

December 31, 2012

VIA EMAIL: secretary@dps.ny.gov

Honorable Jeffrey C. Cohen
Acting Secretary
New York State Public Service Commission
Three Empire State Plaza
Albany, NY 12223

**Re: CASES 12-E-0485, 12-E-0486, 12-E-0487, 12-E-0488, 12-E-0489, 12-E-0490 -
In the Matter of Net Metering Limitations Pursuant to Public Service Law
§66-j and §66-l**

Dear Acting Secretary Cohen:

On October 25, 2012, the New York Public Service Commission (“Commission”) issued notice soliciting comments from interested parties on the net metering limits of New York’s six major electric utilities.¹ The Vote Solar Initiative (“Vote Solar”) appreciates the opportunity to file these comments in general support of the Commission’s review of net metering limits in respect to the State’s broader renewable energy policies and public interest objectives.

Vote Solar strongly recommends that the Commission merge Public Service Law (PSL) §66-j and §66-l, establish a single minimum net metering limitation for all technologies, and increase said limitation of the six major utilities to 10% of 2005 peak load. We finally suggest that the Commission establish increased transparency and disclosure for distributed generation (DG) and net metering growth in each utility service territory.

By taking these actions, the Commission will ensure that net metering is a predictable framework and a fundamental component of a robust and sustainable market for DG solar and other renewables. Securing this policy for customer-sited renewables will enable the State to successfully achieve both current and future DG objectives of the NY-Sun Initiative and Renewable Portfolio Standard unhindered.

¹ Consolidated Edison Company of New York, Inc., New York State Electric and Gas Corporation, Niagara Mohawk Power Corporation, Orange and Rockland Utilities, Inc., Rochester Gas and Electric Corporation, Central Hudson Gas and Electric Corporation
² Case 12-E-0343, *Petition of Hudson Valley Clean Energy, Inc. to Increase Central Hudson Gas*

I. Introduction

The Vote Solar Initiative is a non-profit, grassroots organization working to foster economic opportunity, promote energy independence and mitigate climate change by making solar a mainstream energy resource across the United States. Since 2002, Vote Solar has engaged at the state, local and federal levels to remove regulatory barriers and implement the key policies needed to bring solar to scale.

Vote Solar is particularly active on electric rate design issues related to DG solar, including the billing arrangement known as net metering. Recognizing the importance of this policy for supporting customer-sited solar and other renewable energy technologies, Vote Solar is actively participating in net metering and broader electricity rate design regulatory proceedings in states across the U.S., including: Arizona, California, Colorado, Minnesota, New Mexico, Ohio and Vermont, among others.

As a general principle, net metering is one of the most effective policies for supporting customer generation of renewable energy, and is currently enabling customer-sited generation in 43 states and the District of Columbia. The simplicity and understandability of net metering have been pivotal in reducing barriers to consumer uptake of distributed generation technologies such as solar. It is arguably one of most successful market transformation policies for renewable energy.

II. Recent net metering developments in New York State

New York's net metering policy has long been an essential component for enabling the State's development of customer-sited renewable energy technologies. In combination with the State's NY-Sun Initiative ("NY-Sun") and Renewable Portfolio Standard ("RPS"), New York has established an effective foundation to support the renewable energy market, thereby creating opportunities for New Yorkers to invest in clean energy.

Because of these foundational policies, renewable and solar energy industries are looking to invest in New York. To ensure that the promise of these markets, including good quality jobs, greater consumer choice, and cleaner air, are delivered, policy makers must ensure that current and future solar and renewable energy policies and objectives work together. The Commission is right to review net metering policy and ensure that it is properly designed to accommodate and otherwise support the State's solar and renewable energy goals, including those of NY-Sun and the RPS.

As was revealed in Case 12-E-0343², as a result of increased uptake in customer-sited renewable energy development and applications in the Central Hudson Gas and Electric

² Case 12-E-0343, *Petition of Hudson Valley Clean Energy, Inc. to Increase Central Hudson Gas*

Corporation (“Central Hudson”) service territory, this utility had reached the net metering limitations contained in Public Service Law (PSL) §66-j, and indicated it would suspend acceptance of new net metering applications. In its October 22, 2012 order on the petition submitted by Hudson Valley Clean Energy, Inc. to increase the utility’s net metering threshold, the Commission acknowledged the important role of net metering in fulfilling the State’s overall renewable and solar energy goals. In this order, the Commission acknowledged that failing to address Central Hudson’s net metering limitations would not only stymie further development of customer-sited renewable energy generation, but would frustrate the policies and public interest of the NY-Sun and RPS programs.

