Agenda Item: 8C



STATE OF NEW JERSEY

Board of Public Utilities 44 South Clinton Avenue, 9th Floor Trenton, New Jersey 08625-0350 www.nj.gov/bpu/

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IN THE MATTER OF THE CLOSURE OF THE)	
SREC REGISTRATION PROGRAM PURSUANT)	
TO P.L. 2018, C. 17)	DOCKET NO. QO19010068

Parties of Record:

Stefanie A. Brand, Esq., Director, New Jersey Division of Rate Counsel

BY THE BOARD:

In this Order the Board provides Staff's current forecast for the month in which 5.1% of the kilowatt-hours sold in the State will be generated by solar electric generation facilities connected to the distribution system ("5.1% Milestone").

BACKGROUND AND PROCEDURAL HISTORY

On May 23, 2018, Governor Murphy signed <u>P.L.</u> 2018, <u>c.</u> 17, codified at N.J.S.A. 48:3-51-87 into law ("Clean Energy Act" or "CEA" or "Act"), effective immediately. The CEA effected many changes to the legal and regulatory framework for solar development. One of the most significant changes is the directive that once the Board determines that the 5.1% Milestone has been achieved, the Board shall close the SREC Registration Program ("SRP") to new applicants. On June 22, 2018, the Board approved a rule proposal to amend the RPS rules governing the SRP at N.J.A.C. 14:8-2.4 to conform to this mandate.¹

On August 6, 2018, the Board's proposed rules were published in the New Jersey Register with a sixty-day public comment period with comments due by October 5, 2018.² Seven entities responded to the rule proposal and three entities jointly filed comments. Rate Counsel supported the rule proposal as consistent with and properly implementing the CEA. MSSIA questioned the definition of "attainment" in the law and suggested several possible definitions. The other three

¹ <u>I/M/O Rulemaking to Implement Certain Sections of P.L. 2018, c. 17, Regarding Closing the SREC Program to New Registrations Following the Attainment of 5.1% Total Kilowatt-hours Sold in the State from Solar Electric Power Generators Connected to the State's Electric Distribution System, BPU Docket No. QO18060647, June 22, 2018.</u>

² 50 N.J.R. 1708(a).

Agenda Item: 8C

commenters recommended alternative approaches to determining attainment of the 5.1% milestone and sought more detail on the sources of data and the analytic methods used to calculate 5.1% of kilowatt-hours sold.

On August 7, 2019, the Board approved a rule proposal addressing the methodology for determining the percentage of solar electric kilowatts sold, an approach for the Board to report on progress toward the attainment of the 5.1% milestone, and the implications of that milestone for project registration length.³ In the August rule proposal, based upon solar installation and retail sales data available through July 2019, the Board projected that the 5.1% milestone would be achieved "on or about June 2020". Six sets of comments on the proposed rule amendments were received by the November 15, 2019 deadline.

On December 6, 2019, following numerous stakeholder meetings and iterative revisions to Staff's straw proposal, the Board approved a Transition Incentive program to provide solar incentives for projects that were unable to commence commercial operations prior to the Board's determination that the state has attained the 5.1% Milestone. The Board approved a factorized Transition Renewable Energy Certificate ("TREC") to serve as the Transition Incentive ("TI") for those projects that have registered in the SRP and remain in good standing at the time of 5.1% Milestone attainment but have not commenced commercial operations at that time. In an order to be considered separately on this agenda, Staff recommends that the Board clarify that the existing registration process be kept open after attainment of the 5.1% Milestone so that projects that remain in compliance with the requirements of that registration process after the 5.1% Milestone will be eligible for the TI until registration for the Successor Incentive is opened.

CALCULATION OF THE 5.1% MILESTONE

Pursuant to the rule amendments adopted in another docket on this Agenda, monthly estimates of the percentage of solar electricity within total retail kilowatt-hours sold are to be provided beginning six months prior to the estimated month of attainment of the 5.1% Milestone. Based upon the most current estimates, we are now within the six months of the 5.1% Milestone. However, the Board notes that this figure could change as a result of any input provided by stakeholders, as discussed below.

