



## Project Narrative – Macon County

**March 26, 2018**

SolAmerica Energy, is filing for a special use permit to develop and build a solar farm on parcel 18-08-20-100-007 located in Macon County, IL.

**Property Address:** Near Cundiff Road Whitmore, IL 60560

**Current Property Use & Zoning:** Agriculture

**Proposed Property Use:** Solar Power Farm, to consist of solar modules over roughly 10-15 acres of the parcel.

Solar modules will be approximately 3-6 feet high in the air and each module is roughly 6 feet long x 3 feet wide. Modules are non-reflective. The project is considered a “passive” power plant and noise levels will not exceed 40-60 decibels (just above talking level).

**Plant Operation Schedule:** Plant will be in operation 24 hours a day, yet will make the majority of power during peak sun hours (PSH's) approximately 5-6 hours a day between the hours of 9AM-3PM (depending on the season of the year).

**Plant Personnel:** Personnel will not be onsite for day to day operation. Operation and maintenance of the plant requires personnel to be onsite approximately 7-10 days during a calendar year.

**Assembly Area:** Solar Array will be on approximately 15-20 acres of parcel.

**Development & Construction Schedule:** Approximately 16 weeks from breaking ground to commercial operation. Approximately 10-20 workers will be onsite during construction phase.

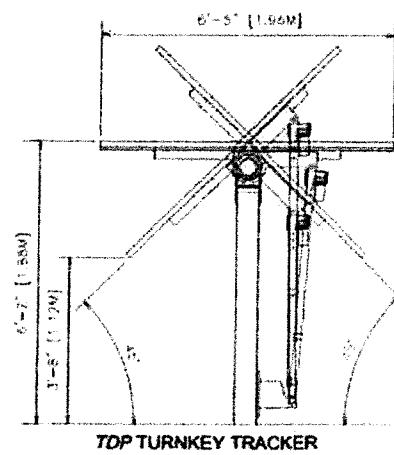
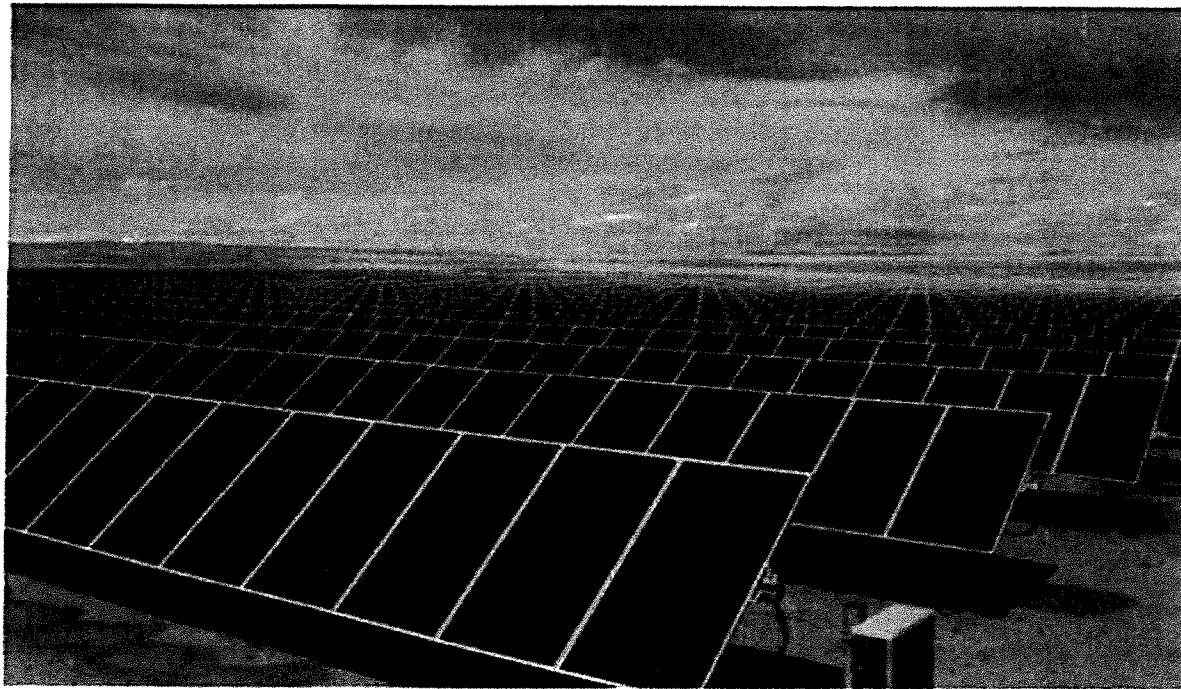
**Past Project Experience:** SolAmerica has over 43 projects developed and constructed totaling more than 33MW (DC) across the states of Georgia, South Carolina, Alabama, Florida, Maryland and New Jersey, with greater than 100 MW (DC) currently in development in these States.

