# Sugar Maple Solar Virtual Community Meeting Q&A April 8, 2021

### 1. What about the large number of geese that use these fields during the fall and spring?

Migratory birds will still be able to utilize these fields in the areas where panels are not placed. In addition, there will be significant spaces between the panels – while they are fairly contiguous, they're not all in the exact same area, so there will be spaces between the areas of installed panels that geese can continue to utilize in the migratory season. The project will not block areas completely for their use.

### 2. How close will these panels be located to my property line?

We will follow the 100-foot setback from non-participating residential property lines, as applied by the 94-c permitting process. We will also be implementing a landscaping plan to provide visual screening and reduce the visual impact of this project.

### 3. What is the drilling being done in the fields around my home this week?

This drilling is temporary and is being conducted in an effort to understand what the subsurface soil conditions are in this area, so that we best understand how we're going to put in the foundations (piles) for this project. The racking systems for the solar panels in this project are called piles, and they are essentially I-beams that get driven into the ground. This drilling that is currently taking place is helping us to understand how far underground these piles need to be driven – whether that's 8, 10, 12 feet or more. This drilling consists of some soil borings and driving of piles into the soil, as well as pile load testing where the piles are moved in various directions and then pulled out.

# 4. What will be done to assist me when the value of my property drops because my home will be surrounded by solar panels?

We don't yet have any large projects like this built in New York State, and so studies of the impact of solar on property values in this area have not yet been conducted. At this point, the understanding that we have from industry studies that have been done in North Carolina and a few other states is that utility scale solar installations have not increased or decreased neighboring property values within these project areas.

Find below a number of industry studies, as well as the published university-led studies, that have been conducted on this topic:

 September 2020 Study by the University of Rhode Island: Property Value Impacts of Commercial-Scale Solar Energy in MA and RI

- <u>June 2020 Adjacent Property Values Solar Impact Study: A Study of Eight Existing Solar</u> Farms (located in Michigan, Minnesota, Indiana, Illinois, North Carolina & Virginia)
- June 2020 Round Hill Solar Impact Study (located in Augusta County, Virginia)
- April 2020 Flat Run Solar Impact Study (located in Taylor County, Kentucky)
- May 2018 Study by the University of Texas at Austin: An Exploration of Property-Value Impacts Near Utility-Scale Solar Installations
- May 2018 Adjacent Property Values Solar Impact Study: A Study of Nine Existing Solar Farms (located in Illinois, Indiana and Minnesota)
- March 2018 Adjacent Property Values Solar Impact Study: A Study of Nine Existing Solar Farms (located in Illinois and Indiana)
- February 2016 Oakwood Solar Impact Study (located in Mebane, North Carolina)

#### 5. How many megawatts does the average household consume per year?

Megawatts (MW) is a measure of power, typically used when discussing a facility's production of energy, while megawatt-hours (MWh) is a measure of electric energy, used for discussing consumption of energy. One MWh is equivalent to the amount of electricity generated by a one megawatt (MW) electric generator operating or producing electricity for one hour. On a household electric bill, electricity consumption is commonly reported in kilowatt-hours (kWh), thus this answer will be provided in kWh. 1 MWh is equal to 1,000 kWh.

According to the EIA, the 2019 average annual electricity consumption for a U.S. residential utility customer (a household) was 10,649 kWh, with this average varying greatly by state – Louisiana with the highest consumption at 14,787 kWh per residential customer, and Hawaii with the lowest, at 6,296 kWh per residential customer.<sup>1</sup>

An extensive report published NYSERDA in March 2021, *Patterns and Trends: New York Energy Profiles, 2003-2017*, reports that the 2015 average consumption of electricity per household in New York was 6,716 kWh.<sup>2</sup> This is the most recent data available, but average residential electricity consumption in New York has consistently been much lower than the U.S. average.<sup>3</sup>

6. You state you have met with landowners, when do you plan to meet with those landowners who live within this project to listen and address our concerns? There was a meeting scheduled last year and then cancelled by your company and we have heard nothing since that time.

COVID has been tricky for these kinds of meetings, but as far as meeting with landowners, we are very accessible. There are a few landowners that have asked questions who we are going to reach out to specifically, and if anyone else has questions you can feel free to reach out to us via <a href="mailto:sugarmaplesolar@aes.com">sugarmaplesolar@aes.com</a>, our toll-free number (866-757-7697) or even the cell phone

<sup>&</sup>lt;sup>1</sup> https://www.eia.gov/tools/faqs/faq.php?id=97&t=3, https://www.eia.gov/energyexplained/use-of-energy/electricity-use-in-homes.php

<sup>&</sup>lt;sup>2</sup> https://www.nyserda.ny.gov/About/Publications/EA-Reports-and-Studies/Patterns-and-Trends

<sup>&</sup>lt;sup>3</sup> https://www.eia.gov/consumption/residential/reports/2009/state\_briefs/pdf/NY.pdf

numbers included at the end of our presentation – you will find that we are extremely accessible.

