Agenda Date: 11/21/25
Agenda Item: LSB

STATE OF NEW JERSEY

Board of Public Utilities
44 South Clinton Avenue, 1st Floor
Trenton, New Jersey 08625-0350
www.nj.gov/bpu/

CLEAN ENERGY

IN THE MATTER OF THE DUAL-USE SOLAR ENERGY PILOT PROGRAM	)	ORDER FOR THE FIRST APPLICATION PERIOD OF THE DUAL-USE PILOT PROGRAM, PROGRAM YEAR 1
	)	DOCKET NO. QO23090679

Parties of Record:

Brian O. Lipman, Esq., Director, New Jersey Division of Rate Counsel
Neil Hlawatsch, Esq., Atlantic City Electric Company
James Meehan, Esq., on behalf of Jersey Central Power & Light Company
Matthew M. Weissman, Esq., Public Service Electric and Gas Company
Christian Malanga, Esq., Rockland Electric Company

BY THE BOARD:

By this Order, in conjunction with the rulemaking in a companion item on this agenda,[1] the New Jersey Board of Public Utilities ("Board" or "BPU") establishes the first application period of Program Year 1, Solicitation Round 1 ("First Application Period"), for the Dual-Use Solar Energy Pilot Program ("Pilot Program"). The Pilot Program is open to qualifying Dual-Use Solar Energy Projects with a capacity no greater than ten (10) megawatts ("MW") and hosted on unpreserved farmland in active agricultural or horticultural use ("Pilot Program Projects").[2] Through this Order, the Board sets the First Application Period of the Pilot Program to open for submission of applications on January 14, 2026, and close to applications on February 25, 2026, at 11:59:59 p.m. EST. The Board also establishes adjustments and revisions to the solicitation and registration processes, application requirements, and monitoring and research requirements to promote participation and success in the Pilot Program.

---

[1] In re a Rulemaking Proceeding to Establish the Dual-Use Solar Energy Pilot Program Pursuant to P.L. 2021, c. 170, BPU Docket No. QX24080597.

[2] All MW values in this Order are in direct current, or "dc".

BACKGROUND

Solar Act of 2021 and SuSI Program

The Solar Act of 2021 directed the Board to establish a program to incentivize the development of 3,750 MW of solar in New Jersey by 2026 through the mechanism of Solar Renewable Energy Certificates IIs ("SREC-IIs"), representing the value of the environmental attributes produced by the solar electric power generation facility. The Solar Act of 2021 also directed the Board to create a small solar facilities program with administratively set incentive values, and a solicitation process for awarding contracts for grid supply solar facilities and net metered solar facilities greater than five (5) MW.[3]

By Order dated July 28, 2021, the Board opened the Successor Solar Incentive ("SuSI") Program on August 28, 2021.[4] The SuSI Program serves as the Board's permanent program for providing solar incentives to qualified solar electric generation facilities; it is divided into the Administratively Determined Incentive ("ADI") and the Competitive Solar Incentive ("CSI") Programs. The ADI Program, opened to new registrants on August 28, 2021, offers a fixed incentive in the form of New Jersey SREC-IIs for net metered residential projects, net metered non-residential solar projects of five (5) MW or less, and community solar programs.[5] Incentive values are set administratively, following comprehensive modeling of costs and multiple rounds of stakeholder involvement. Incentive values vary by market segment, and in some cases, according to project size and siting.

By Board order dated December 7, 2022, the Board established the CSI Program.[6] The CSI Program is open to qualifying grid supply solar installations, to non-residential net-metered solar installations with a capacity greater than five (5) megawatts ("MW"), and to eligible grid supply solar installations in combination with energy storage. The CSI Program awards SREC-IIs through an annual competitive solicitation, with four (4) separate market segments, or tranches: 1) Tranche 1: basic grid supply projects; 2) Tranche 2: grid supply projects sited on the built environment; 3) Tranche 3: grid supply projects sited on contaminated sites and landfills; and 4) Tranche 4: net metered non-residential projects greater than five (5) MW. A fifth tranche pairs a storage project with a grid supply project eligible for Tranche 1, 2 or 3.

---

[3] "Grid supply solar facility" means "a solar electric power generation facility that sells electricity at wholesale and is connected to the State's electric distribution or transmission systems." "Grid supply solar facility" does not include: (1) a net metered solar facility; (2) an on-site generation facility; (3) a facility participating in net metering aggregation pursuant to section 38 of P.L.1999, c.23 (C.48:3-87); (4) a facility participating in remote net metering; or (5) a community solar facility. "Net metered solar facility" means "a solar electric power generation facility participating in the net metering program developed by the board pursuant to subsection e. of section 38 of P.L.1999, c.23 (C.48:3-87) or in a substantially similar program operated by a utility owned or operated by a local government unit." N.J.S.A. 48:3-51; see N.J.S.A. 48:3-116(a); N.J.S.A. 48:3-117(a).

[4] In re a Solar Successor Incentive Program Pursuant to P.L. 2018, c. 17, BPU Docket No. QO20020184, Order dated July 28, 2021 ("SuSI Order").

[5] "Community Solar Energy Program" refers to "the full-scale community solar program for which the Board shall adopt rules no later than January 1, 2022." N.J.A.C. 14:8-9.2.

[6] In re Competitive Solar Incentive ("CSI") Program Pursuant to P.L. 2021, c.169 - Order Launching the CSI Program, BPU Docket No. QO21101186, Order dated December 7, 2022 ("CSI Order").

On April 23, 2025, the Board authorized the CSI Program's third solicitation to open on May 14, 2025.[7]

Dual-Use Act & Development of Dual-Use Pilot Program

On July 9, 2021, the Dual-Use Solar Energy Act of 2021, P.L. 2021, c. 170 ("Dual-Use Act," "Act," or "Statute"), was signed into law. The Act directed the Board, in consultation with the New Jersey Secretary of Agriculture, to adopt rules establishing a Dual-Use Pilot Program within 180 days following the enactment of the Dual-Use Act.[8] The Statute further directed the Board to convert the Pilot Program into a permanent program within thirty-six (36) months, or no later than forty-eight (48) or sixty (60) months, if applicable, after the adoption of rules and regulations.[9]

On May 1, 2023, the Board approved and executed a three (3)-year grant agreement with the Rutgers Agrivoltaics Program ("RAP") at Rutgers University ("RU") to facilitate the development and implementation of the Pilot Program. As well as working with RAP, Board Staff ("Staff") consulted with the New Jersey Department of Agriculture ("NJDA"), the State Agriculture Development Committee ("SADC"), and the New Jersey Department of Environmental Protection ("NJDEP,") (collectively, the "State Agencies") and obtained the input of public Stakeholders in designing the Pilot Program.

On November 9, 2023, Staff released a Pilot Program straw proposal to commence the public stakeholder engagement process, with an updated version issued on November 21, 2023 ("November Straw Proposal").[10] On November 29, 2023, Staff hosted a virtual stakeholder meeting to discuss the November Straw Proposal. Approximately 129 stakeholders attended and fourteen (14) participants provided public comment during the meeting. Meeting attendees included representatives of the agricultural community, solar industry, utilities, trade associations, academia, nonprofits, consultants, environmental organizations, media groups, State and local government, and members of the general public.

On November 14, 2023, Staff, in conjunction with RAP, presented an overview of the November Straw Proposal at the New Jersey Farm Bureau's annual conference in Princeton, New Jersey.[11] The conference was attended by approximately eighty (80) attendees, primarily from the agricultural community, academia, and federal, State, and local government.

---

[7] In re Competitive Solar Incentive ("CSI") Program Pursuant to P.L. 2021, c.169 - Order on Price Cap Determination for the Third Solicitation of the CSI Program, BPU Docket No. QO21101186, Order dated April 23, 2025 ("April 23 Order").

[8] N.J.S.A. 48:3-87.13(a).

[9] N.J.S.A. 48:3-87.13(g).

