Dear Secretary Chiavetta,

Attached for electronic filing in the above-referenced manner, please find comments by ChargePoint, Inc. Please let me know if you have any questions.

Respectfully,



Matthew Deal
Manager, Public Policy
ChargePoint

CC: Certificate of Service

I. Introduction

ChargePoint, Inc. (“ChargePoint”) submits the following comments in support of Duquesne Light Company’s (“Duquesne” or “Company”) proposed EV-TOU Pilot Program (“Pilot” or “Pilot Program”) as part of its Default Service Plan.

II. About ChargePoint

ChargePoint is the leading electric vehicle (EV) charging network in the world, with scalable solutions for every charging need and for all of the places that EV drivers go: home, work, around town, and on the road. ChargePoint’s network offers more than 113,000 places to charge, including more than 1,500 spots in Pennsylvania, and those numbers continue to grow. With thousands of customers in several verticals including workplaces, cities, retailers, apartments, hospitals, and fleets, ChargePoint provides an integrated experience enabling consistent performance, efficiency and reliability at every touchpoint whether one is using a mobile app, plugging into a charger, managing the station or analyzing charging data. On the network, drivers have completed more than 79 million charging sessions, saved upwards of 94 million gallons of fuel, and driven more than 2.2 billion electric miles.

ChargePoint delivers scalable solutions that enable businesses to support more drivers, add the latest software features and expand their electric vehicle and fleet needs with minimal disruption to overall business. Hardware offerings include Level 2 (L2) and DC fast charging (DCFC) products, and ChargePoint provides a range of options across those charging levels for specific use cases including light and medium duty and transit fleets, multi-unit dwellings, residential (multi-family and single family), destination, workplace, and more. ChargePoint’s software and cloud services enable site hosts to manage charging onsite with features like Waitlist, access control, charging analytics, and real-time availability. All products are UL-listed, ENERGY STAR® and CE (EU) certified, and the modular design minimizes downtime and makes maintenance and repair more seamless.

ChargePoint’s primary business model consists of selling its smart charging solutions directly to businesses and organizations while offering tools that empower site hosts and station owners to deploy charging designed for their individual application and use case. ChargePoint provides charging network services and data-driven and cloud-enabled capabilities that enable site hosts to better manage their charging assets and optimize services. For example, with those network capabilities, site hosts can view data on charging station utilization, frequency and duration of charging sessions, set access controls to the stations, and set pricing for charging services. These features are designed to maximize utilization and align the EV driver experience with the specific use case associated with the specific site host. Additionally, ChargePoint has designed its network to allow other parties, such as electric utilities, the ability to access charging data and conduct load management to enable efficient EV load integration onto the electric grid.

III. Comments by ChargePoint

A. ChargePoint supports the proposed EV-TOU Pilot

Duquesne has proposed to implement an optional time-of-use (“TOU”) rate Pilot to eligible Residential, Small Commercial & Industrial, and Medium Commercial & Industrial customers who own or lease an EV or offer charging infrastructure to employees or visitors. The TOU rate is designed as a three-part rate with peak, off-peak, and shoulder periods. In addition, the TOU rate is a “whole-premises” rate meaning it will apply to all electric load behind the customer’s meter.¹ According to the Company, offering lower supply rates during off-peak periods, when electricity supply costs are generally lower, will reduce the cost to customers by encouraging them to shift their charging time.²

ChargePoint supports the Company’s proposed optional EV-TOU Pilot. First, this is an optional rate and customers that are unable to shift sufficient load to off-peak hours have the ability to remain on their existing rate. However, while not all energy use can be shifted under a whole-premises TOU rate, lower prices during off-peak periods encourage customers to change their behavior by shifting flexible energy use, such as EV charging, to off-peak periods – times that are most beneficial for the grid thus, providing an opportunity to reduce energy costs. Second, the Company has designed the rate such that there is a meaningful difference between the peak, shoulder, and off-peak periods, which will incentivize customers to shift their energy use, including EV charging, to off-peak periods. This not only has the benefit of saving customers money, it also increases overall grid utilization, providing benefits to all Duquesne customers, not just those participating in the Pilot.

Further, TOU pricing is an important tool to encourage consumers to change their charging behavior so that it aligns with grid system needs.³ Incentivizing EV charging to take place during off-peak periods through TOU rates can lead to increased utilization of existing utility assets and avoid the need for additional capacity and grid infrastructure. Demands on all aspects of the electric system (generation, transmission, and distribution) vary with time. The addition of new load during off-peak hours can result in the wider distribution of fixed costs across customers, leading to lower rates for all customers.⁴ If TOU rates successfully move significant amounts of EV load to off-peak hours, increased EV adoption puts downward pressure on rates leading to benefits for all customers, not just those participating in the Pilot.

