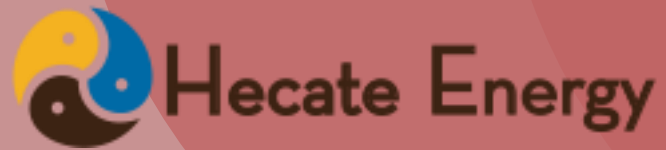


NEW RIVER VALLEY

Three Phases
280 MW Solar Project

HECATE ENERGY
PULASKI LLC



Presentation Overview

Project Team

Project Area

Economic Development

Economic Impact

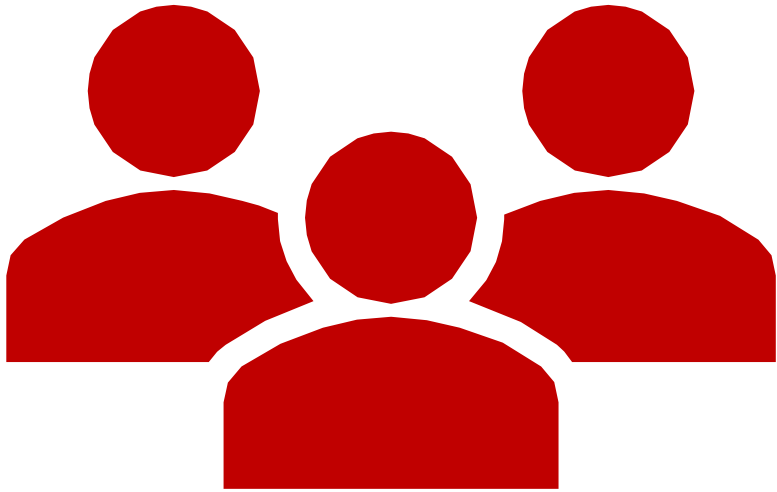
Working with the Airport

Working with the Community

Renewable Energy Infrastructure