[10] Board of Public Utilities, Notice: In the Matter of the Dual-Use Solar Energy Pilot Program, Dual-Use Solar Energy Pilot Program – Staff Straw Proposal and Stakeholder Meeting Notice, BPU Docket No. QO23090679 (November 21, 2023).

[11] New Jersey Farm Bureau, 105th Annual Meeting Web Page, https://njfb.org/2023-njfb-annual-meeting/, November 13-14, 2023.

On June 10, 2024, Staff released a preliminary rule draft for public comment as an additional component of the Straw Proposal ("June Straw Proposal").[12] A rule proposal to codify the Pilot Program and integrate it with the larger SuSI Program set forth at N.J.A.C. 14:8-11 was published in the New Jersey Register on December 2, 2024 ("Dual Use Rule Proposal").[13]

October 2024 Board Order

By Order dated October 23, 2024,[14] the Board established the Dual-Use Pilot Program. The Board ordered that the Pilot Program be open to qualifying grid supply projects; net metered non-residential projects with a capacity greater than five (5) MW; qualifying grid supply projects paired with a storage facility; and net metered non-residential solar projects of five (5) MW or less. The Board approved a capacity target of up to 200 MW total for the thirty-six (36) month duration of the Pilot Program and an annual capacity target for Program Year ("PY") 1 of fifty (50) MW. The fifty (50) MW Pilot Program capacity is additional to the capacity otherwise awarded under the SuSI programs.

As Pilot Program Projects will receive incentives through either the ADI or the CSI program, the Board also ordered that NJ SREC-IIs awarded in the Dual-Use Pilot Program consist of a baseline incentive from the SuSI Program and an adder tailored to cover any additional costs incurred as a result of the agricultural or horticultural aspects of a Pilot Program Project.

The Board also ordered Pilot Program Projects to monitor and conduct research for the duration of the Pilot Program pursuant to the requirements contained within Appendix B of the October 2024 Order. In addition, the Board ordered that each awarded applicant develop a Construction, Operations, Monitoring, and Project Research Plan ("COMPR") establishing the terms and conditions for maintaining eligibility for the SREC-II adder. A COMPR is defined as the document or sets of documents filed with the Board Secretary's Office describing key elements of a selected project.[15] A Pilot Program Project is required to submit a COMPR to the Board after being selected for an award.

[12] Board of Public Utilities, Notice: In the Matter of the Dual-Use Solar Energy Pilot Program, Request for Comments – Preliminary Draft Dual-Use Solar Energy Pilot Program Rules, BPU Docket No. QO23090679 (June 10, 2024).

[13] 56 N.J.R. 2271(a).

[14] In re Dual-Use Solar Energy Pilot Program, BPU Docket No. QO23090679, Order dated October 23, 2024, corrected on January 2, 2025 ("October 2024 Order").

[15] October 2024 Order at page 8.

Notice of Incentive Availability & Expressions of Interest

The Board approved all pre-qualification application and application criteria recommended by Staff in the October 2024 Order, as well as the recommendation that eligible projects be selected through a competitive procurement. Pursuant to the October 2024 Order, on January 6, 2025, Staff issued a Notice of Incentive Availability (NOIA")[16] with an initial annual capacity target up to fifty (50) MW. The NOIA included the scoring rubric approved by the Board for the NOIA in the October 2024 Order. The NOIA opened the pre-qualification application period to Expression of Interest ("EOI") submissions on January 6, 2025 and closed it on February 14, 2025 at 11:59:59 PM.

In response to the NOIA, the Pilot Program received EOIs from thirty-three (33) prospective agrivoltaics projects totaling around 140 MW. These projects were proposed to be located in eleven (11) counties across New Jersey and represent a wide diversity of production systems on unpreserved farmland. Applicants proposed to co-locate solar energy with various agricultural and horticultural activities, ranging from soybean and hay production to specialty grains and vegetables, berries, mushrooms, and native tree shrubs, as well as animal production systems that feature sheep and cattle grazing. The types of solar arrays proposed also varied, with a mix of systems including fixed-tilt and single-axis tracking.

Staff evaluated the proposed projects in consultation with the Evaluation Committee. All projects received a letter of administrative deficiency or completeness, as applicable, and a letter of approval or denial to proceed in applying to the Board during the application period.[17] Five (5) EOIs were not approved to submit applications due to noncompliance with program requirements and unresolved administrative deficiencies. The remaining twenty-eight (28) projects received approval letters.

In compliance with the October 2024 Order, Staff now makes recommendations to the Board regarding a capacity target for the first solicitation, capacity set asides, application fees, and minimum criteria in addition to those contained in the October 2024 Order for participation in the related solicitation round in Program Year 1 ("First Solicitation Round").

STAFF RECOMMENDATIONS

The following policy recommendations were developed from an analysis of the proposed EOI projects by Staff and the Evaluation Committee, Staff's and the interagency team's initial experience with reviewing the first round of EOIs, stakeholder input on the rule proceeding, and other stakeholder inquiries. Staff's recommendations reflect coordination and consultation with the State Agencies and RAP.

[16] Board of Public Utilities, Notice: In the Matter of the Dual-Use Solar Energy Pilot Program, Dual-Use Solar Energy Pilot Program – Notice of Solar Incentive Availability, BPU Docket No. QO23090679 (January 6, 2025).

[17] A prequalification approval letter allows the applicant to submit an application but does not qualify the project for an award in the Pilot Program, nor does it approve project registration requirements under the SuSI Program. The Board will make determinations on projects selected to receive an award following the opening of an application period and review of applications submitted. Only pre-qualified projects that were issued a letter of approval from Staff for their EOI will be eligible to apply.

Clarification on Timing of the Program Year (PY)

Staff recommends that the First Application Period for PY1 open on January 14, 2026 and close on February 25, 2026. Due to the greater than anticipated time needed to launch the Pilot Program and develop program rules, Staff recommends that the Board specify that PY1 began on the effective date of the Board order that opened the Pilot Program, which was October 30, 2024, and will close on the closing date of the First Application Period, instead of beginning on the date that the Pilot Program rules are adopted and close twelve (12) months thereafter. Staff recommends that subsequent program year timeframes be adjusted as necessary to fit within the thirty-six (36)-month timeframe for the Pilot Program provided in the Act. This is consistent with the Pilot Program Rules being considered for adoption in a companion item on this agenda.

Capacity Target

In the October 2024 Order, the Board established an annual capacity target for PY1 of fifty (50) MW. Pursuant to the October 2024 Order, and consistent with the Pilot Program Rules being considered for adoption in a companion item on this agenda, the Board may select projects until the capacity target of fifty (50) MW for PY1 is filled. If the application period is undersubscribed, the Board will not be obligated to select additional projects until the fifty (50) MW is met, nor will the Board be obligated to avoid selecting additional projects if the fifty (50) MW is surpassed, or the application period is oversubscribed. The capacity approved in the application period cannot exceed the total Pilot Program capacity limit of 200 MW, but it may exceed fifty (50) MW. Staff may recommend that the Board limit the number of projects approved for a single applicant within the current Program Year to promote diversity in the pool of selected projects.

The total capacity represented by the thirty-three (33) EOIs submitted amounted to approximately 140 MW. Even without the capacity represented by the EOIs that were denied, the projects that have received approval to submit full applications to the Board constitute approximately 126 MW. Moreover, due to the time needed to launch the Pilot Program, which included the establishment of new processes and procedures for implementation, there is not enough time within PY1 to run another solicitation round or another application period. Thus, Staff recommends that the Board adjust the capacity target for the First Application Period to sixty-five (65) MW, representing approximately one-third of the total maximum capacity of 200 MW allowed by statute for the Pilot Program.

Capacity Set Asides

The group of EOIs reflects a wide variety of projects sizes and crop types across the State. Since the Pilot Program has just begun, Staff believes that establishing capacity set-asides for specific project types would be premature. Therefore, Staff does not recommend establishing capacity set asides for the First Application Period but rather suggests that the Board could consider capacity set-asides in future PYs if the characteristics of the projects submitting applications in future solicitation rounds indicates that such action would be beneficial.

