



STATE OF NEW JERSEY
Board of Public Utilities
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Trenton, New Jersey 08625-0350
www.nj.gov/bpu/

CLEAN ENERGY

IN THE MATTER OF LACEY SAND SOLAR FARM, LLC)
– PETITION FOR ASSIGNMENT OF “PREFERRED”) ORDER
TREC FACTOR FOR FLOATING PHOTOVOLTAIC)
SOLAR PURSUANT TO THE BOARD’S TRANSITION)
INCENTIVE ORDER) DOCKET NO. QO21020469

Party of Record:

Mark S. Bellin, Esq., on behalf of Lacey Sand Solar Farm, LLC.

BY THE BOARD:

By this Order, the New Jersey Board of Public Utilities (“Board” or “BPU”) considers the petition of Lacey Sand Solar Farm, LLC (“Lacey” or “Petitioner”) for an assignment of a 1.0 Transition Renewable Energy Certificate (“TREC”) factor within the Transition Incentive (“TI”) Program.

BACKGROUND

Clean Energy Act

On May 23, 2018, the Clean Energy Act (“CEA”) was signed into law and became effective immediately. Among many other mandates, the CEA directed the Board to adopt rules and regulations to close the Solar Renewable Energy Certificate (“SREC”) Registration Program (“SREC Program” or “SRP”) to new applications once the Board determines that 5.1 percent of the kilowatt-hours sold in the State by each TPS/BGS provider has been generated by solar electric power generators connected to the distribution system (“5.1 % Milestone”). The CEA also directed the Board to complete a study that evaluates how to modify or replace the SREC program to encourage the continued efficient and orderly development of solar renewable energy generating sources throughout the State. By Order dated April 6, 2020, the Board determined that the 5.1% Milestone would be attained by April 30, 2020, and the SRP closed on that date.¹

¹ In re the Closure of the SREC Registration Program Pursuant to P.L. 2018, c. 17; In re a New Jersey Solar Transition Pursuant to P.L. 2018, c. 17 – Calculation of 5.1% Milestone for SREC Program Closure, BPU Docket Nos. QO18070698 and QO19010068, Order dated April 6, 2020.

Replacing the SRP

The Board decided to implement the replacement of the SREC Program in two phases. Phase 1 was the development of the TI Program, open to projects that filed a complete SRP registration after October 29, 2018, but failed to reach permission to operate by the date the 5.1% Milestone has been attained; and to new projects until the Board establishes a registration program for the Successor Program. Phase 2 is the Successor Program, including the Administratively Determined Incentive (“ADI”) Program, which opened to new registrations on August 28, 2021, and the Competitive Solar Incentive (“CSI”) Program, which was approved by the Board on December 7, 2022.

The Board approved the TI Program on December 6, 2019, following a year-long iterative process to provide a bridge between the legacy SREC Program and a to-be-developed Successor Incentive Program.² As described in more detail in the Transition Incentive Order, the Board approved a transition incentive to be delivered via a TREC. A TREC has a base incentive value of \$152/MW-hour. That base value is tailored to various solar market segments by the application of factors “tied to the estimated costs of building the different types and to their varying revenue expectations[.]”³ In other words, the factors allow the TREC to provide differentiated financial incentives for different installation types with the goal of ensuring that ratepayers are providing the minimum necessary financial incentive to develop diverse types of projects. The TI Program portal opened to new applications on May 1, 2020; pursuant to Board Order and the TI Rules, the TI Program remained open to new registrations until the establishment of a registration program for the Successor Program.⁴

The TI Program rules⁵ indicate that projects eligible for the TI Program were those which had registered in the SRP, conditionally certified Subsection (t) projects [N.J.S.A. 48:3-87(t)], conditionally certified Subsection (r) projects [N.J.S.A. 48:3-87(r)], and net metered projects. The TI Program was designed to be an interim program for projects registering between the achievement of the 5.1% Milestone and the opening of the Successor Program. For projects “that are net metered, provide on-site generation, or provide power for a qualified customer engaged in aggregated net metering and that registered in the Transition Incentive Program after October 30, 2020”, the project’s notice of conditional registration would expire after one year.⁶ The TI Program rules do not include an opportunity for extensions.

