

STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION

At a session of the Public Service  
Commission held in the City of  
Albany on July 18, 2013

COMMISSIONERS PRESENT:

Garry A. Brown, Chairman  
Patricia L. Acampora  
James L. Larocca  
Gregg C. Sayre  
Diane X. Burman

CASE 03-E-0188 - Proceeding on Motion of the Commission  
Regarding a Retail Renewable Portfolio  
Standard.

ORDER AUTHORIZING MODIFICATIONS OF THE SOLAR PHOTOVOLTAIC  
PROGRAM IN THE CUSTOMER-SITED TIER

(Issued and Effective July 22, 2013)

BY THE COMMISSION:

INTRODUCTION

In this Order, the Commission authorizes the New York State Research and Development Authority (NYSERDA) to modify the Renewable Portfolio Standard (RPS) Customer-Sited Tier (CST) solar photovoltaic (solar PV) programs to help meet the goals of the NY-Sun initiative. Specifically, the Commission authorizes NYSERDA, in response to its petition of April 25, 2013, to create a new tier (Second Tier) in the Standard Offer solar PV program with a lower incentive level, for commercial systems larger than 50 kW up to 200 kW; correspondingly raise the minimum project size for the Competitive PV program to systems above 200 kW; implement a temporary incentive to allow for capacity additions up to the new 200 kW maximum size in the Standard Offer program; and, increase the residential size cap

from 7kW to 25 kW. In addition, the Commission provides flexibility to NYSERDA to use unencumbered funds from the Competitive PV program to help boost solar PV installation in the New York City area market.

#### BACKGROUND

Since its inception, the Solar PV standard offer incentive program (Standard Offer) has been the cornerstone of the CST program that provides a fixed dollar incentive to residential and commercial customers on a first come-first serve basis. The program is designed to offer the lowest incentive possible to continue to grow the market on a sustainable and reliable basis. Incentive levels are adjusted to address consumer demand and market factors in a way that avoids program interruptions and enables renewable energy businesses to continue to grow in the State. The Commission has authorized NYSERDA to revise the program and budgets a number of times over the years to respond to the market.

In 2010, The Commission authorized a complementary program to facilitate the installation of larger solar PV systems, above 50 kW, through a competitive bidding process (Competitive PV).<sup>1</sup> This latter program was initially established as a "geographic balancing" mechanism in the downstate region (NYISO Zones G, H, I and J) but was expanded by the Commission

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<sup>1</sup> Case 03-E-0188 Retail Renewable Portfolio Standard, Order Authorizing Customer-Sited Tier Program Through 2015 and Resolving Geographic Balance and Other Issues Pertaining to the RPS Program, issued and effective April 2, 2010 (2010 Order).

in 2012 to include the upstate region (NYISO Zones A-F).<sup>2</sup> Together, the Standard Offer and Competitive PV programs support the NY-Sun goals established for the State.

The Standard Offer program budget is divided into monthly allowances to regulate the incentives while providing a sustained and predictable program. The total 2013 budget for the Standard Offer program is \$49.1 million. Currently, the monthly budget is apportioned at approximately \$4.7 million through 2013 with an incentive offered at \$1.40 per Watt. The program is structured so that no new applications will be accepted by NYSERDA in a month when applications for that month already equal or exceed the monthly budget. If applications in a two-month period exceed, by a material amount, the available incentive funding for that period, a reduction in the incentive level will commence. NYSERDA also has the authority to increase incentives if demand declines by an appreciable amount in two consecutive months, although the program goal is to avoid such incentive increases. Other program rules apply and are articulated in NYSERDA's Program Opportunity Notice (PON) 2112.

The current solicitation for the Competitive PV program (PON 2589) totaled \$106.9 million for 2012-2103; allocated specific budgets to downstate and upstate NYISO load zones; and provided for three separate rounds of bids.<sup>3</sup> Projects are chosen based on lowest bid price with a maximum of \$3 million awarded per project. Incentives are paid on actual measured performance over a 3-year run period plus some upfront

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<sup>2</sup> Case 03-E-0188, supra, Order Authorizing the Expansion of the Solar Photovoltaic and Geographic Balance Programs from 2012 through 2015 and the Reallocation of the Main Tier Unencumbered Funds, issued and effective April 24, 2012.

