



Philip D. Murphy
Governor

Sheila Y. Oliver
Lt. Governor

Aida Camacho-Welch
Secretary of the Board
Tel. # (609) 292-1599

STATE OF NEW JERSEY
Board of Public Utilities
44 South Clinton Avenue, 3rd Floor, Suite 314
Post Office Box 350
Trenton, New Jersey 08625-0350
www.nj.gov/bpu/

NOTICE¹

New Jersey Solar Transition **2019/2020 Transition Incentive Staff Straw Proposal**

***Stakeholder Process-Comment Period Extension**

Pursuant to the “Open Public Meetings Act”, N.J.S.A. 10:4-6 et seq., the New Jersey Board of Public Utilities (“BPU”) hereby gives notice of two Public Meetings to discuss the below 2019/2020 NJ Solar Transition Incentive Staff Straw Proposal (“Straw Proposal” or “TI Straw”).

The Clean Energy Act of 2018 (“Act”) requires the BPU to complete a study that evaluates how to replace or modify the SREC program to encourage the continued efficient and orderly development of solar renewable energy generating resources throughout the State. The Act also requires the closure of the SREC market upon the State’s attainment of 5.1% of kilowatt hours sold from solar electric generation facilities. In implementation of the Act, the BPU has engaged a consultant and is leading a Solar Transition process, including measures to close the current SREC Program (“Legacy SREC Program”) and design a successor solar incentive mechanism (“Successor Program”). This TI Straw addresses the need for an incentive program which bridges the gap between the Legacy and Successor Programs (the “Transition Incentive”).

On December 26, 2018, Staff of the BPU released a New Jersey Solar Transition Staff Straw Proposal (“December Straw Proposal”) which included a schedule for the development of the Solar Transition, notice of two stakeholder meetings, and a request for stakeholder comments. The December Straw Proposal requested comments on solar transition principles and the development of a successor to the SREC program. Comments were also sought on the incentive requirements of transition projects, namely those in the SREC pipeline but incomplete at the time the Board determines to close the SREC market to new registrations. On April 8, 2019, Board Staff issued a stakeholder notice (“April 2019 Notice”) which announced three stakeholder workshops to be organized by the Solar Transition Consultants (Cadmus and

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Sustainable Energy Advantage). The second Consultant Stakeholder Workshop, held on June 14, 2019, focused specifically on eliciting stakeholder feedback on potential policy design options for the Transition Incentive. Board Staff has greatly appreciated the input and comments provided by stakeholders throughout this process.

Informed by stakeholder feedback and the Consultant's analysis, Board Staff is issuing the following Straw Proposal and associated questions for public comments.

To further inform stakeholder feedback, Staff is publishing as addendums to the Straw Proposal two documents:

1. The New Jersey Transition Incentive Supporting Analysis & Recommendations drafted by the Solar Transition Consultant.
2. The New Jersey Solar Performance Analysis prepared by the PJM-EIS Generation Attribute Tracking System.

Stakeholders are directed to the New Jersey Clean Energy Program website for background materials, including Board Orders and rules, on the NJ Solar Transition at <http://njcleanenergy.com/renewable-energy/program-updates-and-background-information/solar-proceedings>.

In order to continue dialogue with stakeholders, Staff is planning to hold one webinar and two Stakeholder Meetings to receive feedback on this Transition Incentive Straw Proposal, as well as an opportunity to address the questions contained herein in writing.

Staff requests that stakeholders interested in addressing issues related to the development of the Successor Program clearly state which comments are related to Transition Incentive issues and which are related to the Successor Program. Staff is working toward having a Successor Program ready to follow the Legacy SREC and Transition Incentive when the Board determines that the 5.1% milestone has been attained. Opportunities for stakeholder engagement on the Successor Program will commence in October 2019 and a workshop will be scheduled in November 2019. The Solar Consultants' modeling of Successor Program alternatives is anticipated to conclude in December 2019, after which time a Staff Straw Proposal on the Successor Program will be issued.

The webinar will be held on Friday, August 23, 2019, at 10:00 a.m. To access the webinar, please use the following link from your computer or smartphone:

<https://global.gotomeeting.com/join/487340221>

You can also dial in using your phone.

