nationalgrid

June 19, 2018

VIA ELECTRONIC DELIVERY

Honorable Kathleen H. Burgess Secretary New York State Public Service Commission Three Empire State Plaza, 19th Floor Albany, New York 12223-1350

> RE: Case 18-E-0018 – In the Matter of Proposed Amendments to the New York State Standardized Interconnection Requirements (SIR) for Small Distributed Generators

Case 15-E-0751 – In the Matter of the Value of Distributed Energy Resources

JOINT UTILITIES PROPOSED MODEL TARIFF FOR
COMPENSATION OF A HYBRID ENERGY STORAGE SYSTEM AND
DISTRIBUTED GENERATION SYSTEM

Dear Secretary Burgess:

In response to Ordering Clause No. 2 in the New York Public Service Commission's ("Commission") April 19, 2018 *Order Modifying Standardized Interconnection Requirements* (the "Order") in the subject proceedings, ¹ 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 (collectively, the "Joint Utilities") hereby file a single joint model tariff for compensation of a hybrid energy storage system ("ESS") and distributed generation ("DG") system² interconnected with the three-meter configuration approved in the Order (the "Model Tariff") for the Commission's consideration. The Model Tariff is appended hereto as Attachment A.

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¹ Cases 18-E-0081 *et al.*, *In the Matter of Proposed Model Tariff for Compensation of a Hybrid Energy Storage System and Distributed Generation System*, Order Modifying Standardized Interconnection Requirements (issued April 19, 2018)("Order"), p. 27. In response to a May 16, 2018 request filed by the Joint Utilities, on May 18, 2018 the Secretary granted an extension for this compliance filing to June 19, 2018.

² Within the Model Tariff, the DG system is referred to as electric generating equipment for consistency with existing Value Stack tariff language.

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The Model Tariff incorporates the four distinct options that were described in the Joint Utilities' July 24, 2017 filing³ where the Commission subsequently indicated that "[i]n principal, the utility proposals meet the needs and goals expressed in the VDER Phase One Order." Generally, each option is designed so that the full Value Stack compensation, inclusive of the Capacity Component Credit, Environmental Component Credit, and Market Transition Credit ("MTC"), as applicable, is only available when an export to the utility's distribution system can be clearly identified as originating from electric generating equipment eligible for Value Stack compensation. In the first two options presented in the Model Tariff, this is accomplished by requiring the ESS to exclusively charge from the eligible electric generating equipment (Option 2.a) or by precluding discharges from the ESS when exports to the distribution grid occur (Option 2.b). In the other scenarios, where exports to the distribution system are not exclusively from eligible electric generating equipment, the Model Tariff provides a metering solution to deduct the ESS discharge from any exports within each interval for purposes of calculating the Capacity Component Credit, Environmental Component Credit, and MTC (Option 2.c), or reverts to monthly netting for calculating these credits (Option 2.d).

The four approaches set out in the Model Tariff for calculating the Capacity Component, Environmental Component, and MTC compensation for projects pairing ESS and eligible electric generating equipment are as follows:

a. Option 2.a allows paired systems that are able to demonstrate exclusive charging of ESS with clean energy from eligible electric generating equipment to receive full Value Stack compensation credits based on hourly net injections measured at the customer meter. As

³ Case 15-E-0751, *In the Matter of the Value of Distributed Energy Resources* ("VDER Proceeding"), Joint Utilities' Response to Commission Notice Soliciting Comments Regarding Value of Distributed Energy Resources Implementation Proposals and Cost Mitigation Issues (filed July 24, 2017), pp. 4-5.

⁴ VDER Proceeding, Order on Phase One Value of Distributed Energy Resources Implementation Proposals, Cost Mitigation Issues, and Related Matters (issued September 14, 2017), p. 40.

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required by the Standardized Interconnection Requirements ("SIR"), the customer would need to document the control strategy to ensure such exclusive charging and assume responsibility for the cost of utility-owned metering and provide the metering communications to enable the utility to monitor the AC side of both the ESS and eligible electric generating equipment consistent with the three-meter configuration specified in the Order.⁵

- b. Option 2 b. applies to paired systems with appropriate customer controls so that injections are only made with the ESS not in a charging or discharging mode.
 Compensation is based on net hourly injections measured at the point of common coupling ("PCC") meter with separate utility meter(s) on the AC side of the applicable inverter(s) that can be used to verify operations of the customer's control mechanisms.
- c. Option 2 c. allows paired systems with separate utility metering and appropriate telemetry on the ESS to receive the Capacity Component Credit, Environmental Component Credit, and MTC, as applicable, for the eligible generation by reducing the net hourly injections measured at the PCC meter by any discharge recorded on the ESS meter in the applicable interval.
- d. Option 2.d. applies to all other paired systems and calculates the Capacity Component Credit, Environmental Component Credit, and MTC, as applicable, by netting all injections and withdrawals over the applicable billing period (*e.g.*, monthly) for the

⁵ See Order, p. 17. The Model Tariff refers to this as the "Storage Multiple Meter Configuration" to allow for instances where the ESS and DG equipment are behind a common inverter and therefore only two (2) meters are required.

