



VIA ELECTRONIC SUBMISSION

May 31, 2022

Ms. Aida Camacho-Welch
Secretary
New Jersey Board of Public Utilities
P.O. Box 350
Trenton, NJ 08625-0350

RE: IN THE MATTER OF COMPETITIVE SOLAR INCENTIVE ("CSI") PROGRAM PURSUANT TO P.L. 2021,C.169, Docket No. QO21101186

The American Farmland Trust (AFT) submits the following comments concerning the Competitive Solar Incentive Program in response to the March 15, 2022 release of the New Jersey Solar Siting Staff Straw Proposal and the New Jersey's Board of Public Utilities (BPU) Stakeholder notice dated March 16, 2022.

AFT appreciates the opportunity provided by the BPU to comment on the Staff Solar Siting Staff Straw Proposal for the CSI Program. Founded in 1980, AFT is the only national organization that takes a holistic approach to agriculture, focusing on keeping land in farming, supporting the adoption of sound farming practices, and keeping farmers on the land. With this holistic perspective, AFT is uniquely positioned to offer recommendations for how the BPU can pursue solar siting goals and objectives that advances New Jersey's adoption of renewable energy, while minimizing impacts on the states working lands and achieving the state's climate and decarbonization goals.

As an organization dedicated to keeping farmers on the land and mitigating the impacts of climate change, AFT is supportive of the BPU's efforts to increase the adoption of renewable energy and buildout of infrastructure to support this goal. We recognize that New Jersey will need significant renewable energy buildout, specifically solar generation, across the state to deploy more efficient and cost-effective technologies benefitting customers and industry.

However, poorly planned renewable energy generation siting, such as solar development, could represent a major impact to the agricultural land that we depend on to produce food, feed, fiber, and fuel, as well as to provide ecosystem services such as habitat, carbon sequestration, water filtration, and more. AFT's 2020 [Farms Under Threat: The State of the States](#) report showed that we are already losing 2,000 acres of agricultural land *every single day* in the United States, a trend that would only be exacerbated by poorly planned renewable energy development siting and planning.

Achieving the goals of 100% clean energy and 80% carbon emission reductions by 2050 in New Jersey are important drivers for the development of renewable energy and solar generation. The Solar Act of 2021 was an important step forward to further accelerate the deployment of 3,750 MW of new solar generation by 2050 in New Jersey. The Successor Solar Incentive (SuSI) Program creates the pathway to achieve these goals. Both the Administratively Determined Incentive Program (ADI) and the Competitive Solar Incentive Program (CSI) are complementary to each other, yet offer unique opportunities to advance solar development across New Jersey's diverse landscape by reducing land use conflict and preserving the most important agricultural and forested lands, maintaining agricultural productivity and soil health throughout the construction and life of the project, and implementing new solar technologies that can allow for both preservation of agricultural lands and solar development.

AFT applauds the work that the BPU and Staff, along with the New Jersey Department of Environmental Protection (DEP) and the New Jersey Department of Agriculture, to establish solar siting rules through the Siting Straw Proposal for implementation of Section 6 of the Solar Act of 2021. The comments below express support for the BPU and the Staff's work to develop these standards and offer recommendations to further improve and reduce environmental and agricultural land impacts in order for New Jersey to protect and maintain the most "productive, versatile, and resilient" lands for agricultural production.

Regarding the "Solar Siting Criteria" being developed by Staff, AFT appreciates consideration of developing criteria that considers costs and that all land is not created equal when siting solar energy development. AFT agrees that any solar development project over 5 MW, regardless of the project's participation in the SuSI program, should adhere to the same solar siting rules that preserve and maintain New Jersey's most productive agricultural lands, preserves open space, allows the BPU to track

and monitor all solar development facilities under the siting provisions of Section 6 of the Solar Act of 2021.

Additionally, AFT agrees that limiting solar development on specific and defined lands is a key element of the program and preserving the state's most productive and important agricultural lands until the pilot program is complete and impacts can be further analyzed. AFT believes that the utilization of the United States Department of Agriculture's Natural Resources Conservation Service (NRCS) prime and soils of statewide importance is an important first step when siting solar development on farmland. AFT views this as one component of "Smart Solar Siting" practices that help to better understand the impacts on farmland and farm communities of where solar is sited, and how smart solar siting can lead to the strengthening of farm economies, and maximizes the protection of our most productive, versatile, and resilient farmland.

