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Via E-mail

Sherri L. Golden
Secretary of the Board
New Jersey Board of Public Utilities
44 South Clinton Ave., 1st Floor
PO Box 350
Trenton, NJ 08625-0350

RE: Docket No. QO23090679, In the matter of the Dual-Use Solar Energy Pilot Program

Dear Secretary Golden,

H and Y Associates Inc. ("H&Y") together with Vanguard Energy Partners ("VEP") appreciate the opportunity to provide written comments in response to the request associated with the Board of Public Utilities' ("BPU" or "the Board") Preliminary Rule Draft for the Dual-Use Solar Energy Pilot Program. We thank the BPU and Rutgers Agrivoltaic Program for their hard work in developing this Preliminary Rule Draft and are excited to see the success of this program as a key factor in achieving New Jersey's clean energy goals while preserving the agricultural heritage of the Garden State.

We look forward to The Board's issuance of the formal rule proposal in the near future and anticipate participating in the New Jersey Dual-Use Solar Energy Pilot Program.

Sincerely,

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H&Y and VEP comments on the Draft Rules for the New Jersey Dual-Use Solar Energy Pilot Program:

We are pleased to provide the following comments in regards to the Draft Rules for the New Jersey Dual-Use Solar Energy Pilot Program.

Page 5 “Non-permanent agricultural structure”, Page 6 “Permanent agricultural structure”, and Page 23 (d)

While we understand the intention of this section and definition to exclude photovoltaics that are simply added to existing structures such as rooftops, we believe the current language used may inadvertently prohibit other valid agrivoltaic structures such as canopy systems from being utilized.

Page 13 (e)

Though we understand the Dual-Use Solar Energy Act of 2021 states “continued use,” we hope the Board will consider allowing greenfields and brownfields that have not been farmed, if not in this current Pilot Program, in the final permanent program. The restriction that the land must have been used for agricultural use during the past 3 years, at minimum, limits the ability of the pilot program to help increase farmland in NJ and the State’s ability to study the impact of Dual Use Solar on land that has not been farmed.

Would it not be in the State’s best interest to increase farmland usage than merely preserve current farmland? By allowing land that is not currently being farmed to participate in this pilot program, NJ may see a number of greenfields convert over to farmland, greenfield that otherwise may have become developments or just remained unused. The additional data collected from greenfields would determine if dual use agrivoltaics increases the crop output on greenfields. This data could then incentivize other greenfield owners to follow suit, as they will be able to generate additional income on their unused land through land leases to the farmers and solar field owners.

Furthermore, by allowing brownfields to participate, it will help our universities and other research facilities to be on the forefront of brownfield remediation studies. Currently, there are several studies on the effectiveness and need for more sustainable brownfield remediation methods, more specifically on bioremediation that relies on plants and micro-organisms to clean the soil of contaminants.

Please see the National Institute of Health’s (NIH) “Soil and Brownfield bioremediation” study found here: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5609233/> and their “Metals accumulation by sunflower (*Helianthus annuus* L.) and the efficacy of its biomass in enzymatic saccharification” found here: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5402931/>.

When looking at the potential for crop yield increases when solar and agriculture are collocated, as described by enel’s post “Coming to terms with agrivoltaics,” one could hypothesize a correlated shortening of remediation timelines for NJ brownfields. Similar to greenfield co-located projects, this could generate dual revenue streams for otherwise unusable land.

We believe NJ is missing a prime opportunity to not only increase farmland within the State but also to study the impact of using the co-location of agricultural resources and solar to improve remediation rates on brownfields using sustainable practices.

Page 16 (vii)

Many farms currently have little or no electrical use or service, but may see an increase or new electrical usage due to proposed agrivoltaic techniques. There may also be certain projects that could benefit local communities through the Remote Net Metering Program by providing electricity to Public Entities. These scenarios should be considered while drafting final rules for the Dual-Use program.

Page 19 (11.)

We would like to clarify if “other cultural practices” should be “other agricultural practices” instead.

Page 23 (b)(1)

While we understand that intention for similar fencing is to compare experimental and control areas with similar wildlife access, we do not believe this would be an accurate assessment. Fencing around the agrivoltaic area that is required pursuant to any code, ordinance, permit requirement or statute should be considered part of the experiment as it is an element that would not typically be found on the farm and therefore should be considered as an additional benefit of agrivoltaics. Minimum fence height should also be set by the local code, ordinance, permit requirement or statute.

Page 24 (5)

Many agrivoltaic designs will create conditions for new, more profitable crops/animals that are unable to grow under existing “control” conditions. For example, heat sensitive crops that grow better in partial shade would fair much better under solar arrays than out in an open field. This should also be considered when determining what crop or animal will need to be raised in the control area. Comparing the same crop/animal may not be the best way to determine overall Dual-Use viability for all projects.

Page 24 (6)

There may be certain cases where concrete is a better option over other structural methods, particularly in cases where ballasted systems are beneficial. Rather than having a blanket ban on concrete and cement, we believe the Board should be provided more flexibility to decide what is best for each project.

“COMPR”

We would like to confirm that the COMPR is created and submitted after being selected for the Dual-Use Pilot Program using elements of the EOI and the application itself.