

NEW JERSEY BOARD OF PUBLIC UTILITIES

**FY2016 Renewable Electric Storage Incentive Program
Second Straw Proposal (September 15, 2015)**

Joint Comments of SolarCity Corporation and Eos Energy Storage

SolarCity Corporation and Eos Energy Storage (“SolarCity and Eos”) jointly submit these comments, in support of two key proposals by Board Staff and the Market Manager: basing the prescriptive rebate on energy capacity and allowing RES systems integrated to be integrated with new RE installations. SolarCity offers solar and storage solutions for customers in 19 states and has deployed over 22 MW of solar PV in New Jersey¹; Eos Energy Storage is a New Jersey-based battery storage producer. We appreciate Staff’s continued inclusion of stakeholders in this process and the opportunity to comment on the Second Straw Proposal.

SolarCity and Eos Support Basing the Prescriptive Rebate on Energy Capacity

SolarCity and Eos strongly support the Staff’s proposal that the prescriptive rebate be based on energy capacity (kWh) rather than power capacity (kW). First, we agree with Staff that this change will balance the three goals of the RES program by leveling the economic playing field between systems designed primarily for participation in frequency regulation markets and those designed primarily for emergency back-up and load shifting. Second, we agree that establishing a minimum runtime for systems is not necessary when basing the incentive payment on energy capacity instead of power capacity.

We also agree with Staff’s proposal that the incentive payment be based on the RES system’s energy capacity in kWh as stated on the manufacturer’s specification sheet, but point out that a minimum discharge time cannot be required. Manufacturer spec sheets for energy storage systems will not include a minimum discharge time. Unlike with conventional generation, minimum discharge times are effectively irrelevant for battery storage systems because the minimum discharge is typically less than one second. The characteristics generally included on an energy storage system’s spec sheet include the system’s energy capacity (kWh) and C-rate, which represents the system duration (a C-rate of C/2 represents a system with a 2-hour system duration).

SolarCity and Eos Support Allowing RES Systems To Be Integrated With New RE Installations

SolarCity and Eos strongly support the eligibility of RES systems integrated with new RE installations for several reasons. First, this will allow New Jersey ratepayers without existing RE systems to participate in the RES program. Second, it allows the participation of lower cost projects, as retrofits cost significantly more, and ensures that the maximum number of projects are completed. Third, it allows systems owners to take advantage of the federal Investment Tax Credit, further reducing costs. Fourth, we agree with Staff and other commenters that the

¹ States served as of 8/10/15; MW installed in NJ as of 5/29/15.

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Comments of SolarCity Corporation

SolarCity wholeheartedly supports the rebate program proposed in this Second Straw Proposal for the FY2016 Renewable Electric Storage (RES) Incentive Program and applauds Board Staff and the Market Manager for their efforts. We appreciate the opportunity to comment on this important proposal. SolarCity strongly supports the prescriptive rebated program based on energy capacity (kWh) to balance the RES program goals of load shifting, back-up power, and frequency regulation. We believe that the proposed program is the best possible result of existing market analyses, stakeholder input, and lessons learned and that the full \$6 million RES Incentive Program budget should be allocated to the program. We also propose several minor changes to the implementation details of the program in order to strengthen participation and ensure successful projects. Finally, we strongly supports Staff's proposal to allow RES systems to be integrated with new RE installations.

SolarCity Supports Basing the Prescriptive Rebate on Energy Capacity

As we discuss in greater detail in our "Joint Comments of SolarCity Corporation and Eos Energy Storage," also filed today in this proceeding, SolarCity adamantly supports the Staff's proposal that the prescriptive rebate be based on energy capacity (kWh) rather than power capacity (kW). We believe that this will balance the three goals of the RES program and achieve maximum benefits for NJ ratepayers. We agree that the incentive payment should be based on the RES system's energy capacity in kWh according to the manufacturer's specification sheet, but note that a minimum discharge time may not be stated the manufacturer as it is not relevant to battery storage systems.

SolarCity Proposes Allocating the Full \$6 Million Budget to this Rebate Program

SolarCity strongly urges Staff to allocate the full \$6 million budget approved for the FY2016 RES Incentive Program to the proposed rebate program. It would unnecessarily waste stakeholder and Staff efforts to create a second incentive program for FY2016. It is also unlikely that the market assessment, recommendations, stakeholder process, and final program could be completed in time for a program to implemented and result in successful projects in a reasonable timeframe. Instead, the recommendations of any new market assessment should be incorporated to the FY2017 RES Incentive Program.

The proposed rebate program is already based on a thorough market assessment by Navigant Consulting, Inc. in 2012 and the subsequent exhaustive stakeholder input and Staff work through developing the FY2015 and FY2016 programs. Additionally, stakeholders have not questioned the three important use cases arrived at by Navigant's study and experience with Superstorm Sandy- load shifting, frequency regulation, and back-up power. This suggests that while

potentially informational, an additional academic study of the potential use of resources is not necessary. Significantly more useful would be the experience and knowledge gained through deploying and operating RES systems under a fully funded FY2016 rebate program. Therefore, it would be a mistake and a waste of State and stakeholder resources to withhold funds in order to establish a second incentive program for FY2016.

The Rutgers University Laboratory for Energy Smart Systems (LESS) will require a significant amount of time to conduct a second market assessment for electric storage in NJ, particularly considering the broadening of the scope to include biopower and combined heat and power. After the process to agree on study parameters and determinations, the study team will need time to establish recommendations for those incentive programs. Based on those recommendations, Staff must propose a new program to incorporate those recommendations and hold an entirely separate stakeholder process to develop and finalize that program. There is a very high possibility that this entire process would not be completed until well into 2016, leaving only a short time for any resultant program to actually operate and lead to successfully implemented projects.

