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**Commissioner**

Marian Abdou  
**Commissioner**

Michael Bange  
**Commissioner**

January 2, 2025

To the Service List:

Re: IN THE MATTER OF THE DUAL-USE SOLAR ENERGY PILOT PROGRAM – ORDER  
LAUNCHING THE DUAL-USE SOLAR ENERGY PILOT PROGRAM

DOCKET NO. QO23090679

**Agenda Date: October 23, 2024 – Agenda Item: 8C**

Please be advised that the New Jersey Board of Public Utilities (“Board”) is reissuing the Order for the above-referenced agenda item that was approved by Board at the October 23, 2024 Board agenda meeting to correct an unintended reference to approval of a pre-qualification application that is not attached to the Order nor intended to be approved by the Board.

As a consequence, the re-issued Order omits the following sentence on page 32: “The Board **APPROVES** the pre-qualification application attached to this Order.”

This is the only change to the Order, which will be re-distributed to the parties of record and the attached service list.

Sincerely,

*Sherri L. Golden*

Sherri L. Golden  
Secretary of the Board



Agenda Date: 10/23/24  
Agenda Item: 8C

**STATE OF NEW JERSEY**  
**Board of Public Utilities**  
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CLEAN ENERGY

IN THE MATTER OF THE DUAL-USE SOLAR ENERGY )  
PILOT PROGRAM )  
)  
)  
)  
)  
DOCKET NO. QO23090679

**Parties of Record:**

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

BY THE BOARD:<sup>1</sup>

By this Order, in conjunction with rulemaking in a related docket, Docket Number QX24080597<sup>2</sup> –, the New Jersey Board of Public Utilities (“Board” or “BPU”) establishes the Dual-Use Solar Energy Pilot Program (“Dual-Use Pilot Program” or “Pilot Program” or “Program”). The Pilot Program will be 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 (“Dual-Use Pilot Program Projects”).<sup>3</sup>

**BACKGROUND**

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

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<sup>1</sup> Commissioner Marian Abdou recused herself due to a potential conflict of interest and as such took no part in the discussion or deliberation of this matter.

<sup>2</sup> 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.

<sup>3</sup> All MW values in this Order are in direct current, or “dc”.

following the enactment of the Dual-Use Act.<sup>4</sup> 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.<sup>5</sup>

The Dual-Use Pilot Program 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 study the compatibility of agricultural or horticultural production and solar photovoltaic infrastructure on the same land.

A program for Dual-Use Solar Energy Projects is part of the 2019 Energy Master Plan (“2019 EMP”), specifically Goal 2.1.8, *Coordinate Permitting and Siting Processes for Renewable Energy Development*.<sup>6</sup> New Jersey’s 2019 EMP, which has the subtitle “Pathway to 2050,” includes an analysis to reach 100% clean energy by 2050, and includes projections of associated costs. The analysis identified a target for thirty-two (32) gigawatts (“GW”) of total solar installed by 2050. Modeling from New Jersey’s Integrated Energy Plan, completed as part of the larger 2019 EMP, suggests that New Jersey should seek to install 5.2 GW of solar by 2025, 12.2 GW by 2030, and 17.2 GW by 2035 to put New Jersey on a least-cost path to 100% clean energy by 2050. In February 2023, Governor Murphy announced an accelerated goal of 100% clean energy by 2035.<sup>7</sup> The solar development undertaken as the State works to meet these goals provides solar installers and companies more opportunities than ever before.

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. The Pilot Program was designed in consultation with the New Jersey Department of Agriculture (“NJDA”), State Agricultural Development Committee (“SADC”), and the New Jersey Department of Environmental Protection (“NJDEP,” and collectively with the NJDA and SADC, the “State Agencies”), as well as the input of public stakeholders.

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<sup>4</sup> N.J.S.A. 48:3-87.13(a).

<sup>5</sup> N.J.S.A. 48:3-87.13(g).

<sup>6</sup> BPU, 2019 New Jersey Energy Master Plan: Pathway to 2050, [https://nj.gov/emp/docs/pdf/2020\\_NJBPU\\_EMP.pdf](https://nj.gov/emp/docs/pdf/2020_NJBPU_EMP.pdf).

<sup>7</sup> [Exec. Order No. 315](#) (Feb. 15, 2023), 55 N.J.R. 509(a) (Mar. 20, 2023).

Once launched, the Dual-Use Pilot Program will lay the groundwork for a permanent program. Specifically, the Act mandates the Board “convert the Dual-Use Solar Energy Pilot Program to a permanent program as part of the permanent successor to the solar incentive program established pursuant to P.L. 2021, c. 169 (C.48:3-114 et al.).”<sup>8</sup> The Solar Act of 2021 directed the Board to establish a program to incent the development of 3,750 MW of solar by 2026, by establishing a new program for incentivizing solar development in New Jersey 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.<sup>9</sup>

By Order dated July 28, 2021, the Board opened the Successor Solar Incentive (“SuSI”) Program on August 28, 2021.<sup>10</sup> 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.<sup>11</sup> 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. Since its opening, the ADI Program has incented the development of 573.6 MW of solar in New Jersey.<sup>12</sup>

By Board order dated December 7, 2022, the Board established the CSI Program.<sup>13</sup> 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:

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<sup>8</sup> N.J.S.A. 48:3-87.13(g); P.L. 2021, c. 169 (N.J.S.A. 48:3-114 et seq.) (“Solar Act of 2021”).

<sup>9</sup> “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).

<sup>10</sup> 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”).

<sup>11</sup> “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.

<sup>12</sup> Solar Activity reports, June 30, 2024 update, available at <https://njcleanenergy.com/renewableenergy/project-activity-reports/project-activity-reports>

<sup>13</sup> 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”).

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. Since its opening, the CSI Program has incented the development of 310.21 MW of solar generation and eighty (80) MWh of storage.<sup>14</sup>

### ***Pilot Program Stakeholder Proceedings***

On November 9, 2023, Board Staff (“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” or “November Straw”).<sup>15</sup> Written comments were due on December 13, 2023. On November 29, 2023, Staff hosted a virtual stakeholder meeting to discuss the November Straw Proposal. The meeting was well- attended with approximately 129 attendees and fourteen (14) participants who provided public comment during the meeting. Meeting attendees included representation from 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.<sup>16</sup> The conference was attended by approximately eighty (80) attendees including stakeholders primarily from the agricultural community, academia, and federal, State, and local government.

On June 10, 2024, Staff released for public comment a preliminary rule draft as an additional component of the Straw Proposal (“June Straw Proposal”).<sup>17</sup> No additional stakeholder meetings were held. Written comments were due on June 24, 2024, a deadline later extended to July 3, 2024.

### ***Comments and Written Responses***

With respect to the November Straw Proposal, Staff received sixteen (16) written comments, representing 22 entities from a range of stakeholders, including the New Jersey Division of Rate Counsel (“Rate Counsel”), solar industry representatives, agricultural industry representatives, trade associations, non-profit organizations, and members of the general public.

The BPU received eighteen (18) written comments representing twenty-five (25) entities on the June Straw Proposal from a range of stakeholders, including Rate Counsel, public utilities, solar

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<sup>14</sup> 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.

<sup>15</sup> 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).

<sup>16</sup> New Jersey Farm Bureau, 105th Annual Meeting Web Page, <https://njfb.org/2023-njfb-annual-meeting/>, November 13-14, 2023.

<sup>17</sup> 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).

industry representatives, agricultural industry representatives, trade associations, a non-profit organization, and members of the general public.

All of the comments with respect to both straw proposals are available through the Board's website, through the Public Access System.<sup>18</sup> Commenters provided thoughtful and comprehensive comments on a wide array of solar program and agricultural matters. Each commenter's suggestions and concerns are part of the record reviewed by the Board.

Staff recognizes and appreciates the many thoughtful comments and suggestions filed by stakeholders in response to the concepts set forth in the Straw Proposal. Comment summaries and their corresponding respective responses appear in Appendix A hereto.

### **STAFF RECOMMENDATIONS**

Staff has formulated its recommendations for the design and implementation of the Dual-Use Pilot Program based on extensive stakeholder feedback on the Straw Proposal, as well as close collaboration and consultation with RAP and the State Agencies.

In addition to the guiding principles provided by the Dual-Use Act, throughout the development of the Pilot Program Staff has drawn on the same general principles indicated in its proposal for the SuSI Program:<sup>19</sup>

1. Provide maximum benefit to ratepayers at the lowest cost;
2. Support the continued growth of the solar industry;
3. Meet the Governor's goal of fifty percent (50%) Class I Renewable Energy Certificates ("RECs") by 2030 and 100% clean energy by 2050, which is now advanced to 2035;
4. Provide insight and information to stakeholders through a transparent process; and
5. Comply fully with the Clean Energy Act, including the implications of the cost cap.

### **Program Size, Term, and Structure**

#### *Straw Proposal and Stakeholder Comments*

The Straw Proposal outlined the program term and structure as required by the Dual-Use Act, which mandates that the Pilot Program continue for thirty-six (36) months after the adoption of rules.<sup>20</sup> The first solicitation round and first application window ("First Solicitation") were envisioned to commence on the date that Pilot Program rules are adopted. This date would also commence the first program year ("Program Year 1"), with other program years to commence on the anniversary date of this date (each such year, a "Program Year"). Staff also proposed that the Pilot Program would be opened via Board Order in conjunction with an accompanying rule proposal. Staff envisioned this process to encompass issuing a Notice of Funding Availability ("NOFA") with pre-qualification criteria as explained under *Application Process and Project Selection – General*. Specifically, Staff recommended that a NOFA be the notice that is provided to the public to communicate a description of the upcoming solicitation round, deadlines for submission, and instructions for completing a pre-qualification proposal. Staff recommended in

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<sup>18</sup> Board of Public Utilities, Public Document Search, Docket No. QO23090679, [https://publicaccess.bpu.state.nj.us/CaseSummary.aspx?case\\_id=2112335](https://publicaccess.bpu.state.nj.us/CaseSummary.aspx?case_id=2112335) (September 18, 2023).

<sup>19</sup> SuSI Order at 11.

<sup>20</sup> N.J.S.A. 48:3-87.13(e).

the Straw Proposal that the initial annual capacity target could be adjusted prior to the start of each Program Year and would be announced in a NOFA issued as part of a pre-qualification process for a solicitation.

The Straw Proposal outlined potential annual capacity targets for the Pilot Program, not to exceed a total of 200 MW over the first three (3) years of the Program. The Board may expand this initial capacity target by up to fifty (50) MW per year for two (2) additional years.<sup>21</sup> Staff recommended in the Straw Proposal an initial annual capacity target for Program Year 1 at thirty (30) MW, Program Year 2 at seventy (70) MW, and Program Year 3 at 100 MW, with the flexibility to adjust capacity targets closer to the beginning of each Program Year.

Some stakeholders expressed their support for the 200 MW capacity cap for the full Pilot Program. However, several organizations were concerned that Staff's proposed initial annual capacity targets would limit the diversity of projects accepted by the Pilot Program. These stakeholders provided various recommendations for allocating capacity targets over the three (3)-year Pilot Program period. Several commenters also recommended allowing Dual-Use Pilot Program Projects into the State's Community Solar Energy Program ("CSEP"), which opened for registration on November 1, 2023, on the premise that doing so would benefit low-and-moderate income ("LMI") residents. Comments from a stakeholder requested that "farms," as the stakeholder defines the term, be added to the State's Remote Net Metering ("RNM") Program and rules due to a concern that net-metering Dual-Use Pilot Program Projects may not be practical or financially viable for farms. The stakeholder argued that flexibility is needed to support the electric demands of farms and that most have multiple electrical service lines to support onsite load. Some stakeholders also recommended reconsidering Staff's proposed definition of "farmer."

Comments from Rate Counsel recommended setting initial capacity targets during the NOFA process to provide time for input from non-bidding stakeholders.

#### *Staff Recommendations*

Staff maintains its recommendation in the Straw Proposal that the Board establish the annual capacity target for the three (3)-year Pilot Program at up to 200 MW total, and up to fifty (50) MW per year for two (2) additional years per the Statute in conjunction with the factors discussed in the Straw Proposal. While the process for setting annual capacity targets is not prescribed by the Dual-Use Act, the Act requires that the Board's implementation of the Pilot Program results in a diversity of applications by size and type of agricultural and horticultural production. After considering stakeholder input, and the need to balance a meaningful Pilot Program size with a timely review of the applications submitted, Staff recommends the Board set the initial capacity target for Program Year 1 up to fifty (50) MW. Staff considers this target adequate to meet the objectives of the Statute for the first Program Year. Staff recommends that this initial capacity target be included in the NOFA for the First Solicitation, which is discussed in detail under the section *Application Process and Project Selection – General*. Staff further recommends that the proposed defined term "NOFA" be revised to a Notice of Incentive Availability or "NOIA" to more accurately reflect the fact that an incentive opportunity is being made available. Specifically, Staff recommends "NOIA" to mean a notice issued to the public for the purposes of communicating an opportunity for interested parties to submit an expression of interest for a Dual-Use Solar Energy Project for pre-qualification into the Dual-Use Solar Energy Pilot Program.

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<sup>21</sup> Ibid.

Staff recommends defining the following terms:

- “Farmer” means, consistent with N.J.A.C. 2:76-10.5(c), an owner or operator of a farming operation who, during the calendar year immediately preceding submission of a Dual-Use Solar Energy Pilot Program application or an expression of interest, realized gross sales of at least \$2,500 of agricultural or horticultural products produced from the farming operation exclusive of any income received for rental of lands.
- “Landowner” means the record owner of the land, duly authorized purchaser of the land under a contract for land purchase, or record owner of the development easement acquired pursuant to N.J.S.A. 4:1C-34.
- “Solar operator” means the person or entity that installs, owns, or controls the dual-use solar energy generation facilities, structures, and equipment.

Furthermore, Staff recommends the Board not allow Dual-Use Pilot Program Projects into the CSEP since CSEP does not provide incentives for ground-mounted solar projects, projects located on farmland, open space, or any type of land currently envisioned to be suitable locations for agrivoltaics projects.

Finally, Staff maintains that the Solar Act of 2021 does not provide statutory authority to extend net metering aggregation or remote net metering to projects located on privately owned land. Subsequent legislation significantly modified the statutory requirements for remote net metering.<sup>22</sup> The Remote Net Metering Act did not specifically address Dual-Use Pilot Program Projects, but modification of the Board’s existing RNM Program is ongoing and this program could be a potential pathway for Dual-Use Pilot Program Projects.

### **Application Process and Project Selection - General**

#### *Straw Proposal and Stakeholder Comments*

The Straw Proposal provided Staff recommendations for defining the criteria (a) through (k) as they are listed in the Act and how applications for Dual-Use Pilot Program Projects would be evaluated considering the statutory directive to achieve diversity of size and types of agricultural and horticultural production. Specifically, the Dual-Use Act, at N.J.S.A. 48:3-87.13(c)(1), requires that the following criteria be considered by the Board and NJDA when selecting projects:

- (a) proposals for monitoring the quality of agricultural or horticultural use of the land;
- (b) the incentive level sought by the applicant;
- (c) geographic location;
- (d) interconnection planning;
- (e) proposals for minimizing negative impacts to farmland;
- (f) proposals to address decommissioning;
- (g) proposals for addressing stormwater runoff and other environmental issues;
- (h) technical feasibility;
- (i) technical innovation;
- (j) the quality of any research committed to during the evaluation period; and
- (k) any other criteria as may be deemed advisable by the board.

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<sup>22</sup> L. 2023, c. 190, N.J.S.A. 48:3-87.12 (“Remote Net Metering Act”).



To support an effective and successful application process, Staff recommended a two (2)-step process by which potential Dual-Use Pilot Program Projects would be reviewed by the Board in consultation with the NJDA: 1) a NOFA and pre-qualification or expression of interest (“EOI”); and, if invited through an approval determination, 2) submission of a final application. Staff proposed “EOI” to mean a written response prepared by a potential applicant in the Pilot Program as part of a pre-qualification process indicating the intent to apply for the Pilot Program. Staff proposed that key elements of the application materials submitted for selected projects would form the basis of a Construction, Operations, Monitoring, and Project Research Plan (“COMPR”), which would establish the terms and conditions for maintaining eligibility for an SREC-II adder. Staff proposed defining “COMPR” to mean the document or sets of documents filed with the Board Secretary’s Office describing key elements of a Dual-Use Solar Energy Project selected by the Board to participate in the Dual-Use Solar Energy Pilot Program (“Selected Project”). Staff also proposed an SREC-II adder as the financial incentive to cover project-specific costs pertaining to participating in the Pilot Program, in addition to an SREC-II incentive provided under the SuSI Program. Staff’s recommendations for this approach to providing financial incentives in the Pilot Program are discussed in more detail under the section *Incentives and Project Costs*.

Comments submitted by stakeholders on specific Dual-Use Pilot Program Project selection criteria are addressed separately in their respective categories outlined after this section.

Stakeholders provided both general and specific feedback on the application process. Some of these comments supported the concepts set forth in the Straw Proposal, including allowing the Board the discretion to not select Dual-Use Pilot Program Projects if a solicitation is undersubscribed. Such discretion would be exercised according to a reasonable basis that Staff recommends. With respect to the process in general, stakeholders submitted comments around the importance of having a streamlined process that supports active farmer engagement, in addition to the implementation of a Pilot Program that allows for flexible designs and covers the costs of research. Concurrently, stakeholders suggested specific practices for a Pilot Program such as reviewing applications on a first-come, first served basis in tandem with stringent maturity requirements, allowing for automatic approval on non-farmed land, considering the impact of agrivoltaics on agricultural operations, requiring a deposit with the submission of an application, making a scoring rubric public, and being transparent about the process. Some comments proposed reconsidering aspects of the application process such as not requiring a utility bill, re-evaluating potential impacts of the submission of a lease agreement, including currently unused land, and considering electrical usage on farms.

#### *Staff Recommendations*

Staff continues to recommend the approach in the Straw Proposal, with the modification that the term “NOFA” be replaced with “Notice of Incentive Availability” or “NOIA” to avoid confusion with the New Jersey statute making a “Notice of fund availability” a mechanism for grant funding. N.J.S.A. 52:14-34.4. A NOIA and pre-qualification/EOI component of the application process will enable Staff, the State Agencies, and RAP to review the prospective project plans, including their research plans, and provide feedback to prospective applicants prior to the submission of a full application. Project proposals that receive pre-qualification approval for a particular application period will be encouraged to submit the application for that application period to participate in the Pilot Program. Submission of an EOI to Staff would not bind or commit a project to participate in such application period. However, failure to submit an EOI would preclude a project from participating in the application period for which the EOI was required. The selection criteria for applications, including the weighting or scoring scheme, would be approved by the Board in an Order prior to the opening of an application period within the solicitation round. In preparation for

initiating the First Solicitation for the Pilot Program, Staff recommends that the Board direct Staff to issue a NOIA per Staff’s recommendations described previously.

Staff recommends that a NOIA include the following elements:

- The total Pilot Program capacity available in a Pilot Program solicitation;
- An optimal allocation of capacity among project sizes and types of agricultural and horticultural uses based on a statistical representation of New Jersey’s farm economy, if necessary;
- The minimum project size by crop type, if necessary;
- The minimum research standards by proposed crop, project size, and location on covered agricultural land or not;
- The method for describing the proposed Dual-Use solar and farm activity including solar design characteristics and research elements;
- The method for prospective applicants to demonstrate the need for a Pilot Program incentive;
- A proposed scoring rubric for a Pilot Program solicitation; and
- A request for prospective applicants to submit sufficient detail on their prospective dual-use project and research plans to enable review and feedback by a team comprising Staff, RAP, DEP, and NJDA representatives.

Staff recommends assigning the following weights to the scoring criteria for evaluating Dual-Use Pilot Program Projects:

**Table 1. Weighting of Evaluation Criteria – Summary**

<b>Criterion</b>	<b>Weight</b>
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**

<b>Anticipated Evaluation Criteria</b>	<b>Weight</b>
<p><b>Maintaining the Affected Land in Active Agricultural or Horticultural Use</b></p> <ul style="list-style-type: none"> <li>• <b>Proposals for monitoring the quality of agricultural or horticultural use of the land</b></li> <li>• <b>Minimizing and mitigating negative impacts to farmland</b></li> <li>• <b>Plan for decommissioning</b></li> <li>• <b>Plan for stormwater runoff and other environmental issues</b></li> <li>• <b>Quality of the proposed design of the research plan</b></li> <li>• <b>Three-year plan for the farming operation</b></li> </ul> <p>Higher preference: Detailed plans and partnered with a NJ research public institution of higher education</p> <p><b>Bonus points:</b> considerations for crop adaptability, enhanced benefits for mitigation plans, including environmental impacts and pollinator habitats</p>	<b>40%</b>
<p><b>Incentive Level and Project Costs</b></p> <p><u>Must include the ADI Program or CSI Program incentive amount, based on New Jersey SREC-II values established by the Board</u></p> <p>Higher preference: Lower cost, no adder requested          Lower preference: higher cost with minimal justification</p>	<b>40%</b>
<p><b>Technical Feasibility and Technical Innovation</b></p> <ul style="list-style-type: none"> <li>• <b>Interconnection Planning Status</b></li> </ul> <p><u>Meeting the applicable SuSI Program requirements for a Dual-Use Pilot Program Project is a pre-requisite</u></p> <p>Higher preference:  <u>Feasibility</u> – 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.</p> <p>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.</p> <p><u>Innovation</u> – design aspects that seek to increase or maintain both solar and agricultural productivity compared to standard designs or practices</p>	<b>10%</b>
<p><b>Geographic Location, including whether the proposed project is part of an overburdened community or located in an underserved community</b></p> <p><u>Scoring includes consideration of a project plan for outreach and engagement with the impacted communities</u></p> <p>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</p>	<b>10%</b>

Staff recommends the NOIA include the following minimum pre-qualification criteria:

1. Municipal tax map with the block and lot location of the farm parcel clearly identified that shows the delineation of the proposed project site, research control area, and fencing;
2. Solar capacity;
3. Array type including a description of any innovative design or technology proposed;
4. Calculation of the land area covered by the array and control area;
5. A description of the agricultural or horticultural use of the proposed project site over the previous three (3) years;
6. A description of the agricultural or horticultural activities proposed on the areas under and adjacent to the array for the next three years;
7. The most recent twelve (12) months of historic electricity consumption according to a utility bill showing the site host's name, address, and electric tariff, if applicable, if the project is proposed to be net metered;
8. Anticipated means of electricity sale;
9. Current state of project maturity including any design, contracting, legal, permitting or zoning review work performed and status of interconnection to a distribution or transmission system operated by a New Jersey electric public utility or local government unit;
10. Anticipated construction schedule, including anticipated cost milestones and development milestones, if available;
11. Estimated total installed cost including solar equipment, research required pursuant to the Pilot Program rules, monitoring and data collection equipment, labor, and soft costs;
12. Estimated incremental costs, as a subset of total installed costs, to be incurred as a result of participation in the Pilot Program specific to the agricultural or horticultural aspects of the Dual-Use Pilot Program Project;
13. Estimated Dual-Use incentive adder required to cover incremental costs; and
14. Contact information for one representative appointed by the project team to serve as point of contact for Board Staff and to be responsible for submitting documents required throughout the solicitation process.