² In re a New Jersey Solar Transition Pursuant to P.L. 2018 c. 17, BPU Docket No. QO19010068, Order dated December 6, 2019 (“Transition Incentive Order”).

³ Transition Incentive Order at 30.

⁴ In re a New Jersey Solar Transition Pursuant to P.L. 2018, c. 17, BPU Docket No. QO19010068, Order dated January 8, 2020 (“January 2020 Order”).

⁵ N.J.A.C. 14:8-10

⁶ N.J.A.C 14:8-10.4(e)(4)(ii)

The Board identified eight market segments and assigned each a factor, ranging from 0.6 to 1.0, as set forth below:

Project Type	Factor
Subsection (t): landfill, brownfield, areas of historic fill.	1.0
Grid supply [Subsection (r)] rooftop	1.0
Net-metered non-residential rooftop and canopy	1.0
Community solar	0.85
Grid supply [Subsection (r)] ground mount	0.6
Net-metered residential ground mount	0.6
Net-metered residential rooftop and canopy	0.6
Net-metered non-residential ground mount	0.6

In an Order issued on January 8, 2020, to clarify certain aspects of the TI Program, the Board stated that “new or innovative solar technologies can file a petition with the Board requesting that these type projects be assigned a TREC factorization level” and also restated the eligible project types.⁷

New Jersey-American Water Company, Inc. (“NJAW”) subsequently filed a petition in Docket No. QO20020111 requesting a TREC factor of 1.0 for an 8.5 MW floating solar project located on a raw water reservoir and for floating solar generally. On July 15, 2020, the Board rejected the request and instead assigned a preliminary TREC factor of 0.6 to NJAW’s project and allowed other floating solar projects to request similar relief.⁸ Board Staff (“Staff”) noted that although floating solar could have an important role in the State’s solar future, there was limited experience with floating solar and a lack of data representative of floating solar as a class. The Board found that NJAW had not adequately demonstrated that the costs or benefits of its project or floating solar generally merited a specific TREC factor. The Board’s Order stated that floating solar projects “may petition the Board to request a factor greater than 0.6 based upon the specific facts and circumstances attributable to an individual project” and encouraged settlement discussions with the aim of reaching a satisfactory incentive level.

On July 9, 2021, Governor Murphy signed P.L. 2021, c.169 into law, effective immediately, directing the Board to develop and launch the Successor Incentive Program, among other requirements. On July 28, 2021, the Board announced the closure of the TI Program and the opening of the Successor Solar Incentive (“SuSI”) Program.⁹ The TI Program closed to new registrations on August 27, 2021, and the SuSI Program opened on August 28, 2021.

⁷ In re a New Jersey Solar Transition Pursuant to P.L. 2018, c. 17, BPU No. QO19010068 at 3, Order dated January 8, 2020.

⁸ In re New Jersey-American Water Company for “Preferred” TREC Factor for Floating Photovoltaic Solar Pursuant to the Board’s Transition Incentive Order, BPU Docket No. QO20020111, Order dated July 15, 2020 (“July 2020 Order”).

⁹ In re a New Jersey Solar Transition Pursuant to P.L. 2018, c. 17, BPU Docket No. QO19010068, Order dated July 28, 2021.

PETITION

On February 16, 2021, Lacey filed a petition requesting that the Board assign a TREC factor of 1.0 to its proposed 22.5 MW grid-supply solar project. Lacey entered into a ground lease with the property owner, Lacey Natural Sand, who operates a sand mine in Lacey Township, New Jersey. The sand mine has a series of dredge ponds formed from mining pits. According to the petition, five ponds will be connected to form a single larger 81.5-acre pond, and the project will be constructed in phases as the property is mined.

