

STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION

At a session of the Public Service  
Commission held in the City of  
Albany on November 15, 2018

COMMISSIONERS PRESENT:

John B. Rhodes, Chair  
Gregg C. Sayre  
Diane X. Burman, concurring  
James S. Alesi

CASE 18-E-0206 - Tariff filings to Effectuate the Provisions of  
Public Service Law Section 66-o (Residential  
Electric Vehicle Charging Tariff).

ORDER REJECTING TARIFF FILINGS AND DIRECTING TARIFF REVISIONS

(Issued and Effective November 15, 2018)

BY THE COMMISSION:

INTRODUCTION

Public Service Law (PSL) §66-o, effectuated through Chapter 337 of the Laws of New York 2017, required New York's investor owned electric utilities to file an application with the Public Service Commission (Commission) to establish residential tariffs for eligible electric vehicle (EV) charging by April 1, 2018 and to periodically report on the number of customers served, total amount of energy delivered, and other data the Commission requires. On March 29, 2018, Central Hudson Gas & Electric Corporation (Central Hudson) filed tariff amendments to address PSL §66-o. On March 30, 2018, New York State Electric & Gas Corporation (NYSEG) and Rochester Gas and Electric Corporation (RG&E) also filed tariff amendments to address PSL §66-o. Niagara Mohawk Power Corporation d/b/a National Grid (National Grid), Consolidated Edison Company of

New York, Inc. (Con Edison) and Orange and Rockland Utilities, Inc. (O&R) filed letters stating that their tariffs already comply with PSL §66-o.<sup>1</sup> By this Order, the Commission directs Central Hudson, NYSEG and RG&E to file cancellation supplements cancelling their tariff filings. The Commission also directs each of the investor owned electric utilities to: 1) file tariff amendments as described in the body of this Order, and 2) provide annual reports as described in the body of this Order.

#### BACKGROUND

PSL §66-o was enacted on October 23, 2017 and stated that no later than April 1, 2018 each investor owned electric utility shall file an application with the Commission to establish a residential tariff for the recharging of eligible vehicles. The law also requires periodic reporting to the Commission, on the number of customers and energy delivered under the tariff. The purpose of the law is to provide greater incentives for the ownership of electric vehicles and encourage grid-responsible charging times. The Commission anticipates that these residential-only tariffs will build upon the already available time-of-use (TOU) rates that provide EV-owners incentives and benefits to charge during off-peak hours.<sup>2</sup>

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<sup>1</sup> In its letter filing, O&R indicated that in its January 26, 2018 electric base rate filing, Case 18-E-0067 (O&R 2018 Rate Filing), the Company proposed implementation of two tariff provisions - Special Provisions C and D under the Company's residential voluntary time-of-use service classification, S.C. No. 19 which comply with the requirements of PSL §66-o.

<sup>2</sup> Case 18-E-0138, Proceeding on Motion of the Commission Regarding Electric Vehicle Supply Equipment and Infrastructure, Order Instituting Proceeding (issued April 24, 2018).

TARIFF FILINGS

Central Hudson proposes Special Provision 6.5 within Service Classification (S.C.) No. 6 - Residential Time-of-Use Service for customers with an eligible EV. Under Special Provision 6.5, customers who register a EV and go on the residential TOU rate for their entire load will receive a bill guarantee for a period of one year. The 12-month period will commence with the first meter reading after the EV is registered. The comparison for the price guarantee will be made on a total bill basis for full service customers and on a delivery-only basis for customers taking retail access service. Following the initial year, the customer will receive a credit for any difference between what the customer paid under S.C. 6 and what the customer would have paid under standard residential rates.

NYSEG proposes Special Provision P Plug-In Electric Vehicle within its S.C. No. 8 - Residential - Day Night Service for customers with an eligible EV. NYSEG proposes that customers may take service under Special Provision P for their entire load or for only the load associated with the EV charger. If a customer goes on Special Provision P for EV Charing only, the customer must install a separate meter. Customers that elect to take service for their entire load under Special Provision P will be eligible for a one-time price guarantee. The comparison for the price guarantee will be made on a delivery bill basis for full service customers and for customers taking retail access service. Following the initial year, the customer will receive a credit for the difference in delivery service bills that the customer paid under Special Provision P and what the customer would have paid under standard residential rates.