United States: +1 (786) 535-3211

Access Code: 487-340-221

Note: This webinar can only accommodate the first 150 participants to enter the webinar. If the attendee limit is exceeded, stakeholders wishing to participate in the webinar will still be able to call in to the number above. Additionally, any slides used during the webinar will be posted on the Clean Energy Program website shortly before the beginning of the webinar, so as to allow all participants to follow along.

Stakeholder Meeting #1 will be held:

Date: Wednesday, August 28, 2019
Location: Trenton War Memorial
1 Memorial Drive, Trenton, NJ 08608
Time: 10:00 a.m. – 2:00 p.m.

Note: this stakeholder meeting will include a panel discussion comprised of representative stakeholders, moderated by BPU Staff. Stakeholders will have the opportunity to ask questions to the panel, as well as to provide formal oral comments. This meeting will be recorded by a court reporter. Stakeholders interested in attending must register no later than noon on Tuesday, August 27, 2019 via an email to solar.transitions@bpu.nj.gov.

Stakeholder Meeting #2 will be held:

Date: Wednesday, September 4, 2019
Location: Cook College Student Center, Rutgers University
59 Biel Road, New Brunswick, NJ 08901
Time: 10:00 a.m. – 2:00 p.m.

Note: this stakeholder meeting will include a panel discussion comprised of representative stakeholders, moderated by BPU Staff. Stakeholders will have the opportunity to ask questions to the panel, as well as to provide formal oral comments. This meeting will be recorded by a court reporter. Stakeholders interested in attending must register no later than noon on Tuesday, September 3, 2019 via an email to solar.transitions@bpu.nj.gov.

Written comments are also encouraged and should address the questions posed by Staff and reference the associated question by number. Written comments must be submitted to Aida Camacho-Welch, Secretary, New Jersey Board of Public Utilities, Post Office Box 350, Trenton, New Jersey, 08625. Written comments may also be submitted electronically to solar.transitions@bpu.nj.gov in PDF or Microsoft Word format.

Written comments were due to be submitted by September 6, 2019, however the comment submission period has been extended to ***September 13, 2019**. All comments must be received on or before 5:00 p.m. on ***September 13, 2019** in order to be considered. Please note that these comments may be considered “public documents” for purposes of the State’s Open Public Records Act. Stakeholders may identify information that they wish to keep confidential by submitting them in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3.



Aida Camacho-Welch
Secretary of the Board

Dated: August 28, 2019

2019/2020 Transition Incentive Staff Straw Proposal

In the December 2018 Straw Proposal and the April 2019 Notice, Staff indicated that it is considering recommending that the Solar Transition be addressed in three phases: 1) the closure of the Legacy Solar Renewable Energy Certificates (“SREC”) market to new registrations upon the attainment of 5.1% of the energy sold in New Jersey being generated from solar facilities connected to the distribution system;² 2) the Transition Incentive, which would be available to projects in the SREC Registration Program (“SRP”) pipeline but having not yet achieved commercial operation at the time the 5.1% Milestone is attained; and 3) the Successor Program, which would be developed for all projects not in the SRP pipeline at the time the 5.1% Milestone is attained.

This Transition Straw Proposal is intended to serve as a basis for discussion with stakeholders of potential options for the Transition Incentive. It does not serve as an indication of the Board’s position or decisions. Staff has based the following proposal upon the analysis performed by Cadmus and Sustainable Energy Advantage, the Solar Transition Consultants retained by Board Staff. The report, titled “New Jersey Transition Incentive Supporting Analysis & Recommendations” and prepared by the Solar Transition Consultants, is attached to this Straw Proposal.

Proposal for the Structure of the Transition Incentive

Staff proposes that projects eligible for the Transition Incentive would generate Transition Renewable Energy Certificates (“TRECs”). TRECs would be used by the identified Compliance Entities to satisfy a compliance obligation tied to a new Transition Incentive Renewable Portfolio Standard (“TI-RPS”), which would exist in parallel to, and completely separate from, the existing Solar RPS for Legacy SRECs. The TI-RPS would be a carve-out of the current Class I RPS requirement.