Staff recommends that the submission of an EOI to Staff not function to bind or commit a Dual-Use Pilot Program Project to participate in such application period. However, failure to submit an EOI would preclude a project from participating in the application period for which the EOI was required. Project proposals that receive pre-qualification approval for a particular application period will be encouraged to submit the application for that application period to participate in the Pilot Program. Staff recommends that a full application include the information required from the prequalification application in addition to an updated municipal tax map and documentation demonstrating how minimum criteria will be met.

Staff recommends that all forms and instructions regarding the Pilot Program solicitation process be located on the Board's website at [www.nj.gov/bpu](http://www.nj.gov/bpu). Staff recommends the creation of a standard form of EOI that encompasses the minimum criteria above for the pre-qualification process. Staff anticipates that guidance will be published that explains the various common finance models and the manner in which different participants in the current SuSI Program incentive registration process can apply to the Pilot Program, which is further described in the response to comments on incentive levels below.

## **Siting and Permitting**

### *Straw Proposal and Stakeholder Comments*

Staff's recommendations in the Straw Proposal were based on the mandatory provisions set forth in the Dual-Use Act and the principle of establishing consistency across the Board's regulations for siting solar projects.

A few commenters made recommendations on the specific siting criteria such as allowing Dual-Use Pilot Program Projects to be sited on historically farmed wetlands, supporting higher standards for projects located in ADAs, and allowing co-location of Dual-Use Pilot Program Projects for comprehensive energy planning. Several stakeholders requested clarification on the statutory language for "permitted use," particularly with respect to a special use or conditional use permit from a municipality. Additional comments included a call for consistency in wetland maps being used by the State, clarifying if tree clearing associated with routine maintenance of land in agricultural use, in accordance with guidelines from the Natural Resources Conservation Service ("NRCS"), is subject to the proposed siting criteria, and recommendations to extend project siting to non-agricultural land such as brownfields and greenfields, parking lots, highways, and rooftops. Another comment requested siting on prime agricultural soils or soils of statewide importance, on a limited basis, since this status does not necessarily determine the productivity of the land.<sup>23</sup>

### *Staff Recommendations*

Staff continues to support its recommendations for siting requirements as outlined in the Straw Proposal, which implement the legislative mandates of the Dual-Use Act and the Solar Act of 2021. Dual-Use Pilot Program Projects would be prohibited on wetlands, in the preservation area of the Pinelands, land designated as forest area in the Pinelands, in the Highlands preservation area, on land preserved under the NJDEP's Green Acres Program, or on forested, land and associated transition zones defined under NJDEP's regulations, unless the Board grants a waiver after consultation with NJDEP, the Secretary of Agriculture, and other State agencies as applicable, such as the Pinelands Commission and the Highlands Council. 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. The Board may only allow such a project to be sited on a prohibited land type if it deems the project to be in the public interest. Per the Dual-Use Act, no Dual-Use Pilot Program Projects shall be allowed to be sited on preserved farmland.

With respect to further clarifying the statutory provision for "permitted use," the Act in Section 1.f. references municipal land use law ("MLUL"), N.J.S.A. 40:55D-1 et seq. The referenced provision permits BPU-approved Dual-Use Pilot Program Projects in farmland zones, regardless of the municipal zoning restrictions. Staff anticipates working with RAP to develop educational materials on a variety of topics intended for various audiences with an interest in the Pilot Program, including a model ordinance for municipalities.

Staff recommends that applicable definitions in the CSI Siting Rules be applied to the Pilot

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<sup>23</sup> "Brownfield" means "any former or current commercial or industrial site that is currently vacant or underutilized and on which there has been, or there is suspected to have been, a discharge of a contaminant." N.J.S.A. 58:10B-23(d). "Greenfield" refers to land which has been undeveloped, see *Dictionary.com*, <https://www.dictionary.com/> (accessed on September 30, 2024).

Program.<sup>24</sup> These definitions include: “Agricultural development area” or “ADA,” “covered agricultural land,” “prime agricultural soils,” “soils of Statewide importance,” “wetlands,” “forested land,” and “transition zone.” For brevity, “covered agricultural land,” as defined in N.J.A.C. 14:8-12.2, is used throughout this Order.

## **Enforcement**

### *Straw Proposal and Stakeholder Comments*

In the Straw Proposal, Staff set forth recommendations to ensure that statutory and regulatory requirements regarding Dual-Use Pilot Program Project design and implementation were met, including mechanisms for auditing such projects and suspending or revoking Pilot Program approvals should projects be out of compliance. Staff discussed its understanding of the cyclical and sometimes unpredictable nature of agricultural and horticultural production, as well as the fact that dual-use facilities are experimental in nature. Staff reiterated that the proposed enforcement provisions were not intended to penalize good faith efforts to install and operate dual-use facilities but were instead aimed at preventing the receipt of Dual-Use Pilot Program revenues from solar on farmland that is no longer in active agricultural or horticultural use. As such, Staff also proposed making exceptions to the enforcement strategy for incidents of “force majeure” and proposed to define “force majeure” to mean an act of God or any other occurrence beyond the control of an applicant, such as crop loss due to drought or severe weather.

A few stakeholders commented that rules should allow for “force majeure,” such as crop loss due to drought or severe weather, to be exceptions to non-compliance provisions. Others supported periodic site visits of the farm to ensure auditing compliance but cautioned against allowing the results to put the farm’s financial incentive at risk. In a similar vein, clarification was requested on the continued agricultural or horticultural use requirement as an enforcement mechanism or the “objective criteria” that determines compliance and delivery of an incentive and to allow for amendments to a farm’s three (3)-year plan. Another commenter asked for clarification on the process for remediation and providing an opportunity to return to compliance within a specified time period. Finally, the same stakeholder cautioned against withholding incentives, stating that such a measure would create more risk than financiers would tolerate; the stakeholder asserted that the threat of losing an incentive is a sufficient penalty to ensure compliance.

### *Staff Recommendations*

Staff maintains its recommendation that Dual-Use Pilot Program Projects be subject to enforcement actions should they fail to meet the Pilot Program’s terms and conditions. Staff believes that the Board has the authority as the regulatory agency to impose penalties that are commensurate with the infraction. Such penalties may include withholding the dual-use incentive, rescission of dual-use incentive already paid, or requiring the project developer to decommission the project and restore the land’s prior agricultural or horticultural usage.

Staff also recommends that the Board work with the NJDA to audit projects for their compliance with terms of the Pilot Program. Projects should be required to comply with requirements of the ADI Program or CSI Program for the project’s lifetime. In addition, Staff recommends that the State Agencies work with Dual-Use Pilot Program Projects to remedy any issues. Staff proposes that NJDA be able to request the Board suspend or revoke a Dual-Use Pilot Program Project’s

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<sup>24</sup> N.J.A.C. 14:8-12 (“Siting Rules”).

approval, except in the case of force majeure. Staff recommends revising the proposed definition “force majeure” to mean an act of God or any other occurrence beyond the control of an applicant, such as crop loss due to drought or severe weather, but not to include a change in federal or State law.

In the event that a Dual-Use Pilot Program Project is not meeting the Pilot Program’s requirements, Staff recommends that the Board or its designee shall contact the Dual-Use Pilot Program Project and place the project on probation for thirty (30) to 120 days, the length of the probation to depend on the nature and extent of the violation. In evaluating an appropriate timeframe for non-compliance, Staff considered various factors. The most significant is the short duration of the Pilot Program as a reason for expedient action; Staff also took into consideration that the severity of non-compliance may vary and could require more than thirty (30) days to correct. The project shall submit a remedial action plan within thirty (30) days. The remedial action plan contained within the COMPR may be appropriate as initially set out or it may require revision, depending upon the nature of the issue(s).

SREC-II incentives would be suspended during the Dual-Use Pilot Program Project’s probationary period, which will continue until such time as the Dual-Use Pilot Program Project team has successfully resolved the violation. Failure of the project to correct the deficiency and implement the remedial action plan may result in the project’s termination from the Pilot Program and suspension of incentives.

### **Requirement that Lands Remain in Active Agricultural or Horticultural Use**

#### *Straw Proposal and Stakeholder Comments*

In the Straw Proposal, Staff recommended requiring Dual-Use Pilot Program projects to be located only on lands that have had at least the three most recent years of continuous agricultural or horticultural usage as demonstrated by participation in the State’s farmland assessment program pursuant to the New Jersey Farmland Assessment Act of 1964, P.L. 1964, c. 48 (N.J.S.A. 54:4-23.1 et seq.). Staff also recommended requiring additional evidence of active agricultural or horticultural use through recent pictures, aerial or satellite images of the land that would confirm such land’s recent dedication to crops or livestock, as applicable.

In addition to requiring that lands be used for agricultural or horticultural activities, the Dual-Use Act also requires that they continue to be utilized only for agricultural or horticultural use throughout the duration of the Dual-Use Pilot Program Project. Therefore, Staff recommended continued participation of the farm in the State’s farmland assessment program as a minimum criterion for demonstrating the land usage requirement.

Overall, stakeholders expressed support for establishing a baseline assessment of the land, including using farmland tax assessment as a tool to determine a project’s eligibility for a program incentive, but also offered a multitude of suggestions and concerns. Some organizations expressed concern that past productivity metrics would be used to determine incentive eligibility in the pre-qualification materials. Several other organizations were concerned with the size of a research control area and potential feasibility, viability, and economic challenges, including a potential risk of farms converting to non-agricultural use. Other commenters pointed out the cost of monitoring soil conditions pre- and post-installation of the solar panels for each Dual-Use Pilot Program Project and the potential of these up-front costs to make smaller projects uneconomical; requested additional flexibility for changes in crop production after installation of the solar panels; expressed concern that the three (3)-year active land use requirement would discourage the

participation of first-generation farmers and farms that have not been productive due to poor economic conditions; suggested reconsidering the definition of “farmer”; requested more flexibility in the language for defining the land impacted by the solar panels; and asked that Dual-Use Pilot Program Projects include research goals.

### *Staff Recommendations*

Staff maintains its recommendation in the Straw Proposal that the program participants be required to provide documentation of active agricultural or horticultural use before and after the installation of solar panels. Such documentation should be in the form of the farm’s application for farmland assessment, in combination with other data collection and evaluation components. Staff believes this documentation is needed to ensure that the presence of the solar electric generation equipment does not result in a substantively negative change or reduction in the quality of the land that would impair its agricultural or horticultural usage. Additional details on Staff’s recommendations for the required documentation, such as a map demonstrating the block and lot location of the farm parcel proposed to contain the Dual-Use Pilot Program Project, are described in the section *Application Process and Project Selection – General* of this Order.

Staff also maintains its recommendation in the Straw Proposal that the Board require submission of productivity metrics throughout the duration of the Pilot Program as evidence that a Dual-Use Pilot Program Project is located on land in productive use and such active use of the land is maintained throughout the Pilot Program. The productivity metrics, recommended by Staff, which appear in Appendix B of this Order, would not be used for determining incentive eligibility. Staff also recommends that RAP oversee collecting and managing data from pre- and post-installation of the solar panels for Dual-Use Pilot Program Projects. The recommended process outlined in Appendix B of this Order includes conducting soil evaluations for selected projects. However, 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. 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 data required for submission with the final application following the pre-qualification process.

### **Incentives and Project Costs**

#### *Straw Proposal and Stakeholder Comments*

For an incentive in the Pilot Program, the Straw Proposal outlined an approach that relies directly on the existing ADI and CSI Programs that constitute the SuSI Program implementing the Solar Act of 2021. Staff proposed that in addition to an incentive received through the ADI or CSI Programs, an adder be used to account for the incremental, additional costs that may be borne by program participants. These costs were anticipated to be variable between projects and not simply proportional to the solar capacity of the installation. Such an adder would enable compliance with the mandate of the Dual-Use Act to score applications based upon the incentive level sought by the applicant.

In the Straw Proposal, Staff suggested two (2) different possibilities for determining the CSI “base” incentive applicable to CSI-eligible dual-use projects. The first proposed option was that these projects participate directly in the CSI Program and that any CSI award received constitute the “base” incentive for the Dual-Use Pilot Program. The second option allowed for the Board to establish a proxy “base” incentive for these projects. This proxy would be derived from the results of the most recent CSI Program solicitation, and projects would submit a bid for the adder in the



Pilot Program. In both options, each project would propose the dual-use adder as part of its application for the Pilot Program.

Overall, stakeholders submitted a range of comments that illustrated the variation of potential approaches to incentivizing projects participating in the Pilot Program. Several stakeholders supported a simple incentive process, avoiding a more complex approach, and suggested a fixed incentive level for all Dual-Use Pilot Program Projects. Stakeholders raised concerns about the challenges of competing in the CSI Program, namely the PJM queue backlog and the complexity and uncertainty of participating in two (2) separate solicitation processes. Stakeholders also reiterated the request to participate in CSEP with project sizes allowed up to ten (10) MW.

Some stakeholders supported the concept of an adder to cover expenses incurred by participating in the Pilot Program and also supported using competitive market mechanisms to guide financial incentives. In particular, Rate Counsel provided numerous comments on this topic of incentives and project costs overall. Rate Counsel's comments ranged from cautioning against over-incentivizing to proposing a cap on individual incentives. Rate Counsel also proposed requesting stakeholder input on a rate impact analysis and an initial incentive cap; requiring each potential applicant provide an enumerated list of financial sources for the project; and imposing a fifty percent (50%) weight to the incentive criterion for applications with the lowest amount requested being the highest scored.

#### *Staff Recommendations*

The rules of the SuSI Program are designed to appropriately incentivize small and large solar facilities, within defined project size categories. Given the division of projects of differing sizes between the ADI and the CSI Programs and the allowance for solar development on farmland in each program, Staff considers it important to test incentivizing Dual-Use Pilot Program Projects in both the ADI and CSI Programs. Staff recommends that all dual-use projects receive the appropriate ADI Program or CSI Program "base" incentive value, to which projects will propose a project-specific dual-use "adder" in addition, so that the full amount of the SREC-II incentive payment will reflect the unique cost of each project. Applicants will receive instruction on how to calculate and report their requested dual-use incentive adder. Proposed adder values may account for the incremental cost of the agrivoltaic investment and dual-use pilot-related operational costs including research, data collection, reporting, reduced solar production per acre due to the lower density of modules and positioning of modules to allow more light to the crop, increased racking costs for raising or customizing arrays, and loss or gain in agricultural productivity. If an otherwise qualified application seeks a dual-use adder that cannot be justified by the application materials submitted, Staff may recommend that an applicant reconfigure the project to enable a competitively priced SREC-II adder.

In the ADI Program, net metered projects are allowed up to five (5) MW in size and must fall within a market segment for either residential, non-residential, or community solar projects. As further discussed in the section *Program Size, Term, and Structure*, Staff is not recommending that Dual-Use Pilot Program Projects be eligible for CSEP. Rather, Staff is recommending that Dual-Use Pilot Program Projects be eligible in the ADI Program within the non-residential market segment, either as a ground mounted array or an array installed as a canopy or floating solar facility; given the nature of the Pilot Program, it appears unlikely that eligible projects would be sited on carports or rooftops. Dual-Use Pilot Program Projects that meet the size and siting criteria of the ADI Program would use the applicable ADI SREC-II value as their "base" incentive value in their application for the Pilot Program. Applicants eligible for the ADI Program will be required to identify which market segment they expect their project to have and determine the associated

base incentive level per the Board's SREC-II values in effect at the time of application.

The Dual-Use Act establishes a maximum capacity limit of ten (10) MW for individual projects. All grid-supply projects and all net metered projects greater than five (5) MW are eligible not for the ADI Program but for the CSI Program. Thus, all Dual-Use Pilot Program Projects that plan to sell power on the wholesale market or that are net metered and greater than five (5) MW are considered CSI-eligible facilities and would use a "base" incentive level derived from the CSI Program. Staff has given careful consideration to stakeholder feedback on the feasibility and challenges of the two (2) options for a CSI program adder set out above. In Staff's opinion, the second option, in which a CSI proxy "base" incentive level is set by the Board, will be the most workable for farmer and solar developers, while remaining cost-effective for ratepayers. Dual-Use Pilot Program Projects that are sited on acreage larger than is needed to support ten (10) MW of solar generation would still be able to participate in a CSI Program solicitation on a portion of the property. Similarly, those CSI projects that already have an award from the Board may submit a portion of the project to the Pilot Program, up to ten (10) MW, if they have not yet received permission to operate ("PTO") from an electric distribution company ("EDC").

Finally, Staff proposes that capacity awarded under the Pilot Program be in addition to capacity block limits under the ADI Program and procurement targets under the CSI Program. In other words, capacity awarded under the Pilot Program would not count toward the ADI Program block limits or the CSI procurement targets.

### **Interconnection/Distribution System**

#### *Straw Proposal and Stakeholder Comments*

In the Straw Proposal, Staff recommended that applicants provide a project's interconnection planning status, including proof of submission of an interconnection application, to be considered by the Board in evaluating and scoring applications. Discussed in more detail under the section *Application Process and Project Selection – General*, Staff proposed a pre-qualification application process, in part to avoid overloading the EDCs with unapproved projects seeking interconnection approvals. Staff also recommended that projects be subject to the requirements the ADI Program or CSI Program, as appropriate, and be required to install a revenue-grade meter to measure electricity produced by the Dual-Use Pilot Program Project.

In addition to the responses to Staff's questions about scoring an application based on its status in the interconnection process versus eligibility to apply to the Pilot Program, stakeholders submitted substantive comments. With respect to scoring projects on interconnection planning, stakeholders made different suggestions. Among the recommendations for what applicants should be required to provide were:

- information about costs and feasibility;
- official confirmation that the interconnection application has been accepted for review an executed interconnection agreement; and
- evidence of having applied for interconnection, without the need for further progress.

The stakeholder recommending confirmation that an interconnection application has been accepted for review believes that this requirement will cause the periodic competitive solicitation process to increase participation, which equates to reduced costs. The stakeholders recommending that only evidence of applying for interconnection be required state that addressing project maturity should wait until after a project has been approved.

Several stakeholders recommended awarding more points or weight to projects that are more mature and commented on the need for more details on interconnection requirements. Feedback submitted suggested that a signed interconnection agreement should receive the most points, with a viable interconnection study receiving the second highest number of points. Some stakeholders suggested that any stage of interconnection applicability be considered in scoring applications.

While one (1) stakeholder commented that hosting utility maps do not provide the full details of interconnection capacity and that ample time should be provided for utilities to process applications and provide studies, another stakeholder commented that hosting capacity maps would likely be adequate for smaller, net-metered projects and expressed concern that traditional solar projects could use a program for agrivoltaics to get around interconnection approval issues.

Regarding eligibility to apply in the Pilot Program, stakeholders provided a wide range of feedback. While some comments demonstrated general support for Staff's recommendations, such as dual-use projects in the Pilot Program being subject to the same program requirements as other projects to qualify for the baseline incentive level in the ADI Program or CSI Program, other comments suggested that interconnection maturity could be considered as part of project evaluation but cautioned that not approving dual-use projects in the Pilot Program would add to the existing queue issues at the EDCs and PJM. Comments included considerations for using any stage of interconnection applicability and establishing some type of minimum requirement such as a form of an executed interconnection agreement.

Several stakeholders commented that the EDCs are not processing interconnection applications for dual-use projects and requested that the Board direct EDCs to do so as soon as possible. Some commenters stated that dual-use projects should be able to interconnect as community solar projects or that there be a tranche in the CSEP for dual-use projects.

#### *Staff Recommendations*

Staff proposes the Board adopt the recommendations in the Straw Proposal pertaining to interconnection for the Pilot Program, including the recommendation that Dual-Use Pilot Program Projects not be eligible for in CSEP. Staff reiterates that a project's maturity, including progress toward interconnection approval, should be considered in judging an application's technical feasibility and that Dual-Use Pilot Program Projects would be subject to the interconnection requirements of either the ADI or CSI Program. Generally, the minimum level of interconnection maturity depends on the program and size of the project and Staff recommends adhering to those requirements in the Pilot Program. Staff also reiterates that while competition helps keep costs low, the Board should try to avoid overloading the EDCs with unapproved projects seeking interconnection approvals. To that end, Staff continues to recommend a two (2)-stage approach for reviewing interconnection feasibility for the Pilot Program whereby hosting maps would be reviewed during pre-qualification and interconnection maturity would be evaluated during the full application selection and approval process. Furthermore, Staff recommends that EDCs be required to process interconnection applications for potential Dual-Use Pilot Program Projects in the order in which they are received.

Staff notes that the grid modernization proceedings have proposed expanded rules regarding hosting capacity maps and that there may be additional revisions to the Board's interconnection rules.

### **Minimizing the Negative Impacts to Farmland**

#### *Straw Proposal and Stakeholder Comments*

To implement the mandate of the Dual-Use Act to minimize negative impacts to farmland, Staff recommended that applications to the Pilot Program be required to consider conditions such as soil compaction by construction equipment, soil erosion, and potential runoff from rain collection along drip edges, etc. These conditions would then be monitored as part of a project's monitoring and research plan in the COMPR. This recommendation was based on the premise that the main impact to farmland that is expected from construction and decommissioning activities is soil compaction and trenching. In addition, Staff recommended that Dual-Use Pilot Program Projects meet applicable requirements under the Board's SuSI Program, in either the ADI or CSI Programs. In particular, Staff believes that CSI-eligible projects should be required to comply with the requirements under N.J.A.C. 14:8-12.8(g) that pertain to covered agricultural lands.

Some stakeholders stressed the need to provide clear criteria for scoring applications, entailing as much detail as possible, as early in the process as possible and stated that a project's success should be tied to minimizing negative impacts to farmland. One (1) stakeholder suggested establishing objective criteria that gauge the positive effects from a solar system on agriculture. Another stakeholder proposed scoring projects higher for integrating regenerative soil building practices into their plan. Other stakeholders thought that no additional requirements beyond the Dual-Use Act or the Straw Proposal were needed for this criterion.

One (1) commenter requested that the Pilot Program specify that special use or conditional use permits are not needed for Dual-Use Pilot Program Projects and that farmer and municipal input and engagement are crucial in project planning, particularly for projects located in ADAs.