<sup>3</sup> Round 1 was due December 5, 2012; Round 2 was due on March 14, and Round 3 is scheduled to be due August 29, 2013.

funding. Recently, the Commission authorized NYSERDA to transfer funds in the Competitive PV program from the downstate NYISO load zones (I-J), where the market has not been very active, to the upstate loads zones (A-F and G-H) where there is high market demand.<sup>4</sup>

SUMMARY OF NYSERDA'S PETITION

In its petition, NYSERDA seeks authorization to create a second standard offer tier within the RPS CST PV program for systems sized above 50 kW up to a maximum of 200 kW (Second Tier).<sup>5</sup> This Second Tier is designed to attract proposals for a market segment that is underserved by the current program structure. These medium sized PV systems are too large for the current Standard Offer program, yet cannot successfully compete in the Competitive PV program. NYSERDA has conducted stakeholder meetings that confirm that this niche in the PV market would be better served by a new standard offer targeted to promote these systems. NYSERDA also states that the Second Tier would assist in meeting the 2013 goals of the NY-Sun Initiative. NYSERDA does not propose a specific incentive level for these larger systems, but does provide an example of how the program would function if the new incentive were set at 70 percent of the rate for smaller systems (currently \$1.40 per watt) rounded to the nearest 5 cents, which would produce an incentive of \$1.00 per watt for all watts above the first 50 kW (Base Tier). It proposes that the incentive be determined by

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<sup>4</sup> Case 03-E-0188, supra, Order Authorizing Transfer of Solar Photovoltaic Funding in the Customer-Sited Tier Among New York Independent System Operator Load Zone Groups, issued June 20, 2013.

<sup>5</sup> Petition for Modification of NY-SUN Solar PV Programs, April 25, 2013.

NYSERDA in consultation with our staff, but in no case should it exceed 80 percent of the Base Tier.

NYSERDA further seeks to increase the threshold for eligibility to bid into the Competitive PV program to match the new maximum size for the Standard Offer program, to minimize overlap or confusion between the two programs.

To complete its new Second Tier proposal, NYSERDA proposes that a short term incentive be available for projects previously installed at or below the Base Tier (50 kW). This short term incentive would be applied at the full Base Tier incentive (\$1.40 per watt) for the first additional 50 kW and the Second Tier incentive level for the balance of the project, not to exceed 200 kW in total system size. NYSERDA states that this limited period for system upgrades will both assist in meeting NY-Sun Initiative goals and provide the correct economic signals to existing customers who will likely need to replace or supplement inverters and other hardware and software as well as incur redesign, permitting, and inspection costs.

Finally, NYSERDA requests authorization to increase the eligible system size cap for residential installations from the current 7 kW to 25 kW to be consistent with the eligibility requirements for residential solar PV net-metering.

STATE ADMINISTRATIVE PROCEDURE ACT NOTICE

A notice was published in the State Register on May 15, 2013 [03E0188SP40]. The minimum period for the receipt of public comments pursuant to the State Administrative Procedure Act (SAPA) regarding the Notice expired on July 1,

2013. Comments were received from twelve parties<sup>6</sup> and are summarized below.

SUMMARY OF COMMENTS

SEIA supports NYSERDA's petition, stating that it addresses both residential and small commercial customer needs in reaching the NY-Sun goal of quadrupling PV installations in 2013, over those in 2011. It further notes that increasing the threshold to over 200 kW for the Competitive PV program, and less than 200 kW for the Standard Offer program, will help reduce confusion between the two programs, reduce market overlap, and facilitate PV installations. SEIA also believes that creating the six month short-term incentive for commercial customers to increase their base systems will further increase the likelihood of reaching the 2013 NY-Sun goals. SEIA states that increasing the size cap for residential systems to 25kW will further assist in the installation of new solar PV.

Several parties (Tetra Tech, Green Hybrid, Paradise, and Revolution Solar) recommend raising the upper limitation for the present Standard Offer Base Tier from 50 kW to 100 kW, while maintaining the current \$1.40 per watt incentive. These parties also generally support the new Second Tier up to 200 kW proposed by NYSERDA, although Green Hybrid would increase the Second Tier incentive to 80% of the Base Tier incentive, which when rounded to the nearest five cents would produce a \$1.10 per watt

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<sup>6</sup> Comments were received from Alliance for Clean Energy New York, Inc. (ACE NY), Multiple Intervenors (MI), Hudson Solar, Vote Solar Initiative and Pace Energy and Climate Center (VSI/Pace), Solar Energy Industries Association (SEIA), Tetra Tech, Green Hybrid Energy Solutions, Inc. (Green Hybrid), Paradise Energy Solutions (Paradise), Revolution Solar, New York Light Energy (NYLE), the City of New York (City), and Consolidated Edison Company of New York Inc. (Con Edison).

incentive for that tier. As well, NYLE proposes that the Second Tier incentive be raised to 85% of the Base Tier incentive and that no rounding be used. This would provide an initial Second Tier incentive \$1.19 per watt. These parties generally cite the need to provide more incentives to this market than currently exists or is proposed by NYSERDA in order to reach the NY-Sun goals. NYLE also states that 60% of PV system costs are fixed, such that the variable costs support an 85% Second Tier incentive.