Environmental Considerations

Project Team



Hecate

- › Preston Shultz
- › Paul Turner

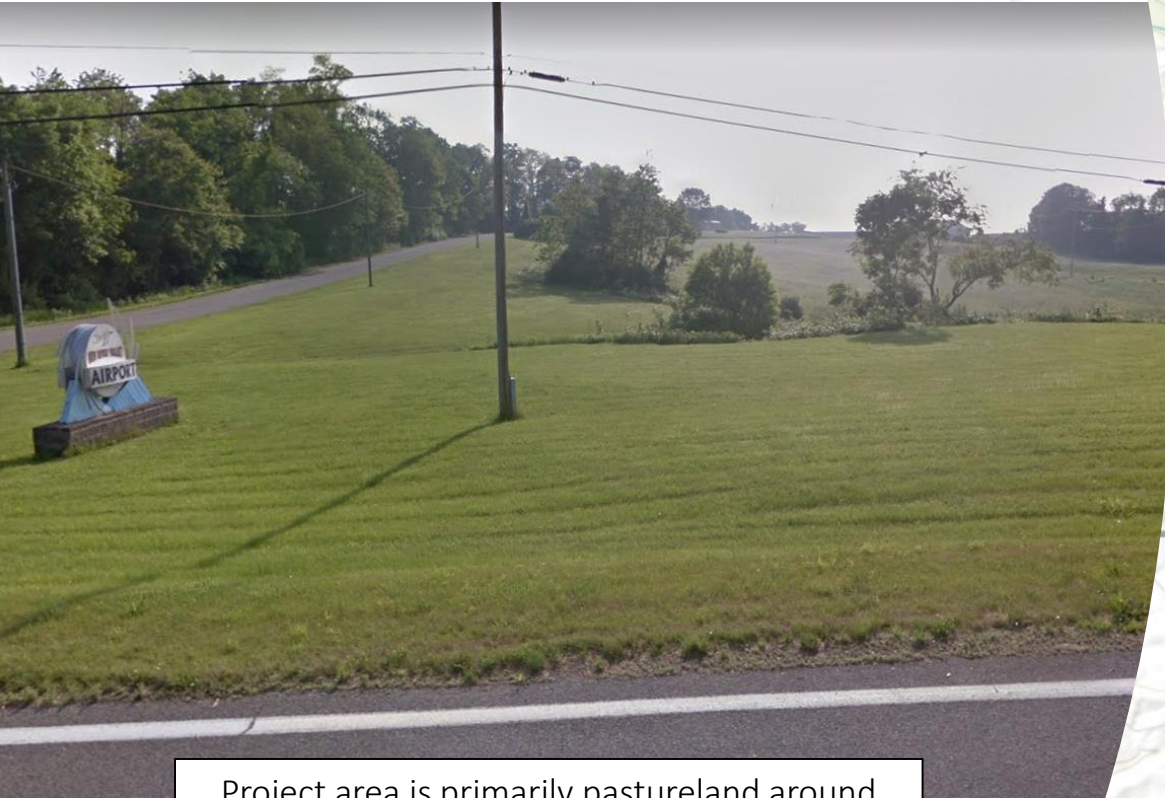
AgriSunPower

- › Felix Garcia
- › John Largen
- › Jay Poole

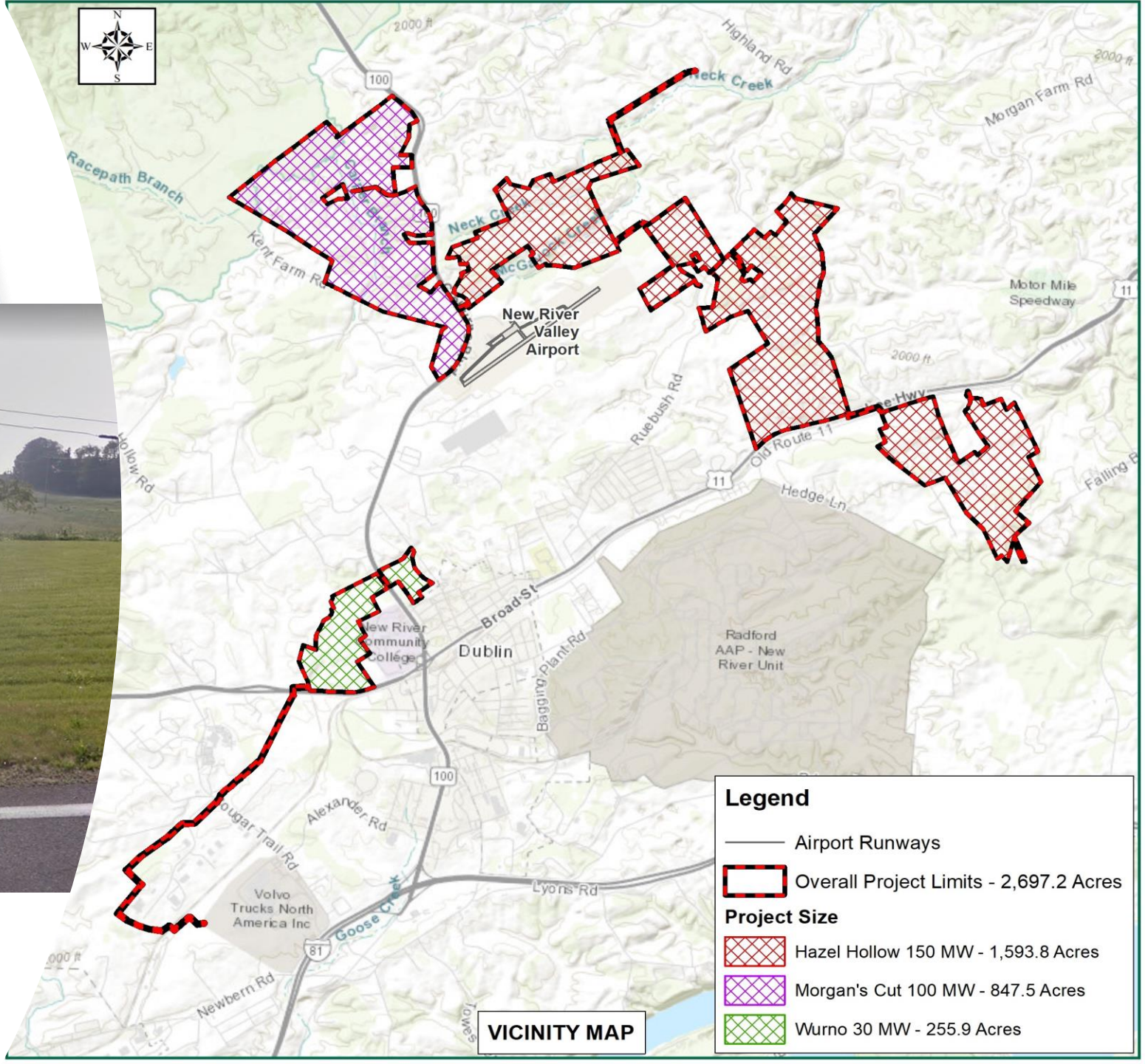
Consultants

- › Chris Tuck – Attorney
- › Timmons Group – Engineering
- › Eden & Associates – Aviation