#### *Staff Recommendations*

Staff recognizes the need to balance adequate regulation with avoidance of an excessive number of requirements to enable an efficient and effective Pilot Program. Staff continues to recommend the strategy set out in the Straw Proposal: monitoring the quality of the farmland while providing research results to inform a permanent program and including requirements for the project design as follows:

- During the application process, proposals for minimizing and mitigating negative impacts to farmland during construction, operation, and decommissioning would be required. The remediation plans would be part of the COMPR.
- Solar array designs would be required to take into account the requirements for the specific farming practices and the energy collection impacts of particular design features; for example, prohibiting the use of concrete in structural footings unless a written justification is supplied by a licensed professional engineer. The use of concrete would only be acceptable for the purposes of installing a shallow concrete pad for placement of balance of system equipment such as inverters or transformers.
- Array designs should plan for minimizing the impacts on soils and anticipate the need for rotating crops annually and interannually.

- Pursuant to the recommendations in Appendix B for project monitoring and research requirements, projects selected to participate in the Pilot Program would be required to conduct monitoring of the pre-construction and post-construction soil quality and collect data on specific soil parameters as part of a research study.
- Requirements pertaining to protecting the soil during decommissioning, which are discussed in the next section, would be required.

## **Decommissioning**

### *Straw Proposal and Stakeholder Comments*

In the Straw Proposal, Staff recommended that the evaluation of Dual-Use Pilot Program Project proposals take into account the extent to which applicants plan to follow an established set of guidelines or best practices to facilitate farming following decommissioning. These guidelines or best practices were based largely on the Board's existing regulations for siting projects in the CSI Program. For selected projects into the Pilot Program, Staff recommended a set of guidelines that projects would be required to meet, at a minimum, with the caveat that the Board have the flexibility to require additional procedures needed based on the results of the Pilot Program.

Stakeholders recommended that dual-use projects continue following standard decommissioning and established restoration best practices, that the Pilot Program not require additional information on techniques, and that it allow for flexibility in decommissioning proposals. One (1) commenter emphasized that techniques must protect topsoil to allow continued farming post-decommissioning.

Several stakeholders suggested a requirement to post a performance bond for decommissioning and stated that utilities should be responsible for decommissioning responsibilities associated with equipment they own.

Finally, stakeholders requested clarification on this criterion and asked that the rules provide that Dual-Use Pilot Program Projects do not require a special use or conditional use permit.

### *Staff Recommendations*

Staff continues to recommend establishing minimum requirements for decommissioning procedures in line with the Straw Proposal. Specifically, Staff recommends that applications to participate in the Pilot Program require a decommissioning plan that minimizes negative impacts to farmland, encompassing the following:

1. The sequence for facility infrastructure removal and site restoration to prior agricultural conditions in the event that solar installations are removed;
2. Identifying the party responsible for removal and restoration back to prior agricultural conditions in the event that solar installations are removed;
3. The party responsible for the costs of decommissioning;
4. The prevention of compaction or other comingling of the topsoil within inter-panel row travel lanes by construction traffic; and
5. Any additional procedure(s) deemed necessary to inform a permanent program, as established by Board order preceding each solicitation round or Program Year.

Staff recommends that Dual-Use Pilot Program projects selected by the Board for an award in the Pilot Program be required to comply with these requirements at a minimum, in addition to any

additional protective measures directed by Board order as a result of the evaluation of data obtained throughout the Pilot Program.

## **Stormwater Runoff and Other Environmental Issues**

### *Straw Proposal and Stakeholder Comments*

Proposals for addressing stormwater runoff and other environmental issues will be one of the criteria for evaluating applications to participate in the Pilot Program. Given Staff's recommendations for incentives delivery, which mean that the requirements of the ADI or CSI Program would be applied for a Dual-Use Pilot Program Project, Staff recommended in the Straw Proposal that these proposals would need to meet applicable requirements for stormwater management, soil erosion, and sediment control under the Board's rules for these programs.

Several stakeholders were generally supportive of practices that support the protection of natural resources and future farming. Some stakeholders commented that existing regulations pertaining to stormwater management, soil erosion, or sediment control are sufficient and additional requirements are not necessary. One (1) stakeholder provided best practices for a strategic agrivoltaic project design based on plant selection and biodiversity. Another stakeholder provided a schematic diagram illustrating best practices for rainwater management and passive aeration. In response to Staff's question about applying a standard or best practice for solar panel density for minimizing environmental impacts from a Dual-Use Pilot Program Project, most respondents did not recommend restricting or predetermining panel density. Two (2) organizations provided recommendations to Staff for this topic area that were better suited for discussion under other criteria, namely meeting with Staff and others to describe their techniques in agrivoltaics in more detail and supporting project research on different conservation and irrigation practices.

### *Staff Recommendations*

After reviewing stakeholder input, Staff continues to recommend the approach in the Straw Proposal as Staff agrees that no new requirements pertaining to stormwater management, soil erosion, or sediment control are needed for the Pilot Program. Specifically, Staff recommends that NJDEP's Stormwater Management Rules pursuant to N.J.A.C. 7:8 be part of the requirements for a Pilot Program, but that a project proposal also encompass commitments to meeting various mitigation and/or prevention plans for other environmental issues that may be specific or unique to the project. Compliance with all applicable permits, approvals, and authorizations required under federal, State, or local laws, rules, regulations, or ordinances would still be required.

## **Technical Feasibility and Technical Innovation**

### *Straw Proposal and Stakeholder Comments*

In the Straw Proposal, Staff recommended that application evaluation and scoring include a review of both technical solar feasibility and agricultural/horticultural feasibility. Staff proposed a criterion for technical innovation and envisioned scoring projects with higher points for design aspects that seek to increase or maintain both solar and agricultural productivity compared to standard designs or practices.

Staff received support for its recommendations that preference be given to a project that would enable access to the site and provide data and documentation about the design and allow farmers

to change their agricultural practices such as, for example, crop rotation. Stakeholders also recommended against requiring additional information on technical feasibility and innovation, suggesting that technical innovation should be a “desired outcome” rather than a criterion for scoring applications. One (1) stakeholder provided an example of project to highlight potential innovative technologies.

Stakeholders identified several concerns with these criteria. Stakeholders commented that scoring technical innovation encompasses the submission of speculative projects with unproven or theoretical designs and false promises from applicants seeking a high score (“bad actors”), calls for expertise outside the scope of the BPU in scoring, and would be a burdensome task in establishing the Pilot Program. General concerns were also expressed about the criteria used to evaluate technical innovation and the clarity needed for the application evaluation criteria and scoring.

Stakeholders specifically discussed costs for these criteria. They cautioned against increasing the cost of Dual-Use Pilot Program Projects by requiring more customized designs and referenced Europe for standardized approaches to racking for cost efficiency. Stakeholders commented that cost estimates are challenging to determine and recommended publishing cost estimates in consultation with the NJDA. Stakeholders also recommended conducting a separate evaluation or study under a Request for Proposal (“RFP”) for the entire program rather than seeking to evaluate individual projects. One (1) stakeholder proposed adding provisions to protect ratepayers from any risk related to unproven technology in agrivoltaics, asserting that associated risks should be the responsibility of the developer.

#### *Staff Recommendations*

Staff continues to recommend that the application evaluation process assess the technical feasibility of each project as well as innovative design aspects that may contribute to novel and effective agrivoltaic systems. The evaluation criteria will encompass consideration of both technical solar feasibility and agricultural/horticultural feasibility – for example, whether the project can scale to a commercially viable installation for both agricultural products and solar production. Technical feasibility considerations may also include a description and location of barriers to construction or control area such as tile/drainage fields, irrigation equipment and coverage, and potential conflicts with underground conduit runs. Inclusion of such descriptions would help to demonstrate that the Pilot Program could effectively convert to a large-scale, permanent Dual-Use program. Staff considers that a demonstration of agricultural feasibility may include detail on data collection and documentation about the design as to enable replicability. Rather than locking a project into one (1) design strategy, Staff proposes that projects maintain flexibility to optimize project design, with farmers allowed to change the agricultural or horticultural practices proposed (e.g., incorporate crop rotation or switch production type or system, as from grazing animals to hay production).

Staff also considers the particular importance of innovation in the Pilot Program, which may offer more flexibility to try novel design strategies than will be offered by a standardized permanent program. In the evaluation process, Staff encourages design aspects that seek to increase or maintain both solar and agricultural productivity compared to standard designs or practice.

## **Research and Monitoring**

### *Straw Proposal and Stakeholder Comments*

In the Straw Proposal, Staff recommended minimum standards for conducting required research studies that would apply to all projects participating in the Pilot Program, regardless of their size and location. To effectively provide meaningful results to inform a permanent program, these minimum standards included the fundamental concept of a research control area. Staff provided two (2) different proposals depending on the location of a Dual-Use Pilot Program Project. The Dual-Use Act requires that a New Jersey public research institution of higher education be included as part of a research study when siting a dual-use project on covered agricultural lands. Staff therefore recommended that the requirements for a Pilot Program distinguish between monitoring and research plans for projects sited on covered agricultural lands compared to those not sited on covered agricultural lands. Those sited on covered agricultural lands would have to meet more stringent requirements.

Stakeholders overwhelmingly provided feedback to change the size of the research control area citing concerns relating to potential project feasibility, viability, and economic/financial challenges. Various options for the size of a research control area were provided in addition to recommendations for how to evaluate the appropriate size. One commenter (1) suggested that Staff's recommendations disproportionately affected smaller projects, while others stated a preference for a smaller control area.

Stakeholders provided suggestions for various research metrics and the structuring of research requirements and studies within the Pilot, including a recommendation that the clock for research should start once a project has achieved substantial completion milestones and another for establishing a working group to determine the most appropriate data collection strategy for a Pilot Program. Additional comments included a request to clarify the requirements in the study and control areas; to require that research include various practices in and around the solar installations; to consider researching greenhouse crop farming projects; to consider additional farmer compensation for potentially burdensome research and reporting requirements; and to mandate a detailed farm production plan.

Some stakeholders supported requiring all projects to have a research component, with each site having an assigned "research and extension partner" and recommended that the Board consider the quality and presence of research commitments in scoring applications, with a specific recommendation for rigorous monitoring and research requirements. Other commenters suggested that the research proposals should be separated from project scoring and awards and that the Board should enroll selected projects in a centralized study and allow for researchers from other states to be involved. Stakeholders suggested increasing the number of participating research institutions to support more diverse projects and results, with a specific allowance for researchers from other states.

Some stakeholders raised concerns about using crop yield comparisons and maintaining the confidentiality of data. Others commented that certain factors could impact timeframes to conduct and complete research; they mentioned interconnection, permitting, construction, crop productivity/yields, and lengthy time periods to establish a new photovoltaic project. Stakeholders recommended that partnerships with the U.S. Department of Energy ("DOE") and other states be established to allow for information sharing and lessons learned.



Comments received on this issue also included recommendations for an annual capacity target, as well as compensation for farmers for supporting monitoring and research equipment needed in the Pilot Program. These issues are more suited for discussion in connection with *Program Size, Term, and Structure* and *Incentives and Project Costs* and will be discussed there.

### *Staff Recommendations*

Staff appreciates the thoughtful feedback from stakeholders. After consideration, Staff recommends the following adjustments to the size of the research control made in the Straw Proposal:

- For solar array projects less than or equal to 3.0 acres, the research control area must be equal in size to the entire area of land containing the solar array, including the areas between the rows of panels.
- For solar array projects greater than 3.0 acres, the required control area size is no less than 3.0 acres.

To clarify the meaning of a “research control area” for the purposes of the Pilot Program, Staff recommends defining it as a designated portion of the project site which does not contain the solar array or balance of system equipment but is equivalent to the array-containing portion with regard to agricultural productivity potential, farming practices, farm management, and any extraneous factors affecting agricultural productivity.

Staff also made minor adjustments to clarify aspects of its recommendations for monitoring and research requirements, most notably, to indicate that a Board-appointed third-party contractor would manage and collect the data for the first three (3) years of a project’s participation in the Pilot Program at no cost to the participant. Appendix B contains the full set of recommendations for monitoring and research requirements.

Staff anticipates issuing guidance on the research and monitoring requirements for prospective applicants as part of the NOIA that will precede each annual solicitation, in addition to other resources to help potential applicants understand the requirements for the Pilot Program and best practices for Dual-Use Pilot Program Projects located in New Jersey. While Staff believes it may be appropriate to establish various working groups under the Pilot Program, there is no data at this time to support discrete recommendations for the opening of the Pilot Program.

## **Geographic Location, Project Size, and Production Type Diversity**

### *Straw Proposal and Stakeholder Comments*

In the Straw Proposal, Staff recommended that geographic location and diversity of production type would be part of the weighting or scoring scheme, also referred to as a scoring rubric, for evaluating projects. Staff recommended that this criterion would change over time as projects are selected and coverage of the state/sub-geographies is attained. Staff recommended that this information would also be used to inform setting a minimum project size for a solicitation round or application period, if necessary.

Stakeholders submitted comments regarding interconnection challenges, clarifying adjacency provisions, and not being overly restrictive in siting projects where interconnection is available, given the challenges to finding interconnection capacity in New Jersey. Stakeholders also recommended providing clear and transparent scoring criteria.

With respect to project size and obtaining a diversity of sizes, Staff received several comments regarding the need for flexibility in this category. Stakeholders recommended focusing on the utility of agrivoltaics as an agricultural tool such that project selection result in projects with good agrivoltaics and economic feasibility. Several stakeholders voiced concern for establishing a minimum project size, arguing that doing so would be exclusionary to smaller farms, particularly those owned by veterans, women, and members of disadvantaged communities, and would discourage achieving a diverse set of projects. Stakeholders provided recommendations for the Pilot Program to consider projects from a minimum of one (1) MW to a maximum of ten (10) MW in the ADI Program, particularly under CSEP.

Lastly, one (1) commenter suggested the Board evaluate the economic impacts of solar lease revenue on unreserved farms staying in productive use versus farms being lost to other potential development, for example, to warehouses and housing.

### *Staff Recommendations*

Staff continues to recommend that the application evaluation criteria be adjusted in subsequent solicitation rounds to achieve greater diversity in agricultural and horticultural use and project size. Staff also recommends that the Board keep the authority to be flexible in making adjustments to these criteria, based on results from the Pilot Program, to support obtaining sufficient data and information to inform the development of a permanent program. As outlined in Staff's recommendations for a NOIA, a proposed minimum project size would be made available prior to each solicitation round or application period. In anticipation of the First Solicitation, Staff recommends that a minimum project size of 500 kW be announced in the NOIA. As outlined in the Straw Proposal, Staff is not recommending a minimum project size per crop type or crop category for the first solicitation round but recommends the Board retain the ability to authorize such capacity set asides in a future application period, based on the evaluation of EOI submissions.

### **Other Project Selection Criteria**

#### *Straw Proposal and Stakeholder Comments*

The Dual-Use Act allows the Board to require additional criteria for an application beyond what is outlined under N.J.S.A. 48:3-87.13(c)(1)(a) through (j). In the Straw Proposal, Staff recommended proposing criteria beyond the Statute to address equity in the Pilot Program in a way that supports a clean energy economy throughout New Jersey and aligns with both the State's environmental justice goals and the federal government's equity initiatives. Specifically, Staff recommended incorporating additional criteria as part of the geographic location criterion that would encompass proximity to overburdened communities and underserved communities in conjunction with a project plan for outreach and engagement with the potentially impacted community(ies).

Stakeholders' suggestions for additional project selection criteria ranged from not adding any additional criteria to a variety of criteria, including supporting Staff's recommendations. Additional criteria suggested by stakeholders included allowing smaller systems to participate to ensure representation from new farmers, including those in disadvantaged and environmental justice areas; considering a subset of research for agrivoltaics in urban agriculture and on green roof projects; consideration of benefits to the farmer and general resiliency of the agricultural use of the affected land; and additional scoring or preference points that demonstrate farmer commitment, land access benefits, and other community engagement. One (1) stakeholder

recommended establishing a limit on the amount of incentives for each applicant (including family members and affiliates), specifically up to thirty (30) MW of selected projects, and suggested public utilities (and associated affiliates and families) be deemed ineligible for participation. The stakeholder also recommended requiring a deposit with application submission, which should include milestone provisions. Consistently voiced throughout the comments submitted to Staff was a request, and the need, for a clear scoring rubric.

One (1) stakeholder made recommendations for setting annual capacity allocation targets and using a waitlist for the Pilot Program. These recommendations are more appropriate in the section *Program Size, Term, and Structure*.

### *Staff Recommendations*

Staff continues to recommend that the Pilot Program encapsulate the State and federal priorities for environmental justice and equity goals. To ensure these priorities are sustained throughout the Pilot Program, Staff recommends that the Board reserve the authority to require additional criteria as appropriate, during a solicitation round but prior to opening an application period.

For implementing these additional criteria, Staff proposes defining these relevant terms as follows:

- “Overburdened community” as defined in the Environmental Justice Rule at N.J.A.C. 7:1C-1.5.<sup>25</sup>
- “Underserved communities” to mean populations sharing a particular characteristic, as well as geographic communities that are unlikely to have received consistent and systemic fair, just, and impartial treatment, such that the failure to receive this treatment impacted their opportunity to participate equitably in and benefit from various aspects of economic, social, and civic life, as exemplified by the list in the preceding definition of “equity.”
- “Equity” to mean the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have historically experienced inequitable treatment, such as Black, Latino, and Indigenous and Native American persons; Asian Americans, Pacific Islanders, and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or adversely impacted by the building or location of their residence.<sup>26</sup>

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<sup>25</sup> “Overburdened community” means “any census block group as determined by the Department in accordance with the most recent United States Census, in which: (1) at least 35 percent of the households qualify as low-income households; (2) at least 40 percent of the residents identify as minority or as members of a State-recognized tribal community; or (3) at least 40 percent of the households have limited English proficiency. For the purposes of [N.J.A.C. 7:1C], State-designated tribal lands shall be considered overburdened communities. Information regarding overburdened communities can be found on the Department’s internet website at <https://www.nj.gov/dep/ej/communities.html>.” N.J.A.C. 7:1C-1.5.

<sup>26</sup> Adapted from federal Executive Order 13985 of Jan. 20, 2021 (On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government).

## **Project Design (excluding Research and Monitoring Requirements)**

### *Straw Proposal and Stakeholder Comments*

In the Straw Proposal, Staff recommended several design requirements that all participating projects must meet, requirements intended to satisfy the purpose of the Dual-Use Act to protect unreserved farmland while simultaneously supporting productive solar generating facilities with the goal of maintaining farmland in active production.

Staff proposed that specific design practices be employed by participants in developing a project for the Pilot Program. Specifically, Staff recommended that solar arrays be designed with farming practices in mind to minimize negative impacts; the arrays should be compatible with long-term use and future diversity of activities, taking into account several factors such as farm yields, electrical production, module configuration, and row alignment. Staff proposed that Dual-Use Pilot Program Projects consider the parcel's layout and the system's edges. Staff also proposed including a research control area to which performance can be compared, which is covered separately under the section *Research and Monitoring*. Additionally, Staff recommended provisions to prohibit concrete footings, with a limited exception for the purposes of installing a shallow concrete pad for placement of balance of system equipment such as inverters or transformers; require deer fencing for all projects at least eight (8) feet tall; ensure animal and public safety; and require that the design minimize soil impacts.

Several commenters opposed the requirement that projects have a research control area equal in size to the land containing the solar array for projects up to 3.0 acres and no less than 3.0 acres for projects larger than 3.0 acres. These comments are discussed in detail under the section *Monitoring and Research Requirements*,

In general, stakeholders requested more clarity around design requirements for Dual-Use Pilot Program Projects. Stakeholders recognized the need for minimum standards but suggested they not be overly prescriptive, allow for trial and error, and consider how the design would support farms and farmers. Some stakeholders particularly focused on the fencing requirement as one that could potentially create unintended consequences.

Some commenters recommended considering other innovative project designs, such as greenhouse farming, a change which would require adjusting the definitions of "non-permanent agriculture structure" and "permanent agriculture structure." A few commenters also supported the need for more flexibility on using concrete.

One (1) stakeholder commented that its research on agrivoltaics supported a strong technical compatibility between high value crops and their technology, such as fruits, berries, nuts, vegetables, nursery stock, hops, and cannabis, but not field crops or livestock. Another stakeholder provided an example of a project design and suggested various configurations that would result in successful projects.

### *Staff Recommendations*

Staff carefully considered stakeholder feedback and continues to recommend maintaining the project design requirements laid out in the Straw Proposal. Staff continues to recognize the need for balance between standards and guidance for project designs on the one hand and flexibility on the other, to allow for innovation and opportunity to learn from research results. At the same time, Staff seeks to ensure that this process is as simple as possible for all parties involved -

applicants, developers, farmers, and the team evaluating applications. This is why Staff recommends that the Board have the flexibility to incorporate metrics that may be needed for a successful Pilot Program but that were not anticipated when project design requirements were being developed.

Staff believes that a large research control area is needed to ensure that an appropriate analysis of the effects of the solar panels can be made - specific details on Staff's recommendations for a research control area are found under the section *Research and Monitoring*.

To provide additional details and clarification around Staff's recommendations, Staff believes that the Board should consider incorporating the following specifications pertaining to the installation, construction, and operation of Dual-Use Pilot Program Projects that are not discussed elsewhere in Staff's recommendations as part of the design for a dual-use facility in the Pilot Program.

- In the case where concrete may need to be used outside of the limited exception for installing equipment such as inverters or transformers, Staff recommends that written justification be submitted by a licensed professional engineer for Staff review and approval.
- Consistent with other solar energy projects in the Board's solar program, require compliance with all applicable federal, State, or local laws, rules, regulations, or ordinances.
- Selected applicants seeking protection for their projects under New Jersey's Right to Farm Act, N.J.S.A. 4:1C-1 et seq., must comply with the relevant provisions of the agricultural management practices at N.J.A.C. 2:76-2A.12 through 2A.13 and not pose a direct threat to public health and safety.
- A Dual-Use Pilot Program Project shall be required to conform to all codes, standards, and licensing requirements that were applicable at the time the project was constructed.
- Dual-use system designs that incorporate permanent agricultural structures are prohibited. This prohibition would include designs with non-permanent agricultural structures that are directly attached to permanent structures. Staff recommends defining "permanent agricultural structure" to mean a structure that has been built with a permanent anchoring system or foundation (typically involving cement or concrete). Examples include farmhouses or residential structures, farm retail stores, barns, packhouses, agricultural equipment and materials storage sheds, greenhouses, grain storage facilities, plant and animal processing facilities, cold storage facilities, and feedlots. Staff also recommends defining the term "non-permanent agricultural structure" to mean a movable structure including high tunnels (a greenhouse-like structure used to protect crops and extend the growing season), center-pivot irrigation systems, post-driven fences, trellises, or structures without permanent anchoring systems or foundations such as animal shelters and some greenhouses.
- Dual-Use Pilot Program Projects must become fully operational, including having monitoring equipment installed for the Selected Project, within the timeframes required under the applicable SuSI Program pursuant to N.J.A.C. 14:8-11 for the ADI Program or the CSI Program as applicable. As a pilot program is intrinsically experimental, Staff recommends that the Board allow Dual-Use Pilot Program Projects in the ADI Program additional time needed to become operational, should they need it, up to a total of two (2) six (6)-month extensions beyond the one (1)-year deadline. Such extensions shall be requested as an update or modification to the COMPR and would be reviewed and approved by Staff or the Board's designee such as the SuSI Program Administrator.

