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December 13, 2023

Via Electronic Mail board.secretary@bpu.nj.gov

Secretary of the Board
44 South Clinton Avenue, 1th Floor
P.O. Box 350
Trenton, NJ 08625-0350

**Re: In the Matter of the Dual-Use Solar Energy Pilot Program
BPU Docket No. QO23090679**

Dear Secretary:

Please accept for filing these comments being submitted on behalf of the New Jersey Division of Rate Counsel in accordance with the Notice issued by the Board of Public Utilities ("Board") in this matter on November 9, 2023, as revised on November 21, 2023. In accordance with the Notice, these comments are being filed electronically with the Board's Secretary at board.secretary@bpu.nj.gov.

Please acknowledge receipt of these comments.

Thank you for your consideration and attention to this matter.

Respectfully submitted,

Brian O. Lipman, Esq.
Director, Division of Rate Counsel

By: /s/ Sarah H. Steindel
Sarah H. Steindel, Esq.
Assistant Deputy Rate Counsel

Enclosure

cc: Stacy Ho Richardson, BPU
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STATE OF NEW JERSEY
BEFORE THE BOARD OF PUBLIC UTILITIES

In the Matter of the Dual-Use Solar)	Docket No. QO23090679
Energy Pilot Program)	

**COMMENTS OF THE
NEW JERSEY DIVISION OF RATE COUNSEL
IN RESPONSE TO THE BOARD'S NOTICE DATED NOVEMBER 9, 2023**

December 13, 2023

(1) Introduction

The New Jersey Division of Rate Counsel (“Rate Counsel”) appreciates the opportunity to provide input to the Board of Public Utilities Staff (“Staff”) concerning the proposed Dual-Use Solar Energy Pilot Program (“Straw Proposal”) under development in accordance with the requirements of the Dual-Use Solar Energy Act of 2021, P.L. 2021, c. 170 (the “Act”). Rate Counsel is pleased to present this written input in accordance with the Notice issued by the Board on November 9, 2023 and revised on November 21, 2023, and to address specific questions related to Straw Proposal included with the Notice.

Rate Counsel supports the development of rules that will facilitate the development of dual-use solar facilities, also referred to as agrivoltaics (“AV”). These facilities offer a number of potential benefits, including increased production of clean energy, increased revenues for farmers and rural landowners, more efficient use of agricultural land (especially in comparison to utility-scale solar, which is usually sole, rather than, dual purpose). The proposed pilot program offers an opportunity to assess these potential benefits, as well as the costs and latent unintended consequences associated with AV.

While Rate Counsel supports the pilot program and the goals it seeks to achieve, Rate Counsel is also mindful that the pilot program will have costs that will ultimately be borne by New Jersey ratepayers, many of whom face a high energy burden that has become even more burdensome because of recent inflation. Further, this program is just one of several supported through various Board programs and pilots. To date, the cumulative costs of these programs are considerable, amounting to billions for solar energy alone. Thus, while the program costs for this individual pilot may seem small, it still can represent an additional burden on households and businesses struggling to get by in today’s challenging economic environment. Rate Counsel,

therefore recommends the Board keep program costs front and center during the Straw Proposal design process.

Rate Counsel strongly supports the Act's requirement that the dual use solar pilot program utilize competitive market mechanisms to evaluate and score eligible projects and to use market forces to guide the establishment of financial incentives.¹ It is clear that by directly referencing competition and market forces, the Legislature intended for the Board to develop a program that is cost-effective and efficient: reducing delivered solar costs to ratepayers financing this program. The Act's pilot program solar capacity cap of 200 MW further demonstrates the clear intent to limit ratepayers' financial exposure.²

In the comments below, Rate Counsel provides input on the specific questions contained in the Straw Proposal. Rate Counsel looks forward to continued participation in this process.

(2) Responses to Board Staff Questions

Question 1: *What additional pre-solar conditions of the farm parcel proposed for a solar array should be documented?*

Rate Counsel Response:

Rate Counsel has no position on this topic at this time.

Question 2: *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?*

Rate Counsel Response:

Rate Counsel has no position on this topic at this time.

¹ N.J.S.A. 48:3-87.3(b)(9).

² N.J.S.A. 48:3-87.13(b)(2).