Project Area



Project area is primarily pastureland around New River Valley Airport





Economic Development



Economic Impact

- Total project investment:
Projected \$400 million
- 130 Construction Jobs
- \$420,000 annually in new
additional tax revenue
- Total tax revenue = \$15 million
over 35-year life of Project

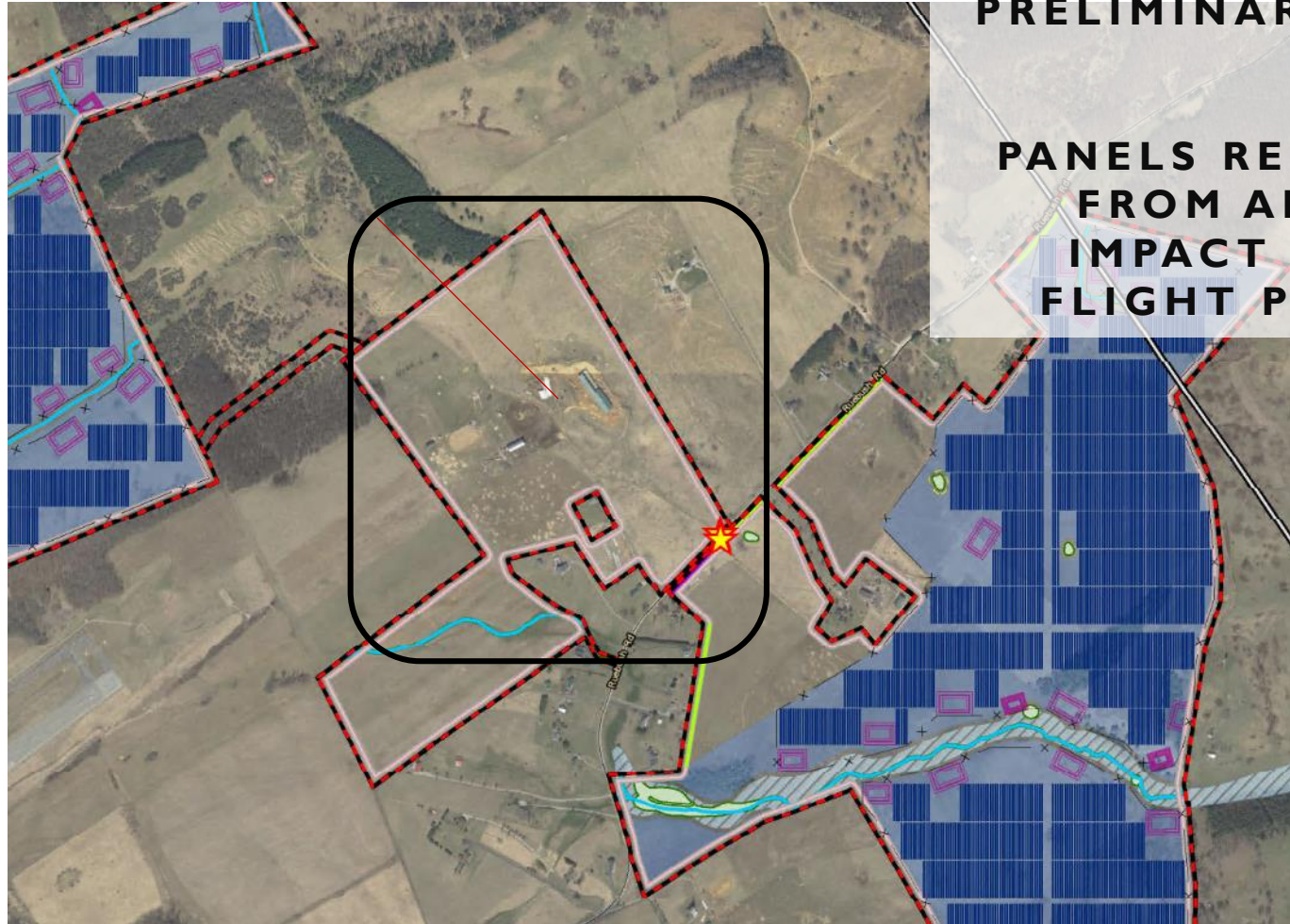


Working with the Community

Working with the Airport

REVISED PRELIMINARY SITE PLAN

PANELS REMOVED
FROM AREA OF
IMPACT UNDER
FLIGHT PATH #2



October 29, 2020

HECATE ENERGY
C/O Christopher A. Tuck, Esquire
P. O. Box 11422
Blacksburg, VA 24062

Re: Solar Farm Project Planned for the Vicinity of
The New River Valley Airport

Dear Mr. Tuck:

I am writing to confirm that after the presentation by you and Rick Thomas of Timmons Group for the Hecate Energy Solar Farm Project being planned for the vicinity of the New River Valley Airport at Dublin, and specifically in light of the review of the Glint/Glare Study performed with regard to the approaches to the airport and determination reported on behalf of Hecate Energy that the portion of the project which would have had a slight impact on an approach will be excluded from the project, the Commission approved a resolution accepting the Glint/Glare Study as Presented with the exclusion of a portion of the project that would have had a slight impact on one of the airport's approaches. As you and others for Hecate were scrupulous to note, the resolution requested addresses only the Glint/Glare issues and is apart from any other issues, particularly any obstruction issues which might be presented on the FAA Form 7460. Those issues must receive approval by the FAA.


The minutes of the October 7, 2020 meeting at which the resolution was adopted have not yet, at this writing, been approved, but the draft minutes set out the resolution in the following terms.