Accordingly, and with statutory authority³ to increase net metering limits if determining such increases are in the public interest, the Commission directed Central Hudson to file tariff amendments to increase the minimum net metering limitation of PSL §66-j (3)(a)(iii) from 1% of 2005 peak load to 3% of 2005 peak load in order to ensure sufficient net metering availability for NY-Sun and RPS program goals. In addition, the Commission indicated its intent to review the net metering limitations under PSL §66-j and §66-l of the other major New York utilities.

Vote Solar respectfully offers its comments on minimum net metering limitations in hopes of aiding the Commission in determining the appropriate next steps for New York’s six major utilities.

III. Statutory minimum net metering requirements

Of particular importance in the Commission’s October 22, 2012 order in Case 12-E-0343 is its elaboration on the definition of the statutory net metering requirements for each relevant utility. As the Commission describes, although the tariffs filed in accordance with the current net metering statute correctly include a hard limit for net metering capacity, with statutory discretion given to both the Commission and utilities to exceed this minimum limitation, the Commission will interpret statutory limitations of net metering as a “minimum” rather than a cap or ceiling. Vote Solar is in agreement with and appreciates this position, as it is clearly consistent with the intent of net metering statute under both PSL §66-j and §66-l.

Although the Commission and utilities have the authority to increase net metering availability in each service territory, it is clear that such a decision must be predicated upon public interest reasoning. As we will describe below, we respectfully submit that it is fully in the public interest for New York to ensure that there is sufficient availability for additional net metering capacity in each of the major utility service territories. The

& Electric Corporation’s Net Metering Limit, Order Raising Net Metering Limit (issued October 22, 2012).

³ Public Service Law §66-j (3)(b) and §66-l (3)(b)

provisions for net metering in New York have and will continue to be an essential tool for encouraging solar and renewable energy adoption, and for helping to achieve the market transformation goals embedded within the NY-Sun program and the RPS.

IV. Net metering as a long-term policy to aid market transformation

Commonly known as the policy that enables a customer to spin their electric meter backwards, net metering has been a broadly adopted policy at the state level and is currently utilized in 43 states and the District of Columbia to support the deployment of customer-sited renewable energy. Without exception, significant and efficient deployment of clean, customer-sited distributed generation occurs only in states with net metering policies that follow best practices.⁴

Net metering is a simple accounting mechanism that reconciles a customer's production of renewable energy and consumption of grid supplied electricity over the applicable billing period. When a customer's generation is in excess of their electricity requirements, this energy is exported and can serve other grid demands. In order for a customer to fully realize the potential of their renewable energy investment, under a net metering tariff, customers producing momentary excess generation receive kilowatt-hour credits that can offset subsequent kilowatt-hour consumption from the grid during the same billing period. Excess credits at the end of a billing period carry over to for use in the next billing period, with most states incorporating annual true-up provisions. In the case of New York, net metering customers are provided compensation for annual excess credits paid at avoided cost. Importantly, only a small percentage of net metering customers receive compensation at the end of the annual period since net metering systems are primarily intended to offset onsite load.⁵

New York should be commended for having implemented best practices into its net metering policy. According to the 6th annual Freeing the Grid report, which grades states for their net metering policies and interconnection procedures, New York is currently one of 16 states to be awarded a grade of "A" for its net metering practices.⁶ Notably, 2012 marked the first year that New York received an "A", and it is clear that many of the mechanics of New York's net metering policy are conducive for supporting increased customer-sited renewable energy generation.

⁴ Best practices in net metering policies can be viewed at: <http://freeingthegrid.org/#education-center/best-practices/>.

⁵ In New York, while net metering is primarily intended to offset onsite load, certain electric customers may also participate in remote net metering, which enables customers to use renewable energy generation to offset the electricity requirements of their satellite electric accounts.

⁶ Freeing the Grid 2012: Best Practices in State Net Metering Policies and Interconnection Requirements. Accessed at <http://freeingthegrid.org/>

As mentioned, however, with programs such as NY-Sun and the RPS Customer-sited Tier (CST) stimulating additional customer-sited renewable energy deployment, Vote Solar believes the Commission must remain vigilant to ensure that net metering is working in concert with these overarching policies. We appreciate that the Commission shares this concern. With solar installations having increased over the past year and the expectation of continued growth throughout the State⁷, it is essential to provide sufficient net metering availability over the long-term for both solar and other renewable energy customers.

According to the Commission's notice, it is clear that certain utilities are closer to reaching their minimum net metering threshold than others. However, to ensure statewide market confidence from both the renewable energy industry and customers alike, it is critical that the Commission establish significant headroom and opportunity for growth under all of the utility net metering programs. It is also clear that geographic development trends are quickly evolving as the market matures and as renewable energy programs take hold. NYSERDA's geographic balancing initiative and CUNY's NYC Solar City efforts, for instance, are significantly supporting increased solar deployment in New York City and the surrounding area.