We do recognize that there are many differing opinions out there regarding solar and other renewable energies and we respect that. We recognize that we might not be able to change those opinions, but we will commit to listening to every situation and try to come to the best solution available for each individual situation. You can always reach out to us, please feel comfortable doing so.

#### 7. Is there a slide with all of this regulatory information?

Yes. Slides 17-24 of the presentation slide deck (which can be viewed <a href="here">here</a>) contain a NYS regulatory overview (information on the 94-c permitting process). If there is regulatory information not available in the slides that you are looking for, please reach out and let us know.

### 8. Will this power be received by the local community or will it be distributed out of the area like the Tug Hill Windmills?

The electricity is going to be gathered as direct current (DC) throughout the whole project area, will be converted to alternating current (AC) by a piece of electrical equipment called an inverter, and then will be transferred onto the grid at our point of interconnection (POI).

From the POI, the electricity produced by this project will be transported down the connected electric lines to the next substation up and down from where we inject our electricity into the grid, and from there, the electricity will be dispersed throughout the communities in the area.

Electricity follows the path of least resistance, so if the local demand for electricity is less than what we're producing, the electricity will continue from these closest substations down the transmission lines and go to the next closest homes that have demand for it. To summarize, the answer is yes – the electricity will first be made available to and used up by the local community – those individuals in the vicinity of the project area.

# 9. What is the plan for maintaining the area? What is the plan for removal/cleanup up of the solar panels and facilities if/once the program/contract is up, eliminated or retired?

Our own operations and maintenance (O&M) team comprised of 2-3 individuals will be responsible for maintaining the project area, in addition to the work of repair teams, mowing teams, etc. as needed. A vegetation management plan will be established and followed through operations. We are looking to plant pollinator friendly seed mixes along the edges of the panels and will also have vegetative buffers where necessary throughout the project that will be maintained in accordance with what type of tree or vegetation they consist of. There is consideration for using sheep or mowing as methods for vegetation maintenance, we are looking at all these alternative opportunities for maintaining the area.

As concerns removal and cleanup of the solar panels and facilities once the contract is up, we (AES Clean Energy) will be responsible for this decommissioning, for taking all of the equipment out of the ground, taking the panels down, and restoring the area to its previous state. The panels will be either reused somewhere else, depending on where they are in their life cycle, or will be decommissioned and recycled via the manufacturers.

In the unlikely event that AES Clean Energy is not able to follow through on our commitment to decommission the project and return the area to its original state, there is a decommissioning financial security in place (funds committed by AES Clean Energy to the local municipalities) that would enable the local municipalities to hire contractors that can decommission the project and restore the project area.

10. How will this program be voted into effect for the area? How will the local population in the immediate areas affected by the construction and the aesthetic impact of this program be consulted?

This project is under the jurisdiction of the State Office of Renewable Energy Siting (ORES). ORES is the entity responsible for approving the project application and granting the permit that will enable the project to move forward.

That being said, we are not just relying on this state agency to give our project the go-ahead. We want to make sure that we're engaging community stakeholders in discussing the project, so we look forward to ongoing and future engagement via meetings like this.

As regards consultation, we are open to a dialogue with anyone at any time. Please feel free to reach out to us if you have any questions or concerns, via the project contact information or our project representative personal phone numbers. Eric and/or Brett will be meeting with anybody in the project area that has further questions and would like to have an in-person conversation.

Meetings like this one and our ongoing engagement with stakeholders are how we get feedback from the local community, so we welcome any and all questions, concerns and feedback.

11. Will an FAA recommended Glare Hazard Analysis be completed? This report would help identify any potential glint and glare impacts on pilots flying to and from both Wheeler Sack Army Airfield and related training flights in the area, as well as flights to and from the Watertown International Airport.

We will be completing a glare hazard analysis as a component of the 94-c application and consulting with airports as required or as needed for this project. Eric has already reached out to and spoken with representatives of several airports in the area.

The 94-c regulations (which can be viewed <a href="here">here</a>) state in Section §900-2.9 Exhibit 8: Visual Impacts, "...the Visual Impacts Minimization and Mitigation Plan [a required component of Exhibit 8 of the application] shall include an analysis using Sandia National Laboratories Solar Glare Hazard Analysis Tool (SGHAT) methodology or equivalent."