In addition, this will require considerable effort from both stakeholders and Staff in a process that is completely outside of the current FY2016 RES stakeholder process and the imminent FY2017 process. In addition to such a significant commitment of resources from many parties, this draws developers away from their efforts to develop and complete projects for the FY2016 program currently under discussion. Finally, a second FY2016 program will not benefit from lessons learned from the implementation of the currently proposed FY2016 program as these projects will not have reached completion.

Instead, SolarCity urges Staff to commit as much funding as possible to the currently proposed program that incorporates a valid market assessment, experience gained from the FY2015 program, and was developed based on the significant good faith efforts of stakeholders. Rutgers LESS will then have sufficient time to complete a thorough market assessment that incorporate appropriate stakeholder feedback and make useful recommendations for future incentive programs for all three categories of resources. These recommendations can be incorporated in FY2017 programs through the expected stakeholder processes. This will provide the additional benefits of program consistency, increased market penetration of RES systems and increased understanding of RES system deployment and operation gained through a fully funded FY2016 rebate program.

However, if Staff believes that it is absolutely necessary to withhold some FY2016 funding in order to establish a second FY2016 incentive program, SolarCity would not support the withholding of more than \$1 million for that purpose. In addition, we propose that any portion of FY2016 funding withheld for a second FY2016 program be recommitted to the currently proposed rebate program if the second FY2016 program recommended by some portion of the \$6 million budget for a separate program recommended by Rutgers Laboratory for Energy Smart Systems (LESS), we propose that the reserved portion of the budget be applied to the open enrollment program if the program recommended by Rutgers LESS and refined through the stakeholder process has not been finalized by March 2016. This will ensure that the full benefits

of the RES program are achieved each year and are not delayed or entirely eliminated by lengthy research and stakeholder processes.

SolarCity Supports the Prescriptive Rebate Design with Minor Adjustments

SolarCity supports the use of an open enrollment program with a prescriptive rebate. We also support Staff's proposed incentive level of \$300/kWh of energy capacity with no tiers. While lower than the level proposed in our comments on Staff's May Straw Proposal, we believe the proposed incentive will support RES projects in the state.

In general SolarCity agrees with the proposed implementation of the program. SolarCity believes that several minor adjustments to the proposed program will ensure its success and ensure maximum benefit to New Jersey ratepayers.

- We propose that the open enrollment program begin three months after Board approval of Staff's final proposal. This will allow all entities that would participate in the program to develop projects that accurately incorporate the details of the approved program. A shorter development period could lead to the submission of speculative projects designed without clarity around program details. This could damage the success of the overall program and lead to awarding projects that cannot be successfully completed.
- We propose that a meaningful application fee should be added to increase the likelihood that awarded projects will be completed. The application fee should be assessed at \$5/kWh of energy capacity of the project and refunded to the developer upon completion of the project.
- We support the consideration of applications on a first-come, first-served basis determined by the date applications are received by the Market Monitor.
- We propose that the project developer cap be adjusted up to 50% of the final program budget as it is too restrictive at the proposed level. This will ensure that the program results in the maximum amount of implemented RES projects. As commercially available and proven energy storage solutions are relatively new to the power industry, imposing a low developer cap in a market where few credible developers have the wherewithal to bring their product to that market may unduly limit the funds that can be realistically deployed.
- We support the 12-month deadline for project completion and the ability for projects to receive a 6-month extension. However, we propose that in order for projects to receive an extension, project milestones must be proven, including an application for interconnection and proof of dialogue with the utility showing reasonable progress (as determined by Staff).
- We support the 10% forfeiture of incentive award for those who require a 6-month extension. However, based on its experience interconnection RES projects, SolarCity proposes that three categories of project delays are out of the hands of the developer and

should therefore cause an exemption from the 10% forfeiture: 1) interconnection delays, 2) delays due to questions surrounding NEM eligibility, and 3) force majeure (at Staff's discretion).

- While we support the Level 3 Interconnection Study reimbursement, we note that this does not provide a long-term solution to unnecessarily cumbersome interconnection processes.
- We support the carrying over of project eligibility and technical requirements from the FY2015 program.
- We support Staff's proposed monitoring and reporting requirements.

SolarCity Supports Allowing RES Systems to Be Integrated With New RE Installations

As discussed in our "Joint Comments of SolarCity Corporation and Eos Energy Storage," SolarCity strongly supports the eligibility of RES systems integrated with new RE installations for several reasons. This will open program eligibility to a much broader range of NJ ratepayers and reduce RES system costs, ensuring that the maximum number of projects are completed.

Conclusion

In conclusion, SolarCity strongly supports the rebate program currently proposed by Staff. In fact, we believe that this program represents the best possible outcome based on existing market assessments, extensive stakeholder input, lessons learned from the FY2015 program, and significant effort by Staff. We therefore propose that the full \$6 million RES Incentive Program budget be allocated to the proposed program and that the results of any further academic study be incorporated into an FY2017 RES program. Finally, while we sincerely endorse the proposed program, we suggest minor adjustments to program implementation details to strengthen the program and ensure successful projects that achieve the goals of the program.

Respectfully submitted,

Betty Watson
Deputy Director, Policy and Electricity Markets
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amount of solar capacity developed through this program would not materially impact the SREC oversupply situation.

Conclusion

In conclusion, SolarCity and Eos strongly support Staff's proposal to base the rebate program on energy capacity (kWh), which will balance the three program goals of load shifting, back-up power, and frequency regulation. We also agree with Staff's proposal to include RES systems connected to new RE installations in order to minimize costs and maximize program benefits. We look forward to continued engagement with Staff and the Market Monitor and to the success of the FY2016 RES program.

Respectfully submitted,

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