JOINT UTILITIES

IMMEDIATE SOLUTIONS PROGRAM DESIGN

Filed March 20, 2023

Case 22-E-0236

Pursuant to New York Public Service Commission's January 19, 2023 *Order Establishing Framework for Alternatives to Traditional Demand-Based Rate Structures*

Contents

0. Introduction

0.1 Background and Summary of Order

The New York Public Service Commission's ("PSC") January 19, 2023 *Order Establishing Framework for Alternatives to the Traditional Demand-Based Rate Structure* ("Order")[1] adopted a suite of operating cost relief solutions for commercial electric vehicle (EV) charging customers. The Order directed the Joint Utilities (JU)[2] to file an Immediate Solution implementation plan on March 20, 2023 (60 days after issuance of the Order) and a Near-term Solution proposal on July 18, 2023 (180 days after issuance of the Order).[3] The Immediate Solution included, for the Upstate Utilities,[4] a Demand Charge Rebate (DCR) for all commercial EV charging use cases; for the Downstate Utilities,[5] a Commercial Managed Charging Program (CMCP) with use-case specific adders for transit and public Level 2 (L2) charging, and a 50 percent DCR for public Direct Current Fast Charging (DCFC) sites; and for all utilities, terminating the existing Per-Plug Incentive (PPI) program for new applicants and redeploying those funds for demand management technology incentives.[6]

This document describes the Immediate Solutions operating cost relief programs as well as related plans regarding existing operating cost relief programs. This filing specifically includes: (1) the JU plan to establish a 50 percent DCR; (2) the Downstate Utilities' CMCP and associated adder incentives; (3) a transition plan to terminate the PPI Program for DCFCs, and the treatment of funds made available from this action; (4) the termination of the EV Quick Charging Station Program component of Con Edison's Business Incentive Rate (BIR); and (5) future reporting requirements.

Specific implementation plans for these programs and associated draft tariff leaves required by the Order will be provided separately in utility specific filings.

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[1] Case 22-E-0236, Proceeding to Establish Alternatives to Traditional Demand-Based Rate Structures for Commercial Electric Charging, *Order Establishing Framework for Alternatives to Traditional Demand-Based Rate Structures* (Issued January 19, 2023).

[2] The Joint Utilities are Central Hudson Gas & Electric Corporation (Central Hudson), Consolidated Edison Company of New York, Inc. (Con Edison), New York State Electric & Gas Corporation (NYSEG), Niagara Mohawk Power Corporation d/b/a National Grid (National Grid), Orange and Rockland Utilities, Inc. (O&R), and Rochester Gas and Electric Corporation (RG&E).

[3] For a Near-term Solution, the Order directed the JU to develop and implement an electric vehicle (EV) Phase-in Rate, including a CMCP for the Upstate Utilities. The Order specifies that the DCR and use-case-specific adders will be offered to customers until an EV Phase-In Rate is available to customers, while the Commercial Managed Charging Program (CMCP) will continue to be offered after the EV Phase-In Rate Solution is available.

[4] The Upstate Utilities are Central Hudson, NYSEG, National Grid, and RG&E.

[5] The Downstate Utilities are Con Edison and O&R.

[6] The Joint Utilities requested and received a 60-day extension, until May 19, 2023 to file a demand management technology program. Case 22-E-0236, *Proceeding to Establish Alternatives to Traditional Demand-Based Rate Structures for Commercial Electric Vehicle Charging.* Ruling on Extension Request (issued March 8, 2023).

1. Demand Charge Rebate

As required by the Order, the DCR will be available to eligible stations until the EV Phase-in Rate is implemented.

1.1 Rebate Eligibility Based on Customer Rate and Station Type

1.1.1 Upstate Utilities' Rebate Program

The rebate will be available to all commercial charging customers under Service Classifications outlined in each utility's implementation plans. Customers participating in the PPI program will not be eligible for the rebate.