Participation of Dual-Use Projects in Remote Net Metering

In response to stakeholder comments and inquiries received by Staff and RAP, Staff considered the feasibility of allowing Pilot Program Projects to enroll in the Board's Remote Net Metering ("RNM") market segment. The Clean Energy Act of 2018 mandated that the RNM market segment be open only to 'public entities' as defined in the Solar Act of 2021. The Remote Net Metering Act of 2023 later modified eligibility requirements for the RNM market segment and

required facilities with a capacity of five (5) MW (dc) or less to receive incentives through the ADI program. At the time that the October 2024 Order issued and the Dual Use Rule Proposal was published, the Board had not yet ruled upon the eligibility of Pilot Program Projects for the RNM market segment. On February 17, 2025, the RNM market segment registration portal opened to new applications, but the Board did not take action at that point to authorize Pilot Program Projects to participate in the RNM market segment.

Once the Board completes its evaluation of PY1, Staff will reassess the viability of RNM as a pathway for Pilot Program Projects in future Program Years. However, no changes are being recommended by Staff with respect to the RNM market segment for opening the First Application Period and Staff does not recommend that projects applying in the First Solicitation Round be given the option to apply as part of the RNM market segment. Staff recommends that the Board consider integrating RNM and the Pilot Program in future Program Years, either PY2, PY3, or both.

Institution of an Application Fee

Pursuant to the Pilot Program Rules being considered for adoption in a companion item on this agenda, any application fees collected are required to be submitted to the New Jersey Clean Energy Program to offset ratepayer costs used to administer the Pilot Program. In comments on the proposal of the Pilot Program Rules, the New Jersey Division of Rate Counsel recommended that the Board institute an application deposit or fee for the Pilot Program. Staff agrees and recommends instituting an application fee for the First Application Period set at $1,000/MW, consistent with the bid participation fee in the CSI Program, which is designed to protect against speculative projects. Staff also recommends providing an option to waive the fee for applicants demonstrating undue financial hardship. Staff bases its recommendation on a number of factors. First, this group of EOIs primarily includes grid supply projects that, per the Board's rules, are using a proxy value in lieu of participating in the CSI Program's Solicitation and were not required to meet pre-qualification requirements in the CSI Program. Second, the submission of a set financial fee upon application to the Pilot Program can serve as a marker of the project team's commitment to completing the project and participating in the Pilot Program. In this context, Staff notes that the SuSI Program sets forth the maturity requirements for Pilot Program Projects; project maturity will be evaluated and scored as part of the Pilot Program evaluation of applications. However, the Pilot Program has a goal of supporting overburdened and underserved communities and Staff does not wish to discourage pre-qualified projects from submitting an application by imposing additional financial burdens to projects. Thus, Staff recommends that the Board allow applicants to demonstrate that the imposition of the fee would impose an undue financial hardship and that Staff be directed to make these determinations as part of the application process. In doing so, Staff intends to make participation – including the application process – as simple and easy as possible.

Minimum Criteria in Addition to those Contained in the October 2024 Board Order and Clarification of Selected Criteria in October 2024 Board Order

Application Process and Project Selection

The Board previously established requirements for applications, in addition to criteria for evaluating and scoring applications. The October 2024 Order required the following information to be submitted with an application after the submission of an EOI:

1. An updated municipal tax map or site plan, with block and lot location of the farm parcel clearly identified, that shows the delineation of the proposed site, its associated research control areas, its proposed location of the balance of system equipment and solar array, and fencing, and whether any changes have been made to the submission pursuant to the EOI; and
2. Documentation demonstrating how the applicant proposed to meet the application criteria.

Consistent with the Pilot Program Rules being considered for adoption in a companion item on this agenda, Staff also recommends that the Board clarify the requirement for the inclusion of a written lease agreement within the EOI to expressly allow acceptance of other forms of written and legally-binding agreement(s), as determined among the project team. Therefore, for the First Application Period and consistent with this clarification, applicants may provide different documentation with the application than that provided with the EOI to document the project team's agreement upon the farmland proposed to serve as the location of a Pilot Program Project.

Staff also recommends that the Board direct Staff to establish a new online application portal that applicants be required to use to submit an application. Staff notes that during the EOI process, the late docketing of two (2) EOIs contributed to delays in finalizing plans to prepare for opening the application period. Using an online platform will not only support a more efficient and accurate method of processing the applications for all parties involved but will also aid in preventing this type of processing error.

Finally, after consideration of comments received on the Rule Proposal, Staff is recommending, consistent with changes to the Pilot Program Rules proposed in the Notice of Proposed Substantial Changes Upon Adoption ("NOPSCUA"), which is being considered in a companion item on this agenda, that documentation that must be provided as part of an application include a detailed breakdown of all sources of project financial support and such other information as Board staff may find necessary to determine the support for the requested adder.

Evaluation Criteria

In alignment with statutory requirements underlying the Pilot Program, the Board must seek diversity and innovation in agricultural and horticultural use, as well as variety in project size, when evaluating applications for this and all application periods. Based on the analysis of the EOIs, further described below, Staff is not recommending any changes to the criteria that were previously established by the Board for evaluating and scoring an application. These criteria are outlined below.

1. Proposals for monitoring the quality of agricultural or horticultural use of the land including the identity and role of any third-party consultant or New Jersey public research institution of higher education that has not been contracted with the Board for purposes of providing Pilot Program research activities;

2. The incentive level the applicant seeks, including the ADI Program or CSI Program incentive amount, based on New Jersey SREC-II values established by the Board pursuant to N.J.A.C. 14:8-11.6 and bids awarded by the Board pursuant to N.J.A.C. 14:8-11.10, and, if required, an adder designed to supplement the value of an ADI Program or CSI Program incentive;
3. Geographic location, including whether the proposed project is part of an overburdened community or located in an underserved community;
4. Interconnection planning status including, but not limited to, demonstrated proof of submission of an interconnection application to an electric distribution company ("EDC") or PJM Interconnection LLC;
5. Proposals for minimizing and mitigating negative impacts to farmland during construction, operation, and decommissioning;
6. Proposals to address decommissioning of the Dual-Use Solar Energy Project equipment, including both procedures and funding consistent with provisions pursuant to N.J.A.C. 14:8-13.12;
7. Proposals for addressing stormwater runoff and other environmental issues;
8. Technical feasibility;
9. Technical innovation;
10. The quality of the proposed design of the research plan pursuant to N.J.A.C. 14:8-13.10 that includes providing crop performance data and other data related to the productivity and viability of dual-use solar and demonstrates the project team's participation in the research studies required of all approved projects; and
11. A three (3)-year plan for the farming operation intended to occur below and adjacent to the solar array including any special operational requirements specific to the solar array. The three (3)-year plan shall include, but is not limited to, crop types, cover cropping, standard agricultural practices, and other cultural practices over this period that are deemed necessary.

Additionally, Staff's analysis of the EOIs submitted did not support any changes to the weighting of the detailed criteria for evaluating or scoring applications that were previously established by the Board. Thus, Staff does not recommend that the Board adjust this weighting, which is summarized in Tables 1 and 2, below.