The incentive would be structured as a factorized renewable energy certificate, which is designed to provide solar producers a financial incentive tied to the estimated costs of building solar facilities and revenue expectations under basic retail rate tariffs or wholesale market revenues for various installation types. In each case, the goal of the factorization program is to ensure that ratepayers are providing the appropriate financial incentive to develop diverse types of projects, consistent with maintaining a healthy solar industry in New Jersey. The value of each TREC could either be set in a TREC trading market, comparable to the existing SREC market, or could simply be set by a Board order (see “Valuing of a TREC Options” section below).

Eligible Project Options

Option 1: Staff would propose that projects eligible for the incentive would be those that remain in the SREC SRP queue at the time that the Board determines that NJ’s retail electricity market has attained the 5.1% milestone. Eligible projects would therefore be those that 1) filed a complete SRP Registration or received conditional certification from the Board after October 29, 2018, *and* 2) have not commenced commercial operation upon the Board’s determination that the 5.1% Milestone has been attained.

² I/M/O N.J.A.C. 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).

Option 2: An alternative strategy would be to close the SREC Registration Program to new registrants and immediately initiate a Transition Incentive registration pipeline. The Transition Incentive program would cover both the eligible projects registered in the SRP that remain under development as well as any new projects registered in the Transition Incentive program at the time the 5.1% Milestone is attained. Staff proposes that this could be accomplished by creating new incentive registration processes and an associated pipeline which would ultimately be merged with the projects left in the SRP at the time of 5.1% milestone attainment. This alternative approach would be intended to give additional certainty to developers seeking to bring new projects online prior to decisions about the Successor Program. This approach could also potentially alleviate pressure on the existing SREC registration program and the EDC interconnection infrastructure from projects rushing to meet the 5.1% milestone. Under this alternative, enrollment in a new registration process could be required of all new solar incentive applicants going forward. Projects in the Transition Incentive pipeline would be joined by the un-commissioned projects that remain in the SRP pipeline at the 5.1% milestone to form a new Transition pipeline.³

Mechanism for Creation of TRECs

Staff proposes that a TREC would be created based upon metered generation supplied to PJM-EIS GATS by the owners of eligible facilities or their agents. GATS will create one TREC for each megawatt hour (“MWh”) of energy produced from a qualified facility. As discussed in the factorization section below, Staff proposes that each MWh of energy produced from a given facility would be provided a TREC factor depending on the type of facility generating the electricity. In the market-valued approach, TRECs would have a useful life (i.e. must be purchased and retired within) of three years. A fixed price TREC would be redeemable in the year in which the electricity was produced or the following Energy Year. Projects would be eligible to receive TRECs for 15 years (“Qualification Life”); at which time projects may be eligible for a NJ Class I REC.

Value of a TREC Options

Staff proposes two different ways of valuing each TREC. Under Valuation Option #1, the Board would rely on market forces to set the value of each TREC, comparable to the market used to set the value of SRECs. Under Valuation Option #2, the value of each TREC would be established via Board order.

Under Valuation Option 1, the value would be subject to an Alternative Compliance Payment (“ACP”) that serves as a soft cap on the value of TRECs, which Staff proposes be called the Transition Incentive Alternative Compliance Payment (“TI-ACP”). The Solar Transition Consultant has proposed that the TI-ACP schedule would be set such that the TI-ACP for EY21 through EY23 would be set relatively low. This would ensure TREC prices during this time period result in incentive program compliance costs that would greatly increase the probability that the total cost of Legacy and Transition incentives do not exceed the cost caps established by the Clean Energy Act of 2018. After EY23, the TI-ACP would be increased so as to ensure

³ The alternative of enlarging the cohort of projects eligible for the Transition Incentive has not been modeled for cost cap implications. Staff anticipates that a large group of registered projects will increase the risk of cost cap exceedance necessitating a lower incentive for the later Transition Incentive registrants.

that projects receive the full value of the incentive required to develop a project, as shown in the following chart developed by the Solar Transition Consultant.