1.1.2 Downstate Utilities' Rebate Program

The rebate will be available to publicly accessible DCFC charging stations under Service Classifications outlined in Con Edison and O&R's implementation plan. Customers participating in the PPI program will not be eligible for the rebate.

1.1.3 Rebate Eligibility for Stations with Co-mingled Non-EV Load for All Utilities

The JU will compute a Charging Ratio (CR) for sites with non-EV load co-mingled with EV load to determine customer eligibility for the DCR. To be eligible for the DCR, a customer's CR must be 50 percent or greater. The CR is the ratio of a customer's maximum potential simultaneous EV charging load (sum of the nameplate of all EV chargers on the customer account, or the maximum load of any load limiting hardware, such as a fused switch or rectifier cabinet, if the amount is less than the sum of the EV charger nameplates) to the customer's maximum potential connected load, including all EV charging and all non-EV load (sum of the maximum potential connected load of all other customer loads behind the meter (or account level for accounts with multiple meters) including, but not limited to, EV charging, lighting, HVAC, elevators, etc). The customer's maximum potential load will be defined by the customer's load letter generated as part of new or additional electric service request. As described further in the utility implementation plans, the customer may be required to provide an updated load letter to establish eligibility for the program if the load letter on file is outdated. The CR computation will be updated when a customer makes any changes to their loads, i.e., EV charging load, non-EV loads, or both.

1.2 Rebate Calculation and Payment

The rebate will be applied to the applicable portion of the delivery part of the customer bill. Based on the Order, the DCR for eligible customers will be calculated as the product of: (1) the actual kilowatt (kW) demand for the billing period, (2) the customer's CR, (3) the 50% rebate level, and (4) the applicable demand rate. Each utility's implementation plan, including the associated tariff leaves, explain this rebate computation. The JU will provide this rebate to each eligible customer in a manner that allows customers to clearly see that they are receiving a rebate and easily identify the amount of the rebate they are receiving each rebate period (e.g., monthly or quarterly). In order to implement this rebate plan in the timeframe required, each utility may take a different approach for providing the rebate to customers, which will be described in each utility's implementation plan.

2. Downstate Commercial Managed Charging Program

2.1 Downstate Program Overview

The Downstate Utilities' CMCP will provide operating cost relief to all commercial EV charging sites while also encouraging grid beneficial behavior. Any commercial charging customer, except for those participating in the PPI program, will be eligible for CMCP. Incentive levels will vary depending on charging use case.

2.1.1 Core Incentives

CMCP incentives include two components that encourage station operators to reduce EV charging during peak periods and increase EV charging during overnight hours.

i. *Pro-Rated Peak Avoidance kW Incentive*: This component of the incentive awards station operators a $ per avoided kW (summer[7]) and $ per avoided kW (winter[8]) during peak periods, where the avoided kW is calculated by subtracting the highest charging station site load in kWs occurring during the peak period throughout the billing period from the maximum potential simultaneous EV charging output[9] at the site in kWs. The peak periods for Con Edison's service territory will be at the local network[10] level, and for O&R at the substation level.[11] Incentive levels are provided by downstate utility and use case in Section 2.4.

ii. *Overnight Off-Peak Charging kilowatt-hour (kWh) Incentive*: This component of the incentive awards station operators for shifting their charging to the overnight period. Operators are awarded $ for every kWh of EV charging from midnight to 8 am in Con Edison and O&R's service territory, and the value will vary by downstate utility as defined in Section 2.4.

[7] June through September

[8] October through May

[9] The maximum potential simultaneous EV charging output will, in many cases, be the sum of the nameplate of each charger at the Charging Site. However, if the site includes load limiting hardware such as a fused switch or a common rectifier cabinet which limits the simultaneous power draw at the site, then the maximum potential simultaneous output will be equivalent to the load limiting hardware capacity.

[10] The local network peak periods will be based on the four Con Edison Commercial System Relief Program (CSRP) peak windows (11 am to 3 pm, 2 pm to 6 pm, 4 pm to 8 pm, and 7 pm to 11 pm). The current CSRP windows by network can be found at https://cdne-dcxprod-sitecore.azureedge.net/-/media/files/coned/documents/save-energy-money/rebates-incentives-tax-credits/smart-usage-rewards/2022-dr-networks-and-tiers.pdf?rev=6d92997741924a7d89946ece767d8f98.

