STATE OF NEW YORK
DEPARTMENT OF PUBLIC SERVICE

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

CASE 15-E-0082 – Proceeding on Motion of the Commission as to the Policies, Requirements and Conditions For Implementing a Community Net Metering Program.

# Staff Whitepaper on Future Community Distributed Generation Compensation

(filed July 26, 2018)

## INTRODUCTION AND BACKGROUND

On March 9, 2017, the New York State Public Service Commission (Commission) issued an Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters.[1] The VDER Phase One Order directed that the compensation for eligible distributed energy resources (DER) transition from net energy metering (NEM) to the Value Stack. The Value Stack is a methodology that bases compensation on the actual, calculable benefits that such resources provide. Quantifying and compensating these benefits remains central to the Commission’s overall strategy to move to an energy system that is cleaner, more affordable and increasingly resilient. Equally important are the objectives of creating robust and competitive markets for DER that are sustainable over the long-term and can maximize value and opportunity for society, the electric grid, and consumers.

The VDER Phase One Order established Phase One NEM, which includes a limited continuation of NEM-style compensation, and an adder to the Value Stack for mass market customers, which is referred to as the Market Transition Credit (MTC).[2] As transitional mechanisms, Phase One NEM and the MTC component of the Value Stack were explicitly designed to balance the need to bring DER markets to scale while actively managing impacts on non-participating ratepayers and providing a pathway towards improving VDER policy. The

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[1] Cases 15-E-0751, et al., Value of Distributed Energy Resources, Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters (issued March 9, 2017) (VDER Phase One Order).

[2] Mass market customers were defined as customers within a jurisdictional electric utility’s residential or small commercial service class that are not billed based on peak demand.

MTC for projects built within each utility territory is funded by ratepayers in the same utility territory and service class as ratepayers who receive the MTC in that utility territory.

In order to manage the impacts of Phase One NEM and the MTC on non-participating ratepayers, the VDER Phase One Order established Tranches of megawatts (MW) for Community Distributed Generation (CDG) projects in each utility territory, with projects in Tranche 0 receiving Phase One NEM, and projects in Tranches 1 through 3 receiving a declining MTC.[3] The Tranches were sized based on a target net incremental annual revenue impact of 2%. The VDER Phase One Order explained that the transitions from Tranche 0 through Tranche 3 would be automatic in each utility territory as each of the Tranches 0/1 and 2 were filled. In the case of Tranche 3, projects would continue to be placed into that Tranche irrespective of reaching the capacity allocation, pending further action by the Commission. To facilitate Commission consideration of appropriate action, the VDER Phase One Order instructed each utility to notify the Commission when 85% of the total MW capacity for its Tranches had been allocated.

In response to notifications from Orange and Rockland Utilities, Inc. (O&R) and Central Hudson Gas and Electric Corporation (Central Hudson) that 85% of their total MTC MW allocation had been reached in their respective service territories,[4] the Commission issued the Order Regarding Compensation of Community Distributed Generation Projects (Tranche 4 Order) on January 18, 2018.[5] The Order established a Tranche 4 for utilities where Tranche 3 was full or could be filled soon, including Central Hudson, O&R, and New York State Electric & Gas Corporation (NYSEG). In each utility territory, a Tranche 4 was established with a fixed capacity allocation and an administratively set MTC, at a level below that utilities' Tranche 3 MTC. As with Tranches 1 through 3, the MTC for projects receiving Tranche 4 compensation

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[3] On-site mass market projects, such as residential rooftop solar, continue to receive NEM-style compensation and are subject to a separate capacity allocation from CDG projects. Options for compensating on-site mass market projects put into service after January 1, 2020 are under consideration in the VDER Phase Two Working Groups. The separate capacity allocation for on-site mass market projects has not yet been reached in any utility territory.

[4] Case 15-E-0751, supra, Staff Whitepaper on Community Distributed Generation Compensation After Tranche 3 (filed August 29, 2017) (Tranche 4 Whitepaper).

[5] Case 15-E-0751, supra, Order Regarding Compensation of Community Distributed Generation Projects (issued January 18, 2018) (Tranche 4 Order).

within O&R, Central Hudson, and NYSEG's respective service territories is funded by ratepayers in the same utility territory and service class as ratepayers who receive the MTC in each utility territory.

In the Tranche 4 Order, the Commission recognized that, based on the overflow of Tranche 3, O&R and Central Hudson are likely to see net incremental annual revenue impacts above 2%, resulting in impacts on non-participating ratepayers in those service territories above the targets set in the VDER Phase One Order. The Commission found that establishing a Tranche 4 in those territories with a further revenue impact was appropriate but also directed that a hard cap be placed on that impact by limiting the overflow of Tranche 4. Furthermore, to allow continued market activity following Tranche 4 reaching capacity, the Commission directed Staff to work with stakeholders and NYSERDA to identify options for moving beyond Tranche 4 without unreasonably imposing further burdens on ratepayers in those utility territories. The Commission specifically instructed consideration of the development of a statewide MTC, determined either administratively or through an auction process.