## **Other (including Reporting and Recordkeeping)**

### *Straw Proposal and Stakeholder Comments*

In Staff's Straw Proposal, the overall intent of the Pilot Program per the Statute was explained in that the results of the Pilot Program including any research results on the efficacy of dual-use in New Jersey will be used to set standards for dual-use solar energy projects in a permanent program. Throughout the Straw Proposal, Staff recommendations consistently referred to this principle in establishing a proposed program design that meets the requirements of the Dual-Use Act while simultaneously acknowledging the importance of the farmer and agricultural industry throughout the development and implementation of a Pilot Program. As such, Staff recommended that the COMPR form the basis of the primary reporting and recordkeeping tool documenting the project's participation in the Pilot Program and be used in the evaluation of the individual project and in the evaluation of the Pilot Program to inform the design of a permanent dual-use program.

Additionally, Staff recommended that EDCs would have an important role, as with other solar programs, to support the implementation of solar incentives not only through processing interconnection applications but by keeping the Board updated on the progress of processing applications for the Pilot Program through reporting requirements.

Overall, stakeholders generally provided positive support for the Pilot Program, recognizing the potential benefits of agrivoltaics. Stakeholders repeatedly commented on ensuring that farmers be included throughout the process and emphasized the importance of the farmer on the success of the Pilot Program.

Specifically, stakeholders suggested that New Jersey evaluate lessons learned from other solar energy programs in the United States and other countries. Comments provided suggested that the Pilot Program should consider siting projects in different regions of New Jersey on various soil types that represent farmer interests and agricultural markets and include education and outreach for stakeholders, given that some may not be familiar with the Board's programs and processes. Other commenters suggested to keep costs at the forefront of a pilot program and outlined concerns about implementing another solar incentive program that will be more burdensome to ratepayers, households, and businesses, especially given inflation. This set of comments described concerns over the costs for all of the Board's programs, but highlighted the costs for the Board's solar energy programs.

With respect to reporting requirements, an EDC commented that reporting requirements for the Pilot Program are unnecessary and duplicative given the Board's reporting requirements for EDCs under other regulations and the anticipated regulations for grid modernization that proposed tracking mechanisms and reports for interconnecting. Other stakeholders commented on the need for clarity on reporting beyond the Pilot Program, and reporting changes or updates to the COMPR and when a COMPR is created and submitted. Finally, other commenters submitted reflected concerns with solar energy programs in general and a recommendation for increased stakeholder engagement including an annual stakeholder meeting to share insights on the Pilot Program and listening sessions and/or virtual open houses.

### *Staff Recommendations*

After considering the input from stakeholders, Staff continues to recommend the approach in the Straw Proposal for using the COMPR as the primary reporting and recordkeeping tool, but Staff does not recommend requiring additional reporting requirements for the EDCs. However, Staff

recommends that the Board have the ability to establish reporting requirements for EDCs by Board order during the Pilot Program should such requirements be needed for the successful implementation of the Pilot Program.

Furthermore, Staff supports its recommendations in the Straw Proposal for keeping the COMPR updated over the lifetime of the pilot program award on an annual basis until the expiration of the fifteen (15)-year qualification life while maintaining applicable records of the COMPR, including any supplementary documentation, and any revisions made thereto. As the intent of a COMPR is to also provide a way in which information from the Pilot Program can be evaluated to inform a permanent program, Staff recommends that a participant provide those records upon request from the Board or Staff within fourteen (14) days of a request. To further support a successful pilot program, Staff recommends that a milestone reporting form be required for all Dual-Use Pilot Program Projects for which such a form is not already required for the pilot project pursuant to the SuSI Program rules at N.J.A.C. 14:8-11.5. In addition, notifications to the Board should be required for any modifications to the COMPR. For modifications made to the COMPR regarding a request to change a provision for a pilot project, Staff recommends that such modifications must be submitted in writing to the Board Secretary and approved by Staff in consultation with NJDA. Staff recommends that a determination be made on these proposed modifications within thirty (30) days of receipt by the Board Secretary. For revisions to the COMPR regarding changes in the ownership of the land or change of farmer or solar operator, Staff recommends that the landowner listed in the COMPR be the responsible entity for notifying the Board of those changes. Finally, for revisions needed to the COMPR in case of sale, transfer, contract modification, or other material change to the pilot project team, Staff recommends the Board be notified in writing within thirty (30) days.

### **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. In compliance with the Dual-Use Act, the Board commits to establishing our State's position as a marketplace leader in agrivoltaics, while at the same time controlling ratepayer costs and working with our State agency partners to protect our farmland and natural resources.

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 play, not only a larger part, but a more sustainable part in the clean energy transition and 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.

The Board has carefully reviewed the extensive record created through the stakeholder proceedings. The various stakeholders who participated in this proceeding have brought considerable dedication and passion to the process of expanding this solar market. That dedication is reflected in the extensive record that forms the basis for the actions taken today. The Board commends and thanks all stakeholders for their active participation in this proceeding. Public participation is invaluable to the Board's decision-making process, and each contribution

made in a public meeting or in written comments has helped inform the Board's conclusions.

After a review of the record and Staff's recommendations, the Board **HEREBY ORDERS** the establishment of a Dual-Use Pilot Program pursuant to the Dual-Use Act. The Board **ORDERS** that solar incentives, in the form of NJ SREC-IIs, be provided to eligible projects upon selection through a competitive procurement, and that the value of each SREC-II be established through the solicitation as recommended by Staff in the body of this Order.

The Board **HEREBY ORDERS** 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 **ORDERS** that a Dual-Use Pilot Program Project must be sized at no less than 500 kW and, in compliance with the Dual-Use Act, at no more than ten (10) MW. The Board **APPROVES** a capacity target of up to 200 MW total for the duration of thirty-six (36) months for the Pilot Program and an annual capacity target for Program Year 1 of fifty (50) MW. The Board **ORDERS** that the capacity awarded under the Pilot Program shall be in addition to the capacity otherwise awarded under the SuSI programs.

For those facilities that are CSI-eligible, the Board concurs with Staff that a proxy "base" incentive set by the Board is more feasible than requiring all such facilities to compete in a CSI solicitation. The Board seeks to minimize the administrative burden of applying to the Pilot Program. The Board **FINDS** that requiring CSI-eligible facilities to participate in two (2) separate solicitations under the Board's rules would be onerous. The Board **HEREBY WAIVES** its rules at N.J.A.C. 14:8-11.10 for CSI-eligible facilities seeking to participate in the Pilot Program and **ORDERS** such projects to submit an incentive value for the CSI component of the project using the Board's highest awarded bid approved for the Basic Grid Supply Tranche (Tranche 1) from the most recent CSI Program solicitation for each application period.

The siting criteria of the Dual-Use Act closely track those under the Solar Act of 2021, and a process for reviewing siting solar projects on these prohibited land types is established under the CSI Program's siting rules at N.J.A.C. 14:8-12. The Board **ORDERS** that the applicable definitions in the CSI Siting Rules shall be incorporated in the Dual-Use Pilot Program and **HEREBY ORDERS** that all Dual-Use Pilot Program Projects comply with the siting criteria as recommended by Staff in the body of this Order. The Board **ORDERS** that all waivers from these siting criteria be sought in accordance with N.J.A.C. 14:1-1.2(b).

The Board **FURTHER FINDS** that projects to be located on preserved farmland are prohibited by the Statute from obtaining a waiver and **HEREBY GRANTS** Staff authority to administratively deny request for a waiver for such projects.

The Board **ORDERS** Dual-Use Pilot Program Projects to maintain the affected land in active agricultural or horticultural use and minimize negative impacts to farmland and the environment. The Board **HEREBY ORDERS** Dual-Use Pilot Program Projects to monitor and conduct research for the duration of the Board's Pilot Program, pursuant to the requirements contained within Appendix B of this Order. The Board **ORDERS** that projects requesting to locate a Dual-Use Pilot Program Project on covered agricultural lands be required to conduct a research study in coordination with a New Jersey public research institution of higher education and request approval from the Board, in consultation with NJDA, for approval to participate in the Pilot Program.



The Board **HEREBY ORDERS** the EDCs to process interconnection applications for potential dual-use projects in the order in which they are received, including those received prior to the effective date of this Order.

As Dual-Use Pilot Program Projects will fall within either the ADI or the CSI programs, the Board **FINDS** that basing the compensation of these projects on the applicable SuSI program incentive aligns with the legislative intent behind the Dual-Use Act and the Solar Act of 2021. The Board **FINDS** that an adder that covers the incremental costs incurred as a result of participation in the Pilot Program, specific to the agricultural or horticultural aspects of a dual-use project, is an appropriate mechanism to fully compensate the Dual-Use Pilot Program Projects for those costs that are specific to their participation in this program. The Board **ORDERS** 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 any additional costs as a result of participating in the Dual-Use Pilot Program. Dual-Use Solar Energy Projects selected to participate in the Pilot Program that receive a NJ SREC-II Certification Number shall be eligible to create NJ SREC-IIs for fifteen (15) years following the date of commencement of commercial operations.

The Board **ORDERS** that for each Dual-Use Pilot Program Project a COMPR establish the terms and conditions for maintaining eligibility for the SREC-II adder. The Board **ORDERS** that the COMPR shall be kept updated throughout the term of a Dual-Use Solar Energy Pilot Program award, until the expiration of the fifteen (15)-year qualification life. For the duration of the Pilot Program, the Board **ORDERS** the COMPR to be updated by the project team annually. The annual update shall be performed by the anniversary of the date the Selected Project receives PTO.

The Board **FINDS** that the Dual-Use Act allows for the Secretary of Agriculture to make a request to the Board to suspend or revoke an award from the Board for a Dual-Use Pilot Program Project in the Pilot Program. The Board **FINDS** that establishing requirements for the enforcement of the terms and conditions of an award in the Pilot Program is in the best interest of protecting unpreserved farmland, the agricultural community, and ratepayers. The Board **ORDERS** that Dual-Use Pilot Program Projects shall comply with requirements of the ADI Program or CSI Program for the lifetime of the project. The Board **DIRECTS** Staff to work with the NJDA to audit projects for their compliance with the terms of the Pilot Program.

If Staff determines that a Dual-Use Pilot Program Project is not meeting the Program's requirements, the Board **ORDERS** that project shall be placed on probation for a period of thirty (30) to 120 days. Failure to correct the deficiency and implement the remedial action plan may result in the project's termination from the Pilot Program and suspension of incentives. The Board may impose additional penalties commensurate with the gravity of the infraction, including but not limited to rescission of dual-use incentive already paid or requiring the project developer to decommission the project and restore the land's prior agricultural or horticultural usage.

If an incident of force majeure as defined in in this Order is identified for such a project, the above enforcement provisions may be modified.

The Board **ORDERS** all Dual-Use Solar Energy Project facilities to comply with the pre-qualification application and application criteria set forth in this Order.

The Board **HEREBY DIRECTS** Staff and the Board's designee, in consultation with NJDA, to develop all program documents and resources that shall be necessary for the operation of the Pilot Program solicitation, including but not limited to: modification of the existing registration

portals for the Pilot Program procurement, updates to the NJCEP website, and development of procurement forms and checklists. The Board **DIRECTS** Staff to issue a NOIA with an initial annual capacity target up to fifty (50) MW. The Board also **DIRECTS** Staff to open the Pilot Program to accept EOIs for Dual-Use Pilot Program Projects sized at a minimum of 500 kW DC through a prequalification application process on January 6, 2025. The Board **DIRECTS** Staff to include the proposed scoring rubric as recommended by Staff in this Order for this first NOIA. The Board **FURTHER DIRECTS** Staff and the Board's designee to implement a deadline of February 14, 2025 at 11:59:59 PM for EOI submissions.

The Board **HEREBY DIRECTS** Staff to evaluate the EOI submissions, in consultation with NJDA, and make recommendations to the Board for establishing or adjusting, as needed, a capacity target for the first solicitation, any capacity set asides, any application fees, and any minimum criteria in addition to those contained in this Order for participation in the related solicitation round.

The Board **FINDS** that CSEP does not provide incentives for ground-mounted solar projects, projects located on farmland or open space, or any type of land currently envisioned as suitable locations for agrivoltaic projects. The Board **FINDS** that allowing for Dual-Use Pilot Program Projects to receive additional incentives provided by CSEP through subscriptions is not in the best interest of the ratepayers. Thus, the Board **FINDS** that allowing Dual-Use Pilot Program Projects into the Board's CSEP would be inconsistent with the requirements of the CSEP and **ORDERS** that Dual-Use Pilot Program Projects shall not participate in CSEP.

Modifications to the existing RNM Program were signed into law on December 21, 2023, directing the Board to establish an application, an incentive, and an approval process that incorporates modified sizing and siting requirements for RNM solar facilities that serve public entities located within the same EDC service territory as the solar facility. The Board notes that Staff is working to prepare recommendations for the Board on these modifications as of the date of this Order. At this time, therefore, the Board will not rule upon the eligibility of Dual-Use Pilot Program Projects for the RNM Program.

The Board **HEREBY DIRECTS** Staff, the Board's designee(s), and the SuSI Program Registration Manager to develop all program documents and resources that are necessary for the registration of qualified projects in the Pilot Program, including, but not limited to the modification of the CSI and ADI registration portals for the Pilot Program, updating the NJCEP website, and development of forms and checklists.

The Board **FINDS** additional reporting requirements for the EDCs in the Pilot Program would be duplicative to existing regulations and proceedings underway. However, the Board **FINDS** that the nature of a pilot program is inherently experimental and **DETERMINES** that future directives for the EDCs may be necessary given the results of the Pilot Program.

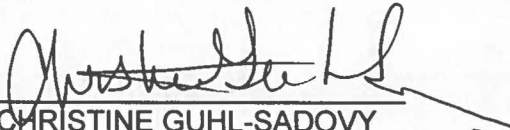
The Board **FURTHER DIRECTS** Staff, the Board's designee(s), and the SuSI Program Registration Manager to communicate the establishment of the Pilot Program to the public. Communication shall include listserv messages, website notices, informational webinars, and such other methods as shall be appropriate.

Finally, unless expressly stated otherwise, the Board **HEREBY APPROVES** all recommendations made by Staff above and **HEREBY DENIES** any conflicting stakeholder comments.

The effective date of this Order is October 30, 2024.

DATED: October 23, 2024

BOARD OF PUBLIC UTILITIES  
BY:

  
CHRISTINE GUHL-SADOVY  
PRESIDENT

  
DR. ZENON CHRISTODOULOU  
COMMISSIONER

  
MICHAEL BANGE  
COMMISSIONER

ATTEST:   
SHERRI L. GOLDEN  
SECRETARY

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

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

DOCKET NO. QO23090679

SERVICE LIST

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## **APPENDIX A: STAKEHOLDER COMMENTS AND RESPONSES**

### I. November 2023 Straw Proposal

The New Jersey Board of Public Utilities (“Board” or “BPU”) received sixteen (16) written comments on the Straw Proposal first published on November 9, 2023, and then updated on November 21, 2023, Docket No. QO23090679.

Comments were received from:

1. New Jersey Division of Rate Counsel (“Rate Counsel”)

#### Agricultural Community

1. American Farmland Trust (“AFT”)
2. Dave Leonard
3. New Jersey Farm Bureau (“NJFB”)

#### Trade Associations and Non-profit filing jointly

4. Coalition for Community Solar Access (“CCSA”)\*  
New Jersey Solar Energy Coalition (“NJSEC”)\*  
Solar Energy Industries Association (“SEIA”)\*  
Vote Solar (“VS”)\*

#### Solar Developers/Industry

5. H&Y
6. Forefront Power
7. CS Energy
8. Lightstar Renewables LLC (“Lightstar”)
9. RIC Energy (“RIC”)
10. Sun’Agri
11. New Jersey Resources Clean Energy Ventures (“NJRCEV”)
12. Solar Agricultural Services, Inc. (“SolAg”)
13. BlueWave
14. Industry Group Filing Jointly  
BlueWave\*\*  
CleanCapital\*\*  
Forefront Power\*\*  
Lightstar\*\*  
Navisun\*\*  
Nextamp\*\*  
Renewable Properties\*\*  
RWE Clean Energy\*\*

#### Other/General Public

15. Alejandro Meseguer

*\*Submitted joint comments*

*\*\*Submitted joint comments as “Industry Group”*

Stakeholder comments are grouped by topic, largely following the layout of recommendations in the Straw Proposal. The questions that were included in the Straw Proposal as topics on which

Board Staff (“Staff”) requested specific feedback is also included. Staff notes the questions were misnumbered in the Straw Proposal with question three (3) being listed twice; as such, these questions are identified as 3a and 3b. Written comments submitted by stakeholders that specify the question numbers are listed under the applicable question. Staff summarized the comments submitted. The summaries are provided as a courtesy to commenters and the public for understanding the contents of the comments. Comments raised in multiple sections are addressed once. In its responses, Staff refers to the New Jersey Department of Agriculture (“NJDA”), State Agricultural Development Committee (“SADC”), and the New Jersey Department of Environmental Protection (“NJDEP”) collectively as the “State Agencies”. The Board has also engaged RAP at Rutgers University (“RU”) to assist with the development and management of the Pilot Program.

### **General Comments and Overall Program Intent**

**Comment(s):** Alejandro Meseguer commented that the Dual-Use Solar Energy Pilot Program (“Pilot Program”) is an excellent opportunity to investigate value added for the farmers and citizens of New Jersey.

**Response:** Staff thanks the commenter for its support.

**Comment(s):** Sun’Agri, NJRCEV, and AFT commented that the Pilot Program needs to focus on the farmer, and in doing so, will ensure participation in the Pilot Program.

**Response:** Staff concurs with the commenters that the farmer is important to the success of the Pilot Program.

**Comment(s):** Sun’Agri and BlueWave commented that New Jersey should evaluate lessons learned from other solar energy programs. Specifically, Sun’Agri mentioned agrivoltaics programs in other countries, noting that the United States is lagging, and BlueWave recommended applying lessons learned from New Jersey’s Community Solar Pilot Program.

**Response:** The Board has engaged RAP to assist with the development and implementation of the Pilot Program. One component of RAP’s scope of work is to investigate the experiences of other agrivoltaic initiatives and apply their insights throughout the lifecycle of the Pilot Program. Staff is intimately involved in the recent development of the CSEP and will be able to share insights as the program matures.

**Comment(s):** While Rate Counsel commented that it supports developing rules for agrivoltaics, and acknowledged the potential benefits and goals, it urged the Board to keep costs at the forefront of its considerations for a pilot program. Specifically, Rate Counsel commented that the addition of another solar incentive program by the Board will be more burdensome to ratepayers, households, and businesses, especially given inflation. The commenter stated that the costs for the Board’s solar energy programs that amount to billions of dollars.

**Response:** The Board is sensitive to the cost of the solar programs to ratepayers. The solar programs are designed to align incentive costs with the representative costs and benefits of solar within distinct market segments and to harness the power of competition to reduce the impact to ratepayers. The Statute requires the Board to establish criteria for evaluating and scoring proposed projects to determine which projects should be allowed to receive incentives through the Pilot Program. One of the criteria for application evaluation is the incentive level sought by the applicant. Additionally, the Straw Proposal includes participation in the Competitive Solar

Incentive (“CSI”) Program for projects eligible for this program. Thus, the CSI Program is incorporated into the Pilot Program, which will inform the development of a permanent program pursuant to the Statute.

**Comment(s):** Sun’Agri provided comments about the potential benefits of agrivoltaics, specifically noting its utility as a climate mitigation strategy that can increase crop yield by 20% and reduce water consumption up to 30%, statistics the commenter says are based on its technology and fourteen (14) years of agronomic research. The commenter also noted additional benefits from agrivoltaics, namely, the establishment of a microclimate that helps protect sensitive crops, decreased impacts of seasonal early/late frosts, improved soil health, reduced pesticide use, reduced greenhouse gases, and protection of biodiversity.

**Response:** The potential benefits of agrivoltaics are appreciated by the Board and its partners active in developing the Pilot Program. The Statute requires that the results of the Pilot Program, including any research results on the efficacy of dual-use in New Jersey, will be used to set standards for dual-use solar energy projects in a permanent program. To date, no research data for New Jersey conditions is available.

**Comment(s):** AFT commented that it encourages the Pilot Program to encompass a variety of designs, capacities, farmer backgrounds, and agricultural plans. The commenter noted pilot projects should be distributed in different regions of New Jersey on various soil types for a range of project designs that represent farmer interests and agricultural markets. AFT recommended that the Pilot Program should provide opportunities for the agricultural community and encouraged the Board to review its policy recommendations, referred to as *Smart Solar*, intended for state and local governments released to the public on December 13, 2023.

**Response:** The Statute requires the Board’s evaluation of program applications to consider diversity of project size and types of agricultural and horticultural production as well as geographic location. The Straw Proposal recommends the Board set a target number for project selection among the eight primary agricultural and horticultural product classifications representing New Jersey’s agricultural economy. The application evaluation criteria will be adjusted in subsequent solicitation rounds to account for the classification of projects selected in earlier solicitation rounds toward meeting the Pilot Program’s goals for diversity of project sizes and types.

**Comment(s):** AFT recommended providing stakeholders education and outreach, such as virtual open houses, upon opening the Pilot Program, because stakeholders may not be familiar with the Board’s programs and processes.

**Response:** The Board has built education and outreach into the provisions of the launch of the Pilot Program. Staff anticipates convening workshops and providing educational materials on various topics prior to the opening of the first application round and, as needed, during the Pilot Program.

### **Program Size, Term, and Structure**

**Comment(s):** Rate Counsel stated that it interprets the statutory 200 megawatt (“MW”) cap on capacity for the Pilot Program as indicating a Legislative limit to protect the financial interests of the ratepayers.