For more on past projects completed by SolAmerica please visit  
<https://www.solamericaenergy.com/projects/>

**Plant & Project Details:** The site will be developed and constructed by SolAmerica Energy and then operated by SolAmerica or another long-term project owner. There will be a long-term power purchase agreement (PPA) with the utility to sell the power to local businesses and/or residents to offset power costs from the utility grid.

**Decommissioning Plan:** A decommissioning plan will be in place and part of the project. Plan will include removal all Solar Project Improvements from the Premises and restore the Premises to a greenfield condition, including removing underground wiring. Decommissioning of all components, above and below ground, typically happens within a period of 180 days after lease termination.

**Architectural Renderings of Solar Power Farm:**

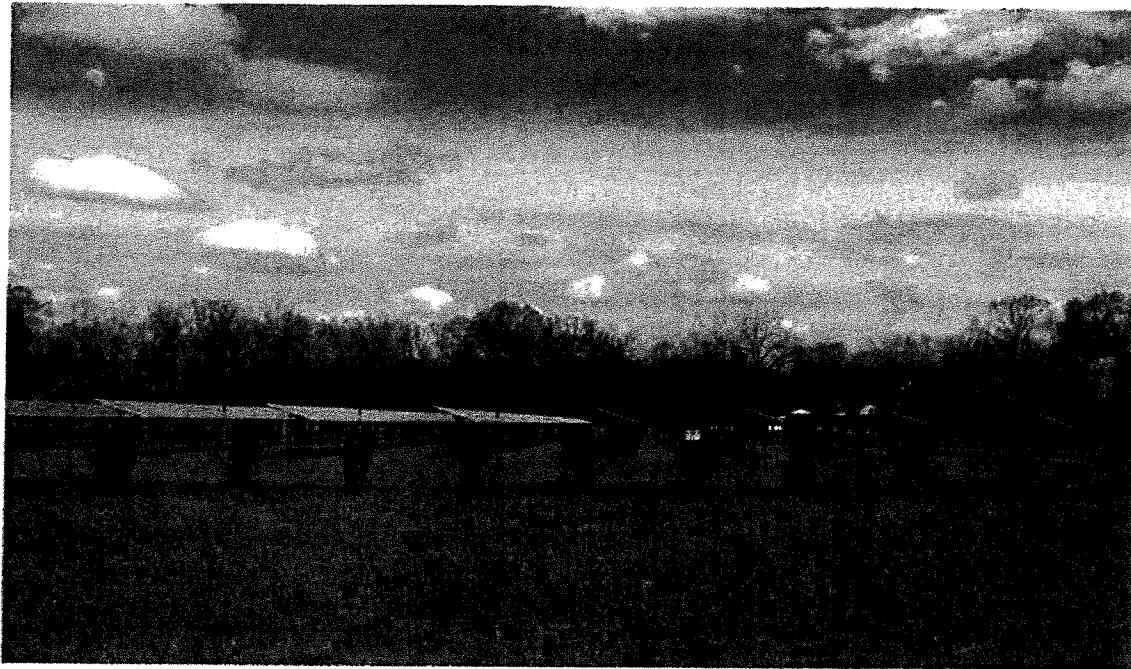




## Community Solar Gardens in Your Community

### What is a Community Solar Garden?

Solar energy can offer substantial cost savings and environmental advantages. However, there are many reasons why a project located on a customer's property may not be feasible. A community solar garden is a shared approach to participating in and benefiting from solar energy that solves these challenges. Participants, called "subscribers," lease or buy a portion of a solar project. Subscribers can be homes, businesses, hospitals, schools, nursing homes or anyone with an electric bill. The electricity produced by a subscriber's share of the system is used as a credit to lower their electric bill, saving them money and allowing them to participate with clean, environmentally-friendly, renewable energy.



*This project was developed and constructed by SolAmerica in Plains, Georgia, on property owned by former President Jimmy Carter.*

### How does Community Solar benefit my community?

Community solar can bring a variety of benefits to the local community. These include:

- **Tax revenue for the local community:** While it depends on project size and the local tax rate, community solar projects in Illinois are expected to bring roughly \$10,000 in tax revenue in Year

1 to the local community. Over the 30-year expected life of the project, total revenue would be hundreds of thousands of dollars.