Table 1. Weighting of Evaluation Criteria – Summary

Criterion	Weight
Maintaining the Affected Land in Active Agricultural or Horticultural Use	40%
Incentive Level and Project Costs	40%
Technical Feasibility and Technical Innovation	10%
Geographic Location, including Part of an Overburdened Community or in an Underserved Community	10%

Table 2. Weighting of Evaluation Criteria – Detailed

Evaluation Criteria	Weight
Maintaining the Affected Land in Active Agricultural or Horticultural Use • **Proposals for monitoring the quality of agricultural or horticultural use of the land** • **Minimizing and mitigating negative impacts to farmland** • **Plan for decommissioning** • **Plan for stormwater runoff and other environmental issues** • **Quality of the proposed design of the research plan** • **Three-year plan for the farming operation** Higher preference: Detailed plans and partnered with a NJ research public institution of higher education **Bonus points:** considerations for crop adaptability, enhanced benefits for mitigation plans, including environmental impacts and pollinator habitats	**40%**
Incentive Level and Project Costs *Must include the ADI Program or CSI Program incentive amount, based on New Jersey SREC-II values established by the Board* Higher preference: Lower cost, no adder requested Lower preference: higher cost with minimal justification	**40%**
Technical Feasibility and Technical Innovation • **Interconnection Planning Status** *Meeting the applicable SuSI Program requirements for a Dual-Use Pilot Program Project is a pre-requisite* Higher preference: Feasibility – consideration of both technical solar feasibility and agricultural/horticultural feasibility, e.g., ability of a project to scale to a commercially viable installation for both agricultural products and solar production. This includes the consideration of project maturity, i.e., projects that have applied, been approved, identified any distribution system interconnection costs and are demonstrated to be close to commencing construction. Innovation – design aspects that seek to increase or maintain both solar and agricultural productivity compared to standard designs or practices	**10%**
Geographic Location, including whether the proposed project is part of an overburdened community or located in an underserved community *Scoring includes consideration of a project plan for outreach and engagement with the impacted communities* Higher preference: part of an overburdened community or located in an underserved community; representation within New Jersey Zero points: siting on a prohibited land type without a waiver	**10%**

Maintaining the Affected Land in Active Agricultural or Horticultural Use

A detailed discussion of Staff's recommendations for requirements pertaining to research and monitoring, which are designed to allow Staff to more effectively evaluate and score applications, appears on page 13 of this Order, with Appendix A outlining the requirements in an organized and more streamlined fashion.

With respect to plans for stormwater runoff and other environmental issues, Staff received a recommendation from NJDEP's Office of Permitting and Project Navigation ("OPPN") that applicants should be required to submit OPPN's Permit Readiness Checklist along with the full application for the Pilot Program. Staff concurs with OPPN, particularly given the wide variety of environmental areas on which projects were proposed in the EOIs received. The submittal of detailed information regarding environmental issues in a format facilitating NJDEP oversight will help streamline the evaluation and scoring process for this criterion.

NJDA also provided feedback with respect to stormwater runoff and soil erosion. NJDA highlighted the importance of projects developing a stormwater runoff and soil erosion mitigation plan that meets the requirements set forth in the Soil Erosion and Sediment Control Act of New Jersey (N.J.S.A. 4:24-39) and its implementing Rules, as well as the requirements of L. 2010 c. 4 regarding calculations of new impervious cover and exemptions for solar panels. NJDA also stressed that applicants should not conflate the two (2) different sets of requirements.[18] In the determination letters issued to the EOI projects, Staff relayed this feedback on the project teams' proposals as well as a detailed description of the requirements. However, Staff does not recommend any additions or revisions to the existing requirements on these matters because the Pilot Program Rules being considered for adoption already require compliance with all applicable permits, approvals, and authorizations required under federal, State, or local laws, rules, regulations, or ordinances. Additionally, the intent of the Pilot Program is to gather information to inform a permanent program specific to establishing standards for agrivoltaics projects; thus, Staff believes that it would be premature at this point to establish additional specific stormwater runoff and soil erosion standards beyond those already required under the applicable laws and regulations.

Incentive Level and Project Costs

In the NOIA, applicants with a CSI-eligible project who had not received an award from the Board were directed to use $95/MWh as a base incentive, or reference value, pursuant to the awards made by the Board for the CSI Program's Second Solicitation ("Second Solicitation").[19] However, given concerns about ratepayer costs, Staff is recommending that the Board consider a calculated method for the reference value for CSI-eligible projects using 90 percent of the lowest awarded bid from the most recent CSI Program solicitation, the CSI Program's Second Solicitation, in line with a change to the Pilot Program Rules proposed in the NOPSCUA, which is being considered

[18] P.L. 2010 does not apply to the Soil Erosion and Sediment Control Act (The Act), N.J.S.A. 4:24-39 et seq., or its Rules at N.J.A.C. 2:90 which regulate new construction activities for the prevention of on- and off -site erosion. Neither the Act nor its Rules prohibit any form of development based upon arbitrary impervious cover limits or any other discretionary 'land use' characteristics. Hence, the Act and its rules are not subject to P.L. 2010, nor are they referenced in it.

[19] In re Competitive Solar Incentive ("CSI") Program Pursuant to P.L. 2021, c.169, Order on the Outcome of the Second Solicitation in the CSI Program, BPU Docket No. QO21101186, Order dated April 17, 2024 ("April 17 Order").

in a companion item on this agenda. Therefore, Staff recommends the revised reference value for the First Application Period for this group of projects, identified from the CSI Program's Second Solicitation, be $64.71/MWh (0.90 x $71.90/MWh).[20]

A comment received on the Rule Proposal recommended that the Board require applicants to make their accounting books available for inspection as a condition of receiving an award. Staff agrees and recommends, consistent with an addition to the Pilot Program Rules proposed in the NOPSCUA, which is being considered in a companion item on this agenda, that the Board require projects to provide an overview of project costs to Staff upon request. Such documentation would not necessarily be required as part of the application scoring and evaluation process before awards are made, but, for instance, could be requested as part of an auditing process or during a site visit. Staff also notes that the Pilot Program, like the Board's other solar incentive programs, will provide a fixed incentive that will not be increased if project costs are greater than anticipated.

Lastly, Staff does not recommend any additional changes to the minimum criteria for incentive levels or project costs established for the Pilot Program at this time.

Technical Feasibility and Technical Innovation

Minimum Project Size – Based on the characteristics of the EOIs, of which the smallest project proposed was 0.92 MW, Staff does not recommend that Board make any changes to the minimum size requirements of 500 kW for the upcoming First Application Period.

Interconnection Planning Status – The majority of the EOIs approved by Staff to move forward to submit an application are grid supply projects. One (1) of the major issues or concerns that stakeholders raised with respect to developing agrivoltaics was the lack of options for how to interconnect. Typically, a project site does not have on-site load to support net metering, and the Board's rules for the Pilot Program do not allow community solar projects. That leaves limited options for commercial farms with no on-site load. As discussed elsewhere in this Order, the RNM market segment may be considered as an option in future Program Years. For CSI-eligible projects, Staff recommends that the Board continue to use the Pilot Program evaluation and scoring criteria to determine project maturity while also considering the pre-qualification requirements as part of the solicitation process in the CSI Program. The Board extended deadlines for projects registered in the CSI Program on August 13, 2025. Moreover, the application for the Pilot Program will require additional information from applicants on interconnection. Thus, Staff believes that taking any action at this time on interconnection would be premature and that, if necessary, the Board could more appropriately address any interconnection considerations for this first group of projects in the Board order that makes awards for Pilot Program Projects participation in the First Application Round.[21]

As part of the documentation required for project registration Staff recommends that the Board require selected projects to submit a unique milestone reporting form specific to the Pilot Program.

[20] Staff notes that, after the NOIA was issued, the CSI Program's Third Solicitation ("Third Solicitation") opened on May 14, 2025 and closed on September 30, 2025. However, since awards have not yet been issued in the Third Solicitation, Staff recommends that the reference value for CSI-eligible projects in the First Application Period projects be based on the Second Solicitation awards.

[21] In re the Matter of the Community Solar Energy Program, the Competitive Solar Incentive ("CSI") Program Pursuant to P.L. 2021, c. 169, and In re Modernizing New Jersey's Interconnection Rules, Processes, and Metrics, BPU Docket Nos. QO22030153, QO21101186, and QO21010085, Order dated August 13, 2025.

Staff believes that having one distinct and separate milestone form for the Pilot Program will be more efficient in implementation and will help applicants and the Board more clearly discern information on agrivoltaics projects versus a standalone solar project. Having this data will further assist evaluation and scoring of project maturity. The form will be made available on the Pilot Program page on the New Jersey Clean Energy Program website before the Board announces the projects selected for an award.