RG&E proposes a new Special Provision (11) Plug-In Electric Vehicles within its S.C. No. 4 - Residential Service - Time-of-Use Rate for customers with eligible EVs. Special Provision (11) is the same as NYSEG's Special Provision P described above.

Con Edison states, in its filing letter, that Special Provision E and Special Provision F under its S.C. No. 1 - Residential and Religious already satisfy the requirements of PSL §66-o. Under Special Provision E, residential customers who take service under the residential and religious voluntary time-of-day rate that register an EV receive a price guarantee for a period of one year. Under the price guarantee, the customer will receive a credit between what the customer paid and under Special Provision E what the customer would have paid under traditional residential rates, if warranted. The comparison will be made on a total-bill basis for full-service customers and on a delivery-only basis for retail access customers. Under Special Provision F, a customer who has a residential/religious account, or a residential tenant or occupant in a building served under another service class, may take service under a separate account, billed under the voluntary time-of-day rate, for the sole purpose of charging an EV. Customers taking service for such purpose will not be eligible for the price guarantee described in Special Provision E. In addition to these two provisions, Con Edison also states that it has established other EV-related programs such as the SmartCharge New York Program and the Business Incentive Rate Program.

O&R states similarly, in its filing letter, that Special Provision C and Special Provision D under S.C. No. 19 - Residential Voluntary Time of Use Service comply with PSL §66-o. O&R's Special Provisions C and D are similar to Con Edison's Special Provisions E and F described above.

Finally, National Grid states, in its filing letter, that Special Provision L under its S.C. No. 1 - Residential Optional Time-of-Use Delivery and Commodity Rate satisfies PSL §66-o. Customers who elect to receive service under Special Provision L are required to install the metering necessary to obtain service. Under Special Provision L, customers who register an EV and go on the residential TOU rate for their entire load will receive a bill guarantee for a period of one year. After the initial one-year term, verified EV owners under this provision will have a one-time option to receive a bill comparison of the charges under Special Provision L and what they would have paid under the S.C. No. 1 standard tariff. If this comparison indicates that the customer would have paid less on the S.C. No. 1 standard tariff rate, National Grid will provide the customer a refund of the difference. With respect to the data requirements of PSL §66-o, National Grid proposes to file annually with the Commission: how much electricity the customers on the tariff are consuming for their EV charging; an estimate of how many EVs are in the Company's service territory; and any future plans for EVs that would encourage further adoption or lower the cost of sub-metering their load.

NOTICES OF PROPOSED RULE MAKING

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), Notices of Proposed Rulemaking were published in the State Register on April 25, 2018 [SAPA Nos. 18-E-0206SP1, 18-E-0206SP2 and 18-E-0206SP3] and May 2, 2018 [SAPA Nos. 18-E-0206SP4, 18-E-0206SP5 and 18-E-0206SP6]. The time for submission of comments pursuant to the Notices expired on June 25, 2018 and July 2, 2018, respectively. Joint comments were received from Natural Resources Defense Council (NRDC), Sierra Club, Pace Energy and Climate Center (Pace), Plug In

America, and EVBox Inc. (EVBox) (together known as the Parties) on July 2, 2018.