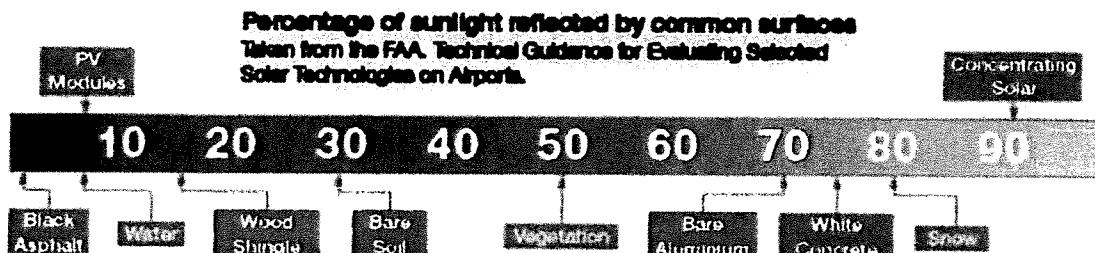
- **Electric bill savings:** Anyone in the same electric service territory of a community solar garden will be eligible to become a subscriber. This provides the opportunity for meaningful long-term bill savings and an ability to participate in an environmentally-friendly project.
- **Local economic activity:** Solar projects involve a variety of trades and service providers, many of which may be sourced from the local community. This can include on-going landscape management, fence installation, electrical engineering, construction labor, consulting relevant to permitting, and operations and maintenance.

### Would a nearby community solar garden impact my property value or quality of life?

A community solar garden is a managed landscape with grass and/or wild flowers. According to the National Renewable Energy Lab (NREL) of the US Department of Energy:

*While the impacts of a solar farm on neighboring property values have not been studied in-depth, numerous studies found the impact of wind energy generation on neighboring property values to be negligible. As solar farms do not have the same impacts as wind farms (i.e., PV facilities do not cast a shadow on neighboring properties, cause light flicker, or have the same visual impact as wind farms), the impacts on property values caused by solar farms are anticipated to be less than the impacts of wind farms.<sup>1</sup>*

Additionally, photovoltaic (PV) solar panels are coated with non-reflective materials designed to maximize light absorption and, as a result, minimize glare. According to a 2014 study by Fisher, Sheehan and Colton: "solar panels produce less glare and reflection than does standard window glass."<sup>2</sup>



**SolAmerica uses PV modules, not concentrating solar.**

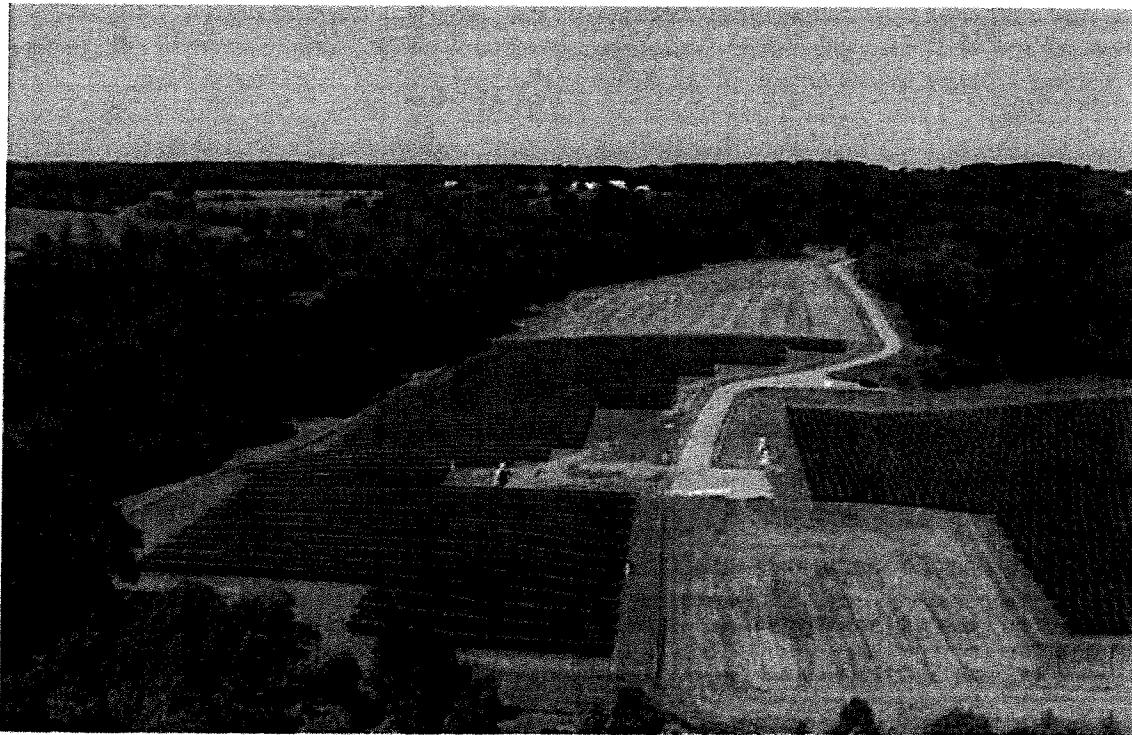
<sup>1</sup> <https://www.nrel.gov/technical-assistance/blog/posts/top-five-large-scale-solar-myths.html>