**Response:** Staff notes that the Statute also provides “that the [B]oard may extend the pilot program by no more than two additional 12-month periods if the [B]oard, in consultation with the



Secretary of Agriculture, determines that such extensions are necessary to adequately evaluate the performance of the projects selected. . . .” In the case of an extension, the Board “may increase the total capacity by no more than 50 megawatts, as measured in direct current, per additional 12-month period.” N.J.S.A. 48:3-87.13(e). Staff believes that the Statute demonstrates a legislative intent to balance incentivizing solar development with the costs to the ratepayers, the same legislative intent evidenced by the Solar Act of 2021.

**Comment(s):** RIC commented that a Pilot Program size of 200 MW and term of three years are not enough to produce results for an informed permanent program, such that this structure will not support enough diverse projects and will result in a small sample size.

**Response:** The size and term of the Pilot Program are set by the Statute, which also provides for the Board to consult with the Secretary of Agriculture prior to the end of the initial three-year term on whether additional time or capacity is warranted pursuant.

**Comment(s):** Several commenters (BlueWave, CS Energy, RIC, Industry Group, NJFB, and AFT) indicated the strategy proposed for allocating capacity for the Pilot Program (thirty (30) MW, seventy (70) MW, and 100 MW for years 1, 2, and 3, respectively) is inadequate and that the Board needs to set higher targets earlier and allocate capacity quickly. NJFB stated there should be no allocation standard. Specific recommendations for allocating capacity were provided as follows:

- Two 100 MW buckets in the first two years (Lightstar, BlueWave, and Industry Group);
- Fifty (50) MW, sixty (60) MW, ninety (90) MW, in that sequence for the course of a three (3)-year program (CS Energy);
- Fifty (50) MW for each Program Year over a three (3)-year program, similar to New Jersey’s Community Solar Pilot Program (NJRCEV); and
- Greater than thirty (30) MW in the first year (AFT).

**Response:** The Statute requires the Board to set annual capacity targets such that the total capacity of all projects approved under Pilot Program in a three-year period shall not exceed 200 megawatts. The process for setting annual capacity targets is not prescribed by the Statute.

However, the Statute also requires that the Board’s implementation of the program results in a diversity of applications by size and type of agricultural and horticultural production. Additionally, criteria for project selection includes proposals to minimize negative impacts to farmland, addressing stormwater and other environmental issues and the quality of any research committed to during the evaluation period. The research results for the Pilot are intended to inform a permanent program. The Board establishes annual capacity targets to balance these objectives; these targets form part of an application selection process and research regime anticipated to be efficient and effective in delivering results useful in informing a permanent program.

Staff recommended in the Straw Proposal that the Board establish an initial annual capacity target with a Board Order establishing the Pilot Program, and the Board is doing so in the attached Order. The initial schedule of annual capacity targets was recommended in anticipation of benefits accruing from lessons learned for all program participants in Program Year 1 and the expectation of more robust project applications submitted in subsequent Program Years. Staff anticipates that the lessons learned in Program Year 1 will enable the larger allocations in Program Years 2 and 3 to be more effectively used.

**Comment(s):** Pertaining to the general timeframe and schedule of the Pilot Program, NJFB

commented that the three (3)-year clock for the Pilot Program, including commencement of research, should start when a project is in progress. Lightstar commented that the Board should consider ways to expedite the implementation of the Pilot Program and its application processes, since the majority of Lightstar's project timelines for permitting and construction extend into 2026. Lightstar stated it has concerns with the general timing of the Pilot Program given the lengthy permitting timeframes, which can extend to twenty-eight (28) months, in New Jersey, in addition to approximately six months for an interconnection study and agreement.

**Response:** The Statute provides that "the Dual-Use Solar Energy Pilot shall continue for thirty-six (36) months after the adoption of rules",<sup>1</sup> mandating that the "three (3)-year clock" commence when the program rules are adopted. Thus, Staff have recommended that the first application due date occur immediately upon publication of the rules in the New Jersey Register. Staff anticipates that more guidance on the research requirements and standards for prospective applicants will issue as part of the Notice that will precede each annual solicitation. As to the impacts of permitting and interconnection timeframes, these will be apparent and taken into consideration by the Board and the Secretary of Agriculture prior to the expiration of the Pilot Program's initial three-year term consistent with N.J.S.A. 48:3-87.13(e).

**Comment(s):** BlueWave, Industry Group, AFT, and NJFB commented that the Pilot Program should allow Dual-Use Pilot Program Projects into the State's Community Solar Energy Program given the benefits to low-and-moderate income ("LMI") residents. AFT and NJFB specifically commented that pilot projects up to ten (10) MW should be allowed.

**Response:** The CSEP was launched by Board Order on August 16, 2023 with the initial registration period opening on November 1, 2023. The rules governing the CSEP provide that eligible facilities must be installed on: 1) Rooftops; 2) Certain bodies of water that have little to no established floral and faunal resources (i.e., floating solar); 3) Carports and canopies over impervious surfaces; and 4) Contaminated Sites and Landfills. The CSEP does not provide incentives for ground-mounted solar projects, projects located on farmland or open space, or any type of land currently envisioned as suitable locations for agrivoltaic projects.

**Comment(s):** Dave Leonard requested that net-metering aggregation be allowed in New Jersey for farms. The stakeholder explained that most farms have multiple electrical service lines to support onsite load, so flexibility is needed to support electric demands. The stakeholder recommends adding "farms" to the existing RNM program/rules in New Jersey; otherwise, he believes that net-metering dual-use projects will not be practical or financially viable.

**Response:** The Solar Act of 2012 established net metering aggregation standards for specific public customers – an eligible customer must be a State entity, school district, county, county agency, county authority, municipality, municipal agency or municipal authority. The Solar Act of 2012 did not provide net metering aggregation for commercial entities. Similarly, the Clean Energy Act established a remote net metering program for public entities only. N.J.S.A. 48:3-87.12. The Board defined public entities eligible for remote net metering consistently with the definition provided in the Solar Act of 2012; that statutory authority did not extend net metering aggregation or remote net metering to projects located on privately owned land. However, on December 21, 2023, Governor Murphy signed into law P.L. 2023, c. 190, which significantly modified the Board's existing RNM Program and required the Board to establish an application, an incentive, and an approval process to meet that mandate. The modification to the RNM

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<sup>1</sup> N.J.S.A. 48:3-87.13(e).

program required by that law remains under development. At this time, Staff does not know whether the modified program will be available to Dual-Use Pilot Program Projects, but that possibility may exist once the modified program is established.

### **Siting and Permitting**

**Comment(s):** NJFB, AFT, Lightstar, Industry Group, and BlueWave requested clarification on the statutory language for “permitted use,” particularly with respect to a special use or conditional use permit from a municipality. Specifically, these commenters recommended not requiring a special use or conditional use permit from a municipality for dual-use projects. BlueWave recommended providing educational materials and technical support for municipalities on this topic.

**Response:** Through its “permitted use” language, N.J.S.A. 48:3-87.13(f) references municipal land use law (“MLUL”), N.J.S.A. 40:55D-1, et seq. For instance, N.J.S.A. 40:55D-66.16 makes solar on a landfill a “permitted use” in every municipality, and N.J.S.A. 40:55D-66.11 permits solar on industrial zoned properties in municipalities. Under the MLUL, proposed uses are either specifically permitted, conditionally permitted or not permitted in certain zones. The referenced provision makes BPU-approved dual-use projects permitted in farmland zones, regardless of the municipal zoning restrictions. Staff anticipates working with RAP to develop educational materials on a variety of topics intended for various audiences with an interest in the Pilot Program, including a model ordinance for municipalities.

**Comment(s):** While SolAg supports the siting prohibitions on wetlands, SolAg recommended allowing projects in the Pilot Program to be sited and researched on historically farmed wetlands.

**Response:** The Act expressly prohibits siting dual-use projects on land designated as freshwater wetlands or coastal wetlands with no exceptions for land that has been historically farmed.<sup>2</sup> The Act does allow for a waiver process to enable siting on prohibited lands, in consultation with the NJDEP and NJDA, “based on unique factors that make the project consistent with the character of the specific parcel.”<sup>3</sup> Thus, if an applicant would like to site a dual-use project on wetlands that were farmed historically, the applicant would need to submit a petition to the Board pursuant to its rules. Petitions for dual-use projects in Modified Agricultural Wetlands would also be required. Staff continues to recommend that the Pilot Program follow the structure, processes, and eligibility criteria established by the Board, pursuant to N.J.A.C. 14:8-12 as the CSI Siting Rules, to implement the Solar Act of 2021.

**Comment(s):** NJRCEV recommended that the Board allow co-location of different solar arrays on different pieces of land, since the Pilot Program will comprise mostly small farms with multiple electrical services serving different parts of their land, and net metering aggregation is prohibited for farms. NJRCEV commented that allowing co-location would enable comprehensive energy planning to support maximum economic benefits and prevent potential issues.

**Response:** Co-location is a defined term in the SuSI Program at N.J.A.C. 14:8-11.2. Siting two or more SuSI-eligible solar facilities on the same property or on contiguous properties, such that the individual facilities are eligible for a higher incentive value than they would be if they were combined into one single facility is prohibited in the Administratively Determined Incentive (“ADI”)

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<sup>2</sup> N.J.S.A. 48:3-87.13(b)(5)(c).

<sup>3</sup> Id. at (b)(5).

Program at N.J.A.C. 14:8-11.4(f) unless the Board provides a waiver in response to a petition. NJRCEV stated that allowing co-location would enable farmers to realize maximum economic benefits, but the Pilot Program is not intended to guarantee maximum financial benefits to participants regardless of the Board's rules.

**Comment(s):** AFT commented that the Board should implement high standards for siting and permitting dual-use projects in Agricultural Development Areas ("ADAs"), for instance, using the European Union ("EU") crop production standard of 65-70% of the baseline crop production as a guide.

**Response:** Staff concurs that establishing higher standards for dual-use projects in ADAs may be worthy of consideration, but notes that this is an area to research in the Pilot Program, pursuant to the Act, to better understand what the provisions will need to be for a permanent program. Staff refers the commenter to Staff's responses on comments under the section for *Research and Monitoring*.

### **Enforcement**

**Comment(s):** AFT and Lightstar commented that the rules should allow for "force majeure" to be exceptions to non-compliance provisions. AFT requested clarification on such exceptions.

**Response:** Staff agrees with commenters that force majeure, such as crop loss due to drought or severe weather, should be considered by the Board, in consultation with the NJDA, as an exception to the enforcement provisions of future rules.

**Comment(s):** AFT commented that periodic verification and field visits of farming practices are needed for an effective financial incentive and that such verification should be performed by government/overseeing authorities. AFT commented the rules should include provisions for auditing compliance, and if needed, enforceable financial mechanisms for noncompliance. BlueWave requested more information on periodic site visits and annual reports and cautioned against confusing a project's research results with evidence of continued agricultural or horticultural use, which may put its financial incentive at risk.

**Response:** Staff thanks AFT for its support of periodic site visits to verify compliance with the program requirements and states that these visits would be conducted by "program staff" from State Agencies. Staff envisions that periodic site visits may be conducted at any time and would be scheduled in advance. Staff anticipates that more information would be forthcoming in the form of additional guidance and resources for implementing the Pilot Program Rules.

In addition to periodic site visits, Staff recommended the submission of an annual report which could entail updates on the status of a project's progress and cover key program elements from its COMPR, which would establish the terms and conditions for maintaining eligibility for a financial incentive. Staff understands BlueWave's concern regarding confusion between research results and evidence of continued agricultural use and does not intend to recommend that the Board penalize a project for poor research results. The Pilot Program incorporates research to determine the feasibility of agrivoltaics, and so all results (negative included) support that goal. However, Staff notes that to maintain eligibility for the financial incentive, adherence to applicable research commitments made in the COMPR would be required. For instance, not collecting any data or conducting any monitoring as outlined in the COMPR would be defined as a type of non-compliance.

**Comment(s):** BlueWave requested clarification on whether the requirement of active, continued agricultural or horticultural use is the enforcement mechanism or is the “objective criteria” that determine(s) compliance and delivery of an incentive.

**Response:** As explained in the Straw Proposal, the Act allows the Secretary of Agriculture to “request that the board suspend or revoke an approval issued pursuant to this section for a violation of any term or condition of the approval or any provision of this section.”<sup>4</sup> The Act also mandated that the land be maintained in active agricultural or horticultural use.<sup>5</sup> Staff views the requirement as a primary enforcement provision but discussed other proposed requirements in the Straw Proposal. The COMPR would include the various terms and conditions that required to maintain for an incentive.

**Comment(s):** BlueWave requested clarification on the implementation process for remediation, such as an outline describing a “standardized opportunity” to return to compliance after notification within a specified number of business days. The commenter also suggested that Staff consider a pre-emptive notice process allowing the owner/operator to provide notice that agricultural activities are not proceeding as expected, which the commenter thinks could provide flexibility in cure period duration.

**Response:** Staff recommends that a pilot participant be notified of non-compliance with a term or condition of approval of a dual-use project by written notice and that the written notice include a description of the violation or conditions that require remediation and instructions for submitting a remedial action plan, for which Staff recommends a timeframe of thirty (30) calendar days. Staff also recommends that the COMPR be required to be updated within thirty (30) days of the Staff’s approval of the remedial action plan. Staff understands that the timeframe by which an issue will be resolved is dependent upon the COMPR terms and its myriad interrelated factors. Thus, Staff recommends the Board remain flexible in its rules pertaining to the timeframe required to demonstrate returning to compliance and use a range for each COMPR element rather than a precise number of days. Staff anticipates that the COMPR would include proactive potential remediation procedures, including timeframes, or “remedial action plans,” for at least some potential problems with a project. COMPRs can be amended to reflect unanticipated changes in the crop plan based on experience gained in prior plantings.

**Comment(s):** BlueWave expressed concerns about withholding incentives, such as level of risk to financiers, and commented that more clarification is needed for program compliance and maintenance. BlueWave further commented that revocation of and paying back an incentive in addition to decommissioning and remediation are extreme measures and that the threat of losing an incentive is a sufficient penalty to ensure compliance.

**Response:** As described in the Straw Proposal, the proposed enforcement provisions are not intended to penalize good faith efforts to install and operate dual-use facilities. Rather, the enforcement provisions are aimed at preventing the receipt of Dual-Use Program revenues for solar on farmland that is no longer in active agricultural or horticultural use and preventing loss of useful research knowledge.

### **Application Process and Project Selection – General**

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<sup>4</sup> N.J.S.A. 48:3-87.13(d) (emphasis added).

<sup>5</sup> N.J.S.A. 48:3-87.13(a).

*Comments submitted on specific project selection criteria are addressed separately in their respective categories outlined after this section.*

**Comment(s):** BlueWave and NJRCEV commented that applications for the Pilot Program should be reviewed on a first-come, first served basis. NJRCEV added the stipulation of incorporating stringent maturity requirements with this approach.

**Response:** The Statute clearly requires the Board to establish criteria for evaluating and scoring proposed projects to determine which projects should be allowed to participate in the Pilot Program. The purpose of developing criteria for evaluating and scoring proposed projects is intended to result in a Pilot Program that meets the statutory requirements and produces useful research results to inform a permanent program.

**Comment(s):** AFT and NJRCEV commented that the application process needs to support farmer engagement and ensure applicants are actively engaging with farmers. AFT stated that farmers should have a viable business plan that takes into account multiple impacts to the farm product(s) and that developers should show how a photovoltaic array is meeting a farmer's needs.

**Response:** Staff anticipates that, consistent with the larger solar market and the Board's incentive programs that meet the needs of different market segment, a variety of ownership models will be used by applicants to develop projects. Additionally, a variety of farm tenancy models will likely exist on the land where the projects are sited. The application process will serve the need for the Board and Secretary of Agriculture to evaluate and score proposed projects. The application will require that applicants document the existing and proposed project participants, including the farmer, and the existing and proposed farm tenancy arrangements. The application will also require that the existing and proposed agricultural and horticultural use must be documented. The application information supplied for projects selected for awards will form the basis of COMPR which will be required to be kept current by the award recipient. Staff believes that the detail in the application and the COMPR obviate the need for requiring a business plan from the farmer or a detailed explanation of how the proposed facility will meet the farmer's needs for participation in the Pilot Program.

**Comment(s):** NJRCEV recommended providing an expeditious/streamlined approval process for an application to the Pilot Program for a project on non-farmed land, regardless of soil designation. The stakeholder further stated this requirement will facilitate currently unused land into agricultural use supporting economic viability.

**Response:** The Statute requires the Board to establish a Pilot Program for solar projects on unreserved farmland while maintaining the affected land in active agricultural or horticultural use. This implies that the farmland where the project is proposed was in active agricultural or horticultural use immediately prior to application. The Pilot Program is intended to produce research results that will inform the development of standards for a permanent program which will include but not be limited to provisions to protect New Jersey's prime agricultural soils, standards for installation and decommissioning techniques designed to minimize negative impacts to farmland, and provisions to ensure the continued active agricultural or horticultural use of the land. A permanent program may be judged as an appropriate tool to convert unused land into agricultural or horticultural use, but that is not the purpose of the Pilot Program. Moreover, Staff does not anticipate a lack of interest from developers with projects that are consistent with the expressed intent of the Statute.

**Comment(s):** BlueWave commented that the scoring rubric needs to be made public, specifying

non-price versus price terms, and should clarify which items are required, awarded points, or encouraged/best practices.

**Response:** Staff concurs with the comment and discussed these points in its Straw Proposal. More information about how Dual-Use Pilot Program Projects will be evaluated, including scoring, will be made public. Staff's Straw Proposal for the Pilot Program recommends a pre-qualification process which would commence with the issuance of the Notice. The Notice would specify a proposed scoring rubric for the forthcoming solicitation. The Straw Proposal further recommends a consolidation of certain criteria to facilitate an evaluation-weighting scheme that is logical and effective, as recommended to the Board in this Order.

**Comment(s):** NJRCEV commented that the Board should consider an automatic approval or waiver process for dual-use projects on non-farmed land/farmland currently not in use, regardless of soil classification.

**Response:** The Statute does not contemplate projects on non-farmed land/farmland currently not in use, regardless of soil classification, as candidates for the Pilot Program; it speaks of incentivizing solar facilities on unpreserved farmland "while maintaining the affected land in active agricultural or horticultural use." N.J.S.A. 48:3-87.13(a). If the commenter wishes to develop solar on these types of land, they are free to pursue eligibility for their projects in the ADI or CSI Programs.

**Comment(s):** AFT recommended that the Pilot Program should favor flexible designs and cover the costs of research and demonstration projects to determine the economic feasibility of agrivoltaics depending upon the crop type, climate, solar array size, and farmer interest.

**Response:** Staff agrees with the comment and anticipates that the proposed framework for the Pilot Program will result in meaningful research results useful in informing a permanent program. Research costs and additional installation/operation costs for dual-use projects are anticipated to be counterbalanced by the dual-use incentive or "adder" assigned to each project. It will be the responsibility of the farmer/project developer to quantify these costs during the application process.

**Comment(s):** Sun'Agri stated that a key criterion in project selection and development of standards should be the impact of agrivoltaics on agricultural operations.

**Response:** Staff agrees with the comment and anticipates that the proposed framework for the Pilot Program will result in meaningful research results on the impact of agrivoltaics, useful in informing a permanent program.

### **Requirement that Lands Remain in Active Agricultural or Horticultural Use**

*Staff question one (1) for stakeholders: What additional pre-solar conditions of the farm parcel proposed for a solar array should be documented?*

*Staff question two (2) for stakeholders: What additional information should be collected to enable an evaluation of solar construction and operational impacts on the land beneath and adjacent to the solar array?*

**Comment(s):** AFT commented that the Pilot Program should focus on keeping land in farming and recommended the Board consider the risk of land used for a project to be converted to non-

agricultural use.

**Response:** The Statute provides a comprehensive set of criteria to determine the impact of solar on farmland and the ability to continue farming land below and adjacent to the solar panels. The unstated purpose behind the Pilot Program is to keep land in farming and for this land to contribute to the State's aggressive goals for increasing the contribution of solar energy to the State's electricity mix. Thus, preventing conversion of farmland to other uses is implicit in the Statute and Pilot Program. While laudable, adding such prevention as an explicit goal is outside the scope of the Pilot Program and adds a degree of complexity to project selection and evaluation not contemplated by the Statute.

**Comment(s):** BlueWave, H&Y, and CCSA/SEIA/NJSEC/VS supported using farmland tax assessment status as a standard and an approach for determining a baseline indicator of a property's agricultural or horticultural use. BlueWave also opposed basing prequalification on past productivity metrics.

**Response:** Staff appreciates the commenters' support for the Straw Proposal's proposed use of a property's farmland tax assessment as a tool to determine a project's eligibility for a program incentive. The Straw Proposal does not propose that to use a farm's past productivity level as a test for incentive eligibility.

**Comment(s):** H&Y commented that it agreed with a standardized method for assessing pre-solar conditions and monitoring soil conditions both pre- and post-installation of a solar facility, but stated that monitoring costs need to be considered; there should be a clear reason for data collection to avoid excessive costs to ratepayers. CCSA/SEIA/NJSEC/VS also supported monitoring and recommended requiring applicants to submit information on previous agricultural yield for a better understanding of the economic impact of the project, in addition to documentation of applicable easement terms and maps if there are any conservation or land preservation easements.

**Response:** The Pilot Program is intended to provide results about the impacts of solar construction and operation on farmland. An understanding of the impacts of construction and operation cannot be made without documentation of a baseline condition of the property prior to construction as well as continued monitoring after the dual-use project is back in farming operation. Staff understands that the cost of collecting this data may make smaller projects relatively uneconomic. Prospective pilot participants that find the costs of data collection uneconomic may wish to wait for the permanent program which will not require the same data collection level or to pursue the ADI or CSI Programs without the associated incentive for participation in the dual-use pilot. Staff continues to recommend for the Pilot Program that RAP conduct pre- and post-construction soils evaluation for the projects selected to move forward and that the applicant pay for the laboratory costs of soil samples. The data required to be submitted with an application package will be communicated with the application following the conclusion of a pre-qualification process.

**Comment(s):** BlueWave and AFT commented on the need to be flexible and allow for crop adaptability to stay in active use. BlueWave further commented that if an applicant could show farmland assessment for the three most recent years, it should not be required to continue the same agricultural or horticultural use.

**Response:** Staff acknowledges the need for flexibility in both the design of a dual-use project and in the need to accommodate changes in proposed crop production as a result of crop



responses to the installation, operation of solar equipment, and market conditions. The Straw Proposal did not propose a need to continue the production of exactly the same agricultural and horticultural products pre- and post-solar installation.

**Comment(s):** RIC recommended requiring applicants to submit information on the land's previous production and on its pre- and post-construction product yields; however, the commenter recommending removing the requirement that the land have been in agricultural use for the three previous years, arguing that which would allow for research and data collection on previously dormant land to inform best practice, diverse types of projects, and a variety of pre-construction land uses. Lightstar commented that it supports Staff's proposal for pre-solar conditions; however, it also disagrees with requiring three previous years of agricultural use, which it stated could disable first generation farmers and result in missed opportunities for historic farmland and prime soils to be re-utilized.