Con Edison supports NYSERDA's petition in its entirety, including NYSERDA's proposed stepped incentive levels, noting that smaller systems (between 50 kW and 200 kW) have had a difficult time in the Competitive PV program solicitation program due to lack of economies of scale. It states the proposed stepped incentive levels recognize the economies of scale available to a 200 kW system that cannot be achieved by a 50 kW system. Based on feedback Con Edison has received from installers, it believes that there is a sizable population of customers reluctant to participate in the competitive solicitation program, but would be well served by the proposed expansion of the Standard Offer program. Con Edison believes that lifting the minimum project size for competitive solicitation program from 50kW to 200kW is prudent.

NYLE recommends that the maximum system size for the Second Tier be increased from 200 kW to 250 kW; increase the threshold for the Competitive PV program to match that size as well as well the six month short-term incentive for previously completed commercial systems. It believes that these changes would reduce the overall installed cost per Watt to ratepayers, as measured across all RPS CST PV programs. NYLE also notes that the direct and indirect costs associated with a single inverter for a 250 kW array are approximately half that of a 200

kW array utilizing two 100 kW inverters as well as reducing mechanical system failure which would increase long term system uptime. It also notes that currently there are no manufacturers which produce a single 200 kW inverter, while it states there are a substantial number of suppliers which produce 250 kW inverters. NYLE also raises concerns that insufficient incentives cause installers to cut corners in installations and that the Base Tier incentive should be maintained at current levels throughout the rest of 2013. It also proposes that incentive levels in the future only be decreased if both applications and completed systems exceed NYSERDA's monthly budget. ACE NY also supports increasing the cap for the Second Tier to 250 kW to better match current manufacturer inverter sizes or 300 kW to coincide with the application process for inverter based systems in the Standardized Interconnection Requirements (SIR).

VSI/Pace also supports NYSERDA's petition, but recommends that the Competitive PV program for this size be revisited in the 2013 RPS Review. Hudson Solar supports the petition, but is concerned that creating the Second Tier in the Standard Offer program is likely to attract large established out-of-state installers to the detriment of small local installers experienced in serving the under 50 kW market. Therefore, it requests separate budgets be established for the Base Tier and the Second Tier.

The City supports the petition, but would increase the upper limitation on eligible systems to 500 kW. It states that doing so would provide financial certainty, market flexibility, and reduce the high upfront capital costs of a PV system. The City also requests that the RPS eligibility rules be changed to allow City-owned property, which does not pay the RPS surcharge, to be eligible for RPS incentives. Finally, it urges that all

of its recommendations be implemented now and not wait for the 2013 RPS Program Review.

Green Hybrid states that residential projects should also be given a six month short-term opportunity, similar to the one proposed for commercial projects, to increase the size of their system to 25 kW. MI takes no position on the specifics of NYSERDA's petition, but opposes any increase in ratepayer collections citing concerns about the lagging economy in New York.

#### DISCUSSION AND CONCLUSION

##### Increase in System-Size Cap

NYSERDA's request for a new tier in the Standard Offer program is based on its "market intelligence," including feedback at a recent stakeholder meeting held in February 2013 on the status of the NY-Sun Program. Participants at that meeting noted that the program rules for the competitive PV program are not well-suited for systems sized under 200 kW, citing customer acquisition costs, contract deadlines and financing difficulties as barriers for supporting smaller PV systems in that program. The comments above have echoed that sentiment. However, Department of Public Service Staff (Staff) reports that 20 percent of the winning bids in each of the last two rounds of the Competitive PV program were in the 50 kW to 200 kW size range. While this does not appear unreasonable, considering that the Competitive PV program is designed to accept bids well above this size, we nevertheless are aware of the ambitious NY-Sun goals set for 2013 and believe that creating a Second Tier in the Standard Offer program, with a lower incentive level, will increase the installation rate of larger systems more rapidly due to the relative ease of application and acceptance into that program.

Several commentors recommended even higher system size caps in the Second Tier than that proposed by NYSERDA. NYLE and ACE NY recommend an increase in the eligibility cap to at least 250 kW based on the premise that a single 250 kW inverter can cost less than two 100 kW inverters. The City recommends raising the cap to 500 kW noting that projects between 50 kW and 500 kW are best suited for locations in New York City and that the Standard Offer Program would reduce the high up-front costs of developing solar PV in that region.