Question 3: *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?*

Rate Counsel Response:

Rate Counsel believes that the single solicitation approach described at [age 16-17 of Straw Proposal is the better alternative. As Rate Counsel understands the single solicitation approach, potential dual-use candidates with CSI-eligible projects would have to pre-qualify for the CSI program and submit a dual-use solicitation bid that would consist of a dual-use application covering all application requirements as well as a proposed all-in New Jersey Solar Renewable Energy Certificate II (“SREC-II”) price. The applicant’s proposed SREC-II price would be comprised of the proxy baseline value (derived from a recent CSI solicitation) and the dual-use adder.³

Rate Counsel believes that the single solicitation approach will be more administratively efficient than the alternative approach which would require CSI-eligible applicants to also obtain a winning bid in the CSI program, either prior to or after a dual-use solicitation.⁴ Enhanced administrative efficiency will, all else constant, reduce application costs (in terms of both time and money) for applicants, Staff, and others and (hopefully) allow for a more streamlined and less complex process.

In addition, Rate Counsel wishes to offer some useful general observations and recommendations related to the awarding of incentives and other matters related to pilot program costs. The primary purpose of the pilot program is to obtain information that will inform the permanent dual-use solar program. The cost of this information can be minimized by the adoption of a market-based approach that is clear, fair, and adequately promoted and will allow

³ Straw Proposal, at 17.

⁴ Straw Proposal, at 17.

market forces to provide dual-use solar energy at the lowest cost. In short, Rate Counsel believes that research production and cost containment are compatible pilot program objectives.

Rate Counsel recommends that Staff estimate program rate impacts that include all potential direct and indirect costs. Furthermore, Rate Counsel cautions against offering unnecessary or excessive incentives to pilot program participants. Rate Counsel notes that AV gives farmers and landowners the ability to self-generate electricity. In addition, AV offers farmers and landowners the ability to potentially increase farm yields. For instance, a recent research report observed:

Although shading might be expected to lower productivity, and does in certain agricultural settings, mounting evidence indicates that AV has the potential to enhance crop and forage yields compared with agricultural yields alone. A recent field study showed that yields of shade-intolerant C4 corn grown under low-density PV panels were increased, while those under high density of PV panels were moderately lower. Similarly, yields of several varieties of lettuce, a C3 specialty crop, were found to be equal or even higher when shading was moderate. Alfalfa plants grown under mobile panels showed an average increase of 10% of their biomass compared with conventional system.⁵

Rate Counsel supports a cap on incentives available to each participant. Rate Counsel believes that inclusion of a reasonable cap offers an important ratepayer protection and is consistent with the Act's goal of utilizing competitive means to reduce ratepayer costs. The cap could be increased, in an incremental manner, in each subsequent solicitation, in the event that the incentive limits thwarts sufficient participation in the pilot program. To determine the initial cap, Rate Counsel recommends that Staff include multiple incentive cap scenarios with its rate

⁵ Nuria Gomez-Casanovas, *et al.*, "Knowns, uncertainties, and challenges in agrivoltaics to sustainably intensify energy and food production," *Cell Reports Physical Science* 4, 101518, August 16, 2023, p. 5 (Internal citations omitted) (available at: [https://www.cell.com/cell-reports-physical-science/pdf/S2666-3864\(23\)00302-8.pdf](https://www.cell.com/cell-reports-physical-science/pdf/S2666-3864(23)00302-8.pdf)).

impact analysis and that Staff solicit stakeholder feedback on both the rate impact analysis and the appropriate initial incentive cap.

Rate Counsel also suggests that all AV projects currently affiliated with state or federal governmental or education institutions be counted toward the pilot program's total capacity limit. These facilities (if any) are available to accomplish the research objectives of the pilot program and because they are affiliated with a governmental entity should not require costly ratepayer-funded incentives.

To help ensure that the solicitation process is as competitive as possible, Rate Counsel recommends that Staff survey and incorporate best practices into the process. These best practices should emanate not only from current New Jersey competitive solicitation processes but also from a review of successful practices in other jurisdictions. Rate Counsel urges Staff to permit stakeholder feedback as the competitive solicitation process is developed and finalized.