[11] The substation peak windows are based on the 4-hour peak periods for each of O&R's 51 substations. The current peak windows can be found in Appendix 2 of Coned and O&R's Immediate Solutions Implementation Plan.

2.1.2 Adder Incentives

As outlined in the Order, two station types will receive additional incentives, called adders, until the EV phase-in rate is available. These adders are available to transit and Public L2 use cases, that can benefit from additional operating cost support beyond the standard CMCP incentives.

2.1.3 Incentive Derivation Guiding Principles

CMCP incentive levels are structured to: (1) be large enough to provide effective price signals that encourage grid beneficial charging behavior, which ultimately helps reduce costs to all electric customers, and (2) provide meaningful operating cost relief to participants while not causing market distortionary effects for customers already receiving other operating cost solutions, or favoring one EV charging business model over another. The level of operating cost relief targeted by the CMCP incentives and use case adders is guided by two metrics: (1) the discount provided by a 50 percent DCR for public fast-charging stations, and (2) achieving a relatively level $/kWh cost at least as low as that for a site operating at a max load ratio[12] of 25 percent. Section 2.4 below provides the basis for the determination of incentive levels for different use cases.

2.2 Downstate Eligibility

All commercial charging customers can participate in CMCP including, but not limited to, commercial fleet, multi-unit dwelling, workplace, and L2 public charging. Participation in some programs may influence eligibility for incentives in other programs as summarized in Table 1. In particular, due to varying market conditions and economics, as well as the overlap of operating cost relief solutions, there is a need to differentiate incentive levels available for publicly accessible DCFCs stations (e.g., on-the go fast charging). To avoid market-distortionary effects, stations participating in the DCR will be offered different CMCP incentive levels than stations that do not participate in the program and do not receive other operation cost relief.

[12] Max load ratio is defined as the ratio of (1) energy (kWh) used by an EV charging customer during a particular time period to (2) the product of (a) the EV customer's peak demand (kW) during that time period and (b) the duration of the time period in hours

$$\text{Max load ratio} = \frac{Energy\ Usage\ (kwh)}{Max\ demand\ \ (kW) * time}$$

Table 1. Downstate Utilities' Operating Cost Relief Incentives Eligibility by Use Case

Charging Use Case	*Operating Cost Relief Available Incentives*							
	PPI	Standard CMCP	Public DCFC CMCP	Public DCFC DCR	Public DCFC Adjusted Public CMCP	L2 CMCP	L2 Adder	Transit Adder
Public charging								
DCFC Option 1	**x**							
DCFC Option 2			**x**					
DCFC Option 3				**x**	**x**			
L2 Option 1						**x**	**x**	
Transit charging								
DCFC Option 1		**x**						**x**
L2 Option 1		**x**						**x**
All other use cases								
DCFC Option 1		**x**						
L2 Option 1		**x**						

2.3 Monthly Incentive Levels

The various incentive levels for Con Edison and O&R are provided in Tables 2 and 3.

Table 2. Con Edison CMCP and Adder Incentive Levels by Use Case.

Charging Use Case	*Incentive Levels*			
	Peak Avoidance Incentive (summer)	Peak Avoidance Incentive (winter)	Overnight off-peak charging (12 midnight – 8 am)	Adder
Public Charging				
DCFC not participating in DCR	<15% max load ratio $20/kW >=15% max load ratio $26/kW	$8/kW	$0.03/kWh	N/A
DCFC participating in DCR	$3/kW	$0.50/kW	$0.03/kWh	N/A
L2	$17/kW	$6/kW	$0.03/kWh	1-5% max load ratio $3/kW 6-10% max load ratio $2/kW 11-15% max load ratio $1/kW
Transit charging				
DCFC and L2	$10/kW	$2/kW	$0.03/kWh	1-5% max load ratio $6/kW 6-10% max load ratio $5/kW 11-15% max load ratio $4/kW
All other use cases: Standard Offering				
DCFC and L2	$10/kW	$2/kW	$0.03/kWh	N/A

Table 3. O&R CMCP and Adder Incentive Levels by Use Case.