Table 1. Modeled TI-ACP Schedules to Account for Cost Cap (drawn from Consultant Report)

TI-ACP Schedules by Scenario/Sensitivity							
Scenarios/Sensitivities	"Kink" Period			Post-"Kink" Period			
	2021	2022	2023	2024	2025	2026	2027
TI-2a - DO w/TREC Factors	\$320	\$288	\$259	\$719	\$719	\$719	\$719
TI-2b - DO w/ TREC Factors & Perpetually Short Design	\$90	\$81	\$73	\$244	\$244	\$244	\$244
TI-3 - DO w/TREC Factors & Firmed Hedge Option	\$65	\$59	\$53	\$155	\$155	\$155	\$155
TI-4 - Partial Long-Term Hedge	\$65	\$59	\$53	\$155	\$155	\$155	\$155
Post-"Kink" Period							
2028	2029	2030	2031	2032	2033	2034	2035
\$719	\$719	\$719	\$719	\$719	\$719	\$719	\$719
\$244	\$244	\$244	\$244	\$244	\$244	\$244	\$244
\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155
\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155

Valuation Option #1

Under Valuation Option #1, a market-based price setting mechanism, the price for each TREC would be established based upon the supply of available TRECs, the TI-RPS demand, transaction costs, and the TI-ACP. The compliance entity would be required to procure and retire TRECs in proportion to their retail sales according to an annual schedule of demand obligations. The ceiling on the TREC price within a given year would be set by the TI-ACP. The TI-ACP for Scenario/Sensitivity case TI-2a in Table 1 developed by the Solar Transition Consultant is most closely aligned with an RPS compliance obligation reliant upon a competitive market-based price required to ensure efficient procurement and retirement of TRECs.

Additionally, under a market-based approach, Staff could recommend the Board direct the EDCs to serve as a “Buyer of Last Resort” for TRECs that remain unsold after the three year useful life granted to each TREC. A pre-established floor price could be established that ensures a contribution to a return on investment for eligible transition projects. EDCs would retire the TRECs and require the ability to pass along the costs of procurement to ratepayers.

Valuation Option #2

Under Valuation Option #2, a fixed price TREC would be compensated at a fixed payment based upon the Consultant’s modeled scenario in Table 1. “Transition Incentive 3 – Demand Obligation with TREC Factors and Firmed Hedge Option” and elements of a “Transition Incentive 4 – Partial Long Term Hedge” would serve as the benchmark TREC price upon which Project Type factors below would be applied.

Factorization of TRECs

Staff seeks comments on assigning different values to electricity produced by different categories of solar facility, a policy known as “factorization.” Factorization is designed to provide differing levels of subsidy support to different types of solar installations with the aim of

tailoring the size of the subsidy to the amount of revenue needed by each project type. In other words, one MWh of solar production would produce one TREC with a different value depending on the project.

Based on analysis by the Solar Transition Consultant, Staff proposes that the following factors be established. Projects would be assigned a factor based on the project type; factors cannot be combined.

Table 2. Project Type Factors Expressed as Multipliers

Project Type	Net Metered Projects (<=25 kW)	Ground Mounted (Grid Supply & NM >25 kW)	Community Solar	Preferred Siting: Subsection t, Grid Supply Rooftop and Carport
	TREC - NM	TREC - GM	TREC – CS	TREC - PS
Compliance Factor	0.2	0.6	0.8	1

Manually, the SRP team would assign certification numbers to each eligible project in the Transition Incentive pipeline, which would indicate a Project Type Factor, falling into one of four categories. For example, in Value Option #1 where TRECs are procured in a competitive market, TRECs from projects that meet the Preferred Siting criteria would be valued by regulated compliance entities five times greater than small net metered projects. TRECs generated from this type of project would receive a price below the TI-ACP (i.e., from Table 1. Option TI-2a: a price less than \$244 per TREC in EY2024). Since small net metered projects receive significantly higher retail value for the electricity produced, the TRECs generated will receive one-fifth of the value of a TREC produced from the Preferred Siting category. In turn, regulated compliance entities would receive five times the value for TRECs procured from projects qualifying as Preferred Siting.

In Value Option #2, where TRECs are provided a fixed price, TRECs from projects that meet the Preferred Siting criteria would also be valued by regulated compliance entities five times greater than small net metered projects. TRECs generated from this type of project would receive the price at the ACP (From Table 1. Option TI-3: \$155 per TREC in EY24). Since small net metered projects receive significantly higher retail value for the electricity produced, the TRECs generated would receive one-fifth of the value of a TREC produced from the Preferred Siting category. Regulated compliance entities would receive five times the value for TRECs procured from projects qualifying as Preferred Siting.