**Response:** The Pilot Program is intended for dual-use solar energy projects on land that was actively devoted to agricultural or horticultural use and will continue to be actively devoted to such use. Staff view the proposal to require documentation of three (3) years of participation in the State's farmland assessment program as a reasonable means to demonstrate prior active agricultural or horticultural use. The Pilot Program is also intended to produce research results to inform a permanent program.

**Comment(s):** BlueWave requested to clarify the meaning of "land below and adjacent to the solar panels" as a metric to measure continued agricultural or horticultural use, to which it added that the definition would influence design considerations.

**Response:** The Act provides a definition of "Dual-use solar energy project" that means the energy generation facilities, structures, and equipment for the production of electric power from solar photovoltaic panels located on unreserved farmland in agricultural or horticultural production that ensures the continued simultaneous use of the land below and adjacent to the panels for agricultural or horticultural production. Staff acknowledges that most solar designs will reduce the area that can be effectively farmed using traditional cultural practices and equipment. In addition, Staff recognizes the need to define the area considered adjacent to solar facilities, structures and equipment for the purposes of measuring impacts to continued agricultural or horticultural use. However, the Pilot Program may benefit from employing a flexible definition that is case, crop and design-specific since the extent of impact from the solar installation on productivity will vary based on these details, and the information gained can then inform the permanent program.

**Comment(s):** Sun'Agri commented that pre-solar conditions will vary based on the types of crops, having detailed farm plans, and the researchers involved. The commenter added that all projects should include research goals, not just those on ADAs.

**Response:** The Act requires that the Pilot Program have established criteria for evaluating and scoring proposed projects to determine program participation. The Straw Proposal provides several criteria that require applicants to be judged on the quality of proposals to conduct research and to monitor various impacts from the projects. Staff proposed that each application commit to providing a report on pre-construction soil quality consistent with the requirements developed with stakeholder input for the CSI Program. Staff also proposed two levels of data collection requirements for projects depending on whether the project is or is not located on prime soils or soils of Statewide importance within an Agricultural Development Area. The Board has engaged RAP to provide advice on developing these program requirements as well as to conduct program

research which will include all participating projects.

**Comment(s):** Several commenters stated concerns with the size of a research control area of 50% or ratio of 1:1, including potential project feasibility, viability, and economical/financial challenges. Forefront Power, Lightstar, and CCSA/SEIA/NJSEC/VS recommended a smaller sized area such as 10%. CCSA/SEIA/NJSEC/VS commented that higher percentages could be scored higher. H&Y recommended considering a fixed size control area as opposed to a specific percentage of the solar array. BlueWave recommended conducting research within the entire field containing the solar array.

**Response:** The Board refers the commenters to the responses on comments under the section for *Research and Monitoring*.

### **Incentives and Project Costs**

*Staff question three (3a) for stakeholders: Which of the alternative approaches to awarding an incentive to a dual-use solar energy project eligible for the CSI Program provide the most competitive, efficient and effective outcome at the least cost to ratepayers?*

**Comment(s):** NJRCEV, AFT, CS Energy, Rate Counsel, Lightstar, and H&Y supported a simple incentive process. NJRCEV supported a fixed incentive approach, such as through the ADI Program, which it noted would provide farmers with stability and predictability in both process and revenue. AFT and CS Energy recommended a standardized incentive structure, with AFT recommending a “verifiable performance standard” as opposed to a project-specific adder. Rate Counsel recommended a single solicitation for the CSI Program, while Lightstar stated that the CSI Program is the wrong avenue to evaluate dual-use projects and cautioned against having applicants submit their own incentive levels, with the exception of Program Year 1 if the Board so desired. Along the same lines, H&Y stated the CSI Program has changes that need to be resolved that would make the process more complex and recommended a new dual-use adder in the ADI Program, specifically under the canopy category. CS Energy stated that dual-use projects in the CSI Program would be the most expensive, given the low value of wholesale energy and capacity revenues.

**Response:** The range of comments provided illustrates the variation of potential approaches to incentivizing projects participating in the Pilot Program. The Act requires the Board to establish “financial incentives available to dual-use solar energy projects approved pursuant to the pilot program.”<sup>6</sup> One of the criteria that the Board is to consider in evaluating and scoring applications is the incentive level sought by the applicant. Results from the Pilot Program are intended to inform a permanent program which is to become a “part of the permanent successor to the solar incentive program established pursuant to” the Solar Act.<sup>7</sup> The Straw Proposal recommends an approach that relies directly on the existing ADI and CSI Programs which constitute the SuSI Program that implements the Solar Act. An adder is proposed to account for the incremental, additional costs that may be borne by program participants. There is little existing basis on which to forecast what these incremental costs will be. However, these pilot program specific-costs are anticipated to be variable between projects and not simply proportional to the solar capacity of the installation. The pilot-specific costs will result from the proposed design of the solar installation, which may vary based on proposed height and associated increased mounting costs,

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<sup>6</sup> N.J.S.A. 48:3-87.13(b)(3).

<sup>7</sup> N.J.S.A. 48:3-87.13(g).

the existence of trackers or other unique balance of system equipment, and result from the need for project specific data collection, research, and monitoring costs. A one size fits all, standardized incentive amount is anticipated to be either unnecessarily expensive, thus increasing the cost to ratepayers, or too low to entice potential Pilot Program participants.

**Comment(s):** CS Energy further commented that Staff's proposal of using the ADI and CSI Programs generates "significant uncertainty" for developers, does not encourage applications for dual-use incentives, presents logistical and timing challenges in terms of getting approved for one process but not the other, and does not provide a fair comparison when evaluating and selecting dual-use applications. With respect to the PJM queue, the commenter stated that the PJM reform process will not likely permit any dual-use projects to participate in the CSI Program, while those that have been grandfathered into the previous PJM queue process will likely proceed in the CSI Program without pursuing participation in a dual-use program.

**Response:** Results from the Pilot Program are intended to inform a permanent program which is to become a "part of the permanent successor to the solar incentive program established pursuant to" the Solar Act.<sup>8</sup> The Straw Proposal recommends an approach that relies directly on the existing ADI and CSI Programs which constitute the SuSI Program that implements the Solar Act. The current proposal to use ADI and CSI incentive levels as a base incentive level and an added incentive that is proportional to incremental costs reflects the statutory requirement to evaluate and score dual-use applications based on criteria which include the incentive level sought by the applicant. To the extent this approach "introduces uncertainty" for developers, such uncertainty is the unavoidable corollary of the attempt to accurately capture the variable costs of the Dual-Use Pilot Program Projects.

**Comment(s):** CCSA/SEIA/NJSEC/VS supported using the existing SuSI Programs and SREC-11s with the recommendation to have the Board set a fixed incentive level to cover the higher costs of a dual-use project. The commenters further recommended that the Board, or an outside firm, analyze costs to better estimate the adder, which would then be released to stakeholders for comment prior to issuing rules for the Pilot Program. Concurrently, the commenters provided an alternative recommendation to score projects higher if an adder is not requested.

**Response:** The establishment of a fixed incentive level for all approved projects is not consistent with the requirement for an application process that requires evaluation and scoring of applicants based on criteria such as the incentive level requested by the applicant. Such a proposal would also ignore the pilot nature of the program which is intended to serve a diversity of project sizes and agricultural and horticultural production types. The incremental costs of this diversity of projects are anticipated to vary widely based upon the characteristics of the array design proposed to accommodate various agricultural and horticultural practices.

**Comment(s):** CCSA/SEIA/NJSEC/VS commented that incentives need to be allowed to be layered for a solar project to be financially viable, meaning combining ADI or CSI Program incentive revenues with "offtake revenues," such as from behind-the-meter, wholesale, or community solar, and noted this approach is particularly important for dual-use projects since the on-site load for a farm will be minimal.

**Response:** Staff does not disagree, but believes its recommendation is consistent with the

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<sup>8</sup> Ibid.

statutory requirement for the Pilot Program to inform a permanent program which is to become a “part of the permanent successor to the solar incentive program established pursuant to” the Solar Act.<sup>9</sup>

**Comment(s):** CCSA/SEIA/NJSEC/VS, Lightstar, Forefront Power, BlueWave and CS Energy recommended allowing dual-use projects into the CSEP. Forefront Power and CS Energy recommended allowing project sizes up to ten (10) MW in the CSEP, with CS Energy in support of a separate tranche for dual-use projects.

**Response:** The CSEP does not allow projects proposed on open space or farmland. The Legislature has capped community solar projects at five (5) MW.

**Comment(s):** AFT recommended “pass-through incentives” for farmers to enable incentive sharing, so that an adder incentive does not get issued solely go to the developer for capital expenses, but it is available for costs pertaining to research and other additional costs specific to a dual-use project.

**Response:** Staff does not anticipate the Board will mandate the terms of individual dual-use project arrangements between solar developers and farmers; these should be negotiated up front between the parties when proposing a project and requesting an adder that provides for the combined cost needs over the life of the project. Staff continues to recommend that the same incentive payment apparatus established for the ADI and CSI Programs be used for the payment of the base and that additional costs specific to the Pilot Program be captured through an adder as approved for each project in the Pilot Program.

**Comment(s):** AFT recommended allowing incentives to cover the purchase or lease of farm equipment or farm infrastructure if these resources are not currently available or owned by the farmer. Sun’Agri recommended that incentives should be offered based on design and operational plans, in addition to the consideration of additional capital expenses for racking, sensors, controls, software; and incremental reduction in solar power production, i.e., “Agricultural Production Offset – APO”. NJFB supported the need for an adder and recommended that adders cover new equipment in addition to materials needed for project design specifications.

**Response:** It will be the responsibility of each applicant to identify the SuSI Program, including the associated market segment, within which the project will seek eligibility for a base incentive and to propose an incentive adder if necessary. The base and incentive adder must be expressed on a dollar per megawatt-hour basis that will be paid over the fifteen (15)-year qualification life of the project. The incentive adder request will require an itemization of the elements of incremental costs it is proposed to cover. Staff does not intend to define what costs may be covered but does anticipate that the incentive requested and the proposed incremental costs to be covered will be a key determinant in project evaluation and scoring. These should be scaled to ensure continued agricultural or horticultural use of the land during the same time period.

**Comment(s):** Rate Counsel commented that it supports the Act’s requirements to score projects and use competitive market mechanisms to guide financial incentives, which it believes will minimize the costs of a program that entails research.

**Response:** Staff agrees with the commenter.

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<sup>9</sup> Ibid.

**Comment(s):** Rate Counsel recommended that Staff estimate all potential direct and indirect costs. The commenter cautioned against over incentivizing, stating that agrivoltaics provide self-generating electricity and potentially increased crop yields.

**Response:** Staff anticipates written guidance will be issued on the development of an adder incentive request and cost itemization. The value of any potential increase in crop yield is likely to be dwarfed by the value of the electricity produced.

**Comment(s):** Rate Counsel commented that it supports a cap on individual incentives and that the Board should request stakeholder input on a rate impact analysis and initial incentive cap.

**Response:** Staff does not anticipate conducting a rate impact analysis or establishing a cap on incentive levels at this time. Dual-Use solar is a new technology in the State, and the Pilot Program is intended to gather the data needed to inform a permanent program. Capping individual incentives at this time would be premature.

**Comment(s):** Rate Counsel recommended that all agrivoltaic projects currently affiliated with state or federal governmental or educational institutions be counted toward the total capacity limit for the Pilot Program.

**Response:** The proposal for the Pilot Program and the associated opportunity for an additional incentive is limited to new projects that participate in the ADI or CSI Programs. Only projects approved by the Board for participation in the program will reserve capacity from the initial 200 MW allocation. However, lessons learned from any agrivoltaic project affiliated with State or federal governmental or educational institutions that produce “research studies on the efficacy of dual-use solar energy in New Jersey” will be incorporated into the evaluation of the Pilot Program for purposes of informing a permanent program as contemplated in the Statute.<sup>10</sup>

**Comment(s):** Rate Counsel recommended incorporating best practices into the competitive solicitation processes and permitting stakeholder feedback on the solicitation process as it is being developed and finalized. Specifically, the commenter recommended that Staff review and evaluate best practices for successful competitive solicitations from those in and out of New Jersey.

**Response:** Staff anticipates following the solicitation practices employed by the New Jersey Department of Treasury, including the establishment of a solicitation committee and scoring rubric prior to the review of applications. Staff further anticipates that CSI Program Staff will share any lessons learned from the CSI solicitations with the Pilot Program Staff, State Agencies, and RAP who will be participating in the evaluation of the Pilot Program.

**Comment(s):** For maximum participation and competition, Rate Counsel recommended that the Board hire a professional advertising and public relations firm to deliver a strong outreach and education campaign. The commenter further recommended outsourcing the solicitation process to a third-party administrator to limit oversight of Staff to administrative topics and improve the appearance of level-playing field to eliminate potential complaints.

**Response:** Staff disagrees with Rate Counsel’s recommendation to hire firms to advertise,

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<sup>10</sup> N.J.S.A. 48:3-87.13(g).

conduct outreach or administer the solicitation process at this time. First, the Board has engaged RAP, as an impartial state university and extension farm group, to assist with development of the Pilot Program, including engagement with the diverse stakeholder community across the State, and to play an advisory role in the review of project applications, as well as other related activities. Second, the Board has existing contracts with other organizations to assist with outreach and marketing for New Jersey's Clean Energy Program. Third, Staff recommends that an evaluation of the effectiveness and efficiency of the First Solicitation using existing resources be performed in making future decisions about outsourcing any additional tasks for the Pilot Program.

**Comment(s):** Rate Counsel recommended a 50% weight to the incentive criterion with the lowest amount requested receiving the highest score.

**Response:** Staff appreciates Rate Counsel's recommendation, but notes that at least twelve (12) other criteria, in addition to cost, are required by Statute to be considered. Many factors will be considered in determining the merits of an application, in addition to the adder requested.

### **Interconnection/Distribution System**

*Staff question three (3b) for stakeholders: In addition to scoring an application based on its status in the interconnection process, should a minimum level of project maturity within the interconnection planning process be required of an applicant?*

*Staff question four (4) for stakeholders: What stage should a project have achieved in the PJM interconnection queue or in the NJ Electric Distribution Company ("EDC") interconnection application process to be considered eligible to apply in the Pilot Program?*

**Comment(s):** Industry Group, Lightstar, Forefront Power, NJFB, and CCSA/SEIA/NJSEC/VS commented that the EDCs are not processing interconnection applications for dual-use projects and requested that the Board direct EDCs to do so. H&Y commented the Board should consider having the EDCs expedite their reviews for interconnecting dual-use projects, Lightstar emphasized the need for processing applications to prepare for a Pilot Program in 2024, and NJFB and Industry Group commented that dual-use projects should be allowed to be studied for interconnection feasibility.

**Response:** Staff recommends the Board direct EDCs to process interconnection applications for potential Dual-Use Pilot Program Projects in the order in which they are received. The pre-application process proposed by Staff prior to EDC approval is intended to reduce the EDCs' workload and focus on projects more likely to meet the goals of the Pilot Program.

**Comment(s):** Industry Group recommended requiring applicants to provide information about costs and feasibility with an application.

**Response:** Staff agrees and has proposed that applicants be required to provide information about costs and feasibility with an application to participate in the Pilot Program.

**Comment(s):** Rate Counsel recommended applicants be required to provide official confirmation that the interconnection application has been accepted for review. In Rate Counsel's opinion, the periodic competitive solicitation process would benefit from increased participation, which it asserts would equate to reduced costs.

**Response:** Based on Staff's recommendation that dual-use projects in the Pilot Program would

be subject to the requirements of either the ADI or CSI Program, the Board's registration requirements for the relevant sub-program within the SuSI Program would apply. See N.J.A.C. 14:8-11.5. Generally, the minimum level of interconnection maturity required by the rules depends on the specific program and on the size of the project and Staff does not recommend changing the existing requirements with the establishment of the Pilot Program rules. Staff concurs that competition helps keep costs low but also seeks to avoid overloading the EDCs with unapproved projects seeking interconnection approvals. To that end, Staff continues to recommend a two-stage approach for reviewing interconnection feasibility for the Pilot Program, whereby hosting maps would be reviewed during pre-qualification and a score for interconnection maturity would be assigned during the full application selection and approval process.

**Comment(s):** In general, Lightstar recommended awarding more points or weight to projects that are more mature and commented on the need for more details on interconnection requirements in connection with its comments on the timeline projections for dual-use projects.

**Response:** Staff acknowledges the commenter's recommendation for additional criteria to be included with a potential application evaluation and weighting scheme. The question in the Straw Proposal had asked whether a minimum degree of project maturity should be required as a means to reserve weight in the evaluation process for the myriad of other criteria required by the Statute to be considered. A project's maturity, including progress toward interconnection approval, will be considered in judging an applicant's technical feasibility.

**Comment(s):** Sun'Agri stated that it had concerns with traditional solar projects using a program for agrivoltaics to get around interconnection approval issues. In addition, Sun'Agri commented that the minimum level of project maturity will depend upon the size of a project but stated that the hosting capacity maps would likely be adequate for smaller, net-metered projects.

**Response:** Staff does not anticipate that the EDCs or PJM will treat the interconnection approval process any differently for dual-use projects than for traditional solar projects. Additionally, Staff does not anticipate that project maturity will be a function of project size but rather that the cost and ability of a project to interconnect may be a function of size. Staff agrees that the hosting capacity maps will be an important tool for developers and farmers interested in participating in the Pilot Program but does not believe that they will be sufficient on their own for a determination on maturity.

**Comment(s):** Forefront Power commented that hosting utility maps do not provide the full details of interconnection capacity and recommended that the Pilot Program allow ample time for utilities to process applications and provide studies.

**Response:** Staff agrees that the host capacity maps are insufficient to make a complete judgement on the feasibility or cost to interconnect an individual project but notes that they are necessary as a first step in evaluating the potential time and cost requirements to interconnect a project. Distribution circuits that are fully saturated with existing interconnected project capacity or that have limited interconnection capacity available will not be strong candidates for siting a project intended to participate in Program Year 1.

**Comment(s):** CS Energy commented that interconnection requirements should be the same requirements as the program for the baseline incentive level, i.e., ADI or CSI.

**Response:** Staff agrees with the commenter.

**Comment(s):** H&Y and CCSA/SEIA/NJSEC/VS recommended against requiring a minimum level of maturity for interconnection. H&Y commented that interconnection maturity could be considered as part of project evaluation and that “[a]dding dual-use projects that might not be approved for the Pilot Program would only add to the existing...” congestion in interconnection queues with PJM and the EDCs. CCSA/SEIA/NJSEC/VS further recommended that applicants only be required to provide evidence of having applied for interconnection and to address project maturity after a project has been approved. CCSA/SEIA/NJSEC/VS and NJFB added that cost and feasibility information be supplied as part of an application, with CCSA/SEIA/NJSEC/VS specifying that this information should be supplied after a feasibility study has been completed by a utility or regional transmission organization (“RTO”).

**Response:** Staff agrees that a project’s maturity, including progress toward interconnection approval, should be considered in judging an application’s technical feasibility. The cost and feasibility of a project’s interconnection will not be revisited after an application has been submitted, scored and evaluated as part of a solicitation. Potential applicants without a clear understanding of costs and feasibility of the entire project should refrain from applying to a solicitation until they have secured this information and are prepared to bid a binding SREC-II incentive amount.

**Comment(s):** RIC recommended a minimum requirement of an executed interconnection agreement in response to both questions, specifying that doing so would support viable projects. With respect to question four (4), RIC, Forefront Power, H&Y, CCSA/SEIA/NJSEC/VS, and Sun’Agri commented that any stage of interconnection applicability can and should be used. RIC and CCSA/SEIA/NJSEC/VS further specified this information be scored accordingly, with RIC specifying that the baseline minimum requirement should be the executed agreement. Lightstar commented that projects greater than one (1) MW could be required to have an executed interconnection study to enter the Pilot Program, similar to the requirement for CSEP. Lightstar added that a signed interconnection agreement should receive the highest points, with the next highest points given for a viable interconnection study. CCSA/SEIA/NJSEC/VS added that parallel applications for both interconnection and the Pilot Program be allowed.

**Response:** Staff agrees that each applicant should demonstrate the level of maturity required of a project participating in either the ADI or CSI as appropriate and a project’s maturity including progress toward interconnection approval should be considered in judging an application’s technical feasibility. Staff is not recommending a specific minimum level of maturity.

### **Minimizing the Negative Impacts to Farmland**

*Staff question five (5) for stakeholders: What additional information pertaining to techniques for minimizing the negative impacts to farmland would be useful for including in the Pilot Program for the purposes of informing a future, permanent dual-use program design?*

**Comment(s):** Sun’Agri offered to meet with BPU and others to describe their techniques in more detail. The commenter is concerned with the project’s success being tied to minimizing negative impacts to farmland and suggests objective criteria that gauge the positive effects from a solar system on agriculture are needed to show a net positive effect on farming.

**Response:** Staff does not envision any additional stakeholder meetings prior to the issuance of the Board Order and accompanying rule proposal for the Pilot Program. If the Board approves Staff’s recommendations for a pre-qualification process, and if the commenter is part of an application/dual-use project under the Pilot Program, then the commenter would be able to



provide additional information as part of those processes. Staff anticipates that a considerable amount of weight will be placed on protecting farmland, which is the responsibility and duty of the State and the purpose of the Act. As part of its strategy to implement the statute, Staff has recommended establishing the baseline conditions of the land/property before a project is constructed and installed as described in the Straw Proposal.

**Comment(s):** BlueWave urged Staff to outline clear criteria for applicants, clarifying what elements are required in all projects and which are used for scoring evaluation.

**Response:** The Dual-Use Act requires the Board to establish requirements in consultation with NJDA. Thus, the Board's rules and orders, with which a Dual-Use Pilot Program Project will be required to comply, will establish clarity on required elements and on scoring criteria. The Pilot Program is intended to support a diversity of projects, which argues against having narrowly defined specifications for all projects. Staff anticipates that the State's goals are best served by gathering data from the widest range of projects possible within the limits established by the Statute. Staff refers the commenter to Staff's responses on comments under the section for *Application Process and Project Selection – General*.

**Comment(s):** Lightstar commented that Staff's proposed framework is sufficient and asks Staff to provide developers with as much detail as possible on the requirements early on in the process.

**Response:** Staff thanks the commenter for its support. A public version of an application will be made available on the Board's website and on the NJ Clean Energy website, in addition to specific information such as application requirements and forms, evaluation criteria, and assorted dual-use related educational resources.