Geographic Location

As noted previously, projects were proposed in eleven (11) counties across three (3) of the four (4) EDC territories, namely Atlantic City Electric ("ACE"), Public Service Electric and Gas Company ("PSE&G"), JCP&L ("Jersey Central Power & Light Company"). Nine (9) projects self-identified as being located in an overburdened or underserved community, and Staff verified that eleven (11) EOI projects were proposed in or in close proximity to municipalities containing overburdened communities as defined by NJDEP's Environmental Justice rule at N.J.A.C. 7:1C-1.5. Staff believes that this group of EOIs represents a diverse range of locations around the State and therefore that imposing any carve-outs or additional criteria is not needed at this time.

Through the Evaluation Committee, Staff coordinated with the State Agencies and RAP on evaluating several proposed project sites on prohibited land types, particularly those in the Highlands Preservation Area, Pinelands Forest Area, or Pinelands Preservation Area. As with other criteria for the Pilot Program, applicants were provided feedback that included the need to confirm the locational details and reminders that the Board may need to grant a waiver from its rules if the location is in fact confirmed to be on any prohibited land type. Pursuant to the October 2024 Order, "[a] developer would be required to petition the Board for a waiver for a Dual-Use Pilot Program Project to be sited in a prohibited area, and each such petition would be decided on its own merits."[22] The waiver process runs on a schedule that is independent of the Pilot Program solicitation process; to allow a project to be sited on a prohibited land type, the Board must find that the project is in the public interest.

For purposes of opening and implementing the First Application Period, Staff is making no additional recommendations regarding criteria or requirements pertaining to prohibited site types.

Monitoring and Research Requirements

The Pilot Program Rules being considered for adoption in a companion item on this agenda establish monitoring and research requirements for the Pilot Program, and the process for implementing these requirements is described in the October 2024 Order at Appendix B.

Soil Health and Environmental Parameters

Staff, in consultation with NJDA and RAP, is proposing minor adjustments to the soil health and environmental parameters that are necessary to better understand the impacts to farmland in New Jersey from Pilot Program Projects.

As part of the pre-construction soil requirements in Appendix A, paragraph A, Staff is recommending the submittal of a soil map to allow the Board to more effectively and efficiently evaluate soil quality characteristics. The original parameter proposed as "topography of the

[22] October 2024 Order at page 12.

project site" was determined to be infeasible to obtain through a soil map and thus removed. Staff is recommending that soil volumetric water content become part of the metric for bulk density and will be used with penetration resistance to calculate soil compaction, which should be kept at a minimum to minimize disruption to the farmland. Finally, Staff recommends clarifying the sampling protocol for bulk density, soil volumetric water content, and penetration resistance to be measured covering the depth range of zero to at least fifteen (15) inches below the surface, or zero inches below the surface to the depth of a restrictive layer.

Other measures like "macro- and micro-nutrient content" and "organic matter content" are recommended to reflect "nutrients" and "total carbon," respectively, to create more clarity in the requirements for project teams while reducing burden regarding the amount of information to obtain. Soil organic matter ("SOM") and soil organic carbon ("SOC") content are important properties determining soil health. Both properties are related through conversion factors, but SOC is more accurately determined from total carbon, i.e., organic plus inorganic, when inorganic carbon is absent from the soil.[23] Revisions to the term "soil texture classification" are recommended to reflect "particle size (texture)".

Additionally, as part of the pre-construction soil assessment, Staff recommends modifications to introduce pH as a parameter to be measured due to its effects on crop growth and yield; the installation of photovoltaic panels can potentially make the soil more acidic and will therefore be essential to monitor throughout the life of the project. Since the panels can alter the microclimate of the soil, "soil respiration" is also recommended as an additional parameter to monitor soil temperature and moisture levels, and subsequently the rate of carbon dioxide release from the soil. The recommended test is one of the more cost-effective options for testing soil respiration compared to more expensive methods using titration or gas analyzers. Staff recommends adding the soil's "infiltration rate" as a new parameter that will allow the Board to determine the effect of the panels on soil-water dynamics. Finally, Staff recommends adding cation exchange capacity ("CEC") and exchangeable cations as new measures. These parameters influence the soil's ability to hold onto essential nutrients and provide a buffer against soil acidification. These measures are at risk of being altered in the microenvironment of the soil when photovoltaic panels are installed and are therefore necessary for the Board to monitor.

For changes specific to the post-construction requirements for soil quality characteristics and environmental conditions, as outlined in Appendix A, paragraph B, Staff is recommending to include a slight modification of "soil density and compaction" to "bulk density and soil volumetric water content measured covering the depth range of zero to at least 15 inches below the surface, or zero inches below the surface to the depth of a restrictive layer." A similar recommended addition includes "penetration resistance measured in five-inch increments and covering the depth range of zero to at least 15 inches below the surface, or zero inches below the surface to the depth of a restrictive layer." Additionally in this section, "organic matter content" is proposed to be replaced with "nutrients, pH, total soil carbon, soil respiration, cation exchange capacity (CEC), and exchangeable cations," which will be collected and analyzed in a laboratory. To inform the Board about potential erosion caused by the solar panels, the "mesh marker method" is being recommended as a requirement. Finally, "infiltration rate" is being recommended as a new parameter, which is explained in the section above for pre-construction requirements.

[23] Selected project teams will be required to determine SOC and, if required, convert SOC to SOM using the conversion factor 1.724, with the caveat that a single conversion value may not represent SOM/SOC ratios for fields across New Jersey.

With respect to the data collection requirements for environmental conditions, Staff recommends removing the requirement to use an "actively aspirated box" to measure air temperature and air relative humidity due to its difficulty to find in the market at a reasonable price mark. Finally, Staff recommends modifying the depth at which soil temperature and soil volumetric water content should be measured to include measurements at both six (6) and twelve (12) inches below the surface since the type of recommended equipment for these parameters does not measure at only one (1) depth.

While Staff recognizes that the additional parameters may potentially add costs to applicants, the adder exists to account for such incremental costs. As previously established, the applicant would be responsible for the laboratory costs of the soil samples and the cost of the research equipment, including the equipment needed for collecting data pertaining to environmental metrics. As part of the Board's grant agreement with RAP, RAP will oversee collecting and managing data from pre- and post-installation of the solar panels for Pilot Program Projects at no cost to the applicant. Participants may choose to contract with a non-Board appointed entity to collect the data at their own cost. Applicants will be notified of the detailed data requirements for submission with the final application materials.

For applicants during this First Application Period, Staff recommends that the specific timeframe and monitoring schedule will be confirmed by Staff, in consultation with the State Agencies and RAP, after the Board awards projects to participate in the Pilot Program. Based on the application submitted and conditionally approved by the Board, the requirements will be documented through a selected project's COMPR, as described in Appendix A. Per the October 2024 Order and the Pilot Program Rules being considered for adoption as companion item on the agenda, a COMPR establishes the minimum monitoring and research requirements for a selected project throughout the life of the project.

Clarification of Three (3) Years of Research Data

Based on stakeholder questions about the timeframe during which the project team must maintain access to the research control area, Staff, in consultation with the State Agencies, recommends that the Board clarify that research and monitoring requirements apply for a three (3)-year period beginning on the date that an awarded project receives permission to operate from the EDC. This recommendation is consistent with a proposed addition to the Pilot Program Rules reflected in the NOPSCUA being considered as a companion item on this agenda. Staff believes that this clarification will support successful project planning, including cost estimation, while ensuring that the Board has access to an appropriate amount of project data to make decisions for a permanent program.