COMMENTS

In their comments, the Parties recommend that the Commission modify the investor owned utilities' (IOUs) tariff proposals to reduce the customer costs associated with adopting whole-home or EV-only TOU rates. The Parties indicate this would allow for the opportunity to realize meaningful fuel cost savings relative to default electric rates if drivers charge in a manner beneficial to the grid. The Parties provided their recommendations based on a report by Synapse Energy Economics (Synapse report).<sup>3</sup>

Regarding on-peak and off-peak time periods, the Parties state that the on-peak periods should be shortened to three to five hours to align with the actual peak hours of the New York Independent System Operator (NYISO). The Parties state that the 2017 average locational marginal prices show peak periods of only 3 hours. The Parties also indicate that IOUs may also want to offer super-on peak (such as Con Edison's super-peak 2pm-6pm summer period) or super off-peak periods to send robust price signals that encourage charging to occur at times most beneficial to the grid. For pricing, the Parties recommend IOUs adopt a 2:1 ratio for on-peak to off-peak pricing at minimum. The Parties state, the IOUs' pricing differentials must be expanded to encourage customer enrollment and generate maximum savings through off-peak charging.

Regarding separate meter and sub-metering costs, the Parties state that the expense associated with a separate/sub-meter installation will likely deter the majority of EV

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<sup>3</sup> Melissa Whited, et al., Driving Transportation Electrification Forward in New York, Synapse Energy Economics, Inc. (June 25, 2018).

customers from adopting the new tariff and that if EV owners are responsible for additional metering costs, the EV TOU rate should be set up in a way that enables costs to be recouped in a reasonable time. Additionally, the Parties state that incremental customer charges for switching to TOU rates or EV-only rates should be minimized as much as possible.

Finally, the Parties recommend that the Commission collect data on number of customers on whole-home versus EV only rate, number of customers opting to leave the TOU rate, aggregated load profiles of EV users, monthly average energy usage and demand associated with EVs, cost to integrate EV into the grid, TOU outreach and education activities and budgets, and any lessons learned from marketing TOU to EV owners that will improve stakeholders' understanding of the effectiveness of the tariffs in achieving their desired impact.

#### LEGAL AUTHORITY

Pursuant to Public Service Law (PSL) §§ 5, 65(1) and (8), and 66(1) and (12), the Commission has the legal authority to review these proposed tariff leaves required by PSL § 66-o. The Commission may modify, reject or approve such filed tariffs. As such, the Commission has the legal authority to review the Company's filing and approve and make effective tariff amendments, as prescribed in this Order.

#### DISCUSSION AND CONCLUSION

##### On/Off Peak Period

In order to prevent strains on utility systems, charging EVs should not coincide with peak demand periods. Charging during off-peak periods increases the use of underutilized system capacity. The Parties advocate to shorten the residential TOU on-peak periods to 3-5 hours to align with

NYISO's actual peak hours. However, most home charging needs can be accomplished within an 8-hour period, and the Parties acknowledge that IOUs' off-peak periods are sufficient to accommodate EV charging. The current off-peak periods encourage EV owners to charge during off-peak periods, as opposed to avoiding charging during a short super-peak period. The off-peak periods, as shown in the table below, are adequate for EV charging and need not be modified now.

Company	Residential TOU Service Class	Off-Peak Period
Central Hudson	S.C. No. 6	7 p.m. to 2 p.m.
Con Edison	S.C. No. 1 rate III	Midnight to 8 a.m.
ORU	S.C. No. 19	11 p.m. to 7 a.m.
NiMo	S.C. No. 1 Special Provision L	11 p.m. to 7 a.m.
NYSEG	S.C. No. 8	11:30 p.m. to 7 a.m.
RG&E	S.C. No. 4	9 p.m. to 7 a.m.

Advanced Meter Infrastructure (AMI) will allow greater flexibility in designing TOU rates with super-peak periods, but AMI has only begun to be deployed in New York. Additionally, various rate design options for a Mass Market Net Energy Metered Successor Rate are being evaluated by the Value of Distributed Energy Resources (VDER) Working Group Regarding Rate Design. By the end of 2018, Department of Public Service Staff is obligated to issue recommendations for consideration by the Commission. The VDER tariff may provide better incentives for grid-responsible charging and possible injections by EVs into the grid. Parties will have an opportunity to comment on that proposal consistent with the requirements of SAPA before consideration and action by the Commission.