**Comment(s):** H&Y commented that the siting restrictions in the Straw Proposal suffice and that any additional restrictions should be developed on the basis of data from the Pilot Program. CCSA/SEIA/NJSEC/VS also commented that no additional provisions beyond those in the Straw Proposal or the Act are needed at this time, and it would be premature to develop more. CCSA/SEIA/NJSEC/VS also commented that special use or conditional use permits are not needed.

**Response:** Per Staff's recommendations in the Straw Proposal, Staff continues to recommend a strategy that monitors the quality of the farmland while providing research results to inform a Permanent Program. Staff recognizes the need to balance the number of requirements to enable an efficient and effective Pilot Program. For CCSA/SEIA/NJSEC/VS's recommendation regarding permitting, Staff refers the commenters to Staff's responses under the section for *Siting and Permitting*.

**Comment(s):** SolAg commented that while including conservation plans would be ideal, requiring a certified Natural Resources Conservation Plan would not be worthwhile due to "the agency's" limited resources given other programs. The commenter suggested considering ranking projects higher for integrating "regenerative soil building practices" into their plan.

**Response:** Staff's recommendations pertaining to conservation plans did not entail a certification from NRCS. The Straw Proposal discussed how certain elements from these plans could be helpful in meeting the criterion for minimizing negative impacts to farmland but recommended a less onerous approach in a proposal for the Pilot Program. Staff also recommends that guidance on soil conservation from the NRCS could be useful to integrate into an application to the Pilot Program.

## **Decommissioning**

*Staff question six (6) for stakeholders: What additional information pertaining to techniques for addressing decommissioning would be useful in the Pilot Program for the purposes of informing a future, permanent dual-use program design?*

**Comment(s):** H&Y recommended continuing to follow standard decommissioning and established restoration best practices.

**Response:** Staff thanks the commenter for their feedback. Staff continues to recommend its proposed approach outlined in the Straw Proposal for requiring an application to include a plan that addresses construction requirements on covered agricultural lands adopted by the Board pursuant to the CSI Siting Rules at N.J.A.C. 14:8-12.8(g). Staff anticipates technical resources will accompany the Pilot Program that further provide guidance and best practices on decommissioning.

**Comment(s):** RIC recommended requiring decommissioning plans but not additional information on techniques. The commenter further proposed allowing flexibility in decommissioning proposals, given anticipated changes in guidelines over time.

**Response:** The Act requires a Pilot Program for the purposes of gathering information to inform a Permanent Program. The Act further mandates that the application criteria include decommissioning proposals and Staff recommends establishing a minimum, baseline level of consistency for all Dual-Use Pilot Program Projects. Staff concurs with the commenter that flexibility is necessary for evaluating dual-use project proposals but believes that the CSI Program has established a precedent for the type of information that could and should be covered in a decommissioning proposal.

**Comment(s):** Lightstar commented that the proposed techniques are robust, emphasizing that they must protect topsoil to allow continued farming post-decommissioning.

**Response:** Staff concurs with the commenter that protecting the topsoil is a priority. Given the objectives of the Act to minimize negative impacts to farmland and to ensure active, continued use of the farmland, Staff intends to continue to work closely with the State Agencies and RAP to continuously evaluate if and how additional requirements and/or guidance on best practices will be needed throughout the Pilot Program.

**Comment(s):** CCSA/SEIA/NJSEC/VS commented that a bond or financial surety should be provided by developers to "localities" to cover the associated costs of decommissioning and returning the site to conditions prior to being developed with solar. BlueWave also supported the requirement to post a performance bond for decommissioning. CCSA/SEIA/NJSEC/VS further stated that the utilities should be responsible for decommissioning responsibilities associated with equipment they own.

**Response:** The Act does not specify decommissioning standards for a Pilot Program but contemplates having standards established for a Permanent Program, which may include the posting of a performance bond. Staff agrees with requiring that financial responsibilities be outlined for decommissioning proposals as part of the application. However, Staff recommends best practices that encompass the inclusion of a financial plan to address decommissioning; Staff anticipates that inclusion of such a plan will enable the collection of sufficient information during

the Pilot Program for establishing standards for the Permanent Program.

**Comment(s):** BlueWave asks for clarification of the weight of this criterion in the application scoring.

**Response:** Staff's Straw Proposal for the Pilot Program recommends a pre-qualification process which would commence with the issuance of a Notice. The Notice would specify a proposed scoring rubric for the forthcoming solicitation. Staff also refers the commenter to Staff's responses on comments under the section for *Application Process and Project Selection – General*.

**Comment(s):** Forefront Power proposed defining in the rules that dual-use projects do not require a special use or conditional use permit.

**Response:** Staff refers the commenter to Staff's responses on comments under the section for *Siting and Permitting*.

### **Stormwater Runoff and Other Environmental Issues**

*Staff question seven (7) for stakeholders: What additional information pertaining to techniques for managing stormwater impacts from impervious coverage and optimizing water management would be useful for considering in the Pilot Program for the purposes of informing a future, permanent dual-use program design? Is there a certain panel density below which we can anticipate minimal environmental impact, including but not limited to those from stormwater runoff?*

**Comment(s):** Sun'Agri offered to meet with BPU and others to describe their techniques in more detail and could provide this information to others working on projects in New Jersey.

**Response:** Staff refers the commenter to Staff's responses on comments under the section for *Minimizing the Negative Impacts to Farmland*.

**Comment(s):** CCSA/SEIA/NJSEC/VS commented that they are generally supportive of practices that support the protection of natural resources and future farming.

**Response:** Staff appreciates the commenters' perspective, which supports Staff's proposed recommendations as outlined in the Straw Proposal to accomplish both the protection of the environment and continued farming in New Jersey. Staff also refers the commenter to Staff's responses on comments under the section for *Minimizing the Negative Impacts to Farmland*.

**Comment(s):** Lightstar recommended considering the following factors for determining panel density: soil compaction, soil depth, and ground cover types. H&Y and CCSA/SEIA/NJSEC/VS do not recommend restricting or predetermining panel density. CCSA/SEIA/NJSEC/VS recommended that panel density and other factors can be evaluated under the Pilot Program for impacts to stormwater as part of the purpose of a pilot program.

**Response:** At this time, Staff does not recommend moving forward with requirements on panel density in the Pilot Program but recommends evaluating this information as part of the overarching analysis of the results of the Pilot Program to determine if panel density requirements are needed for a permanent program.

**Comment(s):** H&Y, CCSA/SEIA/NJSEC/VS, BlueWave and Lightstar commented that the

existing regulations are sufficient. Lightstar specifically cautioned against implementing additional stormwater runoff requirements, noting that existing best practices for stormwater runoff in New Jersey require no additional runoff at the site compared to pre-construction conditions and solar developers are typically expected to follow these best practices.

**Response:** Staff agrees with commenters that no new requirements pertaining to stormwater management, soil erosion, or sediment control are needed for the Pilot Program. Staff continues to recommend the approach in the Straw Proposal that makes a dual-use project subject to the requirements of either the ADI or CSI Program. To clarify, Staff recommends that project proposals include the following:

- A commitment to meet New Jersey's Soil Erosion and Sediment Control Act (N.J.S.A. 4:24-39 et seq.) and the implementing rules at N.J.A.C. 2:90
- A comprehensive siting plan that assesses existing drainage conditions and identifies any areas where surface runoff currently exists or where proposed grades will create surface runoff concentration, whereby all such areas would be designed to prevent onsite erosion, as well as protect offsite areas from erosion and flooding
- A commitment to meet NJDEP's Stormwater Management Rules, N.J.A.C. 7:8
- A method to protect against soil erosion from solar equipment drip lines
- A commitment to meet any applicable Soil Conservation District guidelines for stormwater runoff quantity and erosion control

**Comment(s):** In order to reduce stormwater runoff and limit environmental impacts, Lightstar stated that strategic plant selection and biodiversity strips can be used between and beneath solar panels. The commenter presumed most dual-use projects will be single-axis trackers so that the drip edge will continuously change throughout the day, dispersing water across the panels' width.

**Response:** Staff appreciates the commenter's feedback and anticipates that plant selection, biodiversity, and a project application's consideration of the impacts of the design of a solar array on stormwater runoff and the environment will be part of the scoring rubric.

**Comment(s):** AFT commented that the Board should support project research on different conservation and irrigation practices.

**Response:** Staff refers the commenter to Staff's responses on comments under the section for *Research and Monitoring*.

### **Technical Feasibility and Technical Innovation**

*Staff question eight (8) for stakeholders: What additional information pertaining to technical feasibility and technical innovation would be useful for the purposes of informing a future, permanent dual-use program design?*

**Comment(s):** Sun'Agri offered to meet with BPU and others to describe their techniques in more detail and could provide this information to others working on projects in New Jersey.

**Response:** Staff refers the commenter to Staff's responses on comments under the section for *Minimizing Impacts to Farmland*.

**Comment(s):** AFT supported Staff's recommendation in the Straw Proposal that a preferred

project would enable access to the site and provide data and documentation about the design to enable replicability and applicability to support a robust permanent dual-use program. The commenter also agreed farmers should be able to change their agricultural practices, for example by adding crop rotation.

**Response:** Staff thanks the commenter for its support and continues to support the recommendations made in the Straw Proposal.

**Comment(s):** Rate Counsel recommended adding provisions to protect ratepayers from any risk related to unproven technology in agrivoltaics. The commenter stated that it supports innovative technology but that the associated risks should be the responsibility of the developer.

**Response:** The Act enables enforcement action, in the form of suspension or revocation, against an approved project in the Pilot Program that does not meet the conditions and terms of such an approval.<sup>11</sup> Staff continues to recommend the enforcement strategy outlined in the Straw Proposal that is anticipated to protect ratepayers. In addition, the Act mandates that the rules and regulations developed for a Pilot Program include technical feasibility and technical innovation, among other criteria, for evaluating and scoring projects.<sup>12</sup> As with the development of any solar energy facility, there is inherent risk for the project not being developed due to a myriad of factors; Staff's recommendations put forth in the Straw Proposal in accordance with the Act are anticipated to guide successful projects for the Pilot Program.

**Comment(s):** RIC commented that it had concerns with scoring technical innovation: the submission of speculative projects with unproven or theoretical designs, false promises for a high score from applicants ("bad actors"), the BPU lacking the technical capability to score this category appropriately, and such scoring being a burdensome task while establishing the Pilot Program. The commenter stated that technical innovation should be a "desired outcome" rather than a criterion for scoring applications. Similarly, BlueWave did not recommend requiring additional information on technical feasibility and innovation.

**Response:** The Act mandates that the rules and regulations developed for a Pilot Program include technical feasibility and technical innovation, among other criteria, for evaluating and scoring projects.<sup>13</sup> The Straw Proposal recommends consolidation of certain criteria to facilitate an evaluation-weighting scheme that is logical and effective. To communicate the need for realistic projects, while supporting creativity, the Pilot Program considers these criteria, incorporates a pre-qualification process and also contemplates development of educational materials and resources and consultation with other State Agencies. As with the development of any solar energy facilities, there is a potential for "bad actors"; Staff's recommendations put forth in the Straw Proposal in accordance with the Act are anticipated to guide successful projects.

**Comment(s):** Lightstar cautioned against creating increased costs for dual-use projects through more customized designs and referenced Europe for standardized approaches to racking for cost efficiency. The commenter recommended the Board consider options that will be the most commercially feasible and impactful for the ratepayer; for instance, considering "off the shelf racking" that meets a potential minimum height requirement, such as the 6 ft. 10 in. requirement

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<sup>11</sup> N.J.S.A. 48:3-87.13(d).

<sup>12</sup> N.J.S.A. 48:3-87.13(b)(9) and (c)(1).

<sup>13</sup> N.J.S.A. 48:3-87.13(b)(9) and (c)(1).

for cropping systems in Italy, which Lightstar noted has similar irradiance to New Jersey. Similarly, H&Y commented that “strong experimental design” is imperative for determining additional costs and assuring “high-quality and sufficient data” are collected. The commenter further stated that transparency and clear communication are important for successful research.

**Response:** While Staff understands the commenters’ concerns, Staff believes that imposing strict design criteria and standards at the commencement of the Pilot Program defeats its purpose. As outlined in this Appendix and the Board Order, Staff is recommending the establishment of some project design criteria, research standards, and best practices to achieve a reasonable level of standardization among dual-use projects and enable sound comparisons. The comparisons among projects and their results, or the evaluation and analysis of the Pilot Program, will provide direction on what standards and requirements are needed for a permanent program. Staff concurs with H&Y that effective communication is important for the Pilot Program and reiterates Staff’s responses to comments throughout the Appendix for the development of educational materials and resources for the Pilot Program.

**Comment(s):** CCSA/SEIA/NJSEC/VS commented that cost estimates are challenging to determine and recommended publishing cost estimates in consultation with the NJDA. The commenter also recommended conducting a separate evaluation or study under a Request for Proposal (“RFP”) for the entire program and not individual projects.

**Response:** As discussed in the Straw Proposal, Staff proposed that applicants would be provided guidance on how to calculate and report their requested dual-use incentive adder. While Staff and the Board cannot predict every type of potential dual-use project design that may be submitted, Staff reiterates that educational materials will be provided to help applicants with the application process and Pilot Program.

**Comment(s):** BlueWave commented that it had concerns about the criteria used to evaluate technical innovation and again requests clarity to the application evaluation criteria and scoring. The commenter also stated that incorporating research and control areas into a project limits farmers’ flexibility to change agricultural practices after the Pilot Program has completed.

**Response:** Staff refers the commenter to Staff’s responses to comments in this section and under the section for *Application Process and Project Selection – General*. As proposed in the Straw, Staff continues to recommend flexibility for farmers to be able to substitute agricultural or horticultural uses or adapt crop rotation in response to the installation of the solar array.

### **Research and Monitoring**

*Staff question nine (9) for stakeholders: What challenges or obstacles do you foresee that could prevent a project applicant from providing research results within the timeframe of the Pilot Program?*

**Comment(s):** Sun’Agri offered to meet with BPU and others to describe their techniques in more detail and could provide this information to others working on projects in New Jersey.

**Response:** Staff refers the commenter to Staff’s responses on comments under the section *Minimizing Impacts to Farmland*.

**Comment(s):** Several commenters (AFT, CS Energy, NJRCEV, Industry Group, and NJFB) expressed concern about the proposed control area of the same size as the array area, stating

that such sizing is infeasible and needs reconsideration. AFT specifically recommended careful consideration of the pros and cons of a fixed size control area and Sun'Agri commented that control plots need to be included but do not need to be the same size as the array.

Specific recommendations for a control size area or plot were provided as follows:

- 10% control area, and extra points for having a control area (Industry Group);
- 1:2 ratio (control to field area) or sized for the type of proposed research that is not burdensome to a farmer (AFT);
- No specific size provided but consider adjacent preserved farmland, area in close proximity, minimizing restrictions, or other methods (CS Energy, Sun'Agri, NJRCEV, and NJFB respectively).

Note that several other commenters provided recommendations and feedback on the size of the control area under the section *Requirement that Lands Remain in Active Agricultural or Horticultural Use*. Staff's responses that follow here also evaluated those comments.

**Response:** Staff appreciates the commenters' thoughtful feedback on the size of a control area. In the Straw Proposal, Staff recommended a research control area identical in size to the area under and adjacent to the solar panels, i.e., no more than one-half of the crop at a project location could be covered with solar arrays. Applications using agricultural or horticultural production systems that are not normally farmed in uncovered fields will not require an open field as a control area, but instead a conventionally-shaded, appropriately-sized control area. Staff continues to recommend a research control area to support valid research results, but recommends revising the recommended size so that for solar array projects less than or equal to three (3.0) acres, the research control area must be equal in size to the entire area of land containing the solar array, including the areas between the rows of panels; for solar array projects greater than three (3.0) acres, the required control area size is no less than 3.0 acres.

**Comment(s):** SolAg commented on the need to clarify the requirements in the study and control areas, such that there is no need to have the study area be an exact replica of the control area baseline conditions. NJFB commented that research should include various practices in and around the solar installations.

**Response:** The Straw Proposal included, within Appendix B, an outline of the proposed research effort for all approved projects, with additional details about the various types of solar array designs in Appendix C. Staff anticipates that more guidance on the research requirements and standards for prospective applicants will be issued as part of the Notice that will precede each annual solicitation.

**Comment(s):** Sun'Agri recommended that the Pilot Program's research metrics include project duration, considering that productivity is dependent upon crop type, and a required detailed farm production plan to be reviewed by agronomists or other professionals.

**Response:** Per the Straw Proposal, Staff continues to recommend that planned research should be achievable within three (3) years (36 months) with results produced to inform the permanent dual-use program, given the short duration of the Pilot Program. Staff also continues to recommend that the application would require a proposal for supplying data to Staff designed to sufficiently confirm that farming related land usage requirement continues to be met throughout the fifteen (15)-year term of the SREC-II life of the Dual-Use Pilot Program Project. Finally, Staff continues to recommend the COMPR, which would encompass the details of farm production for a Pilot Project and be reviewed by representatives of NJDA and RAP.

**Comment(s):** AFT, BlueWave and NJFB recommended avoiding a narrow focus on crop yield comparisons and focusing on actual production results, such as farm income and soil conditions, considering different soil types, land contours/slopes, and conservation and irrigation practices. The commenters also encouraged the Board to consider research areas covering regenerative soil health practices, land access, battery storage, and electrification of farming practices that support agricultural and horticultural operations, in addition to how to scale projects in varying communities and production systems, for example, workforce development, market accessibility, and supply chain investments.

**Response:** Staff appreciates the commenters' feedback. The Act requires an evaluation of specific criteria in order to score and approve projects. As explained in the Straw Proposal, Staff recommended that studies evaluate topics such as the impact on crop type and yields, in addition to growing conditions, soil health/conditions, economic feasibility, including cost data, and others as outlined in Appendix B. While there is a focus on crop yield and cost data to support a valid statistical analysis, there are other criteria required by the Act to consider when evaluating and scoring projects in making recommendations to the Board for approvals.

As part of the educational materials and resources to support the Pilot Program, Staff anticipates information on design considerations such as land contours/elevation, water features, environmental/conservation measures, and land access. With respect to battery storage and electrification of farming practices, these areas would be covered in general under the Board's other initiatives for renewable, clean energy. Finally, Staff believes guidance for how to scale projects in varying communities and production systems would be considered as part of the evaluation of the results of the Pilot Program and potentially developed after the Pilot Project has been implemented, as part of the development and implementation of a Permanent Program.

**Comment(s):** Sun'Agri commented that the important components for successful agrivoltaics are light management and microclimate optimization. The commenter noted successful outcomes for high value crops over field crops that have been proven in research literature, while their data demonstrated "non-piloted shade" did not provide significant agricultural results.

**Response:** Staff appreciates the commenter's feedback. RAP continues to work closely with Staff to launch the Pilot Program as well as participate in various research and data collection requirements for the program. As part of these efforts, RAP plans to offer Extension outreach materials that will cover a variety of array design considerations including both light uniformity and energy production aspects for the different array types and cropping systems.

**Comment(s):** With respect to conducting research on ADAs, AFT commented that research should focus on those practices and applications which are most likely to be successful for farmers and suggested that the Board say more about research that needs to be done. NJFB questioned the need for having two different sets of research requirements for ADAs and non-ADAs. AFT further recommended considering the associated additional costs and a centralized approach to data collection to ensure methodologies are consistent, if expanded research is truly necessary for these areas. AFT also recommended establishing a working group to determine the most appropriate data collection strategy for a Pilot Program.

**Response:** In the Straw Proposal, within Appendix B, an outline of the proposed research effort for projects located within ADAs was included. Staff recommended that cost data be collected as part of the research efforts for approved projects, in addition to cost information provided by applicants during the application process for requesting an incentive. Data collected by approved



projects will be sent to a centralized location where it will then be evaluated as part of the overall analysis for the Pilot Program. RAP continues to assist with the development of standard research guidelines, including monitoring methods and data collection, for all projects and plans to provide technical assistance and applicable materials, as described in this section. Staff also proposes general guidance for the application process and educational materials about the Pilot Program be made publicly available in addition to outreach resulting from RAP's efforts.

**Comment(s):** RIC and H&Y commented on several factors that could impact the timeframe of completing research, such as interconnection, permitting, construction, crop productivity/yields, and lengthy time periods to establish a new photovoltaic project. AFT recommended starting the research clock once a project has achieved substantial completion milestones.

**Response:** Staff appreciates the commenters' feedback and recognizes those factors which could impact timeframes to conduct and complete research. The Act contemplates additional time in the form of two additional 12-month periods "to adequately evaluate the performance of the projects selected" for the Pilot Program.<sup>14</sup> However, there is no discretion allowed by the Act for a different commencement date for conducting research from the total timeframe of thirty-six (36) months allotted for the Pilot Program that begins after the adoption of the rules.

**Comment(s):** Industry Group and BlueWave recommended separating research proposals from project scoring and awards, and then enroll awarded projects into a centralized research study. Similarly, Lightstar recommended centralizing research at the BPU/RAP level and suggested avoiding individual research plans for each project because it surmised doing so could result in unfavorable research results.

**Response:** The Act expressly directs the Board and the NJDA to consider the quality of any research as part of the application criteria to evaluate and score for project applications in the Pilot Program.<sup>15</sup> Staff reiterates the Legislature's priority on research as part of the Pilot Program given the Act's requirements for research in ADAs as well as for informing the Permanent Program.<sup>16</sup> As described in Staff's responses under this section, there will be standards and best practices for conducting research for all projects approved in the Pilot Program to establish consistency across the Pilot Program.

**Comment(s):** Lightstar and AFT recommended New Jersey learn from New York State Energy Research and Development Authority's ("NYSERDA's") recent Request For Information ("RFI") on agrivoltaics. AFT recommended partnerships with the U.S. Department of Energy ("DOE") and other states to allow for information sharing and lessons learned.

**Response:** As part of the development of the Straw Proposal, Staff, RAP, and the State Agencies reviewed information on agrivoltaics in other states, including New York. Staff can understand considering a working group that includes DOE, other states, and other stakeholders in the future as part of the evolution of a Pilot Program.

**Comment(s):** Sun'Agri commented that a research component of the Pilot Program that involves university researchers is important and recommended that all projects should have a research

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<sup>14</sup> N.J.S.A. 48:3-87.13(e).

<sup>15</sup> N.J.S.A. 48:3-87.13(b)(9) and (c)(1)(j).

<sup>16</sup> N.J.S.A. 48:3-87.13(b)(4) and (g).

component, with each site having an assigned “research and extension partner,” and allow for researchers from other states to be involved. Rate Counsel recommended the Board consider the quality and presence of research commitments for scoring applications and increase the number of participating research institutions to support more diverse projects and results.