<sup>2</sup> Colton, Roger. "Assessing Rooftop Solar Glare in Dense Urban Residential Neighborhoods." 2014

Regarding noise, a study conducted by Tech Environmental, Inc., for the Massachusetts Clean Energy Center, that investigated two utility-scale solar projects concludes: *Any sound from the PV array and equipment was inaudible at set back distances of 50 to 150 feet from the (project) boundary.*<sup>3</sup>

Lastly, proper on-going maintenance, including ensuring that plant growth does not shadow the solar panels, is critical to project production. Therefore, community solar gardens will establish long-term site management agreements before going into operation. This should result in sites that are well-maintained.

In fact, solar is a quiet and, typically, visually appealing neighbor that can block the path of undesirable development for decades to come. If desired by local residents, the fence around the project can include a fabric screen to block the view of the project.



*This project was constructed by SolAmerica in West Friendship, Maryland.*

#### **Do solar gardens pose risks to wildlife or the surrounding community?**

Photovoltaic solar gardens produce no air emissions, do not release toxic materials, and emit no radiation. Further, projects that use photovoltaic technology, do not produce excessive heat. In fact, solar gardens are frequently home to nesting birds and, with the right plant mix, can attract butterflies and other species.

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<sup>3</sup> Tech Environmental, Inc., December 2012.

<http://files.masscec.com/research/StudyAcousticEMFLevelsSolarPhotovoltaicProjects.pdf>



More than 1.5 million homes now have solar panels on their roof. Like all electrical devices, from cell phones to computers to refrigerators, solar panels and system inverters emit electrical and magnetic fields. Even with these direct installations, a study conducted by Tech Environmental, Inc., for the Massachusetts Clean Energy Center concludes that electrical and magnetic fields generated by solar panels and their inverters are lower than background electrical and magnetic fields created by other devices that surround our daily lives and, that, these fields are several hundred times less than recommended exposure limits.<sup>4</sup>

### **What are the health and environmental benefits of solar energy?**

Solar energy and other forms of renewable energy can replace the use of fossil fuels, such as coal and natural gas, to generate electricity. This provides significant health and environmental benefits. Burning fossil fuels release a variety of pollutants, including sulfur dioxide (which causes acid rain and respiratory ailments), nitrogen oxides or NOx (which contribute to acid rain and ground-level ozone (smog), which can burn lung tissue and can make people more susceptible to asthma, bronchitis, and other chronic respiratory diseases), particulate matter (which produce haze and can cause chronic bronchitis, aggravated asthma, and elevated occurrence of premature death) and mercury (which, after entering the food chain, can cause neurological effects in children, especially infants). Fossil fuels are also the single largest source of greenhouse gases, which drive man-made climate change.<sup>5</sup>

### **Who is SolAmerica?**

SolAmerica is a leader in the design, development, financing, construction, and operations of solar power arrays. Founded in 2009, SolAmerica has delivered solar applications across a broad range of industries, earning the trust of leading commercial firms and utilities. SolAmerica has successfully implemented high-profile solar projects across a variety of solution types, including-ground mount, roof-mount and solar battery storage projects. For more information on past projects, services offered, office locations and company contacts please visit [www.solamericaenergy.com](http://www.solamericaenergy.com).

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<sup>4</sup> Tech Environmental, Inc., December 2012.

<http://files.masscec.com/research/StudyAcousticEMFLevelsSolarPhotovoltaicProjects.pdf>

<sup>5</sup> <https://www.ucsusa.org/clean-energy/coal-and-other-fossil-fuels/hidden-cost-of-fossils>