Upon the presentation on behalf of Hecate Energy reporting the September 21, 2020 Glint/Glare analysis affecting an approach to the New River Valley Airport and the representation on behalf of Hecate Energy that a portion of the planned Solar farm project identified on page 26 of the study document which would have an effect on the approach would be excluded from the project and not be installed or implemented, the Commission resolved a finding that the Hecate Energy solar farm project as so proposed and as so modified would potentially have little or no impact on the New River Valley Airport. This resolution does not address any other possible issues particularly those involving any obstruction issues with the solar farm matter is not addressed in the Hecate Energy presentation or in the study presented to the Commission.

It is the Commission's understanding that you intend to share information of this with the Pulaski County Planning Board and the county's Board of Supervisors. Any possible obstructions will be presented to the FAA for their approval via their form 7460.

Thank you for your and your colleagues' review of the plans for Hecate Energy and the Assurance of the modification to prevent any Glint/Glare effects for the airport's approaches.

Yours very truly,


Robert N. Glenn
Chairman

Working with the Community

Construction Overview

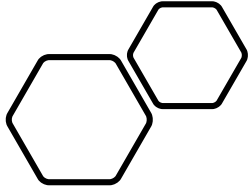
- Construction expected to take 10-12 months.
- Minimal impact to the surrounding area during construction. No heavier machinery than what is currently being used for agricultural activity.
- Major construction activities limited to delivery of components, piling installations, and cable trenching.
- Pilings and Racks
 - Piles Driven into ground, 6-10 feet.
 - Racking mounted 6-10 feet at highest point.
 - Single Axis Trackers follow the sun
 - Rotate East to West at 5 min intervals
- Solar Modules
 - Non-Reflective
 - Spaced ~20 feet apart





Working with the Community

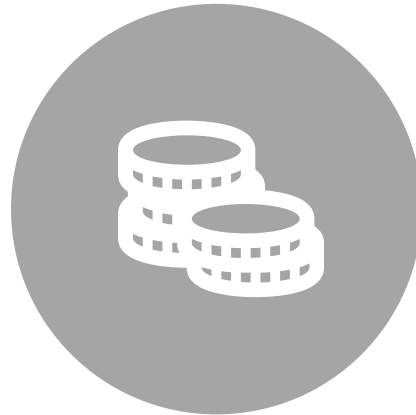
- Viewsheds will be maintained by minimizing visual impact of the facility
- Vegetative screening will be utilized to protect viewsheds where necessary



