

Morris Solar Frequently Asked Questions

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AES in Adair County, Missouri

As the project owner, who is AES?

- AES is a global energy company, with a focus in the U.S., that is accelerating the future of energy. AES has been developing and delivering innovative energy solutions to its customers for over 40 years. In the U.S. alone, AES successfully operates more than 450 solar projects that are in the ground and reliably producing clean energy across 22 states. With 4.7 GW of operating clean energy projects and more than 40 GW of projects under development, AES is a market leader in clean energy development in the U.S. AES is also a diversified energy company, owning and operating two large investor-owned utilities in Indiana and Ohio, as well as other generation assets in the U.S. and worldwide.

Why is the solar project located here in Adair County?

- The location for this project was selected based on an assessment of 1) Ameren's transmission network and electrical infrastructure 2) available substation capacity (fancy word for electrical "space" left in a substation), and 3) an examination of the nearby landowner's property to identify the most suitable land. Typically, companies want to site solar facilities near existing electrical infrastructure (so it's easy to put the power onto the grid) and they want land nearby that is dry, flat, and has large parcel sizes.

What is the total economic impact of this project?

- Morris Solar is a \$385 Million investment in the community (inclusive of property tax impact). This multi-million-dollar investment will create approximately 340+ construction jobs and approximately 6-10 long-term operational jobs. The construction work brings economic benefit through lodging, purchase of goods, and dining at local restaurants. We will employ local contractors to handle long-term vegetation management at the site.

How much tax revenue will the project generate? Where does it go?

- Morris Solar will provide significant tax benefit to Adair County, public services, and the Kirksville R-III School District. Approximately \$8.8 million between real estate and personal property taxes will be generated during the life of the project. This revenue comes with no increased demand on public services, such as water, sewers, fire, police, or education. This is additional and unencumbered tax revenue for the township, County, and school district.

Will a nearby solar array impact the cost of homeowner's insurance?

- A nearby solar project should have no impact on an individual homeowner's insurance.

Does renewable energy increase the utility bill of local community members?

- No, this project should not influence local or state power prices.

Environment

How will this project impact the environment? What studies have been conducted?

- As part of the development process, we conduct studies to identify sensitive features of our proposed project site. By identifying these resources at the front end, we can design our facility in a way that avoids any impacts through the below studies:
 - A delineation of any wetlands and streams
 - A search for any hazardous materials on site
 - An assessment of the cultural resources on site (archeological and architectural)
 - An identification of any threatened and endangered wildlife habitat on site
 - An assessment of local floodplains and hydrology
 - An assessment of soils and geology - including on-site geotechnical and pile load testing studies
 - A survey of terrain, boundary, and real estate encumbrances
 - Infiltration testing to understand soil drainage rate
- Specific project studies and surveys conducted include:
 - Bat Habitat Suitability Assessment
 - Cultural Resources Study
 - Raptor Nest Survey
 - Wetland Delineation
 - Meade's Milkweed Survey
 - Phase 1 Environmental Site Assessment (ESA)
 - Hydrology Study
 - Soil Properties (or Geotechnical) Study
 - Land Title Review and American Land Title Association (ALTA) Report

What is the landscaping plan? What will the project look like from the road and neighboring homes/buildings?

- Landscaping plans are designed to preserve as many existing trees as possible and typically incorporate professional and high-quality landscape design with native plants and natural contours around the project perimeter to buffer views and allow the project to blend into the surrounding community.

How will landscaping and vegetation be managed?

- The vegetation throughout the array must be properly managed to minimize any shading on the panels from tall grass. As part of the project's operation and maintenance plan, the ground cover will likely be managed through sheep grazing and seasonal mowing. Sheep grazing is a sustainable alternative to standard site maintenance and sheep are naturally suited to the job. Weed control is managed through limited spot treatments with selective herbicides.

Does your company currently use sheep for vegetation management on projects?

- Yes, we currently have 35 project sites and approximately 5,000 acres with sheep grazing for our solar projects. We are currently working to secure sheep grazing contacts on this project by working with local shepherds. If you or anyone you know may be interested in partnering with us on sheep grazing, please let the Morris Solar team know!

How does this project maintain ag land and agricultural use?

- The project area will utilize approximately 1,100 acres of privately owned land, or 0.5% ([Source: USDA](#)) of the total agricultural land in the County. Solar projects are a beneficial method of preserving farmland. By utilizing the property for the solar farm, the soil is effectively laying fallow during the operational period of the project. During this period, the soil will regain many of the nutrients lost when the land was used for agriculture. The high-quality ground cover grown under the panels and around the project infrastructure will help replenish nutrients in the solar over time by preventing soil compaction, increasing organic matter inputs via the use of a cover crop, and by reducing pesticide use. Further, the project expects to use livestock (sheep) to graze the site, employing a sustainable site maintenance plan, while keeping the land in active agricultural use.

Construction & Operations

How long will construction take? Will there be noise or other disruption during construction?

- The entire construction period for the project is expected to last approximately 19 months – this is a standard timeframe for a project of this size and in an area where winter weather impacts schedule. Construction will only take place during appropriate work hours. Noise will be largely limited to approximately 2 months of pile driving that happens early in construction. Once operational, the solar project will be a quiet neighbor. You can expect to see an increase in truck traffic during construction along designated haul routes used for the project. Traffic will return to normal once the project is operational.

Will the project be noisy once operational?

