

November 26th, 2024

Dear Neighbor:

On behalf of Kings Highway Solar LLC, we invite you to an informal public information meeting for the Kings Highway Solar project. Kings Highway Solar is a solar farm being developed along Kings Hwy by Renewable Energy Services (RES). RES is a family-owned and operated North Carolina-based renewable energy development company. The project will sit on a portion of parcel ID's 51-19; 51-20; 51-18; 52-18A; and 52-4A. An image of the land involved is included as the last page of this letter.

You are receiving this notice because you own property adjoining or near the proposed facility. We would like to offer you the opportunity to learn about the project and its design, meet the development team and ask any questions you may have. The meeting is open to anyone who wishes to attend, but only those nearest the proposed project will receive this letter.

If interested, please join us in person at the Essex Public Library meeting room, located at 117 N Church Ln, Tappahannock, VA 22560 on <u>Wednesday</u>, <u>December 11th</u>, as well as on <u>Wednesday</u>, <u>December 18th</u>, from 5:30-6:30pm.

We realize schedules vary so please join us on a drop-in basis at a time convenient for you. If you are unable to attend, have an immediate question, or would like a one-on-one meeting, please don't hesitate to reach out to either Tom Delafield or Majed Alshanteer. We will meet with you personally or communicate by phone or email, whichever is easiest for you.

Enclosed with this letter we've provided answers to frequently asked questions that might be helpful or of interest. In the meantime, please let us know if you have questions or concerns. Our offer to meet with you is sincere. We recognize that every community is different and deserving of unique consideration.

Sincerely,

Tom Delafield

COO Renewable Energy Services, LLC (919) 723-7473 (direct) tdelafield@r-e-services.com **Majed Alshanteer**

Associate Project Manager Renewable Energy Services, LLC (336) 899-3038 (direct) malshanteer@r-e-services.com

Frequently Asked Questions

What is "solar energy"?

Solar energy is simply the conversion of sunlight into useable energy in the form of electricity. It is one of the main types of "renewable energy" and does not use fossil fuels.

What is a solar farm?

A solar farm is a collection of ground-mounted solar panels on a parcel of land that allows the operator to efficiently use sunlight to produce renewable energy. By grouping panels together, more energy is produced at a lower cost than with other methods of energy production.

Why solar energy?

Solar energy provides clean (no emissions) energy. New energy generation is required to replace old power plants such as coal as they retire due to end of life, environmental or economic pressures. Solar farms are able to provide clean energy below the costs of operating these older generation assets. From an economic perspective, it makes sense to replace more costly fuels like coal and oil with the free, natural sunlight which ultimately lowers the total energy costs for consumers. And from a land use perspective, cities and counties across the country are realizing that solar farms offer large tax benefits with far less impact on neighbors than a subdivision, industrial site or other type of land use.

Are solar farms common in Virginia?

Yes, Virginia is one of the most active states for solar farm activity in America, ranking 9^{th} overall is the U.S. for solar installation. The number of solar farms in Virginia has grown rapidly in the last decade with 65 active solar farms in the state today, and many more in development.

Will I be able to see the solar farm?

No. The facility fence line will be set back two hundred (200) feet from Kings Highway and adjoining, small-lot residential parcels. The project's design will also incorporate fifty (50) feet of vegetative buffers along right of ways and where adjoining residences. A thirty (30) foot vegetative buffer will be planted where adjoining non-wooded parcels, and the remainder of the site will utilize preserved vegetation. Landscape buffer visualizations can be provided via email and will be available at the public meetings. This plan will be submitted for approval by the County of Westmoreland. Additionally, unlike houses or other forms of traditional development, it will be silent and completely dark at night.

Are there other design elements a neighbor should know about?

Yes. The project's design will look to implement wildlife permeable fencing; install native, pollinator friendly-ground cover underneath panels; and preserve the existing vegetation on site, where possible, providing a natural buffer along the project's northern, western and southern boundaries. No ecologically sensitive areas, like wetlands or floodplains will be adversely affected.

The project plans to incorporate a small battery energy storage system to help provide electricity to the grid when the sun isn't shining. The system is planned to be a 4-hour lithium-ion battery chemistry, very similar to those used in electric cars. The battery, if constructed, would be directly beneath the power line, approximately a mile from Kings Hwy and several thousand feet from the nearest home.

The design will be approved by the Board of Supervisors based on the Planning Commission's recommendation as a part of our land use permit.

Are all utility companies investing in solar?

All major utility companies in the United States generate portions of their energy from "clean" sources that do not create toxic by-products (e.g. coal ash and air emissions). Sunlight is one of those clean sources. PJM owns numerous solar facilities across the PJM service area, including several in the state of Virginia. Additionally, large companies such as Amazon, Google, and Apple use solar energy to provide energy to their server facilities. Many other large companies like Bank of America, Walmart and GM have joined the "Renewable Energy 100" pledge to source 100% of their energy from renewables and use roof-mounted solar on some of their facilities.

How does a solar facility work?