Charging Use Case	*Incentive Levels*			
	Peak Avoidance Incentive (summer)	Peak Avoidance Incentive (winter)	Overnight off-peak charging (12 midnight – 8 am)	Adder
Public Charging				
DCFC not participating in DCR	<15% max load ratio $13/kW >=15% max load ratio $17/kW	$5/kW	$0.03/kWh	N/A
DCFC participating in DCR	$2/kW	$0.40/kW	$0.03/kWh	N/A
L2	$11/kW	$4/kW	$0.03/kWh	$2/kW
Transit charging				
DCFC and L2	$7/kW	$1/kW	$0.03/kWh	$5/kW
All other use cases: Standard Offering				
DCFC and L2	$7/kW	$1/kW	$0.03/kWh	N/A

2.4 Incentive Level Basis

2.4.1 Standard Incentive Level

As outlined in the eligibility and incentive tables above, these incentive levels will be available to all EV charging sites other than those identified below in subsection 2.4.2 through 2.4.4 below. These levels were set to provide price signals encouraging grid beneficial behavior as well as sufficient operating cost to a range of station use cases including fleet, multifamily buildings, and workplace charging.

2.4.2 Publicly Accessible DCFC

Publicly accessible DCFC participating in DCR

These incentive levels will provide publicly accessible DCFC charging sites receiving the DCR additional operating cost relief above and beyond the DCR support. These incentives are offered to put in place price signals that encourage grid beneficial charging operations when feasible, including through leveraging the capabilities of demand management technologies. The incentive levels are smaller than the standard offering to avoid market distortionary effects when considered along with the DCR.

Publicly accessible DCFC *not* participating in DCR

Public charging sites that do not participate in the DCR and see an opportunity to effectively manage charging and reduce site load through leveraging demand management technology and/or innovative operational and business models can earn higher CMCP

incentives. The incentives will provide a level of operating cost relief that is in line with the DCR. The summer peak avoidance incentives are higher at max load ratios equal or greater than 15% to maintain price signals for grid beneficial behavior: (1) as stations with higher utilization are likely to experience higher peak demand from simultaneous charging, (2) as managing site load becomes increasingly important for concentrated fast-charging loads during summer peak period, and (3) to keep the incentive price signal strong as the proportion of incentives to the overall bill decreases with increasing utilization.

2.4.3 Transit Fleets

Transit fleet will be eligible to participate in Standard CMCP and receive additional operating cost relief through a use-case adder incentive that is fixed based on the max load ratio. The adder incentive structure is a fixed $ per kW of maximum potential simultaneous charging output that varies with max charging ratio to provide predictable support across different utilization rates. The incentive structure and level is right-sized to smooth out and reduce the delivery cost per kWh. For Con Edison, the adder will begin at $6/kW/month at one percent max load ratio and decline until a station reaches 15 percent max load ratio. For O&R, the adder will be $5/kW/month.

2.4.4 Public L2

Public L2 sites will be eligible to participate in a CMCP at higher incentive levels and receive a use-case adder incentive that is fixed based on the max load ratio. The CMCP will serve as a higher percentage of the operating cost relief relative to the adder to maintain the strong grid beneficial price signals balanced with the benefits of predictable support provided by the adder. As with the transit adder, the Public L2 adder incentive will be based on charging station nameplate and the max load ratio, and the structure and level are designed to smooth and reduce the per kilowatt-hour cost. The structure proposed is based on a fixed $ per kW of maximum potential simultaneous charging output. For Con Edison, the adder will begin at $3/kW/month at one percent max load ratio and decline until a station reaches 15 percent max load ratio. For O&R, the adder will be $2/kW/month.