- The solar project will be a quiet neighbor. There are only a few pieces of at the site equipment that will make any sound. These are the inverters and

transformers, and they are equipped with cooling fans. Tech Environmental, Inc. conducted an Acoustic Study, which analyzed noise produced from similar utility-scale solar sites. Based on this report, noise levels approached typical background noise levels within 150 feet from inverter locations. All proposed inverters for the project will be located well over 150 feet from any site boundaries and neighboring parcels.

Will the project impact local roads?

- In 2022, AES signed a Road Maintenance and Use Agreement with Adair County. Before construction begins, this Agreement requires AES to do a “ride around” with the Adair County Road and Bridge Supervisor to log the current condition of any haul roads used for the project and take pictures. Once the project has been built, it will be AES’ financial and contractual obligation to restore county roads and bridges to their pre-construction condition. As part of this Road Maintenance and Use Agreement, AES will be responsible for providing the County with either a parental guarantee or performance bond with sufficient funds to cover any and all road restoration work before any work on the solar project can begin.

Will the project produce any glare or reflection?

- Solar panels are intended to capture the most light possible, and specifically designed to reduce reflection and glare. Modern solar panels reduce reflection by using anti- reflection coatings (ARC) and by texturing the surface. According to the National Renewable Energy Laboratory, solar panels reflect as little as 2% of incoming sunlight and produce less glare than standard windows and water. The Federal Aviation Administration (FAA) produced a final policy report that found solar projects do not create hazardous glare for aircraft in the area. Morris Solar has received two Determinations of No Hazard (DNH) from the Federal Aviation Administration that confirm that the project would not interfere with FAA equipment or the nearby Kirksville Regional Airport, if built.

Will the project produce any light pollution at night?

- There will be standard, motion-censored security lighting on the project. This lighting will be pointed downward and away from any surrounding neighboring properties. There will be no consistent nighttime lighting.

Can the solar array withstand intense storms, wind, and hail?

- Solar panels are extremely durable and rigorously tested to withstand harsh weather, including strong wind and hail. AES utilizes panel vendors that use a thick tempered front-side glass, greatly increasing the module strength.

Is there any impact to the water table? Will the Project increase stormwater runoff outside of the Project area?

- No, the solar project will not increase stormwater runoff outside of the project area and will be properly managed within the project area. Rain falls on the solar panel and runs off the edge of the panel, where it falls off the drip line to infiltrate the ground below. The area beneath the panel and between the panels consists of pervious soil and well-maintained vegetation. Natural drainage features of the land are maintained, and the project will observe setbacks from any stormwater detention areas. Additionally, as part of the local permitting process we are working with local authorities to ensure that Morris Solar meets or exceeds all Adair stormwater criteria. Any stormwater that is generated onsite will be treated using best management practices.

What is the decommissioning plan for the project's end of life? Will materials get recycled?

- When a solar project reaches the end of its project life, the owner/operator is responsible for executing the approved Decommissioning Plan, including abiding by all local and state decommissioning requirements. This includes the removal, recycling, and disposal of all solar panels, racking, equipment, and other structures associated with the project, as applicable. The land surface within the project area will be sensitively restored to pre-project conditions to allow a return to agricultural use or other uses consistent with the land-use policies at the time. Through our supply chain process, we identify and prioritize equipment manufacturers that align with our environmental, safety and human rights commitments. Some of these commitments include buying equipment from manufacturers whose supply chains and suppliers comply with a national recycling program. We also seek to buy high-efficiency products, which reduces the total volume of raw materials and parts required for each project.

Health & Safety

Are solar panels safe?

- Yes. No peer-reviewed reports provide evidence of any health issues caused by solar panels. All solar panels used by AES pass the EPA's Toxic Characteristic Leaching Procedure (TCLP) test and are classified as non-hazardous, and are not regulated as toxic materials.

What are solar panels made of? Are the components a health risk?

- The panels AES plans to use on Morris Solar are crystalline-silicon panels. Crystalline-silicon solar modules are made mainly of glass, aluminum, copper, and silicon, along with other commonly used plastic and wires. The cells on solar modules that are used to capture sunlight are made of silicon, which is a naturally occurring element. Crystalline-silicon solar modules are made of basic "solid-state" materials, meaning there are no liquid or gaseous components.

The project will be constructed with all Tier I panels. Tier I panels are high quality and rigorously tested for predictable performance, durability, and content. All solar panels used by AES pass the EPA's Toxic Characteristic Leaching Procedure (TCLP) test and are classified as non-hazardous and not regulated as toxic materials.

Will the project emit concerning electromagnetic fields (“EMFs”)?

- PV systems do not emit any material during their operation. Electromagnetic fields (EMFs) are also referred as non-ionizing radiation, which means the radiation does not have enough energy to damage DNA. Studies prove humans are all exposed to EMFs throughout our daily lives, including wall-sockets, cell phones and computers, without negative health impact. Someone outside of the fenced perimeter of a solar facility is not exposed to a significant EMF level from the solar facility. There is no concern or negative health impact from EMFs produced in a solar farm.

Does the project pose a fire risk?

- Solar systems are governed by the same Building/Electrical/Fire codes that govern the construction of homes and other buildings with electrical systems in the community. The local fire and EMS organizations will be thoroughly trained on the project and available access points. Turn around radiuses will be reviewed to ensure local emergency equipment can operate within the site. The project will be fenced and secured with locks to ensure access only for approved personnel.