Residential TOU Rates - Customer Charges

Under existing New York electric utility tariffs, residential TOU rates contain a higher customer charge than the traditional residential rate. Current residential customer charges for each utility are as follows:

Company	Monthly Residential Customer Charge	
	Traditional	TOU
Central Hudson	\$21.00	\$24.00
Con Edison	\$15.76	\$19.87
ORU	\$20.00	\$32.00
National Grid	\$17.00	\$17.00 - Customer \$ 3.36 - Incremental \$20.36 - Total
NYSEG	\$15.11	\$17.40
RG&E	\$21.38	\$21.38 - Customer \$ 3.98 - Meter \$25.36 - Total

The incremental customer charge associated with TOU rates can deter EV customers from adopting the TOU tariff and can impact a customer's decision as to whether to purchase an EV. Minimizing such costs will lower barriers for customers to adopt TOU rates.

In most instances, the incremental customer charge is associated with the additional cost of a TOU meter. As noted by the Parties, incremental customer charges should be fair and reasonable. Most New York electric utilities have plans to deploy AMI throughout their service territories. Once AMI is approved by the Commission and deployment is complete customer charges for residential TOU classes should be equal to

traditional residential customer charges since AMI meters are capable of measuring energy consumption in different time periods without the need of a special TOU meter.

To encourage TOU rate adoption by EV owners, each investor owned electric utility is required to file tariff revisions for residential customers with registered EVs that take service under residential TOU rates such that the TOU customer charge will be equal to the traditional residential customer charge. For utilities with residential TOU rates that contain incremental meter charges as opposed to increased customer charges, such as National Grid and RG&E, residential customers with qualifying registered EVs that take service under residential TOU rates shall not be subject to the incremental charge. Each of the investor owned electric utilities are required to file tariff revisions to address these modifications.

As discussed in the Synapse Report, "nearly all utility service territories, the whole-house TOU rate would generate positive fuel cost savings relative to a typical new gasoline-powered vehicle. However, when compared to a standard hybrid vehicle, such as a Toyota Prius, EV fuel savings largely disappear." The reduction in customer charges for EV owners that go on the residential TOU rate for whole-house load will provide EV owners with fuel cost savings. The investor owned electric utilities are allowed to defer the revenue requirement associated with the incremental cost of the TOU meters.

#### Residential TOU Rates for Sole Purpose of EV Charging

The Synapse Report offers recommendations to increase fuel cost savings for EV owners, including reducing or eliminating the customer charge for second meters, and explore submetering as a means to lower the cost for EV-only rates. While "(c)ustomers may prefer an EV-only TOU rate to a whole-

house rate because it is much easier for customers to monitor and control the timing of EV charging than the use of other appliances in the home" EV only TOU rates will not properly influence EV owner demands as a whole. Cost allocation and rate design principles are ideally load agnostic.

Con Edison and O&R allow residential customers (or a residential tenant or occupant in a building served under another S.C.) to take service under a separate account using the residential TOU rate for the sole purpose of charging an EV. National Grid and Central Hudson tariffs allow residential customers to take service under a separate account using the residential TOU rate for the sole purpose of charging an EV. NYSEG and RG&E propose tariff provisions that would allow customers to take TOU service strictly for EV charging using a separate meter. However, such customers would be required to pay significant upfront costs.

While the tariff provisions of Con Edison, O&R, National Grid, and Central Hudson require customers to pay an additional customer charge, which may dissuade customers from separately metering EV load, they provide the companies with appropriate cost recovery of investments to serve such customers. NYSEG and RG&E shall modify their tariffs and allow residential customers to take service, under a separate account, using the residential TOU rate for the sole purpose of charging an EV, similar to the other electric and gas companies. Such customers shall be subject to an additional customer charge.

Residential customers served under the residential TOU rate for the sole purpose of EV charging are not to be eligible for the bill guarantee described below. Customers using the TOU for the EV charger only should be able to determine if the tariff will provide savings for them without the need of the bill guarantee.