Generally described, solar "panels" are placed onto steel frames (called "racks") that are driven into the ground so that very little land is disturbed. These panels passively receive the sun's light, which in turn causes electrons in the solar cells to move about. This movement generates a direct current that is converted at the site to alternating current before being transferred to the electrical grid. There are zero fumes, emissions, or byproducts.

Does the community receive taxes from a solar farm?

Yes. There are several mechanisms through which the County can tax solar. Westmoreland County currently utilizes a revenue sharing agreement, in which the solar farm pays an escalating fee per megawatt of the facility's capacity every year. This begins at \$1,400 per megawatt with 10% escalation every five years. This could amount to

\$4,402,817 in total taxes paid to Westmoreland County during the forty-year (40) life of the project.

What other benefits will our community see from this project?

In addition to the tax revenue solar farms generate, the facility's construction will bring over one hundred construction jobs and an influx of business into the area, including to hotels, restaurants, equipment rentals, fencing, fuel and waste services.

Where will the energy go?

The energy will be routed through the electrical grid by PJM, the regional grid operator for the mid-Atlantic seaboard, which including Virginia. The electricity produced will likely be consumed by residences and businesses across Westmoreland, and other surrounding counties. This solar farm will be able to produce enough electricity to power approximately 8,850 homes.

Are solar farms safe?

Yes, solar farms are very safe. The EPA has extensively tested solar panels and concludes that they are completely safe. Another common question asked relates to the electromagnetic fields, or EMF, generated by the solar farm inverters. The amount of EMF exposure to a person on the outside of a solar farm is less than the person receives when inside his or her own home, or even using common appliances. For more information on this, or any other topic, please reach out directly. Third parties, such as the N.C. Clean Energy Technology Center at N.C. State University, have numerous resources on solar farms. One such paper can be found at https://content.ces.ncsu.edu/health-and-safety-impacts-of-solar-photovoltaics.

Do solar farms harm property values?

Hundreds of studies have been done in numerous states by certified and licensed appraisers using industry standard methods. Many of the studies have been audited by independent appraisers. They have concluded that solar farms possess none of the characteristics that would cause harm to adjoining property values (noise, odor, light, traffic, etc.), and we are not aware of any studies that have found evidence of harm from existing facilities, including studies conducted across Virginia.

Do solar farms produce noise, traffic, light or odor?

No. The inverters are the only components of a solar farm that produce meaningful noise. When standing directly next to one you might hear a hum similar to an air conditioner. From outside the facility, they are impossible to hear over ambient noises created by wind, birds, background traffic, etc.

The average solar farm generates one or two vehicle trips *per month,* as contrasted with an average single-family home that generates 9.52 vehicle trips *per day* (Institute of Transportation Engineers, *Trip Generation Manual,* 9th ed.). One home (or a group of new homes, such as a new subdivision), on the other hand, would generate traffic and suburban noise in the form of lawn mowers, leaf blowers, and common noises created whenever people gather.

Solar farms do not emit any light and only operate during the day. There will be no lighting at night. Additionally, the facility produces no odors. In other words, you won't be able to hear it, smell it, see it, or be aware of traffic generation.

What is the impact on wildlife?

Solar farms, because of their inherent size, can displace larger forms of wildlife like foxes, coyotes, and deer; however, the project is exploring wildlife permeable fencing to allow smaller animals to continue to traverse the area and utilize natural resources such as streams and wetlands. Smaller animals have often been found to nest and live within the fence lines.

Underneath the panels, solar farms incorporate natural vegetation that covers approximately 98% of the site. A native seed mix will be incorporated on site to benefit the adjacent and surrounding farm community by sustaining the vital local pollinator species as well as reducing the use of herbicides on site.

How long do they last?

A standard lease is 30 to 40 years. Once the solar farm is no longer needed, it can be easily decommissioned by lifting out the panels and pulling up the steel posts holding the frames, and the land can be returned to its natural state. In other words, unlike a subdivision, the land can easily be returned to agriculture. Virtually all parts of the facility are recyclable, being predominantly made of steel, aluminum, copper and silicon. Additionally, the project will submit a decommissioning plan to Westmoreland County, outlining all necessary actions and specifying the parties responsible for removing the facility at the end of the term.

What does the local planning & zoning process entail?

Kings Highway Solar has submitted a Special Exception Permit application to the County of Westmoreland's Building & Zoning Department. The project, through the Special Exception Permit application, seeks special permission for constructing a solar array farm in the county's A-1 Agricultural District.

The Westmoreland County Planning Commission will hold a public hearing to review the application and project materials and make a recommendation to the Westmoreland County Board of Supervisors. The Board of Supervisors will then hold a public hearing before ultimately voting on the Special Exception Permit application.

The County of Westmoreland Planning Commission is holding a work session to discuss the project on Monday, December 16^{th} at 3pm and has scheduled the Planning Commission Meeting for Monday, January 6^{th} at 1:30pm. The Board of Supervisors meeting will be held on Monday, February 10^{th} at 6pm. All meetings will be held at the same location, at 111 Polk St. Montross, VA 22520.



Kings Highway Solar Project Area