This Staff Whitepaper presents recommendations for Commission consideration that would modify the MTC and move beyond Tranche 4. These recommendations represent only one part of the ongoing effort to refine the Value Stack, improve VDER policy, and support distributed generation in New York. As forward-thinking policy with the objective to create competitive, cost-effective and sustainable DER markets, VDER is complemented by ongoing efforts in the following areas.

- Ongoing work in the Value Stack working group to improve calculation of avoided distribution cost and environmental values;
- Consideration of mass market successor rate proposals in the Rate Design working group;
- Continued monitoring and review of the interconnection process through the Interconnection Policy and Technical Working Groups;
- Recent NY-Sun program redesign;
- Actions taken to support participation of low-income customers in CDG at the July 12, 2018 Commission session; and
- Cost reduction initiatives, including consolidated billing, which is scheduled for discussion at an August 8, 2018 public meeting.

Staff requests that interested individuals and organizations file comments on this Whitepaper by October 15, 2018.

## OPTIONS AND ISSUES FOR CONSIDERATION

In considering the various options available for CDG compensation beyond Tranche 4, Staff is guided by the Commission's direction to evaluate the viability of a statewide MTC and to develop recommendations for moving beyond Tranche 4 that would not unreasonably burden a particular group of ratepayers. Consideration of a statewide-funded MTC or similar mechanism also offers the opportunity to evaluate the status and viability of currently open Tranches in each utility service territory and ensure that reasonable and viable opportunities for distributed generation are available across the state, along with fairly allocating the costs associated with the MTC.

The chart below shows the current status of the authorized Tranches in each utility as of July 15, 2018. In particular, despite the high MTC value available, development of CDG projects in the Consolidated Edison Company of New York, Inc. (Con Edison) has been very limited, with only 8.1 MW reserved of the 136 MW allocated to Tranche 1. Development in the service territory of Niagara Mohawk Power Corporation d/b/a National Grid (National Grid) has also been somewhat slower than in other utility territories, especially considering National Grid's large size. While development has generally been strong in the New York State Electric & Gas Corporation (NYSEG) and Rochester Gas and Electric Corporation (RG&E) service territories, it has slowed as later tranches have been reached. By contrast, the pace of development in Central Hudson and O&R has remained high even as MTC compensation has declined.

| Tranche | ConEd | Orange & Rockland | NYSEG | Central Hudson | National Grid | RG&E |
|---|---|---|---|---|---|---|
| 0/1 | 7.9 of 136 MW | 20 of 23 MW CLOSED | 62 of 62 MW CLOSED | 38.6 of 39 MW CLOSED | 90.5 of 140 MW | 28 of 28 MW CLOSED |
| 2 | 0 of 206 MW | 12 of 12 MW CLOSED | 84 of 84 MW CLOSED | 18.3 of 19 MW CLOSED | 0 of 157 MW | 42 of 42 MW CLOSED |
| 3 | 0 of 205 MW | 34.2 of 12 MW CLOSED | 62 of 77 MW | 31.4 of 19 MW CLOSED | 0 of 177 MW | 3 of 41 MW |
| 4 | N/A | 15.5 of 15 MW CLOSED | 0 of 80 MW | 21.3 of 20 MW CLOSED | N/A | N/A |

For context, the currently authorized MTCs for SC-1 for each Tranche in each territory are:

| Tranche | ConEd | Orange & Rockland | NYSEG | Central Hudson | National Grid | RG&E |
|---|---|---|---|---|---|---|
| **0/1** | $0.1054 | $0.0911 | $0.0314 | $0.0599 | $0.02820 | $0.0383 |
| **T 2** | $0.0949 | $0.0821 | $0.0259 | $0.0524 | $0.02290 | $0.0327 |
| **T 3** | $0.0845 | $0.0731 | $0.0204 | $0.0449 | $0.01750 | $0.0271 |
| **T4** | | $0.0462 | $0.0149 | $0.0373 | | |

The Tranche results must also be considered in the context of other developments in the DER market. The projects that have been placed in Tranches so far have also qualified for NY-Sun grants at various levels based on the declining MW Block system, with some projects being viable at lower MTC levels due to qualification for blocks with larger grants. As contemplated by the Commission in its VDER Phase One Order, contemplation of NY-Sun redesign would be an important consideration to help further avoid market disruption during the transition to VDER. The recently released NY-Sun redesign will result in consistent incentive sizes for future projects at a level higher than the most recent blocks as well as incentive adders for carports and rooftop canopies in Con Edison’s territory, and landfill, brownfield and affordable housing adders statewide. Furthermore, other Commission initiatives, including the increase in the maximum project size from 2 MW to 5 MW,[6] will reduce project costs and increase access to DER, as will consolidated billing, which is currently under consideration and development. At the same time, other factors, such as the tariffs recently imposed on imported solar cells and modules, as well as steel and aluminum, by the federal government, may increase project costs. Given this broader context and the various factors impacting project development under VDER policy, it is prudent to review and consider the impact and effectiveness of transitional mechanisms such as the MTC to ensure that there is continued balance of DER opportunity and ratepayer impact. It is notable that more than 500 MW of CDG have moved forward under VDER Phase One despite the intertwined factors impacting project development, both those within and outside of the Commission's ability to manage and control.