Location of the Research Control Area

The purpose of the research control area is to serve the primary function of providing valid data for comparison purposes in order to inform designing a permanent program. The location of that area may impact the likeness of soil type and quality, as well as the impact of farm management practices between the two (2) parts of the project site. As such, the Pilot Program Rules being considered for adoption require a research control area to be a portion of the project site which is equivalent to the array-containing portion with regard to agricultural productivity potential, farming practices, farm management, and any extraneous factors affecting agricultural productivity. However, the EOIs received included proposals to locate research control areas away from the project site where the solar array is located and in areas of the project site that may not be ideal

for a research control area, such as where bodies of water are located, trees or hedgerows exist that would need to be removed and could impact property drainage, or land is bound by excessive roadways. In addition, public comment received on the Rule Proposal recommended allowing the research control area to be located on a separate, nearby parcel of land or on an alternative location set by some fixed distance. Staff believes that research control areas that are more than fifty (50) yards from the project site may differ in soil type, among other factors, which would impact the soil testing aspects of the research requirement and could make the control area not adequate for comparison purposes. However, Staff also recognizes that a given applicant may be able to demonstrate a unique circumstance that justifies the use of a non-adjacent or more distant research control area. Accordingly, Staff recommends that an applicant that proposes a research control area located on a separate farm parcel or otherwise separated from the location of the project site at a distance of more than fifty (50) yards from the Pilot Program Project be required to submit a justification to the Board as part of the application process. This recommendation is consistent with a proposed addition to the Pilot Program Rules reflected in the NOPSCUA being considered as a companion item on this agenda.

Post-Application Submission

Staff does not recommend any changes to the procedures for awarding projects from those laid out in the October 2024 Board Order and the Pilot Program Rules being considered for adoption. Pursuant to these rules, the Board will approve, approve with conditions, or deny each application based on Staff's recommendations. The Board will make these determinations within 180 days of receipt of the applications, in consultation with the Secretary of Agriculture. Thereafter, the results of this application period will be documented in a Board Order with an accompanying summary of the responses to the applications, projects selected for an award, and authorization for Staff to issue award letters to the selected applicants. The award letters will specify terms and conditions for maintaining eligibility for a Dual Use adder. This Board Order, as well as key elements of a project's application, will form the basis of a COMPR for the selected project and will be required as part of the registration documentation.

The same Order that selects and conditionally approves Pilot Program Projects will provide the value of the Pilot Program adder that is determined through the solicitation process. Projects will be eligible to receive the total incentive, which is the combined value of the adder and the base incentive value through ADI or CSI, once they have received a New Jersey State Certification Number. The incentives will be provided in the form of NJ SREC-IIs created by PJM-EIS GATS for each megawatt-hour generated, metered, and reported to PJM-EIS-GATS.

DISCUSSION AND FINDINGS

New Jersey's solar programs have created a thriving industry, and the Board has strongly supported the development of innovative technical advances for clean energy and renewable energy projects throughout the State. The Board is committed to establishing our State's position as a marketplace leader in agrivoltaics in accordance with the requirements of the Dual-Use Act, while at the same time controlling ratepayer costs and working with our State agency partners to protect our farmland and natural resources.

The Pilot Program, which the Dual-Use Act directed the Board to open, is designed to encourage the development of Dual-Use Solar Energy Projects, also known as "agrivoltaics," and the creation of a new segment of the solar industry in New Jersey that is compatible with the State's rich agricultural heritage. Specifically, the Pilot Program seeks to demonstrate and provide information on the compatibility of agricultural or horticultural production and solar photovoltaic

infrastructure on the same land.
The Board also recognizes the significant benefits associated with the expansion of local, distributed, renewable, non-polluting sources of energy. In addition to the reduction of emissions that contribute to climate change, there is the reduction of air pollutants and the associated health benefits, increased resilience in the form of distributed generation, and the economic growth fueled by local job creation. Dual-Use solar energy provides a further benefit – it ensures that the agricultural community can not only play a larger part in the clean energy transition but can receive the economic benefits of doing so. Dual-Use solar can provide farmers with an additional stream of revenue, assisting with farm financial viability and enabling continued agricultural or horticultural production, while also increasing the statewide production of clean energy. In New Jersey and the larger PJM Interconnection LLC region, new generation is crucial to address the need for additional capacity due to the increases in electricity demand driven by the load growth from artificial intelligence data centers, new manufacturing facilities, and transportation electrification. New generation is essential for ensuring grid reliability while providing more predictable and affordable electricity for consumers and helping the state achieve its clean energy goals. However, the Board emphasizes that any financial incentives awarded in the Pilot Program are for evaluation and research purposes only and should not be considered indicative of potential incentive levels in the future.

After a review of the record and Staff's recommendations, the Board **FINDS** that only pre-qualified projects that submitted an EOI in response to the NOIA and were issued a letter of approval are eligible to apply during the First Application Period.

The Board **FINDS** that additional time is needed to implement the solicitation for PY1 for the reasons described in this Order and **ORDERS** that the twelve (12)-month timeframe of PY1 is extended to the closing date of the First Application Period, which, as directed below, will be February 25, 2026. The Board **FURTHER ORDERS** that for subsequent Program Years, the twelve (12)-month timeframes be adjusted to comply with the thirty-six (36)-month timeframe pursuant to the Dual-Use Act. In addition, based on the fact that EOI submissions for approximately 126 MW of capacity were received and that there would not be sufficient time in PY1 to run a second solicitation, the Board also **APPROVES** increasing the capacity target for the First Application Period to sixty-five (65) MW.

The Board **APPROVES** an application fee for the First Application Period of $1,000/MW for the purpose of preventing speculative projects. This fee is consistent with the bid participation fee in the CSI Program. The Board **FURTHER APPROVES** an option for Staff to waive the fee for applicants demonstrating undue financial hardship.

The Board **ORDERS** that applicants may be required to provide the documentation and information necessary to determine the support for a requested adder, including but not limited to a detailed breakdown of all sources of project financial support.

The Board **DIRECTS** Staff to develop a new application portal that will be hosted online for use beginning with the First Application Period. The Board **FURTHER DIRECTS** that this portal shall be the sole avenue for applicants to submit applications.

The Board **APPROVES** the recommendation to require OPPN's Permit Readiness Checklist with the full application for the Pilot Program, and **ORDERS** applicants to submit the checklist during the First Application Period. The Board also **APPROVES** the use of a unique milestone reporting form specific to the Pilot Program, and **ORDERS** applicants to submit the form as part of the application, beginning with the First Application Period.

The Board **ORDERS** CSI-eligible facilities seeking to participate in the Pilot Program to submit an incentive value for the CSI component of the project using 90 percent of the lowest awarded bid approved for the Basic Grid Supply Tranche (Tranche 1) in the CSI Program's Second Solicitation, the most recent CSI Program solicitation. Therefore, the revised reference value for the First Application Period for this group of projects will be $64.71/MWh.[24]

The Board **ORDERS** Pilot Program Projects to monitor and conduct research for the duration of the Board's Pilot Program, pursuant to the updated requirements contained within Appendix A and explained within the body of this Order.

The Board **ORDERS** all Pilot Program Project facilities to comply with the application criteria set forth in this Order.

The Board **DIRECTS** that the First Application Period of the current solicitation period of the Pilot Program open to submissions on January 14, 2026 and close on February 25, 2026. Therefore, the Board **ORDERS** that Program Year 2 will commence on February 26, 2026.

Finally, unless expressly stated otherwise, the Board **HEREBY APPROVES** all Staff recommendations set forth within the body of this Order.

This Order shall be effective on November 28, 2025.

DATED: November 21, 2025

BOARD OF PUBLIC UTILITIES
BY:

CHRISTINE GUHL-SADOVY
PRESIDENT

DR. ZENON CHRISTODOLOU
COMMISSIONER

MICHAEL BANGE
COMMISSIONER

ATTEST:

SHERRI L. LEWIS
BOARD SECRETARY

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

[24] April 17 Order at page 7.