**Response:** Staff appreciates the commenter’s support of its recommendation to require that all Pilot Projects have a research component. For research conducted in ADAs, the Act mandates the involvement of a “New Jersey public research institution of higher education.”<sup>17</sup>

**Comment(s):** AFT commented that the purpose of data collection should be to inform a permanent program and not simply to collect data. The commenter recommended that a function of the Pilot Program should be to enable data sharing and standardization of data collection for this purpose, while also considering compensation for farmers of the supporting monitoring and research equipment. SolAg commented that farmers may be uncomfortable publicly disclosing certain data, such as economic and/or socioeconomic data.

**Response:** Staff proposed recommendations for a research component of the Pilot Program to serve the purpose of informing a Permanent Program. In consultation with RAP and the State Agencies, the minimum amount of monitoring needed was outlined to serve this purpose. Staff is mindful of the resources needed to accomplish effective and successful results and continues to recommend the approach as proposed. As discussed in Staff’s responses to comments in this section, RAP is assisting with the standardization of research requirements, including data management, and there will be accompanying materials provided to support the implementation of the Pilot Program. However, to protect the competitive interests and privacy of applicants, there may be some data that are considered confidential and cannot be shared. Staff also refers the commenter to Staff’s responses on comments under the section *Incentives and Project Costs*.

**Comment(s):** CCSA/SEIA/NJSEC/VS recommended the Board issue two (2) solicitations for the Pilot Program at 100 MW each, given the pent-up demand for an agrivoltaics program. H&Y recommended establishing annual capacity targets as minimums as opposed to caps.

**Response:** Staff refers the commenter to Staff’s responses on comments under the section *Program Size, Term, and Structure*.

**Comment(s):** Sun’Agri commented that grazing sheep is a proven market and does not need to be researched at the same level of crops.

**Response:** Staff appreciates the feedback from the commenter. In the Straw Proposal, Staff’s proposed recommendations for implementing the Act included parameters and guidelines to encourage a successful Pilot Program. Among these parameters and guidelines included a three-year demonstration requirement of participation in the State’s farmland assessment program; as such, Staff believes it is premature to exclude agricultural or horticultural practices that Staff considered to be within the scope of the Act. Additionally, as part of a project’s research plan, Staff continues to recommend that farmers should be allowed to change their agricultural or horticultural practices, which could include grazing animals, and thus data and documentation on that design would be desired to help inform a Permanent Program. Staff will take this aspect under consideration into the proposal for a scoring rubric for projects. Further, the Program is intended to include a diversity of projects and that the projects would also support a diverse range

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<sup>17</sup> N.J.S.A. 48:3-87.13(b)(4).

of agricultural or horticultural operations in the future.

**Geographic Location, Project Size, and Production Type Diversity**

*Staff question twelve (12) for stakeholders: The Act gives the Board the authority to designate additional criteria in reviewing and making decisions about dual-use projects. What additional information pertaining to diversity of size and productivity would be useful for the purposes of future permanent dual-use program design?*

*Geographic Location*

**Comment(s):** Lightstar recommended not overly restricting siting ability where interconnection is available since interconnection capacity is difficult to find in New Jersey. The commenter added that there are enough existing challenges to finding farmers who will participate and a location that meets requirements for solar development and agrivoltaics. Similarly, BlueWave commented that adjacency provisions should be defined prior to the application period to avoid potential legal challenges and confusion, as seen in Maine. Thus, the commenter recommended using the distinction in New Jersey's interconnection rule for address, meter number, and interconnection point and cited an example from JCP&L's interconnection agreement (Attachments A and D). BlueWave stated that this approach will allow for economies of scale, facilitation of farm management transitions, and larger scale and more robust scientific research.

**Response:** In the Straw Proposal, Staff's recommendations pertaining to larger project sizes (near (ten) 10 MW) at locations where multiple projects could be in the same area, i.e., at or near the same geography location, farm, farm parcel, entity or interconnection point, are intended to enable decisions to be made about reviewing and scoring projects to implement the Act's requirement for diversity of size and agricultural and horticultural production. Staff continues to anticipate that the weight or score applied to geographic location in the application process would change over time as projects are selected and coverage of the state/sub-geographies is attained. Staff understands the commenters' concerns and reiterates its expectation that the Pilot Program will be opened via Board Order, which would outline Staff's recommendations to the Board for consideration and include an accompanying rule proposal defining the Pilot Program's design, which would include direction on interconnection requirements. Staff also refers the commenters to Staff's responses on comments under the section for *Interconnection/Distribution System*.

**Comment(s):** Pertaining to the Staff's recommendation that multiple projects at or near the ten (10) MW limit at or near the same location, BlueWave asserted that the scoring criteria should be clear and transparent for the entire application process but emphasized this point for the geographic location criterion. The commenter recommended that Staff not deny feasible projects based on the purpose of attaining geographic diversity.

**Response:** Staff reiterates its recommendation to similar comments on the application criteria, namely, the recommendation to consolidate certain criteria to facilitate an evaluation-weighting scheme that is logical and effective. Staff refers the commenter to Staff's responses on comments under the section *Application Process and Project Selection – General*.

*Project Size and Size Diversity*

**Comment(s):** AFT commented that dual-use projects up to ten (10) MW should be considered for both ADI and CSI Programs. Similarly, NJRCEV commented to increase the size limits in ADI from five (5) MW to ten (10) MW.

**Response:** The Solar Act of 2021 limits the capacity of small solar facilities, i.e., community solar and net-metered facilities, that are part of the SREC-II program (established as the ADI Program within the SuSI Program) to five (5) MW.<sup>18</sup> Thus, to maintain compliance with the Statute, for project size, Staff recommends retaining the capacity limit for solar projects under the ADI Program. Furthermore, although the ADI Program rules allow for the Board to grant a waiver in response to petition for co-location pursuant to N.J.A.C. 14:8-11.4(f), part of the intent of the Board's rule prohibiting co-location is to prevent combined projects that are larger than five (5) MW.<sup>19</sup> Larger projects should seek incentives through the CSI Program and Staff refers the commenters to Staff's responses in the section under *Incentives and Project Costs* for Staff's recommendations on having dual-use projects participate in the CSI Program.

**Comment(s):** Sun'Agri commented that energy size is important but noted that it is also important to focus on the utility of agrivoltaics as an agricultural tool as compared to greenhouses. The commenter further noted that this usage will possibly change the strategy of positioning solar above crops from a land use principle.

**Response:** The Act establishes a maximum capacity limit of ten (10) MW on individual projects.<sup>20</sup> Thus, not only is capacity important, but it is also a mandate for the Pilot Program. In addition to the statutory definition for a dual-use project that outlines the basis of eligibility for participation in the Pilot Program, Staff continues to recommend that agrivoltaic systems which include solar panels that are mounted on or attached to agricultural structures, such as barns, storage buildings, greenhouses, etc., not be considered for the Pilot Program. While creativity and innovation are encouraged, there are project parameters discussed in this Appendix and outlined in the Order, which are necessary to meet the requirements of the Act and support a successful Pilot Program.

**Comment(s):** Sun'Agri and BlueWave commented that not allowing smaller project sizes to participate in the Pilot Program may be exclusionary to smaller farmers and discourages diversity of projects. Sun'Agri commented that these smaller farms tend to be newer and typically owned by veterans, women, and members of disadvantaged communities; as such, project sizes should be considered at a lower capacity, for example, at 100 kW. Similarly, AFT commented that projects should be encouraged which provide new or enhanced farming operations owned by historically marginalized farmers. BlueWave commented that it had concerns with the size limit approach and recommended to consider size limits similar to those in New York, namely one (1) MW on at least ten (10) acres of land, with the exception of behind-the-meter serving the load on the farm and those projects owned by a non-profit organization.

**Response:** Staff appreciates the commenters' feedback and recommends that the Board have the flexibility to establish a minimum capacity limit for individual dual-use solar pilot projects, and set this limit by Board Order, prior to the opening of a solicitation. In other words, Staff envisions that setting different minimum capacity targets for each solicitation may be necessary to ensure that the Pilot Program evaluates a diverse pool of project sizes.

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<sup>18</sup> N.J.S.A. 48:3-116(a).

<sup>19</sup> New Jersey Board of Public Utilities (NJBPU), Letter from the Secretary: *Clarification of the Successor Solar Incentive Program rules regarding co-location*, (August 10, 2023), [https://www.njcleanenergy.com/files/file/ADI/FY24/Clarification%20of%20the%20SuSI%20Rules Board%20Secretary's%20Letter.pdf](https://www.njcleanenergy.com/files/file/ADI/FY24/Clarification%20of%20the%20SuSI%20Rules%20Board%20Secretary's%20Letter.pdf).

<sup>20</sup> N.J.S.A. 48:3-87.13(b)(1).

### *Production Type Diversity*

**Comment(s):** Sun'Agri, Lightstar, Forefront Power, H&Y, Industry Group, and CCSA/SEIA/NJSEC/VS commented that flexibility in this category of diversity of size and production type needs to be considered, generally recommending avoiding being too selective or focusing on crop yields. Specifically, Sun'Agri recommended selecting projects based on a range of economically important crops in New Jersey. Lightstar recommended to not use the scheme outlined in the Straw Proposal in Table 1 but focus more capacity on projects with good agrivoltaics and economic feasibility, thereby using agrivoltaics as a farm viability tool, which Forefront Power, H&Y, AFT, Industry Group, and CCSA/SEIA/NJSEC/VS also recommended.

**Response:** As Staff explained in the Straw Proposal, the classification scheme outlined in Table 1 served to inform compliance with the Act's mandate of size and production type diversity. Staff continues to recommend that the application evaluation criteria be adjusted in subsequent solicitation rounds to accomplish greater diversity in agricultural and horticultural use and project size. These criteria will be evaluated along with other mandated criteria pursuant to the Act, including requested incentive levels, and a scoring rubric will be made public prior to the opening of the First Solicitation for the Pilot Program.

With respect to commenters' feedback for providing flexibility to project size, Staff also refers commenters to Staff's responses under the subsection *Project Size and Size Diversity* in this section.

**Comment(s):** Forefront Power proposed evaluating the solar lease revenue on unpreserved farms staying in productive use versus farms being lost to other potential development, for example, to warehouses and housing, to enable a true understanding of farm revenue impacts to inform a permanent program.

**Response:** Staff appreciates the commenter's thoughtful input on analyzing economic factors in order to inform a permanent program and refers the commenter to its responses in the section *Incentives and Program Costs*.

### **Other Project Selection Criteria**

*Staff question ten (10) for stakeholders: What additional criteria, if any, should the Board consider in making its awards?*

*Staff question eleven (11) for stakeholders: If so, how should those additional criteria be weighted?*

**Comment(s):** Sun'Agri commented that the Pilot Program needs to include smaller systems to permit new farmers, including those in disadvantaged and environmental justice areas, to participate. The commenter also recommended considering a subset of research for agrivoltaics in urban agriculture and on green roof projects.

**Response:** For the first portion of Sun'Agri's comments, and as a general response to the second portion of the comments, Staff refers the commenter to Staff's responses on comments under the section *Geographic Location, Project Size, and Production Type Diversity*. Specific to the second portion of the comments, Staff is charged with reviewing dual-use projects in all parts of the State as part of the research to inform a permanent program and does not believe there needs to be a separate research category for urban agriculture at this time. On a related note, Staff

recommends the Board consider and establish capacity set-asides within the annual capacity target for particular types of projects. Given the statutory definitions and intent of the Act, green roof projects are outside of the scope of a dual-use program (pilot or permanent) and would not qualify.

**Comment(s):** Rate Counsel recommended establishing a limit on the amount of incentives for each applicant (including family members and affiliates), specifically up to thirty (30) MW of selected projects, and suggested public utilities (and associated affiliates and families) be deemed ineligible for participation. The commenter also recommended requiring a deposit with application submission, which should include milestone provisions.

**Response:** Staff agrees that utilities should not be eligible to participate. With respect to establishing limits on applicants and associated projects, Staff believes implementing a limit on the number of projects approved for a single developer in a Program Year may be appropriate, in order to promote a diverse pool of developers (and projects). The application process required by the Act provides for collection of fees or deposits. Based on expressed interest and anticipated participation in the solicitation round, Staff will make a recommendation to the Board regarding the necessity for application fees. Any application fees collected will go to the New Jersey's Clean Energy Program to offset ratepayer costs used to administer the Pilot Program.

**Comment(s):** Lightstar recommends that benefits to the farmer and general resiliency of the agricultural use of the affected land be considered such that both are a top priority in project evaluation simultaneously with project feasibility.

**Response:** Staff believes the top priorities of a Pilot Program as directed and intended by the Legislature under the Act are to reduce the pressure to develop New Jersey's agricultural land while also facilitating development of more renewable energy and demonstrating the utility of agrivoltaics in the State. Staff acknowledges the importance and significance of farmers as part of developing a program for agrivoltaics and believes the investigation and evaluation of benefits to farmers is a necessary component of establishing a Permanent Program. Staff also recognizes the Board's overall mission to protect ratepayers and has the responsibility to recommend a program at the least cost that also protects the interests of the ratepayers. Staff refers commenter to Staff's responses on comments under the section *Application Process and Project Selection – General* pertaining to making a proposed scoring rubric public.

**Comment(s):** Forefront Power recommended allocating 100 MW in PY1 and PY2 to get projects in the ground sooner in addition to considering the lengthy timeframes for projects such that crops may not be ready until next season following construction. The commenter also recommended the usage of a waitlist should an approved project become infeasible to enable others to get implemented sooner.

**Response:** For the first portion of the commenter's feedback, Staff refers the commenter to Staff's responses on comments under the section *Program Size, Term, and Structure*. For the second portion of Forefront Power's feedback, Staff believes a waitlist may be beneficial for reasons cited by the commenter, in addition to the short duration of the Pilot Program and time and resources that will be devoted to reviewing, evaluating, and selecting projects.

**Comment(s):** H&Y commented that the Straw Proposal contained sufficient criteria but that project selection and criteria be transparent with a clear scoring rubric.

**Response:** Staff refers commenter to Staff's comments in the section *Application Process and*

*Project Selection – General.*

**Comment(s):** BlueWave supports the inclusion of criteria directing the benefits of dual-use solar to overburdened communities, and efforts to consider environmental justice communities and community engagement. The commenter stated that these criteria should be a clear metric on the scoring rubric used for project evaluation and selection.

**Response:** Staff thanks the commenters for their support. Staff also refers commenter to Staff's comments in the section *Application Process and Project Selection – General.*

**Comment(s):** H&Y and CCSA/SEIA/NJSEC/VS recommended not considering any additional criteria at this time.

**Response:** Staff thanks the commenters for their feedback. Staff continues to recommend the additional criteria outlined in the Straw Proposal for environmental justice.

**Comment(s):** AFT commented that it encourages the participation of community stakeholders and recommended additional scoring or preference points that demonstrate farmer commitment, land access benefits, and other community engagement. The commenter indicated that a statement of support from the farmer/landowner for a project should be included as part of the information collected from pilot projects.

**Response:** In line with Staff's recommendation to add a criterion that covers environmental justice, Staff concurs with the commenter that a project's plan for outreach and engagement with the potentially impacted community(ies) be considered as part of scoring the application. Staff also agrees that a farmer and landowner, if applicable, must be part of the project team and include signed certifications attesting to their familiarity with the requirements for participation in the Pilot Program, as well as to the accuracy of the submitted documents for a project. Finally, Staff recommends that farmers provide their experiences and views on the pilot projects as part of a Board-approved survey, which are anticipated to be part of the data collection process.

**Project Design (excluding Research and Monitoring)**

**Comment(s):** Sun'Agri commented that its research supported a strong technical compatibility between high value crops and their technology, such as fruits, berries, nuts, vegetables, nursery stock, hops, and cannabis, but field crops and livestock have not.

**Response:** Staff appreciates the feedback from Sun'Agri. One of the goals of the Pilot Program is to determine the type of agricultural and horticultural processes that will be successful in New Jersey. Pre-determining or pre-selecting product types is premature and would not support the Act's mandates, as described throughout Staff's responses and the Order.

**Comment(s):** Sun'Agri commented that increasing the spacing between solar arrays will not achieve strong results, but there is a need for minimum design standards and detailed project planning for agrivoltaics that goes beyond row spacing, array type, etc. to benefit farmland based on farming operations. The commenter offered to meet with Staff to clarify these comments.

**Response:** Staff continues to recommend establishing a Construction, Operations, Monitoring, and Project Research Plan ("COMPR") to encompass comprehensive planning aspects of an agrivoltaics project. Staff anticipates these plans will be developed by and with the farmer(s) and will outline the potential benefits of a project. With respect to the latter portion of Sun'Agri's comment, Staff refers the commenter to Staff's comments in the section *Minimizing Impacts to*

*Farmland.*

**Comment(s):** AFT commented on the need for clear, but not overly prescriptive designs for solar arrays and heights and requested a better understanding for how to design a solar system to support farms. SolAg also commented that the locational requirements in the "study area" need clarity overall, particularly with respect to fencing from Appendix C, paragraph three (3), in the Straw Proposal, and that the farmer must be involved in the project design with the consideration of financial compensation.

**Response:** As per the Straw Proposal, Staff continues to work with RAP to develop educational materials for project participants that includes guidance on project design considerations. With respect to SolAg's latter comment regarding compensation for farmers, Staff refers the commenter to Staff's responses in the section *Incentives and Project Costs*.

**Comment(s):** AFT stated that the Pilot Program should focus on experimentation and incorporation of regenerative practices and allow for trial and error combined with corrective actions, given the myriad of challenging variables such as weather patterns, high costs, and other barriers in the farming community.

**Response:** Part of the Act's mandate in establishing a permanent program is to develop standards for installation and decommissioning techniques that minimize negative impacts to farmland and provisions to ensure active agricultural and horticultural use of the land continues. As such, Staff presumes that consideration to regenerative practices would be given to planning a project's design and continues to reiterate its recognition of cyclical and sometimes unpredictable nature of agricultural and horticultural production, as well as the fact at this point in time that dual-use facilities in New Jersey are experimental in nature.

**Comment(s):** NJRCEV commented that minimizing restrictions and the research aspects of a Pilot Program would support individual farmers and enable a successful program. The commenter added that the Pilot Program needs to allow farmers more autonomy over their own land.

**Response:** The Board was directed by the Legislature, and has the responsibility, to develop a program that meets the requirements and intent of the Act. Staff recognizes the need for balance between standards, guidance, and flexibility in a design to allow for innovation and opportunity to learn from research results. There is also the recognition of the goal to ensure this process is as simple as possible for all parties involved, i.e., applicants, developers, farmers, and the team evaluating applications.



II. June 2024 Preliminary Rule Draft

The BPU received eighteen (18) written comments, representing twenty-five (25) entities, on the [Dual-Use Solar Energy Pilot Program Request for Comments](#) (“Preliminary Rule Draft”) issued on June 10, 2024, Docket No. QO23090679.

Comments were received from:

1. New Jersey Division of Rate Counsel (“Rate Counsel”)

Electric Distribution Company (“EDC”)

1. Rockland Electric Company (“RECO”)

Agricultural Community

2. NJ Farm Bureau
3. American Farmland Trust (“AFT”)

Trade Associations<sup>a</sup>

4. Coalition for Community Solar Access (“CCSA”)<sup>a</sup>  
New Jersey Solar Energy Coalition (“NJSEC”)<sup>a</sup>  
Solar Energy Industries Association (“SEIA”)<sup>a</sup>

Non-profit Organizations

5. Mid-Atlantic States Career and Education Center (“MASCEC”)<sup>b</sup>

Solar Developers/Industry

- Tatleaux Solar Group (“Tatleaux”)<sup>b</sup>
6. EnergySun Farms, Inc.
7. CS Energy
8. CleanCapital
9. Blue Wave
10. H and Y Associates Inc. (“H&Y”)<sup>c</sup>  
Vanguard Energy Partners (“VEP”)<sup>c</sup>
11. Solar Landscape
12. Hyperion Systems LLC (“Hyperion”)
13. Solar Agricultural Services, Inc. (“SolAg”)
14. Forefront Power
15. Industry Group:<sup>d</sup>  
BlueWave  
Forefront Power  
Lightstar  
Renewable Properties  
RWE Clean Energy

Other/General Public

16. Kathleen Shea
17. Jeanne

*a,b,c,d: Submitted comments jointly*

In general, stakeholders provided comments on similar aspects of a pilot program that had been

previously recommended by Staff in the November Straw Proposal. For efficiency toward implementing a pilot program, a summary is provided below. Staff carefully considered and thoroughly reviewed each individual comment in preparing recommendations for the Board and a rule proposal.

Overall, stakeholders focused primarily on two areas of the Preliminary Rule Draft, namely allowing Dual-Use Pilot Program Projects to participate in the CSEP and adjusting the size of the research control area.

Specific to the draft rule text, stakeholders submitted recommendations for changes in areas such as a minimum project size limit, compensation on research and reporting for farmers, definition of a farmer, clarity around the context of a lease agreement, siting requirements, three-year farmland assessment, EDC reporting requirements, and clarity on force majeure.

Pertaining to the elements and implementation of a pilot program, stakeholders provided comment on topics such as availability of hosting capacity, having the EDCs process applications immediately, guidance on coordinating research and program requirements, incentive sharing, concerns with the timeline of the Board processing applications, consideration of allowing for brownfields and land no longer being farmed to be included as siting locations, and additional opportunities for stakeholder input.

## **APPENDIX B: 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 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 unreserved 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 across the project site, solar array, and research control area required as described above must include the following parameters:

1. Soil map unit;
2. Soil textural classification;
3. Hydrologic soil group;
4. Organic matter content;
5. Salinity;

6. Macro and micro nutrient content;
7. Bulk density;
8. Overall slope; and
9. Topography of the project site.

(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. Soil density and compaction;
2. Organic matter content; and
3. 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 Dual-Use Solar Energy 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 Dual-Use Solar Energy Project will be located, if applicable;
3. 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 Dual-Use Solar Energy 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 Dual-Use Solar Energy 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 Dual-Use Solar Energy 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 Dual-Use Solar Energy 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 Dual-Use Solar Energy 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 Dual-Use Solar Energy 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 Dual-Use Solar Energy Projects not located on covered agricultural lands must include the following information pertaining to environmental conditions:

1. Solar radiation measured horizontally;
2. Air temperature using an actively aspirated box;
3. Air relative humidity using an actively aspirated box;
4. Soil temperature at six (6) inches below the surface;
5. Soil volumetric water content at six (6) 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 Dual-Use Solar Energy 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 Dual-Use Solar Energy Projects must include the following information pertaining to solar array performance:

1. Electricity production using time intervals of no less than one 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 Dual-Use Solar Energy Projects must include the following information, obtained via responses to a Board-approved survey, 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.