In addition to aligning net metering with the current 2015 objectives for customer-sited renewable energy under NY-Sun and the RPS, it is equally if not more important to assess the longer-term horizon for this suite of policies. As recommended in the New York Energy Highway Blueprint, for example, the State should advance policies to encourage distributed renewable energy development while continuing NY-Sun and the RPS as long-term and multi-year programs beyond 2015.⁸ Vote Solar strongly supports these Energy Highway recommendations, and believes that doing so will send the necessary long-term market signal that will help New York fundamentally transform its renewable energy marketplace. In the event that NY-Sun and the RPS are extended past 2015, it will again be essential to align the State's net metering policy to support this increased growth.

While ensuring that minimum net metering limitations of PSL §66-j and §66-l will accommodate the State's current clean energy objectives is important, Vote Solar urges the Commission to secure net metering as a fundamental and lasting policy pillar of New York's solar and renewable energy economy. By establishing long-term market confidence in utility net metering programs with ample opportunity for new customers,

⁷ According to the SEIA/GTM Research U.S. Solar Market Insight report, residential solar installations have increased markedly in Q3 2012, reaching a new high of 4 MW up from 2.5 MW and 2.6 MW in the two previous quarters of 2012. As of the end of Q3 2012, New York has approximately 144.5 MW of installed solar capacity, of which 40.6 MW are residential, 62.1 are non-residential, and 41.8 are utility-scale.

⁸ New York Energy Highway Blueprint, see pages 66-67 & 69-70.

New York's growing solar industry will be assured that this necessary clean energy policy will help support the transition towards a robust and sustainable solar economy.

V. Ensure that net metering will support a long-term market for DG solar and other renewables

With effective net metering provisions already in place, a rapidly growing solar market and the longer-term promise of market transformation, **Vote Solar recommends that the Commission merge PSL §66-j and §66-l, establish a single minimum net metering threshold for all technologies, and increase said threshold of the six major utilities to 10% of 2005 peak load.**⁹ Doing so will fundamentally secure this framework for customer-sited renewables while enabling the State to successfully achieve both current and future objectives of NY-Sun and the RPS unhindered. In addition, merging PSL §66-j and §66-l will help to eliminate confusion with the application of net metering law.

Our high-level analysis shows that raising the six utilities' minimum net metering thresholds to 10% of 2005 peak load would provide sufficient room for continued market growth throughout New York through the end of the decade. Establishing such a threshold would enable increased investment in customer-sited generation and support fundamental market transformation with the extension of NY-Sun and RPS with comparable levels of funding.

VI. Properly assessing the net impacts of offering net metering

In Case 12-E-0343 the Commission ordered a more modest increase from 1% to 3% of 2005 peak load for Central Hudson. The Commission supported their reasoning by stating that, “[a]lthough net metering is an important tool in promoting State energy policy, it can add complexity and cost to maintaining and managing the utilities’ distribution systems.”¹⁰ For Central Hudson’s service territory, the Commission suggests that the costs associated with raising the net metering limitation to 3% are extremely minor, therefore justifying that the increase is in the public interest.

In case 12-E-0343, the Commission further notes that, “costs must be balanced appropriately against the benefits provided by net metering in terms of promoting renewable energy and the State’s energy policies in general.”¹¹ We fully agree with the Commission that costs must be appropriately assessed and balanced against the benefits

⁹ We note that additional action would be necessary to further increase the net metering limitation of §66-j for Central Hudson that was recently increased to 3%.

¹⁰ Case 12-E-0343, Petition of Hudson Valley Clean Energy, Inc. to Increase Central Hudson Gas & Electric Corporation’s Net Metering Limit, Order Raising Net Metering Limit (issued October 22, 2012), at p.7.

¹¹ *Id.*

that DG provides to the entire system. However, we take firm issue with the conclusion that, “as net metering increases as a percentage of total load, the potential for unexpected costs and complexity will increase.”¹² Before a conclusion can be drawn that net metering will result in a cost burden as customer-sited renewables increase, we would request that the Commission direct a comprehensive and transparent study of the costs and benefits of offering full retail rate net metering credits.

Without a robust and stakeholder driven process to evaluate the benefits and costs of net metering, we urge the Commission to hold a healthy skepticism about statements not supported by data, which suggest that costs will unequivocally increase as net-metered renewable energy systems reach higher penetration levels. Similarly, without a proper study quantifying costs and benefits, the claims that only net metering participants receive the benefits of this arrangement while those who do not participate in a net metering program bear the costs are unsubstantiated. Our position is that until these claims are supported by actual data we fail to be convinced that net metering is an inherently unsustainable policy.