Community Benefits



NO BURDEN TO COUNTY
SERVICES



POSITIVE ECONOMIC
IMPACT – TAX REVENUE



ECONOMIC DEVELOPMENT
ATTRACTANT

County Investment

\$0

Positive economic impact
& tax revenue



Economic Development Attractant



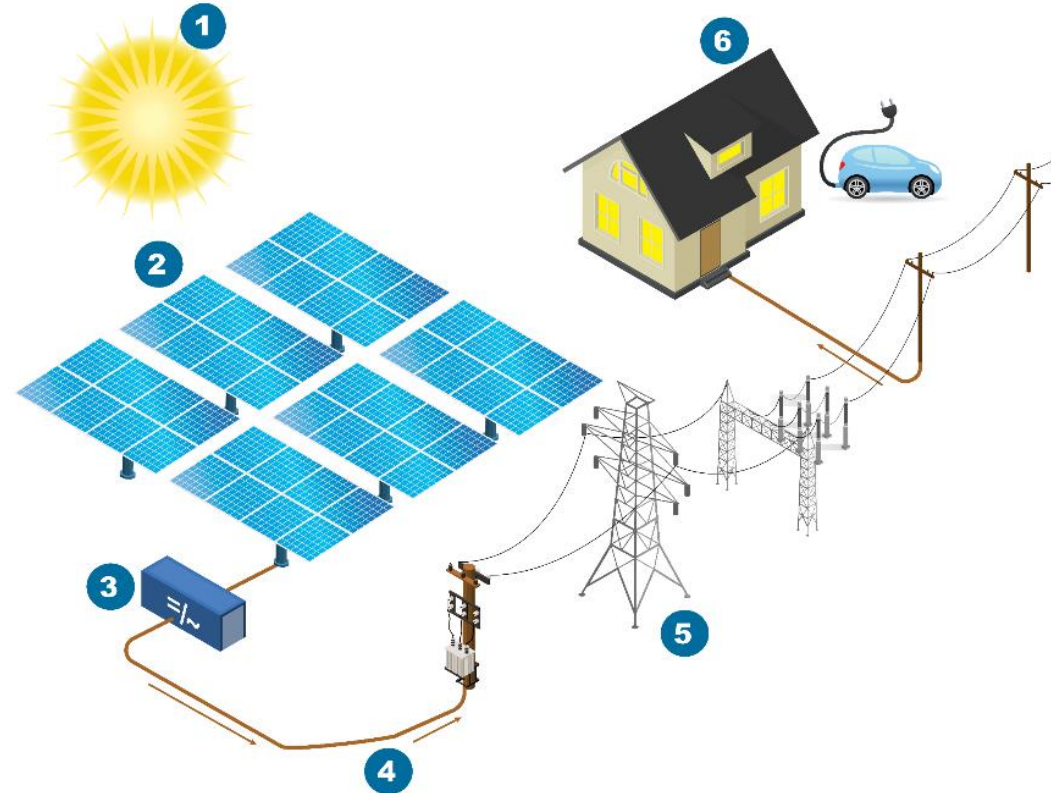


Solar Energy



The Solar Generation Process

- 1 When exposed to sunlight, material in a solar panel absorbs the sun's photons
- 2 Photons dislodge the electrons from atoms in the photovoltaic (PV) cell and start a flow of electrons
- 3 Direct current (DC) flows from the panel to an inverter that turns it to alternating current (AC)
- 4 Copper wire carries the current out through transformers that increase the voltage and upload the power onto the electric grid
- 5 The electricity travels across the distribution and transmission systems to get to your home and area businesses
- 6 Electricity is consumed by lights, heating, cooling, automation and transportation