Factorization, if adopted, would be beneficial because it targets the size of the subsidy to the cost of constructing each type of facility, while also considering the regulatory framework in which each project operates (i.e., the retail or wholesale value of the electricity produced, the net of which is referred to as the Cost of Entry). This has the potential to reduce the total cost of the program to ratepayers, while also providing the opportunity for projects to earn a tailored set of returns. For example, the Solar Consultant estimates that projects under 25 kW and eligible for net metering need a lower additional subsidy because net metering already allows most of

these projects to earn a large part of its required financial return via avoiding retail rates or receiving a net metering credit. By contrast, a facility falling into the “preferred siting” category, which includes facilities on landfills and rooftops, not otherwise eligible for net metering, generally require a larger subsidy to be economically viable. The projected economics of Community Solar and Ground Mount⁴ projects fall somewhere in between, and thus, under a factorization proposal, would receive an intermediate subsidy.

Compliance Entities in the TI-RPS Options

The compliance obligation, or requirement to comply with the TI-RPS, could be assigned in one of two ways:

Compliance Entity Option #1: Third Party Electric Suppliers (“TPS”) and Basic Generation Service (“BGS”) providers could be obligated to procure and retire TRECs in proportion to their annual retail sales according to an annual schedule of demand obligations that would track the expected production of the projects eligible for the Transition Incentive.

Compliance Entity Option #2: Alternatively, the compliance obligation could be shifted to the Electric Distribution Companies (“EDCs”). The EDCs would be obligated to procure and retire all TRECs produced by eligible projects at pre-established rates assigned by Board Order.

If Compliance Entity Option #1 is selected, i.e., the compliance obligation is placed on TPS and BGS providers, Staff suggests that the TREC be a market-based, tradeable instrument with value based upon supply and demand, subject to the ACP and any purchaser of last resort mechanism.

If Compliance Entity Option #2 is selected, i.e., the compliance obligation to purchase TRECs is placed on the EDCs, Staff envisions that the TREC could have a fixed price established by Board order. Fixing the TREC value under Compliance Entity Option #2 and placing the purchase obligation on the EDCs has the considerable benefit of being relatively easy to implement.

Staff’s initial sense is that a market-based mechanism such as Compliance Entity Option #1 may be more suitable for the Successor program. However, if Compliance Entity Option #1 is selected for the Transition Incentive, Staff suggests that the implementation of the TI-RPS would be achieved in a manner similar to the existing RPS compliance processes. The TI-RPS (i.e. the compliance obligation) would be expressed as a percentage of retail sales. A schedule of annual demand obligations would be assigned to the retail electricity sales of TPS and BGS Providers and each would be required to annually demonstrate to the Board sufficient retirement of RECs or payment of ACPs. Further, because the size of the pipeline of eligible Transition Incentive projects that eventually reach commercial operation is unknown at the time the Legacy SREC program closes, the compliance obligation would have to be adjusted as projects enter service or leave the pipeline. Staff requests comment on how such a mechanism would work.

Staff envisions that the Board would establish a preliminary estimate of the TI-RPS obligation in January 2020, based upon the then-current size of the SRP pipeline, the anticipated size of the

⁴ Note that certain ground mount projects also qualify for net metering, but are generally ineligible to offset the demand charges associated with customers of greater than 25 kW.

SRP pipeline at the time the 5.1% Milestone is attained, and the anticipated build rate and productivity of projects in the pipeline. The January 2020 preliminary estimate of demand would be published in advance of the February 2020 BGS auction, so as to ensure that the TI-RPS compliance obligation would begin in EY2021 (note that this is solely to facilitate administration of the Transition Incentive; any TRECs generated prior to the beginning of EY2021 would remain fully valid for compliance for the duration of their useful life (see Terms for TREC below). The TI-RPS schedule of annual demand obligations established in January 2020 would increase from EY21 through EY23 to reflect the increased production as TI-eligible projects commence commercial operations during this time period.