Vote Solar is engaged and deeply committed to working with various stakeholders in multiple states to ensure that net metering is designed as a long-term and sustainable policy for increased DG deployment. Through this work, we understand that there are concerns regarding the costs associated with net metering, similar to those referenced by the Commission in Case 12-E-0343 and highlighted above. We would like to take this opportunity to briefly describe the breadth of this work in order to help inform the current net metering conversation in New York.

According to Vote Solar’s extensive engagement in net metering evaluation efforts across the U.S., we conclude that the results of the most prominent of DG valuation studies¹³ clearly demonstrate that the increased deployment of DG solar and use of net metering produce benefits to the entire electricity system not just those that participate in a net metering program.

Most notably, customer-sited solar generation offers many benefits to the electric system and by extension to non-solar customers, including but not limited to:

- Reduction in utility marginal energy and capacity generation requirements, particularly during peak periods
- Reduction in system losses
- Avoidance or deferral of distribution and transmission investments
- Localized grid support, including increased reliability benefits

¹² *Id.*, at p.8.

¹³ RW Beck's 2009 study for APS; Austin Energy's 2012 solar value study; Crossborder Energy's 2012 study of net metering in California

- Fuel-price certainty
- Reduction in air pollutants and water use.

It is Vote Solar’s position that the aforementioned benefits must be quantified, and that solar customers should be adequately compensated for the value their solar energy is delivering to the system. The Commission should be aware that the Solar America Board for Codes and Standards, an independent organization sponsored by the U.S. Department of Energy, released a report in 2012 titled, “A Generalized Approach to Assessing the Rate Impacts of Net Energy Metering.” The purpose of the report “is to provide a consistent methodology to analyze the potential rate impacts of net metering. With reliable estimates of rate impacts, regulators can make informed decisions regarding modification of NEM rules.”¹⁴

Chart 1: Costs and benefits associated with a net metering program. (Source: Solar America Board for Codes and Standards)

Benefits to the Utility	Costs to the Utility
Avoided Energy Purchases (inc/fuel)	Net Metering Bill Credits
Avoided T&D line losses	Program Administration
Avoided Capacity Purchases	
Avoided T&D Investments and O&M	
Environmental Benefits – NO _x , SO _x , PM, & CO ₂	
Natural Gas Market Price Impacts	
Avoided RPS Generation Purchases	
Reliability Benefits	

In considering the various DG and net metering evaluations around the country, it is clear that applying a consistent methodology with transparent assumptions and opportunity for stakeholder participation is key. Please see Appendix A for a summary of the most notable DG and net metering evaluations.

We are confident that a similar exercise in New York would not only demonstrate that customer-sited renewable energy delivers significant benefit to the entire rate base, but would establish firm and convincing justification for not only increasing minimum net metering limitations for the six utilities, but also full removal of these limitations. Doing so would secure a predictable net metering framework as a fundamental component of a robust and sustainable market for DG solar and other renewables.

¹⁴ Solar America Board for Codes and Standards. “A Generalized Approach to Assessing the Rate Impacts of Net Energy Metering.” January 2012.

VII. Establish increased transparency and disclosure for DG and net metering growth

Vote Solar encourages the Commission to increase the transparency and disclosure of actual net metering installations and expected deployment. Doing so will further support the opportunities for the solar and renewable energy industry to invest and expand in New York.

We recommend that the Commission require further scrutiny over regular reporting of installed net metering capacity by service territory and size, as well as planned net metering in interconnection queues. We also suggest that the Commission work with the utilities and NYSERDA to ensure that this information is displayed online in a user friendly and publically available format. We encourage the Commission to review the California Solar Initiative website or the Arizona Goes Solar websites as good examples of a transparent reporting system.¹⁵

VIII. Conclusion

Vote Solar sincerely appreciates the opportunity to submit comments on this important matter. We look forward to engaging further in this discussion, and always remain available to answer questions the Commission may have regarding our written comments.

We hope that this process results in a proposal that will meet stakeholder needs and desires while simultaneously allowing New York's DG solar and renewable energy market to expand. Vote Solar thanks the Commission for the opportunity to present our perspective, and looks forward to working with the Commission and other stakeholders.

Respectfully submitted this day, December 31, 2012.

/s/ Peter Olmsted
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¹⁵ The California Solar Initiative "Trigger Tracker" can be viewed here: <http://www.csi-trigger.com/>. The Arizona Goes Solar website can be viewed at <http://www.arizonagoessolar.org/>.