Because the competitiveness of the solicitation process is, in part, a function of the number of bidders, the pilot program must be properly noticed. To encourage maximum participation, Rate Counsel recommends a robust awareness and education campaign, preferably one that is guided by a professional advertising and public relations firm. The solicitation process must also be fairly and impartially administered in order to attract maximum participation. Rate Counsel recommends the use of a third-party administrator with experience in managing competitive solicitation processes. In addition, Rate Counsel suggests that Staff limit its advisory role during the solicitation process to procedural and filing topics and avoid substantive topics, such as the competitiveness of a potential bid. Doing so will improve the appearance of a level playing field and will help eliminate potential complaints from unsuccessful applicants.

Finally, Rate Counsel recommends that the scoring rubric used to evaluate applications give high percentage weight to the requested incentive amount (whereby lower incentive requests are scored more favorably). Rate Counsel suggests that a minimum weighting of 50 percent be applied to this critical evaluation criterion.

Question 4: *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?*⁶

Rate Counsel Response:

See response to Question 5.

Question 5: *What stage should a project have achieved in the PJM interconnection queue or in the NJ EDC interconnection application process to be considered eligible to apply in the Pilot Program?*

Rate Counsel Response:

Rate Counsel believes that applicants that have received official confirmation that their interconnection application has been accepted for review (in other words, the applicant has complied with the minimum filing requirements) should be eligible. The interconnection process can be lengthy. However, Rate Counsel believes that the periodic competitive solicitation process would benefit from increased participation, which could reduce the total amount of incentives granted and thus minimize costs to ratepayers..

Question 6: *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?*

Rate Counsel Response:

Rate Counsel has no position on this topic at this time.

⁶ Note that this is the second question listed as Question 3 on page 18 of the Notice. Since Questions 5 and 6 appear identical, Rate Counsel believes Staff intended this question as Question 4, and the following question, listed as Question 4 in the notice, as Question 5.

Question 7: *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?*

Rate Counsel Response:

Rate Counsel has no position on this topic at this time.

Question 8: *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 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?*

Rate Counsel Response:

Rate Counsel has no position on this topic at this time.

Question 9: *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?*

Rate Counsel Response:

Rate Counsel urges Board to include provisions in the Straw Proposal that protect ratepayers from any risk related to unproven AV technology. While Rate Counsel supports the development of innovative AV technologies, the risks associated with such technologies should be borne by the project developer.

Question 10: *What challenges or obstacles do you foresee that could prevent a project applicant from providing research results within the timeframe of the Pilot Program?*

Rate Counsel Response:

Rate Counsel has no opinion on this question; however, Rate Counsel offers related comments. First, Rate Counsel recommends that Staff consider not only the quality of research commitments when evaluating applications, but also whether there are any research commitments at all, and give preference to applications that include research commitments. Second, Rate Counsel recommends that Staff implement measures to increase the number of

participating research institutions, as doing so will lead to a more comprehensive research approach, will facilitate more creativity in the selection of research topics, and will encourage a greater diversity of perspectives on the research results.

Question 11: *What additional criteria, if any, should the Board consider in making its awards?*

Rate Counsel Response:

Rate Counsel recommends that the Board consider each applicant's total incentives and place a limit on the amount of incentives that each applicant (including immediate family member and affiliated entities) may be awarded. Specifically, Rate Counsel recommends that applicants be limited to incentives on up to 30 MW of selected dual-use solar capacity. This limit would not act to prevent an applicant from further participation if the applicant was willing to forego additional incentives.

Rate Counsel also suggests that public utilities (and affiliates and employees of public utilities, as well as immediate family members of utility employees) be deemed ineligible for pilot program participation. Such a restriction would prevent potential conflicts of interests.

Finally, Rate Counsel believes that a deposit requirement would be beneficial. A deposit in conjunction with submittal of an application would reduce the likelihood of uncommitted applicants. An additional deposit requirement upon selection would help ensure that project developer remains committed and that the project has secured necessary capital. The recent turmoil witnessed in the State's offshore wind development process is a clear reminder that initial enthusiasm by project developers can wane over time, resulting in project cancellations. Rate Counsel also recommends that Staff include milestone provisions in the deposit requirement to ensure timely project completion.

Question 12: *If so, how should those additional criteria be weighted?*

Rate Counsel Response:

See response to Question 11.

Question 13: *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?*

Rate Counsel Response:

Rate Counsel has no position on this topic at this time.