Upon attainment of the 5.1% Milestone, the TI-RPS demand obligation or annual schedule of percentage requirements could be adjusted to align with the actual size of the SRP pipeline and associated build rates. Any adjustment would be reflected in the compliance obligation for the following energy year, EY2022.

The Clean Energy Act of 2018 signed on May 23, 2018, increased the solar requirements in the RPS starting on June 1, 2018 and exempted BGS supply under contract at the time of enactment. The Act also required implementation in a competitively neutral manner between TPS and BGS Providers which required the increase avoided by the exemption be placed on non-exempt BGS supply. BGS supply contracts are procured annually for a portion of the default electric supply over a period of three years, 1/3 every year. The increase in RPS requirements avoided through exemption of pre-existing BGS contracts will be transferred to non-exempt BGS supply over the two years following the year covered by the exemption.

The Board would require the EDCs to jointly procure TRECs from all eligible solar electric generation facilities using the PJM-EIS GATS platform. A Board-approved, publicly available, TREC price schedule would assign value to the megawatt hours produced by various project types. EDCs would retire the TRECs and pass on to their ratepayers the costs apportioned to each EDC according to market share of statewide retail electricity served.

Questions to Stakeholders

General Structure of the proposed Transition Incentive

- 1) What are the potential advantages and challenges of Staff's proposed Transition Incentive design?
- 2) What are the advantages and challenges to the two approaches; a fixed price TREC and a market based TREC?
- 3) Does the proposed Transition Incentive provide sufficient financial surety for projects currently in the SRP pipeline that may not reach commercial operations prior to the closure of the SREC market to new entrants?
- 4) How can the Board most accurately predict the amount of capacity expected to be in the SRP pipeline at the time the 5.1% Milestone is hit? During what timeframe in the transition process, would a final determination of the size of the pipeline of eligible projects be required? Should there be a true-up?

Eligibility

- 5) How should the Board treat projects entering the SRP pipeline that have not 1) filed a complete SRP Registration or received conditional certification from the Board after October 29, 2018, *and* 2) have not commenced commercial operation upon the Board's determination that the 5.1% Milestone has been attained?
- 6) Should the Board cease accepting new registrations to the SREC Registration Program, and begin only accepting registrations to a new Transition Incentive cluster?

Terms for each TREC

- 7) Please discuss the proposed 15 year TREC term, with appropriate justification for any recommended changes.

Value of a TREC

- 8) Are the TI-ACP schedules proposed to be associated with each compliance entity option appropriate? If modifications are required, how should the schedules be adjusted and why?
- 9) Please critique the proposal of a "custom" TI-ACP which is relatively low in EY21, EY22 and EY23 and increases thereafter, keeping in mind the statutory cost cap the program must operate under.
- 10) What are the implications of establishing a "Buyer of Last Resort" and floor price mechanism for the TREC market? What factors should Staff consider in recommending how a purchase price is established?
- 11) When and how should a floor price be established to provide the maximum benefit to ratepayers, developers, investors?
- 12) Would the availability of a floor price above the NJ Class I ACP provide any reduction in finance costs for eligible projects?

Factorization of TRECs

- 13) Do you agree with the proposed categories of factors? Why or why not?
- 14) Please address the financial incentive levels for each of the four project types.

15) Do you agree with the proposed assigned factors? Why or why not? Please provide documented explanations for your response.

Compliance Entities

- 16) Please discuss the advantages and disadvantages of the two proposed options, i.e. having the compliance entities be 1) Third Party Electric Suppliers and Basic Generation Service Providers, or 2) the Electric Distribution Companies.
- 17) Which of the two options is preferable for the Transition Incentive?
- 18) Do parties agree that a fixed price TREC lends itself to the EDCs serving as the compliance entity, while a market-based price for TRECs lends itself to the TPS/BGS providers serving as the compliance entity?

Written comments are also encouraged and should address the questions posed by Staff and reference the associated question by number. Written comments must be submitted to Aida Camacho-Welch, Secretary, New Jersey Board of Public Utilities, Post Office Box 350, Trenton, New Jersey, 08625. Written comments may also be submitted electronically to solar.transitions@bpu.nj.gov in PDF or Microsoft Word format.

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