Pursuant to the July 2020 Order and its directive for floating solar developers to substantiate requests for TI Program factors greater than the preliminary assignment of 0.6, Lacey commissioned a study to determine a TREC factor for its project from its expenses (“Gabel Report”). The Gabel Report, which was attached to the petition, incorporated a System Advisory Model (“SAM”) output adapted from the illustrative SAM case developed for the non-residential ground-mounted market segment within the ADI Program. The report described the design of the project and what it characterizes as the benefits of the proposed location. According to the Gabel Report, it used inputs “consistent with the BPU’s default assumptions” in the modeling used for the TI Program, with three exceptions: system nameplate capacity, DC to AC ratio; and total installed costs. Gabel Report at 5.¹⁰ With the inputs the consultant used, the model supported a TREC factor of 1.1 for the project. Lacey is requesting a 1.0 factor.

According to the petition, a solar system would be a revenue-generating use of an abandoned water body that would otherwise have no productive purpose and would be considered an attractive nuisance. The petition also stated that a 1.0 factor would be consistent with the Community Solar Pilot Program rubric, which accorded “preferred” status to floating solar on sand and gravel pits.¹¹

Lacey also provided the lease agreement between itself and the property owner, Lacey Natural Sand LLC, and a letter from the Pinelands Commission stating that the proposed solar energy facility was consistent with the land use priorities of the Pinelands Comprehensive Management Plan, but the Commission had not received an application.

The Petitioner responded to three sets of discovery requests from Staff. These responses identified the project’s permitting and interconnection processes, project design and site preparation, and costs.

STAFF RECOMMENDATION

Staff notes that Lacey’s proposed project would be a grid-supply solar project, connected to the transmission system of PJM Interconnection, LLC (“PJM”). The TI Program was open to new net-metered projects, community solar projects, and grid-supply projects granted conditional certification under the Subsection (r) process or under the Subsection (t) program. Petitioner’s project does not fall under any of these categories. The January 8, 2020, Order stated that “new or innovative solar technologies can file a petition with the Board requesting that they be assigned

¹⁰ The Gabel Report also noted that it had not included capacity market revenues in its analysis because the Minimum Offer Price Rule had at that time increased the uncertainty of certain higher cost solar projects clearing competitive capacity auctions. Gabel Report at 7.

¹¹ In re the Community Solar Energy Pilot Program, BPU Docket No. QO18060646, Order dated January 7, 2021.

a TREC factorization level”, but it did not state that eligibility in the TI Program may be changed for such new or innovative solar technologies. The fact that the proposed project would be floating solar has no bearing on its mechanism of interconnection. Staff does not recommend the Board grant eligibility in the TI Program for a grid-supply project that was not certified under Subsection (r) or Subsection (t) or previously registered in the SRP. No other general grid-supply projects were accepted into the TI Program, and all such projects have waited for the establishment of the CSI Program within the SuSI Program. Staff does not recommend waiving the rules in this closed program and making an exception for the project.¹²

Staff further notes that the TI Program provided for the expiration of conditional registration one year after receipt of a notice of conditional registration for “facilities that are net metered, provide on-site generation, or provide power for a qualified customer engaged in aggregated net metering and that registered in the Transition Incentive Program after October 30, 2020” or two years after the registrant’s Board Order granting conditional certification for Subsection (t) projects.¹³ Were Petitioner’s project granted for a waiver so that this general grid-supply project could enter the TI Program, Staff has concerns regarding the project’s ability to reach commercial operation before a potential expiration date and with an incentive value reflective of current market conditions. First, Petitioner’s project remains in the System Impact Study phase of the PJM Interconnection queue process, so it is uncertain when the project will have approval to connect to the grid as PJM undergoes a transition.¹⁴ Second, Petitioner indicated that the project is to be built on dredge ponds as mining operations proceed and that the ponds are not yet combined. Mining operations of this scale tend to take considerable time, and it is unclear that both excavations of the mine and construction of the solar array can be completed in the time permitted in the TI Program. Nothing provided by Petitioner indicates that this work has yet begun. Third, there is ongoing litigation between Petitioner and Lacey Natural Sand regarding compliance with various terms of the lease.¹⁵ The allegations in that case suggest that Petitioner does not currently have control over the site or a finalized plan for project configuration. Nor did Petitioner have site control or a finalized plan for project configuration when they filed their petition in February 2021, making the project inherently speculative.

