

According to the Guideline Regarding the Definition of Agricultural Solar Tariff Generation Units

“Demonstrate how your proposed dual use design will provide greater total agricultural yields than if the agricultural crop and the solar PV system were grown and installed separately, utilizing the same amount of total dual use land for the comparison.”

- Shaded ends of cranberry bogs have less than half the yield of the nonshaded areas.
- The shade from panels make the bogs stay wet longer and increase fruit rot.
- Poles and panels will interfere with the irrigation systems and precipitation which reduces uniformity.
- Nonuniform applications done thru the irrigation allows for increased disease and pest pressure which drops yield.
- The crop would be at least cut in half and the fruit would be lower in quality.
- The panels take up more than twice the acres for the same output.
- The structures would increase labor cost, you would no longer able to use helicopters for fertilizer or crop removal. Companies are offering up to 27 dollars per hour now because they can't get help and they can do use helicopters to haul off the fruit.

This does not demonstrate greater yields. Cranberries are a perennial plant that develops the next years bud in August. The buds are either (floral which produce berries) or (vegetative which make only more vines.) Vines in the shade produce more vegetative buds instead of floral ones, so the plant can grow more leaves to collect more sunlight to make carbohydrates to survive. The cranberry plant chooses survival before reproduction, which means (cranberries). The first year would have the best yield do to the number of floral buds from the previous year with no solar. The second year would be the first year of buds made in the shade, and the third year would be the beginning of a true demonstration of the dual use. Before allowing solar panels to be placed on hundreds of acres of cranberry bogs it should be demonstrated on one acre for at least five years.

The director of the University of Massachusetts Cranberry Station research center in Wareham commented in the WGBH article Sept 2 2019 that the research center would need at least three years to get conclusive evidence on the panels' effects on cranberries. She added that she thinks growers building solar panels over their bogs before more data comes out is a dicey proposition.

If the growers of the cranberries really thought this would work, why would they not take the offered \$3,000 per acre lease and keep their crop? Instead selling out for roughly \$50,000 per acre which the solar company is willing to pay to get the extra 6 cents per kilowatt hour for dual use, which is millions of dollars.

Who is going to audit the crop yields? Is it based on an average of the previous 5 years crops? “Which can be obtained from the handler or the cranberry marketing committee”. Who is going to make sure the crop actually comes from the dual purpose acres. What happens when the solar company cannot produce the percent yield, or stop growing the berries? How long do they have to remove the panels? Would they have to return the extra 6 cents per kilowatt hour for not meeting the requirements?

Applicant shall provide documentation that the project's proposed solar design's sunlight amount and sunlight reduction is compatible with the proposed agricultural crops and productivity over the project lifetime.

How can they do this without at least a five year study?

David Paquin cranberry grower for 36 years, the overseer of over a thousand acres of producing cranberry bogs, and designer of the fertility program on over two thousand acres.