
Isabelle Creek Frequently Asked Questions – April 2025

How does the project connect to the grid?

For large energy projects in Wisconsin to connect to the grid, they must obtain a Generator Interconnection Agreement (GIA) from the Midcontinent Independent System Operator (MISO). This agreement grants the necessary permission for the project to supply energy to the regional electrical grid. Once a project is filed into MISO's interconnection queue, MISO conducts studies to determine the required Network Upgrades. These upgrades ensure the grid continues to provide reliable electricity service when the project becomes operational. Each project has a specific Point of Interconnection (POI) that cannot be changed once the study process begins.

How do we deal with topography?

We carefully consider topography to optimize energy production and minimize environmental impact. Complex terrain can affect sunlight exposure, shading, and the efficiency of solar panels. Engineers use advanced modeling to determine the best locations for panels, ensuring they receive maximum sunlight throughout the year. Additionally, topography influences the design of access roads, drainage systems, and the placement of electrical infrastructure. By accounting for these factors, our projects can effectively harness solar energy while preserving the natural landscape.

What are the setbacks we are working with?

Solar panels and infrastructure will be set back from adjacent properties, residences, and public rights-of-way in compliance with Pierce County standards. The table below illustrates minimum setback requirements in Pierce County:

Project Equipment	Minimum Setback Distance
All above ground components (excluding fences and access roads).	<ul style="list-style-type: none">• 150 ft from nonparticipating residences• 100 ft from nonparticipating landowners lot lines• 67 ft from all road rights-of-way
Inverters	<ul style="list-style-type: none">• 250 ft from nonparticipating landowners lot lines
Substation	<ul style="list-style-type: none">• 75 ft from nonparticipating residences• 50 ft from nonparticipating landowners lot lines

**Property line setbacks may be waived or modified with the consent of adjacent property owner.*

How can the visual impact be mitigated? (the largest concern)

A 50-ft vegetative buffer will be maintained between project fence line and adjacent properties and road right of ways to minimize the project's visual impacts. Additionally, the project will incorporate the requirements of Pierce County's Minimum Landscaping Policy, to minimize views from adjacent properties. Finally, AES will hire a third-party contractor to complete a visual analysis and render visual simulations. Industry standard solar panels have anti-glare coating. AES will review results of studies conducted to demonstrate and ensure that panels are not harmful to nearby residents, roadways, or air traffic.

How will vegetation be managed on site (under panels) and in the buffers?

AES will work with a third-party consultant and the Pierce County Land Conservation Department to develop a vegetation management plan that will be reviewed and approved by the Pierce County Land Management Committee. The plan will include approved seed mixes, vegetation maintenance, and weed control measures for the vegetative buffer to be followed during facility construction as well as facility operations in accordance with Pierce County Code 240-31.

Does the project spray any chemicals on site as part of the weed control plans?

Any weed control measures are approved of in accordance with Pierce County and would not include any aerial or broadcast spraying. If spraying is needed to control any weeds it is typically through hand-held sprayers and done on a spot specific basis.

Will the project impact on the topsoil? Will this land be farmable in the future?

Maintaining the project site's topsoil health is a primary concern throughout the project timeline. It is key to establishing a safe and healthy ground surface to both construct and operate upon. With proper soil conservation practices topsoil impacts such as erosion, compaction, and loss of organic matter can be mitigated or minimized. These soil conservation practices include vegetation stabilization before construction, topsoil segregation during earth moving activities, and erosion control measures. Additionally, the land is allowed to rest during the project life which enhances the soil health, and it's returned to agricultural or previous use after decommissioning.

Will wires be underground or overhead?

The medium voltage wires connecting the inverters to the project substation will be buried underground. The only potential scenario where the ability to bury medium voltage wires is limited may be in road rights-of-way and near other utility lines.

There will be very limited high voltage wires on this project, as the project substation is located adjacent to the point of interconnection. Any high voltage wires would be above ground and like existing high voltage transmission infrastructure.

Why am I only hearing about this project now/ how does the development process work?