## RECOMMENDATION

Based on the Commission's guidance, the current status of the market, and analysis performed by Staff and NYSERDA, the following changes are recommended:

(1) For NYSEG, RG&E, and National Grid, remaining capacity within each territory should be reallocated and divided between two new Tranches, Tranche 5 and 6, with enhanced MTC values;

(2) For Con Edison, all three existing Tranches should have enhanced MTC values, coupled with a reduction in the capacity of Tranche 3; and

(3) For O&R and Central Hudson, no further Tranches or MTC should be created, but instead new CDG projects should receive an additional up-front incentive.

In addition, to further ensure that all New Yorkers are able to take advantage of the benefits of CDG, Staff will work with NYSERDA and stakeholders to investigate and propose options for allowing submetered customers to receive the MTC or similar compensation.

## NYSEG, RG&E, and National Grid

As described above, CDG activity and customer opportunity has been somewhat limited in National Grid as compared to the size of the service territory, and although has been more

[6] Case 15-E-0751, supra, Order on Phase One Value of Distributed Energy Resources Project Size Cap and Related Matters (issued February 22, 2018).

robust in NYSEG and RG&E, has recently slowed. Project costs are likely to be relatively similar on average in all three utility territories. Therefore, Staff recommends setting uniform MTCs for projects that qualify[7] in each of the territories after the date of this Whitepaper to encourage appropriate levels of growth across these territories, while incentivizing CDP providers to locate projects where they create the most value and the fewest costs. In recognition of the market trends discussed above and based on the Commission's interest in continued growth of CDG in each territory, the uniform MTC, at least for the initial Tranche, should exceed the current MTCs in each territory.

Based on analysis conducted by Staff and NYSERDA, the appropriate MTC value to encourage further development at this time is 3 cents per kWh, for both residential and small commercial customers. A significant amount of capacity should be reallocated towards a Tranche 5, at that value. The remaining capacity should be reallocated to Tranche 6, at a reduced value of 2.5 cents, to reflect the expectation of further cost reductions in the future. All existing Tranches should be closed and the remaining capacity reallocated and divided between Tranches 5 and 6 at 3 cents and 2.5 cents, respectively, weighted towards Tranche 5. These Tranches, like Tranche 4, should have a hard cap. Staff's proposed reallocation of capacity, which keeps net revenue impacts at National Grid, NYSEG, and RG&E close to the 2% target, is as follows:

| Tranche | National Grid | NYSEG | RG&E |
|---|---|---|---|
| 5 ($0.030) | 475 MW | 75 MW | 60 MW |
| 6 ($0.025) | 50 MW | 35 MW | 15 MW |

Projects that qualified before the date of this Whitepaper should not have their compensation changed. For those projects, the developer made a determination that the then-available compensation was sufficient given the various and intertwined market factors at that time and, in turn, received a commitment to earn that compensation through the utility tariffs. Those projects should therefore not have their MTC lowered, nor should they receive a higher MTC. Offering this compensation only to newly submitted projects after the date of this Whitepaper and leaving projects that qualified before the date of this Whitepaper in their existing

[7] A project "qualifies" when it meets the standard for placement in a Tranche; that is, when it has a payment made for 25% of its interconnection costs or has its Standard Interconnection Contract executed if no such payment is required.

Tranches will ensure fairness to all projects. Projects that have already qualified should not be permitted to exit the Tranche system and reapply so as to receive a different MTC rate.

## Con Edison

In order to spur CDG development at Con Edison, increased compensation is necessary. By reducing the capacity allocation in Con Edison Tranche 3, the per-kWh compensation in Tranches 1, 2, and 3 can be significantly increased while keeping net revenue impacts close to the 2% target. To ensure that Tranche 1 is viable, projects that qualify in the future in Tranche 1 should receive an MTC of 14.35 cents. The Tranche 2 MTC should be increased to match the previous Tranche 1 MTC, 10.54 cents, while the Tranche 3 MTC should be increased to match the previous Tranche 2 MTC, 9.49 cents. The resulting MW allocations are as follows:

| Tranche | Con Edison |
|---|---|
| 1 ($0.1435) | 128 MW[8] |
| 2 ($0.1054) | 206 MW |
| 3 ($0.0949) | 50 MW |

The same eligibility rules described above, with only those projects qualifying after the date of this Whitepaper receiving the new values, should apply.