The CEA's mandate to close the SREC program to new applications upon the attainment of the 5.1% Milestone requires the Board to compare solar electricity generation and retail electricity sold over the same time period. In other words, the Board must compare the kilowatt-hours of solar electric generation during a given twelve-months with the total kilowatt-hours sold during the same twelve months. However, the lack of current data on both solar generation and retail electric sales makes determining this ratio difficult.

⁴ IMO A New Jersey Solar Transition Pursuant to P.L. 2018, c.17, Docket No. QO19010068. December 6, 2019.

³ <u>I/M/O N.J.A.C.</u> 14:8-2.4 Amendments to the Renewable Portfolio Standard Rules on Closure of the SREC Registration Program Pursuant to P.L. 2018, c. 17 (Rule Proposal), BPU Docket No. QX19060720, August 7, 2019. The rule proposal was approved August 7, 2019 and published in the September 16, 2019 New Jersey Register with comments due November 15, 2019.

Agenda Item: 8C

To implement the statute and rule, the Board will estimate solar electric generation on the basis of installed solar capacity as that capacity is reported on a monthly basis from the SRP through New Jersey's Clean Energy Program ("NJCEP"). The amount of installed capacity and the amount of solar irradiance is different each month; each project's SREC eligibility begins upon a date determined by the local EDC's issuance of a Permission to Operate or "PTO". Given these variables, a schedule of twelve months of solar output factors must be applied to the cumulative installed solar capacity in each month to accurately estimate the amount of electricity produced by the fleet of statewide installed solar.

To estimate monthly statewide solar electricity production, Staff have adapted the Board-approved protocol for measuring solar generation used in the SRP.⁵ The Board's protocol for measuring annual productivity of New Jersey solar installations has historically employed an estimate of 1200 kilowatt-hours per kilowatt of installed capacity, measured in DC. This estimate is derived from the National Renewable Energy Laboratory solar estimation tool PV Watts and is based upon typical meteorological data collected from Newark and Atlantic City weather stations.

However, Staff acknowledges that actual solar electricity generation from the fleet of New Jersey solar installations will depart from the Board's estimation protocol. Several variables are at work. Actual weather conditions over the preceding twelve months inevitably differ from the assumptions made by the model. In addition, the actual average fleet-wide solar installation parameters deviate from the solar installation parameters used in PV Watts. During the period from Energy Year 2014 through Energy Year 2018, for example, PJM-EIS found that SREC creation averaged 1169 kilowatt-hours per kilowatt (dc) rather than the 1200 kilowatt-hours historically used by the Board.⁶ (See Appendix A)

Similarly, current monthly retail electricity sales data is not immediately available. Staff relies upon the reports of electricity load served by Third Party Suppliers and Basic Generation Service Providers ("TPS/BGS providers") through PJM-EIS GATS for Board-jurisdictional load. PJM Interconnection LLC, manager of the regional wholesale electricity market, provides load served data to its unregulated affiliate PJM-EIS, which manages the Generation Attributes Tracking System ("GATS") used to track New Jersey's RPS. GATS makes available to state RPS administrators, on a regular basis, load served data that can be easily differentiated to identify the entities obligated to comply with the RPS. Since it does not reflect line losses, it has historically required adjusting by an average of 5% to accurately reflect retail sales.

Working within these data constraints, Staff calculates the trailing twelve-month estimate of the solar portion of retail electricity sold by dividing the estimated amount of solar electricity produced over the previous twelve months by the estimated amount of retail electricity sold over the same period.

⁵ <u>I/M/O New Jersey's Clean Energy Program – Fiscal Year 2020 Protocols to Measure Resource Savings.</u> Docket No. QO19040471. Pg. 191, July 10, 2019.

⁶New Jersey Solar Performance Analysis. PJM-EIS. February 1, 2019. Attachment to the Transition Incentive Staff Straw Proposal. August 22, 2019. https://www.njcleanenergy.com/renewable-energy/program-updates-and-background-information/solar-proceedings. Accessed December 19, 2019.

Agenda Item: 8C

Applying the monthly output factors in Appendix A to the cumulative installed capacity reported by the SREC Registration Processing team on December 18, 2019 results in an estimation of solar electricity produced through the previous twelve months.