AFT also commends the BPU, the State Agriculture Development Committee (SADC) and the New Jersey Department of Agriculture (NJDA) for their recommendations regarding mitigation guidelines and construction requirements within "Appendix B" of the solar siting straw proposal. AFT offers the following recommendations for proposed mitigation guidelines best management practices for construction.

Project Planning

a) Project Inspector

AFT strongly believes that an "environmental inspector" to monitor projects during construction is critical to ensure compliance and adhering to Best Management Practices (BMPs) for construction, during use, and when returning the land back to agricultural production. AFT also recommends utilizing environmental and agricultural inspectors that have experience in the development of solar facilities on agricultural lands, knowledge of soil testing, removal, and vegetation management. AFT believes that proper BMPs will better inform how solar projects should be built on farmland to preserve soil and water health and minimize impacts of development for when land returns to agricultural use.

b) Resource Identification:

i. Agricultural Lands

Regarding the recommendation for Resource Identification, AFT would recommend utilizing analyses that are informed by USDA soil designations of Prime and Statewide Importance in addition to recognition of New Jersey's best agricultural lands for growing food crops and requiring special consideration. Specifically, AFT, through the [Farms Under Threat: State of the States](#) report, has developed a method to assess the suitability of agricultural land for long-term cultivation and food production. This method uses three factors that provide relevant information about the land's "productivity, versatility, and resiliency" (PVR) in different ways.

The PVR analysis utilizes three factors: 1) soil suitability, 2) crop type and growing season length, and 3) land cover/use type. These factors are quantified and mapped using high-quality national spatial datasets and identifies Nationally Significant Land, as well as identifying each state's "best land" to provide more information at the state level. The PVR analysis identifies "best land" in New Jersey by mapping the agricultural lands with PVR values above the state median. This identification allows each state to better identify their "best land" when compared to other lands within the state.

AFT would strongly recommend the BPU and Staff review the [Farms Under Threat: State of the States](#) PVR analysis to identify New Jersey's "best land" when analyzing prime farmland and soils of Statewide Importance within Agricultural Development Areas and resource identification for soils requiring special consideration. AFT believes this analysis will further enhance the protection of New Jersey's most productive, versatile, and resilient farmland when compared to all agricultural lands within the state, and not just at a national level comparison.

iii. Soil Compaction Baseline

AFT appreciates the inclusion of soil baseline testing and recordation of those measurements. However, we do recommend that the BPU's clarify "bulk density testing" and testing using a "penetrometer." Bulk testing is typically done in a laboratory setting from samples taken from the field. In contrast, penetrometer testing is done in the field. Both methods of testing provide baseline information to inform compaction. The two testing methods are used interchangeably in the "Soil Compaction Baseline," however they are separate tests and should be distinguished from each

other and clarification is needed regarding the requirement of either “bulk density testing,” “penetrometer testing,” or both.

Additionally, AFT would like clarification regarding soil compaction baseline testing results and how this data is collected and shared with the landowner, communities, and other state agencies. AFT hopes that this information will be made publicly available, in aggregate to protect privacy, for analysis, comparison following decommissioning and restoration, and preservation if ownership or developer changes occur over the lifespan of the solar facility.

Construction and Restoration

f) Soil Protection

AFT agrees that minimizing soil disturbance and impacts during the construction of solar facilities is an important step in preserving the productivity of the soil and agricultural lands. This includes the utilization of alternative footing technologies, other than concrete footings, to minimally impact the soil during construction and decommissioning. Additionally, AFT has concerns regarding the removal or grading of topsoil; this practice should be strongly discouraged and avoided on productive farmland. Any disturbance or movement, such as stockpiling, of topsoil can change the structure and health of the soil, which will forever change the productivity of prime farmland soils. By utilizing current and developing technologies, New Jersey can continue to lead the nation by setting BMPs for construction, which will minimize the impact on prime farmland and retain soil health and structure for future use.