## O&R and Central Hudson

As explained by the Commission in the Tranche 4 Order, permitting any further net revenue impact in the territories of O&R and Central Hudson would create an unreasonable burden on ratepayers in those utility territories. However, as MTC compensation is provided directly by the utility and the costs caused by that compensation collected from other ratepayers through utility rate adjustment mechanisms, it would be impractical to fund a Tranche 5 MTC in O&R or Central Hudson from any source other than ratepayers in the respective O&R or Central Hudson territories. For that reason, no further Tranches should be created in those territories and no MTC should be included in the compensation for projects that qualify after the closure of Tranche 4.

[8] In addition to the 7.9 MW already qualified in Con Edison's Tranche 0/1 at the original value.

Eliminating the MTC without providing any replacement, however, would likely result in complete elimination of viable economic opportunities for further development of CDG in O&R's and Central Hudson's service territories, at least in the short term, to the detriment of customers interested in participating in CDG as well as the State's clean energy goals. For that reason, Staff proposes that CDG projects that qualify in O&R and Central Hudson after the closure of Tranche 4, including projects that qualified after the closure of Tranche 4 but before the filing of this Whitepaper, receive an additional per-kW incentive payment made directly to the developer or the developer's assignee by NYSERDA, similar to the incentive payment provided through NY-Sun. The amount of the incentive payment should be set to be approximately equivalent to the net present value of the MTC those projects would have received if further Tranches were created, based on the same 3 cent and 2.5 cent values used for Tranches 5 and 6 in other utility territories, less the expected compensation from Demand Reduction Value as described below. The incentive should be funded through existing sources of funds collected on a statewide basis, such as previously collected but currently uncommitted funds. Sufficient funds should be allocated to finance up to 50 MW of projects in Central Hudson and 45 MW of projects in O&R at this time, and only projects in those service territories will be eligible for this incentive.

Inasmuch as projects that receive this incentive would not receive any MTC, they would be eligible to receive the Demand Reduction Value as part of the Value Stack. Staff's Draft Whitepaper Regarding Distribution Values[9] proposes changes to the DRV that are expected to increase its effectiveness as a compensation element and therefore increase the viability of these projects.

[9] Case 15-E-0751, supra, Draft Whitepaper Regarding Distribution Values (filed July 26, 2018).

CONCLUSION AND REQUEST FOR COMMENTS

Staff's recommendations, if adopted, would result in the following capacity allocations:

| Tranche | ConEd | Orange & Rockland | NYSEG | Central Hudson | National Grid | RG&E |
|---|---|---|---|---|---|---|
| 0/1 | 7.9 of 135.9 MW | 20 of 23 MW CLOSED | 62 of 62 MW CLOSED | 38.6 of 39 MW CLOSED | 86.6 of 140 MW CLOSED | 28 of 28 MW CLOSED |
| 2 | 0 of 206 MW | 12 of 12 MW CLOSED | 84 of 84 MW CLOSED | 18.3 of 19 MW CLOSED | N/A | 42 of 42 MW CLOSED |
| 3 | 0 of 50 MW | 34.2 of 12 MW CLOSED | 62 of 77 MW CLOSED | 31.4 of 19 MW CLOSED | N/A | 3 of 41 MW CLOSED |
| 4 | N/A | 15.5 of 15 MW CLOSED | N/A | 21.3 of 20 MW CLOSED | N/A | N/A |
| 5 | N/A | N/A (Incentive available for 45 MW) | 0 of 75 MW | N/A (Incentive available for 50 MW) | 0 of 475 MW | 0 of 60 MW |
| 6 | N/A | N/A | 0 of 35 MW | N/A | 0 of 50 MW | 0 of 15 MW |

Overall, Staff's recommendations, if adopted, will result in enhanced MTC availability for more than 1,000 MW AC of new projects, as well as availability of new incentive payments for almost 100 MW AC of new projects. These increased MTC levels, coupled with NY-Sun redesign and other improvements to the Value Stack proposed in Staff's Draft Whitepaper Regarding Distribution Values, will continue the acceleration of the DER market and spur further substantial increases in distributed, clean generation installed in New York State. As these Tranches become filled and the incentives exhausted, Staff will continue to work with NYSERDA and stakeholders under the VDER transition to evaluate further market changes, including the implementation of cost reduction initiatives and improved Value Stack components, and determine what further intervention is appropriate.

Staff requests that interested individuals and organizations file comments on this Whitepaper by October 15, 2018. Commenters may provide recommendations related to Staff's proposal or propose alternate methods for modifying or replacing MTCs moving forward.