IN THE MATTER OF THE DUAL-USE SOLAR ENERGY PILOT PROGRAM

DOCKET NO. QO23090679

SERVICE LIST

New Jersey Division of Rate Counsel

Brian O. Lipman, Esq., Director
Division of Rate Counsel
140 East Front Street, 4th Floor
Trenton, NJ 08625-0003
blipman@rpa.nj.gov

New Jersey Division of Law

Deputy Attorney General
Department of Law and Public Safety
Richard J. Hughes Justice Complex
Public Utilities Section
25 Market Street, P.O. Box 112
Trenton, NJ 08625

Pamela Owen, Assistant Section Chief, DAG
pamela.owen@law.njoag.gov

Steven Chaplar, DAG
steven.chaplar@law.njoag.gov

Atlantic City Electric Company

92DC42 500 North Wakefield Drive
Newark, DE 19702

Neil Hlawatsch, Assistant General Counsel
neil.hlawatsch@exeloncorp.com

Heather Hall, Manager
New Jersey Regulatory Affairs
heather.hall@pepcoholdings.com

Jersey Central Power & Light Company
300 Madison Avenue
Morristown, NJ 07962

James Meehan, Esq.
jameehan@firstenergycorp.com

Tom Donadio
tdonadio@firstenergycorp.com

New Jersey Board of Public Utilities

44 South Clinton Avenue, 1st Floor
P.O. Box 350
Trenton, NJ 08625-0350
www.nj.gov/bpu/

Sherry L. Lewis, Board Secretary
board.secretary@bpu.nj.gov

Bob Brabston, Esq., Executive Director
robert.brabston@bpu.nj.gov

Stacy Peterson, Deputy Executive Director
stacy.peterson@bpu.nj.gov

Taryn Boland, Chief of Staff
taryn.boland@bpu.nj.gov

Henry Gajda, Chief of External Affairs
henry.gajda@bpu.nj.gov

General Counsel's Office

Ava-Marie Madeam, Deputy General Counsel
avamarie.madeam@bpu.nj.gov

Elspeth Hans, Deputy General Counsel
elspeth.hans@bpu.nj.gov

Rachel Boylan, Legal Specialist
rachel.boylan@bpu.nj.gov

Division of Clean Energy

Veronique Oomen, Director
veronique.oomen@bpu.nj.gov

Matt Rossi, Deputy Director
matt.rossi@bpu.nj.gov

Earl Pierce, Administrative Analyst
earl.pierce@bpu.nj.gov

Laura Scatena-Amissah, Research Scientist
laura.scatena@bpu.nj.gov

Sawyer Morgan, Research Scientist
sawyer.morgan@bpu.nj.gov

Diane Watson, Research Scientist
diane.watson@bpu.nj.gov

Jusleen Basra, Program Specialist
Jusleen.Basra@bpu.nj.gov

Public Service Electric and Gas Company

80 Park Plaza, T5
P.O. Box 570
Newark, New Jersey 07102

Matthew M. Weissman, Esq.
Managing Counsel, State Regulatory
matthew.weissman@pseg.com

Stacey M. Barnes, Esq., Associate Counsel
stacey.barnes@pseg.com

Bernard Smalls
bernard.smalls@pseg.com

Rockland Electric Company

4 Irving Place
New York, New York 10003

Christian Malanga, Esq., Associate Counsel
malangac@coned.com

Ben Falber, Esq., Associate Counsel
falberb@coned.com

TRC Energy Solutions

900 Route 9 North, Suite 404
Woodbridge, NJ 07095

Brian Deluca, Program Manager
bdeluca@trcsolutions.com

Michael Ambrosio, Director, Policy and Planning
mambrosio@trcsolutions.com

Tammy VanBlarcom, Manager
SREC Registration Program
tvanblarcom@trccompanies.com

Thomas A. Kowalczyk, Manager
Regulatory Compliance
317 George Street, Suite 520
New Brunswick, NJ 08901
tkowalczyk@trcsolutions.com

Rutgers, The State University

Diane Ambrose, Ph.D., Executive Director
33 Knightsbridge Rd., 2nd Floor East
Piscataway, NJ 08854
diane.ambrose@rutgers.edu

David R. Specca, Rutgers Agrivoltaics Program Lead
Rutgers EcoComplex "Clean Energy Innovation Center"
1200 Florence-Columbus Rd.
Bordentown, NJ 08505
specca@njaes.rutgers.edu

NJBPU, Cont'd

Florence Dou, BPU Project Fellow
florence.dou@bpu.nj.gov

Olivia Najjar, Program Specialist
olivia.najjar@bpu.nj.gov

Zach Goldberg, BPU Science Fellow
Zach.goldberg@bpu.nj.gov

New Jersey Department of Agriculture

Frank Minch, Division Director
Division of Agricultural and Natural Resources
200 Riverview Plaza - 3rd Floor
P.O. Box 330
Trenton, NJ 08611
frank.minch@ag.nj.gov

State Agriculture Development Committee

Charles Roohr, Executive Director
P.O. Box 330
Trenton, New Jersey 08625-0330
charles.roohr@ag.nj.gov

New Jersey Department of Environmental Protection

Dave Pepe, Director
Office of Permitting and Project Navigation
401 E. State Street, P.O. Box 420
Trenton, NJ 08625
david.pepe@dep.nj.gov

Highlands Water Protection and Planning Council

Benjamin L. Spinelli, Esq., Executive Director
100 North Road (Route 513)
Chester, NJ 07930-2322
ben.spinelli@highlands.nj.gov

The Pinelands Commission

Susan R. Grogan, Executive Director
P.O. Box 359
New Lisbon, NJ 08064
susan.grogan@pinelands.nj.gov

APPENDIX A: MONITORING AND RESEARCH REQUIREMENTS

Monitoring and Research Requirements

The Construction, Operations, Monitoring, and Project Research Plan ("COMPR") shall establish the minimum monitoring and research requirements for a Selected Project[25] throughout the life of the project. A New Jersey public research institution of higher education may serve as the primary designer and organizer of research studies involving projects selected as part of the Pilot Program.

The cost of the research equipment shall be the responsibility of the applicant, including the equipment needed for collecting data pertaining to environmental metrics. Management and collection of the data listed below in (A) through (M) for the first three (3) years of a Selected Project by the Board or its designee will be at no cost to the participant. Participants may choose to contract with a non-Board appointed entity to collect the data at their own cost.

Monitoring requirements needed to support compliance with maintaining unpreserved farmland in active use, and with other terms and conditions specified for a Selected Project after the end of the Pilot Program, are subject to the results of the Pilot Program and Board approval through an Order. The minimum requirements for a Selected Project must be included in the COMPR and include metrics that monitor and track:

- The quality of agricultural and horticultural use of the land, including but not limited to separate reporting of yields within the solar array-covered and the research control area;
- The amount of electricity generated;
- Impacts on the land, as shown by reporting requirements listed below;
- Stormwater runoff and other environmental issues; and
- Any additional parameters deemed necessary for researching and evaluating the Pilot Program as established by the Board Order preceding each application period.

Within ninety (90) days of receipt of notice of selection for a Dual-Use Solar Energy Pilot Program award, a report prepared by a qualified soil scientist or geotechnical engineer is required to be added to the COMPR on the pre-construction soil quality characteristics across the project site, solar array, and research control area as outlined in (A) below.

After the completion of the Pilot Program, the terms and the conditions in a Selected Project's COMPR, including any conditions specified by the Board in an Order, shall be the responsibility of the entities or representatives thereof that own or control a Selected Project, including, but not limited to, the farmer(s), landowner(s), and solar operator(s) as those terms are defined in the Order.

(A) Monitoring of the pre-construction soil quality characteristics, before site preparation begins, across the project site, solar array, and research control area required as described above must include the following parameters:

1. Soil map unit(s), soil type(s), textural classification, hydrologic soil group, salinity, and overall slope, as provided by a soil map;

[25] "Selected project" means a Dual-Use Solar Energy Project selected by the Board to participate in the Dual-Use Solar Energy Pilot Program.