j) Revegetation and Weed Control

Regarding the seeding of disturbed areas, AFT recommends changing the “7 day” requirement to a “3 day” requirement for soil erosion and sediment controls. Exposed soils, especially prime farmland soils, are greatly impacted when exposed, even for just a few days. Additionally, seed variety should be made through consultation with both the landowner and the conservation district, with an emphasis on seeding with native, pollinator-friendly species, which reduces the likelihood of introducing invasive, or non-native, plant species into the local ecosystem. The [National Seed Strategy for Rehabilitation and Restoration](#) is a program through The Plant Conservation Alliance, which is chaired by the United States Bureau of Land Management (BLM), and supported by United States Department of Agriculture, other federal agencies, and private sector partners to protect

native plants, support local ecosystems for animals, pollinators and people. The National Seed Strategy for Rehabilitation and Restoration provides a framework and strategy for establishing native plant species during ecological restoration and conservation of habitats on public and private lands. Utilizing this or comparable native plant strategy will encourage developers, landowners, and farmers to adhere to a standard practice that is both environmentally and agriculturally friendly.

Monitoring and Remediation

AFT agrees with the Staff's proposal for a 6-year monitoring period on an annual basis. Additionally, AFT would recommend that additional monitoring take place every 5 years, following the initial 6-year annual evaluations. Doing so will allow for continued data collection to better assess the impact of native ground cover revegetation, ecosystems, and the impact to surrounding areas, in the short-term, long-term, and when returning land to agricultural production. Additionally, AFT would like to seek clarification regarding the annual evaluations and how this data is collected, by whom, and shared with the landowner, communities, and other state agencies. AFT hopes that this information will be made publicly available, in aggregate, to protect privacy, for analysis, comparison, and preservation if ownership or developer changes occur over the lifespan of the facility. AFT strongly encourages project-level vegetation performance data collection and platforms to enable accessibility for research purposes.

Record Keeping

As mentioned above, and in the Staff Straw Proposal, AFT would like to seek clarification regarding record keeping and how this data is collected, by whom, and shared with the landowner, communities, and other state agencies. AFT hopes that this information will be made publicly available, in aggregate, for analysis, comparison, and preservation if ownership or developer changes occur over the lifespan of the facility.

Finally, AFT would recommend the consideration and inclusion of dual-use and agrivoltaic technologies in the BPU's Solar Siting Straw Proposal when siting solar development on farmland. Dual-use and agrivoltaic technologies support agricultural landowners, communities, and farmland production, while allowing the co-development, or co-location, of solar generation on agricultural lands. Exploring the deployment of dual-use or agrivoltaics technologies to produce solar energy and agricultural products on the same acreage increases land use efficiency and sustains viable agricultural enterprises. Utilization

of dual-use practices and agrivoltaics can also provide additional benefits to soil health, water quality, and economic benefits to farmers, while maintaining agricultural production.

Additionally, AFT would recommend prioritization in the approval process for the siting of and participation in the CSI program, as well as a streamlined waiver process once the 2.5 percent statewide threshold has been met for projects that utilize dual-use or agrivoltaic technologies. Agricultural dual use solar technologies and practices allow for continued agricultural production, such as grazing, large livestock co-location, and crop production while generating energy on the same parcel, with the intention of avoiding the negative displacement impact of solar development on active agricultural lands. Furthermore, AFT would recommend that solar development on farmland utilizing rigorous dual-use or agrivoltaics practices should not be counted in the same way as non-dual use CSI projects when factoring the statewide threshold on “on prime agricultural soils or soils of Statewide importance.” AFT believes that allowing for the utilization of dual-use and agrivoltaic technologies on projects in the CSI program will reduce the impacts of solar development on farmland, and ought not further delay the deployment of dual-use and agrivoltaic technologies while the BPU continues to develop a dual-use solar energy pilot program, pursuant to the “Dual Use Solar Act of 2021.”

Conclusion

The American Farmland Trust (AFT) appreciate the BPU’s thoughtful and inclusive consideration of New Jersey’s approach to siting solar on farmland and lands of statewide importance. AFT also appreciates the opportunity to provide comments, recommendations, and work collaboratively with the BPU in advancing the Competitive Solar Incentive Program and Solar Siting Straw Proposal. We hope that the recommendations included in the above comments will support the BPU’s efforts and allow for New Jersey to continue to lead our nation in achieving our clean energy, climate, and decarbonization goals.

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