2.5 Adjustments to Incentive levels

As the CMCP program matures and additional charging infrastructure comes online, the availability of broader data can inform the effectiveness of incentive levels. Incentives will be reviewed and as needed adjusted to: (1) incorporate insights from larger EV charging and load profile data sets, (2) cost effectively influence behavior change, (3) manage the program budget, and (4) avoid any market distortionary effects when the EV Phase-in Rate is implemented. Incentives will be adjusted considering the grid value that beneficial charging behavior provides, and in line with the guiding principles outlined above in subsection 2.1.1.

3. Per-Plug Incentive Termination

The Order directs the JU to terminate the Per-Plug Incentive (PPI) program for new participants and redeploy the unspent program funds for a new program to incentivize EV charging demand management technologies. The deadline for new applications in the PPI Program, communicated to customers via the JU website and each utility's website, is March 20, 2023.

Pursuant to the terms of the Order, the JU will allow PPI Program participants a one-time option to either continue participating in the PPI Program or to switch to participation in the Immediate Solution, the DCR and/or CMCP available in their service territory. Participants remaining in the PPI Program will receive their declining annual incentives until the end of the PPI program on February 28, 2026.[13] In line with the Order, existing program participants will be given a 60-day election period to choose between remaining on PPI or switching to one or more of the available Immediate Solutions. The one-time 60-day election period will begin on the date an Order is issued by the Commission in response to this filing.

Shortly after the conclusion of this election period, the JU will estimate the budget required for PPI participants that opt to stay in the PPI program through 2026, or the end of the program. The budget for the demand management technology program will be the net of total funds available for the PPI program at the end of the election period minus the program end PPI budget. Furthermore, the JU will develop a process to redirect any funds that are not paid out from the program end PPI budget[14] after February 28, 2026 to the demand management technology program.

The demand management program design and implementation plans will be filed by May 19, 2023.[15]

4. Con Edison EV Business Incentive Rate Termination

Con Edison proposes to sunset the EV Quick Charging Station Program component of BIR once the DCR and CMCP become available. EV BIR provides an electric rate delivery reduction between 34% and 39% for publicly accessible DCFC greater than 100 kW. The DCR and CMCP will offer sufficient operating cost relief for existing EV BIR customers, and inclusion of EV BIR will lead to market distortionary effects. At the lowest max load ratios, for example, stacking DCR, CMCP, and BIR could lead to an effective charge of $0/kWh.

5. Reporting Requirements for Immediate Solution Programs

The JU will provide the following data semi-annually, on a per-participant basis, for immediate solution programs if feasible: (1) the number of accounts participating in the Immediate Solutions; (2) participants' average peak demand kW; (3) participants' average monthly kWh consumption; (4) participants' average annual load factor on a year-to-date basis;

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[13] Case 18-E-0138, Order Establishing Framework for DC Fast Charger Infrastructure Program (issued February 7, 2019) (DC Fast Charger Framework Order)

[14] For example, if a station terminates operation, it is no longer eligible to receive PPI funds which would result in funds left over at program end.

[15] Case 22-E-0236, *Proceeding to Establish Alternatives to Traditional Demand-Based Rate Structures for Commercial Electric Vehicle Charging.* Ruling on Extension Request (issued March 8, 2023).

and (5) the number and type of each charger participating. For the DCR, data for items (2) through (4) will be provided at the account level, and for the CMCP at the site level.

The JU will also collect and report the following data annually if feasible: (1) the year-over-year growth rate in number of accounts participating in the Immediate Solutions; (2) an assessment of whether incremental EV charging load has resulted in local grid impacts; (3) an assessment of the extent to which incremental EV charging load has resulted in upward or downward rate pressure on non-participating customer rates; and (4) an assessment on the impacts of the Immediate Solutions on low- and moderate-income customers and Disadvantaged Community residents.

The JU propose that the initial report filing be made three months after the first full year of program operation of the Immediate Solutions. Thereafter, the respective reports will be made on a semi-annual and annual basis.