2. Bulk density and soil volumetric water content covering the depth range of zero to at least fifteen (15) inches below the surface, or zero inches below the surface to the depth of a restrictive layer;
3. Penetration resistance covering the depth of zero to at least fifteen (15) inches below the surface, or zero inches below the surface to the depth of a restrictive layer;
4. Nutrients, pH, total soil carbon, soil respiration, particle-size (texture), cation exchange capacity ("CEC"), and exchangeable cations, as provided by a laboratory analysis; and
5. Infiltration rate.

(B) Monitoring of the soil and environmental conditions for Selected Projects post-construction of the facility is required and must include the following parameters:

1. Bulk density and soil volumetric water content covering the depth range of zero to at least fifteen (15) inches below the surface, or zero inches below the surface to the depth of a restrictive layer;
2. Nutrients, pH, total soil carbon, soil respiration, CEC, and exchangeable cations, as provided by a laboratory analysis;
3. Penetration resistance covering the depth range of zero to at least fifteen (15) inches below the surface, or zero inches below the surface to the depth of a restrictive layer;
4. Mesh-marker method to assess erosion;
5. Infiltration rate; and
6. Any other environmental parameters specified for the project site pursuant to the COMPR and deemed necessary for the Board to inform a permanent program, as established by Board Order for each application period.

(C) Data collection for Selected Projects not located on covered agricultural lands must include the following information pertaining to the project site:

1. Name, phone number and email address for each member or entity of the Selected Project team;
2. Postal address of the proposed land parcel on which the Selected Project will be located, if applicable;
3. Global positioning system (GPS) coordinates;
4. Soil type and topography;
5. For net-metered projects, two-year record of electricity consumption, in the form of utility bills, prior to solar array installation;
6. Type of agricultural or horticultural activity;
7. Solar array size, including ground area, type, panel specifications, number of panels, and nominal production;
8. Size of area within the solar array area rendered unfarmable by the solar array structure and the location and size of area of any required infrastructure, meaning the balance of system equipment;
9. Installation date that specifies the first day of operation of the solar array;
10. Name of local electric utility;
11. Name of the solar developer involved with the project design and installation; and
12. Any additional metric(s) deemed necessary to inform a permanent program, as established by Board Order with each application period.

(D) Data collection for Selected Projects located on covered agricultural lands must include the parameters established at (C) above in addition to any other metric(s) deemed necessary to inform a permanent program pertaining to the project site, as established by Board Order with each application period.

(E) Data collection for Selected Projects not located on covered agricultural lands must include the following information pertaining to crop production:

1. Type of crop;
2. Sowing or transplanting date;
3. Sowing or transplanting rate;
4. Harvest date(s) for both the solar array covered area and research control areas, separately;
5. Crop yield for both the solar array covered area and research control areas, separately;
6. Information on whether having an agrivoltaic array on-farm has led the farmer to introduce, expand, decrease, or stop production of specific crops; and
7. Any additional metric(s) deemed necessary to inform a permanent program, as established by the Board Order for each application period. Additional metrics may include data on the impacts of agrivoltaics on farm viability and data on farmers' experiences with agrivoltaics, including challenges encountered and adaptations made to farm operations due to the introduction of agrivoltaics.

(F) Data collection for Selected Projects located on covered agricultural lands must include the parameters established at (E) above for crop production, in addition to the following:

1. Pre-planting soil prep, including dates;
2. Type of pre-planting soil prep;
3. Sowing or transplanting equipment used;
4. Applications of fertilizer, including dates, rates, and equipment;
5. Applications of chemicals, including dates, rates, and equipment;
6. Post-planting soil and crop maintenance;
7. Equipment used for post-planting soil and crop maintenance;
8. Irrigation methods, including dates and rates, if applicable;
9. Harvesting equipment used;
10. Post-harvesting soil maintenance, if applicable; and
11. Post-harvesting cover crop planting and maintenance, if applicable.

(G) Data collection for Selected Projects not located on covered agricultural lands must include the following information pertaining to animal production:

1. Type of animal;
2. Type of grazing strategy, including procedures, dates, and number of grazing days;
3. Average start weight of animals when put on pasture, including date;
4. Yield of hay/silage;
5. Supply of drinking water, including name and type of system and rate;
6. Average end weight of animals when removed from pasture, including date, if applicable;
7. Grass maintenance after animals are removed from pasture, including dates, if applicable;

8. Direct reporting on whether having an agrivoltaics array on-farm has led the farmer to introduce, expand, decrease, or stop production of specific livestock types; and
9. Any additional metric(s) deemed necessary to inform a permanent program, as established by Board Order with each application period. Additional metrics may include data on the impacts of agrivoltaics on farm viability and data on farmers' experiences with agrivoltaics, including challenges encountered and adaptations made to farm operations due to the introduction of agrivoltaics.

(H) Data collection for Selected Projects located on covered agricultural lands must include the parameters established at (G) above for animal production in addition to the following:

1. Grass maintenance, including fertilizers, chemicals, dates, and rates;
2. Equipment used for grass maintenance;
3. Procedures and equipment used for hay/silage production, including dates; and
4. Equipment used for pasture maintenance after animals are removed, including dates, if applicable.

(I) Data collection for all Selected Projects pertaining to environmental conditions, including but not limited to, air temperature, solar radiation, relative humidity, and soil temperature, must adhere to the procedures set forth in this subsection.

1. Data should be recorded in time intervals of no longer than one hour.
2. If recording a single value for a specific time interval, that value should be the average measurement of all the measurements collected during that time interval.
3. All environmental data should be collected in duplicate: One (1) measurement at a representative location in the control area, which is unobstructed by any solar panel, and the other at a comparable location in the dual-use area impacted by the solar panels. The locations must be those which were approved in the most recent version of the COMPR for the Selected Project.
4. Sensors should be calibrated and re-calibrated as needed, according to manufacturers' recommendations.

(J) Data collection for Selected Projects not located on covered agricultural lands must include the following information pertaining to environmental conditions:

1. Solar radiation measured horizontally;
2. Air temperature;
3. Air relative humidity;
4. Soil temperature at six (6) and twelve (12) inches below the surface;
5. Soil volumetric water content, also known as pressure potential, at six (6) and twelve (12) inches below the surface; and
6. Any additional metric(s) deemed necessary to inform a permanent program, as established by Board Order with each application period.

(K) Data collection for Selected Projects located on covered agricultural lands must include the parameters established at (J) above for environmental conditions in addition to precipitation, including date and amount.

(L) Data collection for all Selected Projects must include the following information pertaining to solar array performance:

1. Electricity production using time intervals of no less than one (1) day;
2. For net-metered projects, monthly accounting of any additional electricity purchased from the local utility;
3. Income to farmer/landowner from lessee for projects with a leased array site;
4. Performance of individual rows or module strings, if readily available;
5. Solar irradiance as measured at the array, such as a sensor attached to a rack, if applicable;
6. Maintenance and repairs to the solar equipment, if applicable; and
7. Any additional metric(s) deemed necessary to inform a permanent program, as established by Board order with each application period.

(M) Data collection for all Selected Projects must include the following information, obtained via responses to a survey developed and approved by Board Staff, pertaining to general attitudes, experience with dual-use, and policy views:

1. Farmers' views toward agrivoltaics as an agricultural technology and how their views change with further experience;
2. Challenges farmers encountered with agrivoltaics, including whether or how these challenges were overcome, and whether adaptations were made to farm operations due to the introduction of agrivoltaics;
3. Farmers' views regarding possible public policies that would encourage or advance agrivoltaics in New Jersey; and
4. Any additional metric(s) deemed necessary to inform a permanent program, as established by Board order for each application period.

(N) After the completion of the Pilot Program, the terms and the conditions in a Selected Project's COMPR, including any conditions specified by the Board in an order, shall be the responsibility of a Selected Project.

1. In order for the Board to effectively evaluate the results of Selected Projects and make informed decisions about a permanent program, the monitoring and research requirements required pursuant to this section shall be in effect for three (3) years beginning on the date that a Selected Project receives permission to operate from an EDC.