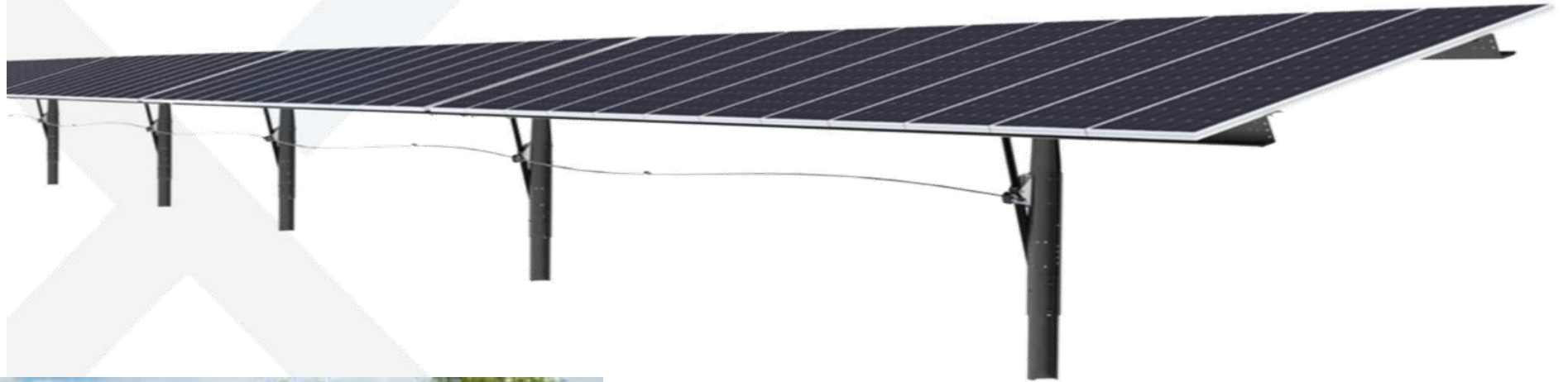
How Solar Works

Engineering & Technology

- The Project will be configured as a ground-mounted solar farm with photovoltaic (PV) panels on galvanized steel tracker racking structures.
- It will include rows of single-axis trackers, oriented in a north-south direction, that rotate the PV panels from east to west following the sun's daily path, optimizing the amount of power the solar farm can produce.
- The tracker structure is low-profile, approximately 10 feet high above grade at the tallest point (about the height of field corn stalks).
- The solar panels planned for this Project are the crystalline type commonly used for residential rooftop systems. They contain the same materials (glass, aluminum, plastic) used in many household products such as windows.



Understanding Solar Panels



* *What IS a solar panel?*

Steel and glass (made from sand)

A microwave oven omits more radiation than a solar farm

Environmental Studies

- Community impacts are rigorously studied in the Special Use Permit process. Issues pertaining to community, wildlife or wetland impacts are addressed as part of this comprehensive process.

Additional Studies Conducted

- ✓ Land use, geology, soils, water resources, wetlands, protected species, cultural resources, viewshed analysis, noise, transportation, socioeconomics are all studies that are being conducted by professionals hired by Hecate Energy.



Environmental Stewardship

- Hecate Energy's environmental philosophy is based on protecting our air, earth and water with clean energy.
- **Maintenance and Cleaning**
 - ✓ If solar panels are broken or damaged through acts nature or otherwise, there are no materials that will leak out or pollute the air or ground. Hecate Energy will be responsible for any repairs or maintenance.
 - ✓ Panels do not require washing with chemicals. To the extent washing is needed, which is expected to be infrequently due to regular rainfall, distilled water will be used.

Did you know?

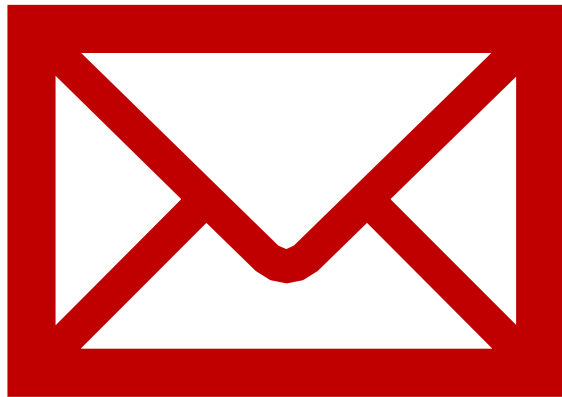
Solar energy does not pollute local water resources because solar photovoltaic cells do not rely on water to generate



Community Benefits

- Minimal impacts – primarily temporary construction impact; and visual impacts can be appropriately mitigated
- No burden to County services
- Positive economic impact – tax revenue
- Economic Development attractant





Please send questions to
info@aspenergy.net

For more information, visit:

<https://content.ces.ncsu.edu/health-and-safety-impacts-of-solar-photovoltaics>