Price Guarantee

The current and proposed tariffs provide for a one-year price guarantee for residential customers that register a qualified EV and go on the TOU rate for their entire load. This guarantee is meant to encourage customers to try the rate without risk. Under this guarantee, the customer will receive a credit for the difference, if any, between what the customer paid under the TOU rate and what the customer would have paid under the standard rate, so long as the TOU rate was proven to be higher than the standard rate. For Central Hudson, Con Edison, National Grid and O&R, the comparison between the two rates will be made on a total bill basis for full-service customers and on a delivery-only basis for retail access customers. NYSEG and RG&E propose the comparison be made on a delivery bill basis for full-service customers and for retail access customers. National Grid excludes the incremental customer charge of \$3.36 per month and the new hedge adjustment component of the Electricity Supply Reconciliation Mechanism from the credit.

In order to provide full service customers with adequate bill protection, the price guarantee shall be made on the total bill for such customers. NYSEG and RG&E are required to revise their tariffs accordingly.

Annual Reporting Data to be Provided

PSL §66-o requires each investor owned electric utility to periodically report:

- (a) the number of customers who have arranged to have electricity delivered under the tariff;
- (b) the total amount of electricity delivered under the tariff; and
- (c) other data required by the Commission.

National Grid proposes an annual reporting period for consistency with its reporting commitment on its Earnings Adjustment Mechanisms, where such annual reports will be filed no later than March 1 beginning in 2019, and proposes to file the following: how much electricity the customers on the tariff are consuming for their EV charging, an estimate of how many EVs are in its service territory, and any future company plans for EVs that would encourage adoption or lower the cost of sub-metering their load. NYSEG and RG&E also propose to report annually, the number of customers and usage for customers taking service under its' special provisions.

As summarized earlier, the Parties recommend that the Commission collect data on many items including: number of customers on whole-home versus EV only rate, number of customers that stop taking service under the TOU rate, aggregated load profiles of EV users, monthly average energy usage and demand associated with EVs, cost to integrate EV into the grid, TOU outreach and education activities and budgets, and any lessons learned from marketing TOU to EV owners. Since it is likely that few EV owners will take TOU service strictly for charging, aggregated load profiles and monthly average energy usage and demand associated with all EVs will not be readily available to the utilities. Each investor owned electric utility shall provide an annual report containing: the number of customers who have arranged to have electricity delivered under the special provisions mentioned above; the total amount of electricity delivered under the special provisions mentioned above; an estimate of how many EVs are in their service territories; and any future company plans for EVs.

The Commission orders:

1. Central Hudson Gas & Electric Corporation, New York State Electric & Gas Corporation and Rochester Gas and Electric are directed to file a cancellation supplement, effective on not less than one day's notice, on or before November 28, 2018, cancelling the tariff amendments listed in the Appendix.

2. The requirements of Public Service Law §66(12) (b) and 16 NYCRR §720-8.1 as to newspaper publication for the proposed changes directed in Clause No. 1 are waived.

3. Central Hudson Gas & Electric Corporation, New York State Electric & Gas Corporation, Orange and Rockland Utilities, Inc. and Rochester Gas and Electric Corporation are directed to file tariff amendments consistent with the discussion in the body of this Order on not less than 90 days' notice, to become effective on April 1, 2019.

4. Consolidated Edison Company of New York, Inc. and Niagara Mohawk Power Corporation d/b/a National Grid are directed to file tariff amendments consistent with the discussion in the body of this Order regarding residential Time Of Use rates customer charges on not less than 90 days' notice, to become effective on April 1, 2019.

5. The requirements of Public Service Law §66(12) (b) and 16 NYCRR §720-8.1 as to newspaper publication for the proposed changes directed in Clauses 3 and 4 are not waived.

6. 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 file, 30 days following the end of each calendar year commencing with the calendar year 2019, an annual report, as described in the body of this Order.

7. In the Secretary's sole discretion, the deadlines set forth in this order may be extended. Any request for an extension must be in writing, must include a justification for the extension, and must be filed at least one day prior to the affected deadlines.

8. This proceeding is continued.

By the Commission,

(SIGNED)

KATHLEEN H. BURGESS  
Secretary