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paired system, effectively adopting the proposal of the Department of Public Service Staff ("Staff") as referenced in the VDER Order.⁶

The Joint Utilities look forward to working collaboratively with Staff and other stakeholders in the process leading up to the adoption of the Model Tariff.

Respectfully submitted,

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⁶ VDER Proceeding, Order on Net Energy Metering Transition, Phase One Value of Distributed Energy Resources, and Related Matters (issued March 9, 2017), p. 46.

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CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. and ORANGE AND ROCKLAND UTILITIES, INC.

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ATTACHMENT A

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Section ____. Charges and Credits – Proposed Model Value Stack Tariff

Market Transition Credit ("MTC").

 Customers with energy storage systems ("ESS") paired with electric generating equipment eligible for Value Stack compensation shall be subject to the conditions set forth in part 2 of this Section for purposes of calculating the following credits, as applicable:
 Value Stack Capacity Component Credit;
 Environmental Component Credit; and

All other Value Stack components will be calculated as specified in Rule ____ for ESS paired with electric generating equipment eligible for Value Stack compensation and such component credits will be calculated based on net injections to the Company's system as specified in Rule ____.

Customers with ESS paired with electric generating equipment eligible for Value Stack compensation
will have the opportunity to elect one of the four compensation methodologies as appropriate and as set
out below which will determine the calculation of their Value Stack Capacity Component Credit,
Environmental Component Credit, and MTC.

Election of paired ESS compensation methodology 2.a, 2.b, 2.c, or 2.d below is irrevocable, subject to the Customer's continuing compliance with the terms of the Company's tariff and according to the operating characteristics as specified in the Standard Interconnection Contract of the SIR, and must be made by the Customer during the interconnection or opt-in process and will take effect on the subsequent bill upon commencing parallel operation and no earlier than 30 days after election, subject to the installation of all required metering and telemetry. The default option, if no other election is made by the Customer, is compensation methodology 2.d below.

- a. Storage Multiple Meter Configuration For Customers with ESS paired with electric generating equipment who are able to demonstrate by submission of a completed SIR application that they exclusively charge ESS with a paired generator eligible to receive Tier 1 RECs, the Value Stack Capacity Component Credit, Environmental Component Credit, and MTC will be based on net injections to the Company's electric system as measured at the Company's meter located at the point of common coupling ("PCC") and calculated as described in [insert each utility's reference to normal Value Stack calculations]. Customers will be responsible for any work to accommodate the Company's multiple meter configuration that includes a separate revenue grade interval meter at the PCC with the Company's system, and separate revenue grade interval meter(s) and appropriate telemetry on the AC side of the inverter(s) of the ESS and the electric generating equipment. This will typically result in two (2) Company revenue-grade meters if the ESS and electric generating equipment share a common inverter, and three (3) Company time-synchronized revenue-grade meters if both the ESS and electric generating equipment each have a separate inverter.
- b. Storage Controls Configuration For Customers with ESS paired with electric generating equipment who are able to demonstrate by submission of a completed SIR application and by the operating characteristics specified in the Standard Interconnection Contract of the SIR that appropriate controls are in place to assure that net injections are only made with the ESS not in a charging or discharging mode, then the Value Stack Capacity Component Credit, Environmental Component Credit, and MTC

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will be based on net injections to the Company's system and calculated as described in [insert each utility's reference to normal Value Stack calculations]. This controls demonstration may require separate Company revenue grade interval meter(s) and appropriate telemetry on the AC side of the applicable inverter(s) and explicit Company acceptance prior to connecting the Customer's ESS.

- c. Storage Export Netting Configuration For Customers with ESS paired with electric generating equipment with a separate Company revenue grade interval meter and appropriate telemetry on the AC side of the inverter of the ESS and whose storage configuration does not meet the requirements of 2.a or 2.b above, the Value Stack Capacity Component Credit, Environmental Component Credit, and MTC will be determined by reducing the net hourly injections, as measured at the Company's meter located at the Customer's PCC with the Company's system, by any discharge recorded on the Company's meter at the Customer's ESS in the applicable hour according to operating characteristics specified in the Standard Interconnection Contract of the SIR. The amount of hourly exports attributed to the ESS discharge (i.e., the hourly injection not eligible for the Value Stack Capacity Component Credit, Environmental Component Credit, and MTC) will be eligible for DRV and Value Stack Capacity Component Alternative 3 compensation.
- d. Storage Default Configuration For all other Customers with ESS paired with electric generating equipment, the Value Stack Capacity Component Credit, Environmental Component Credit, and MTC will be based on netting of all metered consumption and injections at the PCC over the applicable billing period according to the operating characteristics specified in the Standard Interconnection Contract of the SIR.
- e. The Customer is responsible for any costs associated with additional metering requirements and telemetry as described in [insert each utility's reference to metering requirements of the tariff].