12. What research has been completed or will be put into effect to analyze and assess the depreciation of our property values that will absolutely ensue due to this project?

At this point we don't have any research plans post-production, though that would be very useful information for the industry to have, and we'd be happy to participate in that afterwards.

13. The towns are responsible for decommissioning the old stuff come the end of life but use the set aside monies from the plan? It would be local responsibility to do the work and dispose of the old equipment?

We (AES Clean Energy) are initially responsible for all decommissioning. Decommissioning would only fall to the towns should we fail to fulfill our obligations, and financial security (required under 94-c) will be provided by AES Clean Energy, which the towns would be able to use to cover the costs of decommissioning in this unlikely case – to hire a project management or decommissioning company that would carry out this work.

14. RE: the recent 94-c reform. Did this recent change impact the timeline of this project?

Additionally - RE decommission details, are they available to the public?

This change has not impacted the timeline of this project – the schedule has been as it's been, and the 94-c process has a very similar timeline (to the Article 10 process) once the application is deemed complete (the length of time it takes to have the permit ultimately issued or a decision made on the permit).

The decommissioning details for this project are still being analyzed and finalized, they will be dictated by design and other factors, so this information is not yet available. However, these details (including financial security specifics, the amount of decommissioning, the process by which components are decommissioned, what components are decommissioned, etc.) will be finalized and included in the 94-c application, which will be available to the public as soon as it is submitted (submission is targeted for this summer).

15. Will you be mowing or planting pollinator plants within the fenced-in area?

We cannot definitively answer this question as we have not yet finalized our landscaping plan, but both of these options are being considered.

16. How are the old panels disposed of? Are they recycled or taken to the landfill at end of life?

At this time, if panels are cracked or broken, they are taken back to the manufacturer to be recycled.

As end of life for a solar project could be 25-35 years from now, it's difficult to answer that question, not knowing what the solar industry will be at that point. But, based on the market for

recyclables we're assuming that by then there will be a great market for recycling e-wastes (including solar panels).

### 17. What if our house sits on a hill and trees would have to be 40 feet tall to block the glare?

As mentioned previously, we will be conducting a glare analysis for the project, but generally solar panels do not produce much glare, as they have a very anti-reflective coating which helps them absorb light better. They are designed to absorb light, rather than reflect it.

Additionally, though we don't yet have a full landscaping plan for this project, we will be implementing landscaping/vegetative buffering where appropriate, based on the setting and our visual impact analyses.

### 18. What are the major changes in the project from what was presented last year before AES took over?

There are two major changes from what was presented last year – the transition in ownership of this project from Geronimo to AES, and the potential addition of 20 MW of battery storage. The battery storage component is being evaluated right now and hasn't been 100% decided on, but we will have that decision made prior to the submission of our 94-c application (targeted for this summer). Engineering of the battery system and consultations with local fire departments and EMS will also take place prior to application submission.

# 19. Can you expand on the details of the battery storage? Type of batteries? Maintenance? Environmental concerns? Potential hazards? Similar battery storage used in nearby projects?

The battery storage component will be contained entirely in one location, adjacent to the project substation. It will look like and be treated like all other electrical equipment and will be protected as such with relevant setbacks. As regards battery type, we will be using lithium ion batteries, though we do not yet know the exact brand. AES does have a partnership with a company called Fluence, which is the largest battery installer in the world, which we mention only to illustrate that we are very well aware of monitoring safety concerns with both vendors and operators of batteries. We will be monitoring and making sure that any safety concerns are addressed throughout construction and operation of the project. We are not specifically aware of battery storage being used in nearby projects, but generally, lithium ion batteries are the kind of battery being installed right now in New York.

#### 20. Can those of us registered get a copy of this recorded meeting?

The recording of the meeting is available on the project website, at <a href="https://www.aes.com/sugar-maple-solar-project">www.aes.com/sugar-maple-solar-project</a>.

### 21. By what date will you know what lands are being used in the project?

We cannot provide an exact date right now, though we are close to finalizing our layout. We still need to take all of the environmental, construction and subsoil information we have gathered into account and make the best decision for where we are going to locate all of the project equipment. That will absolutely be done before we submit our application, so when we submit (targeted submission is this summer), the layout will be finalized and will be publicly available in the application itself.

### 22. Will the project include stationary panels or the design that generally tracks the path of the sun?

Because the topography in this area is fairly flat, it works perfectly for tracking units, so this is what we will be using. The tracking panels will slowly move with the sun on a single, north-south axis, moving from the east to the west as the sun moves through the sky.