B. ChargePoint offers two recommendations for future consideration

ChargePoint strongly supports efforts to ensure that the development of Pennsylvania’s EV charging market takes place in a manner that benefits the grid and all ratepayers. Utility rate design is an effective tool for incentivizing off-peak EV charging. However, in order to ensure that load from EVs creates net

¹ Direct Testimony of Katherine M. Scholl, pp. 19 -20.

² *Id.*, p 21.

³ ChargePoint notes that TOU rates may not be a perfect application for certain publicly available charging stations that are used by EV drivers that cannot adjust their usage to avoid the impact of higher priced TOU time periods.

⁴ NARUC, Electric Vehicles: Key Trends, Issues, and Considerations for State Regulators, at 21 (Oct. 2019) (“NARUC EV White Paper”), available at <https://pubs.naruc.org/pub/32857459-0005-B8C5-95C6-1920829CABFE> (citing Jones et al. “The Future of Transportation Electrification: Utility, Industry and Consumer Perspectives,” Lawrence Berkeley National Laboratory (2018), at http://eta-publications.lbl.gov/sites/default/files/feur_10_transportation_electrification_final_20180813.pdf).

benefits for Duquesne’s customers, ChargePoint respectfully recommends the Commission and the Company consider implementation of EV-specific rates through embedded metering in EV chargers, as well as broader EV load management options at its disposal to ensure that the increased adoption of EVs leads to beneficial load growth across the grid.

1. Background on embedded metering

Utility commissions traditionally require the installation of separate utility meters to implement EV-specific TOU rates. However, jurisdictions around the country are increasingly determining that such requirements inadvertently limit the achievement of load management goals due to the added extra cost of separate utility meters and the limited ability to support active demand response. For example, the Minnesota Public Utilities Commission has required utilities to evaluate "options to reduce the upfront cost burden for customers looking to opt into [EV- specific tariffs] and a discussion of sub-metering technologies available."⁵

There are a range of methods available on the market that can facilitate the implementation of EV-specific rates without the added cost of secondary utility meters or sub-meters. Smart, or networked, EV charging stations enable load analysis and management, facilitate demand response and load control programs, and directly implement EV-specific TOU rates.

Networked charging stations can feature embedded energy meters, using two-way communications to transmit that data to a central service hosted by the EV networking service company. Many currently-available EV charging solutions have substantially the same metering capabilities as traditional utility meters. For example, ChargePoint's single-family residential charging station, ChargePoint Home, meets or exceeds the requirements set forth in the electricity-as-motor-fuel sections of NIST Handbooks 44 (device code)⁶ and meet the accuracy requirements of ANSI C12.1-2008 (1% class) as applied to embedded EVSE metering.

EV charging data can be accessed and merged with a utility's meter data management systems to associate the smart charger's load with utility meters and specific customers for tracking or billing purposes. The same platform and network can provide the necessary load management signals to control chargers.

2. EV-only TOU rates

In its Application, the Company states that, “[d]uring the pilot program, the EV-TOU rates would apply to all load associated with the applicable meter, not just the EV load. This would avoid the need to purchase and install a separate meter.”⁷ Embedded metering in EV chargers allows utilities to implement TOU rates focused on EVs and eliminates the need for a customers’ entire premises to be subjected to the rate. A TOU rate that applies only to EV load could be more attractive to customers, especially those unable to shift a majority of load at their premises, and therefore shift more flexible EV charging load to off-peak

⁵ Minnesota Public Utilities Commission Docket Nos. M-15-111, M-15-112, M-15-120: *Order Accepting 2017 Annual Reports And Establishing Requirements For Next Annual Reports*.

⁶ NIST Handbook 44 Section 3.40.

⁷ Direct testimony of David B. Ogden, p. 17.

periods further increasing utilization of the grid and providing greater benefits to all customers in Duquesne's territory. ChargePoint recommends the Commission and the Company consider future programs utilizing embedded metering to implement EV-specific TOU rates.

3. Menu of load management options

ChargePoint would also respectfully recommend that, in future proceedings, a larger menu of load management options be considered. In addition to EV-specific rates/tariffs, the Commission and the Company should consider active managed charging programs, which enables a centralized entity or the customer to take direct control of charging load. By taking direct control over charging load, a utility or aggregator can start, limit or stop the rate of charge temporarily during times of high demand without materially impacting overall EV charging. When applied over an EV fleet or other aggregated group of EVs, this load management technique can provide significant system benefits as well as system-wide cost savings. Networked charging stations and cloud services provide the ability for EV charging site hosts to conduct load management in real time. Load management events can be scheduled to expire after a period of time, returning the equipment to normal maximum power output, or the event can be immediately rescinded at any time. Demand response events can be programmed to occur for individual charging ports or any desired groups of ports. EV time-of-use rates can serve as a bridge between passive and active managed charging options by showing customers how, in exchange for providing grid benefits by controlling their charging, they can save money

IV. Conclusion

ChargePoint appreciates the opportunity to provide these comments in support of Duquesne's EV-TOU Pilot Proposal and stands ready to provide any additional information at the Commission's request.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Duquesne Light Company :
For Approval of its Default Service Plan : P-2020-3019522
for the Period June 1, 2021 through May 31, 2025 :

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true copy of the foregoing document upon the following parties by electronic mail.