We are not persuaded by these arguments. In fact, we believe the lower costs of the larger inverters supports the concept that PV systems beyond 200 kW should be bidding in the Competitive PV program and not receiving incentives in the Standard Offer program. Also, increasing the system size beyond that proposed by NYSERDA will put enormous pressure on the current Standard Offer budget, which is close to being fully encumbered each month by applications for projects currently capped at 50 kW. Therefore, we will authorize NYSERDA to set the Second Tier system size cap for commercial systems at no more than 200 kW in the Standard Offer program.

We also authorize NYSERDA to raise the residential cap from 7 kW to no more than 25 kW to be consistent with New York's net-metering law and to support home-based businesses and electric vehicle charging stations with meters under residential rates. Finally, we authorize NYSERDA to increase the minimum system size in the Competitive PV program to above 200 kW to avoid market overlap and confusion between the Standard Offer and the Competitive PV programs.

Incentive Levels and budgets

We will require NYSERDA to initially set the Second Tier incentive level at 70 percent of the Base Tier incentive, currently set at \$1.40 per Watt. As NYSERDA illustrates in its petition, a 100 kW PV system would earn a total incentive of \$1.20 per Watt and a 200 kW system would earn an incentive of \$1.10 per Watt. NYSERDA has provided Staff with market data that supports this level and we believe it is reasonable considering the ease of application into the Standard Offer program and the payment structure of the incentives, which are based on capacity additions and not production, which is required in the Competitive PV program. We will also authorize NYSERDA to implement the short-term incentive structure, through the end of 2013, which it proposes for adding additional capacity to systems already installed.

We will require NYSERDA to continue the procedures it currently has in place for adjusting incentive levels based on demand. However, because the demand for projects in the Base Tier (under 50 kW) may differ dramatically from those of the Second Tier (above 50 kW - 200 kW), we will allow NYSERDA, in consultation with Staff, flexibility in adjusting the Base Tier and the Second Tier incentive levels in order to properly respond to those two tiers. Therefore, the lowering of the incentive for the Base Tier may not automatically necessitate the lowering of the incentive for the Second Tier. The reverse will apply as well. We remind NYSERDA and Staff that it must balance the level of funding with the incentives to avoid creating a "run on the bank" and long application queues.

We are also sensitive to the concern of Hudson Solar that creation of the Second Tier may squeeze out the small NY-based installer that focuses on residential and small commercial systems under 50 kW. However, we are reluctant, at this time,

to create separate budgets for the two tiers since program demand may fluctuate considerably by installer and system size each month as the new Second Tier is rolled out. We realize there will be a learning curve and uncertainty for NYSERDA and the market participants as these changes unfold, and we do not want to add additional complexities or controls to the program until there emerges a consistent need to do so. If program experience over the next several months reveals trends that warrant controls, we will expect NYSERDA, in consultation with Staff, to identify opportunities to improve the program in a fair and cost efficient manner.

#### New York City Market

In its comments, the City proposes a change in the eligibility rules to allow non-RPS paying customers to be eligible for incentives under the solar PV programs so systems can be installed on City owned buildings that primarily receive their electricity from the New York Power Authority. These issues have been raised and responded to in the past, leading us to decide that there were enough NYC-owned properties contributing to the RPS that we did not need to consider how the program might be opened for other NYPA customers.<sup>7</sup> The City has yet to demonstrate that this is not the case. Since this request has far reaching policy implications for all CST programs, not just solar, we will reserve further discussion on this issue for the broader RPS program review. We are hopeful that creating a Second Tier for larger PV systems in the Standard Offer program will be the boost that is needed to incent installers to increase solar PV penetration in the New York City market area (NYISO load zone I-J).

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<sup>7</sup> 2010 Order p. 35.

In addition, to ensure that eligible projects in the New York City area (zones I-J) that apply to the Standard Offer program do not go unfunded, we will afford NYSERDA the flexibility to apply any unencumbered funds, from the I-J load zone budget, in the Competitive PV program to the Standard Offer program for projects proposed in zones I-J. This shift will only be allowed if unencumbered funds remain after awards are made in the third round of the Competitive PV Program and only if demand exceeds the budget in any given month for the Standard Offer program. We believe this measure is prudent given the significant emphasis on installing more solar PV in the New York City area.

Finally, in response to the comments of MI, the program changes authorized herein are within the currently authorized budgets we have previously set for the solar PV programs and require no increase in ratepayer collections.

The Commission orders:

1. The New York State Energy Research and Development Authority (NYSERDA) is authorized to revise the Solar Photovoltaic Programs in the Customer-Sited Tier of the Renewable Portfolio Standard Program in the manner described in the body of this order.
2. This proceeding is continued.

By the Commission,

(SIGNED)

JEFFREY C. COHEN  
Acting Secretary