On December 6, 2019 GATS reported the unadjusted load served by New Jersey TPS/BGS providers to Staff as approximately 74.5 million MWh for the twelve months ending on November 30, 2019. The unadjusted load served must be reduced by a factor accounting for line losses to reflect retail sales by the RPS obligated entities; in Staff's experience with these figures in the annual RPS compliance process, this adjustment has averaged 5%.

Using these inputs, Staff's calculation produces an estimate that, at present, 4.87% of the retail electricity sold in New Jersey is generated by solar facilities connected to New Jersey distribution systems.

STAFF RECOMMENDATION

The above-referenced rule adoption requires the Board to seek a stakeholder input to refine the assumptions used in calculating attainment of the 5.1% Milestone. Staff recommends that the Board direct Staff to gather final stakeholder input into the variables used in calculating the percent of retail electricity sales comprised from solar electricity, the monthly solar production factors to apply to cumulative installed capacity to arrive at estimated solar electricity generation as well as line loss adjustment factors to apply to Board-jurisdictional load served to arrive at retail electric sales. Staff proposes that the Board provide notice to stakeholders seeking that this stakeholder input must be provided by January 17, 2020. Based upon these refined inputs, Staff anticipates providing the Board an updated forecast for 5.1% milestone attainment by January 31, 2020.

DISCUSSION AND FINDINGS

The Board <u>FINDS</u> that amendments to the RPS rules have been properly proposed and adopted to close the SREC registration program upon attainment of the 5.1% Milestone. The Board <u>FINDS</u> that Staff should seek additional stakeholder input on the variables used to calculate the 5.1% Milestone, including the solar capacity factor and the line loss adjustment factor, as directed in the rule. The Board <u>HEREBY NOTICES</u> SREC Market Stakeholders to provide input on the variables referenced through submission to the Board's SECRETARY'S OFFICE by close of business on January 17, 2020. The Board <u>DIRECTS</u> Staff to post this Order to the New Jersey Clean Energy Program website and to distribute the Order to the relevant stakeholder email distribution lists. Staff has proposed a public process for obtaining it. The Board <u>DIRECTS</u> Staff to report its findings on refined estimates of solar productivity and retail electricity sales to the Board on or before January 31, 2020, and periodically thereafter until the attainment of the 5.1% Milestone.

Agenda Item: 8C

This Order shall be effective on January 8, 2020.

DATED: 1/8/20

BOARD OF PUBLIC UTILITIES

BY:

RESIDENT

COMMISSIONER

COMMISSIONER

UPENDRA J. CHIVUKULA

COMMISSIONER

ROBERT M. GORDON COMMISSIONER

ATTEST:

SECRETARY

I HEREBY CERTIFY that the within document is a true copy of the original in the files of the Board of Public Utilities.

Agenda Item: 8C

IN THE MATTER OF THE CLOSURE OF THE SREC REGISTRATION PROGRAM PURSUANT TO P.L. 2018, c. 17.

BPU DOCKET NO. QO19010068

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Agenda Item: 8C

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Agenda Item: 8C

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Agenda Item: 8C

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Agenda Item: 8C

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Agenda Date: 01/08/2020 Agenda Item: 8C

APPENDIX A

		Installed		Solar MWh	
		Capacity at	Produced as a		
	Expected	Month		Percent of	
	Solar Output	Start	Production	Retail Sales	
Month	(MWh/MW)	(MWdc)	*(MWh)	(%)	
June 2019	120	2,882	345,877	4.52%	
July 2019	125	2,943	367,877	4.58%	
Aug. 2019	116	<i>2,980</i>	345,700	4.65%	
Sept. 2019	102	3,006	306,584	4.70%	
Oct. 2019	85	3,058	259,966	4.75%	
Nov. 2019	68	3,087	209,932	4.79%	
Dec. 2019	59	3,122	184,212	4.83%	
Jan. 2020	73	3,157	230,478	4.87%	
Feb. 2020	86	3,192	274,532	4.92%	
Mar. 2020	103	3,227	332,405	4.98%	
Apr. 2020	115	3,262	375,157	5.05%	
May 2020	120	3,297	395,6 <u>68</u>	5.124%	
Total	1172	_	3,628,387		