Honorable Mark A. Hoyer
Deputy Chief Administrative Law Judge
Pennsylvania Public Utility Commission
400 North Street, 2nd Floor
Commonwealth Keystone Building
Harrisburg, PA 17120
mhoyer@pa.gov

John F. Lushis, Jr.
Norris McLaughlin, P.A.
515 W. Hamilton Street
Suite 502
Allentown, PA 18101
jlushis@norris-law.com

For Calpine Retail Holdings LLC

Mark Szybist
Natural Resources Defense Council
1152 15th Street, NW
Washington, DC 20005
mszybist@nrdc.org

James Laskey
Norris McLaughlin, P.A.
400 Crossing Blvd., 8th Floor
Bridgewater, NJ 08807
jaskey@norris-law.com

For Calpine Retail Holdings LLC

For NRDC

Richard Kanaskie
Scott B. Granger
Bureau of Investigation & Enforcement
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
PO Box 3265
Harrisburg, PA 17105-3265
rkanaskie@pa.gov
sgranger@pa.gov

David T. Evrard
Aron J. Beatty
Office of Consumer Advocate
555 Walnut Street Forum Place, 5th Floor
Harrisburg, PA 17101-1923
DEvrard@paoca.org
ABeatty@paoca.org

Sharon E. Webb
Assistant Small Business Advocate
Office of Small Business Advocate
555 Walnut Street, 1st Floor
Harrisburg, PA 17101
swebb@pa.gov

Gregory Peterson
Phillips Lytle LLP
201 W 3rd Street, Suite 205
Jamestown, NY 14701
gpeterson@phillipslytle.com

*For Statewise Pennsylvania LLC & SFE Energy
Pennsylvania Inc.*

Thomas F. Puchner
Phillips Lytle LLP
Omni Plaza
30 South Pearl Street
Albany, NY 12207
tpuchner@phillipslytle.com

*For Statewise Pennsylvania LLC & SFE Energy
Pennsylvania Inc.*

Michael Zimmerman
Tisheka Williams
Emily M Farah
Duquesne Light Company
411 Seventh Avenue 15th Floor
Pittsburgh PA 15219
twilliams@duqlight.com
mzimmerman@duqlight.com
efarah@duqlight.com

Charles E. Thomas, Jr.
Thoms Niesen & Thomas, LLC
212 Locust Street
Suite 302
Harrisburg, PA 17101
cthomasjr@tntlawfirm.com

For MAREC Action

Elizabeth R. Marx
John Sweet
Ria Pereira
Pennsylvania Utility Law Project
118 Locust Street
Harrisburg, PA 17101
pulp@palegalaid.net

For CAUSE-PA

Todd S. Stewart
Hawke McKeon & Sniscak, LLP
100 North Tenth Street
Harrisburg, PA 17101
tsstewart@hmslegal.com

For EGS Parties

Kevin C. Blake
Phillips Lytle LLP
125 Main Street
Buffalo, NY 14203
kblake@phillipslytle.com

*For Statewise Pennsylvania LLC & SFE Energy
Pennsylvania Inc*

Michael W. Gang
Anthony D. Kanagy
Post & Schell, P.C.
17 North Second Street
12th Floor
Harrisburg, PA 17101
mgang@postschell.com
akanagy@postschell.com

For Duquesne Light Company

Bruce H. Burcat
MAREC Action
PO Box 385
Camden, DE 19934
marec.org@gmail.com

For MAREC Action

Henry McKay, Program Director
Solar United Neighbors of PA
327 Whipple Street
Pittsburgh, PA 15218
henry@solarunitedneighbors.org

Brian Kalcic
Excel Consulting
225 S. Meramec Avenue
Suite 720T
St. Louis, MO 63105
Excel.consulting@sbcglobal.net

Witness for OSBA

James Van Nostrand
Keyes & Fox LLP
275 Orchard Drive
Pittsburgh, PA 15228
jvannostrand@keyesfox.com

Date: July 17, 2020

Harry S. Geller
118 Locust Street
Harrisburg, PA 17101
hgellerpulp@palegalaid.net

Witness for CAUSE-PA

Barbara R. Alexander
Barbara Alexander Consulting, LLC
83 Wedgewood Drive
Winthrop, ME 04364
barbalexand@gmail.com
barbalex@ctel.net

Witness for OCA

Emily Collins
Andrew Karas
Fair Shake Environmental Legal Services
647 E. Market Street
Akron, OH 44304
ecollins@fairshake-els.org
akaras@fairshake-els.org

/s/ Alicia Zaloga _____
Alicia Zaloga
KEYES & FOX LLP
1155 Kildaire Farm Road, Ste. 202-203
Cary, NC 27511
Tele: (919) 825 – 1739
Email: azaloga@keyesfox.com