Staff additionally believes that the Petitioner has not adequately demonstrated that its floating solar project should be assigned a 1.0 TREC factor. Staff has carefully reviewed the project’s proposed costs and revenues, as well as further experience with this technology in New Jersey and the United States, and does not believe that a 1.0 TREC factor is appropriate.

Staff indicates the factors for the TI Program were determined based on an in-depth analysis for each technology class reflecting contemporaneous project costs and benefits, as more fully described in the Transition Order. At that time there was insufficient data to set a class-wide incentive level for floating solar projects. Most experience with this technology is in Europe and Asia, with only a few large-scale projects in the United States to date.

¹² Staff also notes that the TI Program closed to new registrations on August 27, 2021, and Staff has no record of an attempt to register the Project in that program. Although Lacey’s submission of a petition may be considered a formal expression of interest in the program, Staff notes that a registration would have been rejected due to the project being grid-supply.

¹³ N.J.A.C. 14:8-10.4(e)(4)(ii)

¹⁴ PJM Interconnection: [Services Request Status](#), Request Project ID AG1-188. Accessed September 15, 2023

¹⁵ Superior Court of New Jersey Chancery Division - Ocean County. Docket No. OCN-C-31-22.

Along with Staff's draft Capstone Report for the Board's ADI Program, developed in consultation with Cadmus Group, LLC ("Cadmus"), Staff also released underlying modeling spreadsheets that employed SAM modeling. One use of SAM is to determine a solar project's anticipated internal rate of return ("IRR") or, alternatively, an incentive level required to provide a given IRR. Cadmus performed an analysis of floating solar costs as compared to ground-mount. It modeled a capital expenditure of \$2.17/W for a representative floating solar system, which was 19% greater than the representative ground-mount system. The higher costs derived from costlier balance of system and more complex engineering, though Cadmus did not incorporate site use costs or site preparation expenses. Cadmus also modeled representative cases for floating solar in each electric distribution company's service territory and concluded that the additional costs associated with floating solar in New Jersey do not warrant a full 1.0 TREC factor. While the anticipated costs provided by the Petitioner for their project are greater than those modeled for the base case, Staff believes these are not characteristic of floating solar projects and that they do not justify a 1.0 factor.

Staff therefore recommends that the Board deny the petition. Staff encourages the Petitioner to consider the CSI Program for the project.

DISCUSSION AND FINDINGS


The Board believes that floating solar represents a positive development in renewable energy technology. The Board, however, must balance the interest of supporting New Jersey's solar industry and the implementation of novel technologies in the State with minimizing the costs to ratepayers and compliance with its rules to the greatest extent possible. In pursuing these goals, the TI Program rules were designed to provide a smooth transition to the SuSI Program for a limited time at a low cost to ratepayers for only certain project types. Thus, when faced with a petition seeking a greater incentive value and entry into the TI Program, the Board carefully reviews the facts and circumstances of each petition to determine whether such relief is in the public interest.

After review of the petition, the Board **FINDS** that the record does not support the Petitioner's request for eligibility and TREC factor assignment in the TI Program. The Board further **FINDS** that, because the TI Program was not open to grid-supply projects, other than those certified under Subsection (t) or Subsection (r) or previously registered in the SRP, the Petitioner's project is not eligible for entry into the TI Program and **DENIES** the petition.

The effective date of this Order is October 4, 2023.

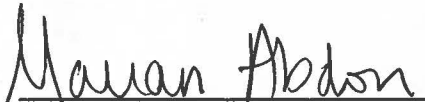
DATED: September 27, 2023

BOARD OF PUBLIC UTILITIES
BY:

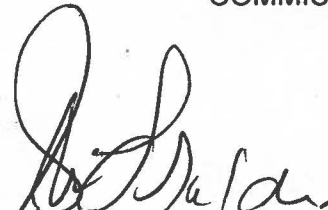

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SECRETARY

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

IN THE MATTER OF LACEY SAND SOLAR FARM, LLC – PETITION FOR ASSIGNMENT OF
“PREFERRED” TREC FACTOR FOR FLOATING PHOTOVOLTAIC SOLAR PURSUANT TO THE
BOARD’S TRANSITION INCENTIVE ORDER

DOCKET NO. QO21020469

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