The solar development process involves site selection, feasibility studies, design, permitting, financing, construction, and commissioning. Community outreach often begins later in the solar development process because the initial stages are filled with uncertainty regarding the project's feasibility and potential success. Engaging the community prematurely might lead to confusion and frustration if the project is ultimately canceled. Once the project shows more promise and has a clearer path to development, outreach efforts can be more effective and meaningful, gathering community input and addressing community questions. Continuous stakeholder engagement and community outreach remain crucial even after the project is operational to address ongoing questions, adapt to changing needs, and ensure long-term success.

How tall will the high voltage (HV) poles be?

There will be very limited high voltage wires on this project, as the project substation is located adjacent to the point of interconnection. Any high voltage wires would be above ground and similar to existing high voltage transmission infrastructure

How will this project impact adjacent property values?

Multiple peer-reviewed studies have shown that utility-scale solar projects do not have a significant impact on property values. Solar projects contribute to economic development, create jobs, and provide tax benefits. Additionally, during their operational lifetime, solar projects preserve land from more disruptive or permanent development encroaching into agricultural land, maintaining a low impact presence during operations and allowing for agricultural land use again after operations.

Who is responsible for decommissioning?

AES will be responsible for decommissioning all project components and returning the site to its original condition after the project ceases commercial operation. A Decommissioning Plan will be included in the project's application for a Conditional Use Permit, including requirements for financial assurance.

Why aren't you building until 2029?

Due to current feedback from MISO, we cannot deliver energy on to the electrical grid until 6/1/2030. A construction start in 2029 allows us to complete construction of the project as near to this date as possible, so to avoid the project sitting dormant not producing electricity. We continue to coordinate with MISO and will update if the energization schedule requirements on the project change.

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

The entire construction period for a utility-scale solar project typically takes 12-18 months. Construction will not begin until all permits are received, and any pre-construction work and standard site due diligence is completed. During the construction period, noise is mainly limited to the pile driving that happens early in construction. A strict noise ordinance is followed to ensure that work happens during appropriate hours. Further, water trucks will be used for compacting project roads to manage construction dust and ensure there is minimal impact on the surrounding community.

How do I know how my property is impacted by this project, why isn't there a more detailed map?

Development and design for the Isabelle Creek Solar Project is a long process. While more detailed designs will be provided as the project progresses, community members are welcome to reach out to the Isabelle Creek Solar team to learn more about the project and how it may relate to their property. You can contact the project team directly at Email: WIStakeholderrelations@aes.com or by phone at (534) 248-8930.

Will sheep be used on this project or pollinator plants to provide additional benefits?

Sheep grazing to assist with vegetation management is an option we will pursue as we get closer to construction. We will seed the project area with native vegetation, which may include pollinator species that are adapted to this area.

How did you decide to build the project here?



Solar projects are sited where there is available transmission infrastructure and demand for electricity to be added into the grid. From there, AES then looks for land that avoids environmental impacts on wetlands and forest, as well as land that isn't too steep to require large amounts of earth work. Frequently, previously cleared/disturbed farmland meets many of these criterium.

What types of panels are you using on this project?

We are currently multiple years out from final selection of the solar panel manufacturer for this project. Currently, AES aims to utilize domestically manufactured solar panels for this project and all other projects starting construction in 2029.

What happens to the panels if they are broken or at the end of the project life?

If any component of the project, including solar panels, is removed from operation for any reason, we will look to first resell the component to a 3rd party. If that is not possible, we will try to salvage the parts of the component for scrap. If salvaging is not possible, we will recycle the component. Solar panels are non-toxic and predominantly aluminum, glass, and plastic, all easily recyclable materials.

Are solar farms noisy? What about the associated substation?

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. All project inverters will be 250 feet from any nonparticipating residence. We will perform a noise study as a part of our permit application.

Is the facility fenced in? How does wildlife move around?

The project exterior fence will be a woven wire fence that allows small wildlife to move throughout the site, however, larger wildlife, such as deer, will be excluded from the fenced area and will move around the site. The perimeter fence will not be continuous around the entire project site. AES will preserve wooded deer habitat, wetlands, steep slopes, and drainage flows that will break up the project site and allow for wildlife movement.

How is a solar facility able to produce any energy in colder northern climates?

The sun shines every day therefore solar facilities produce electricity every day, including days with snow and clouds. Technological improvements have allowed us to build in northern latitudes taking advantage of even those lower radiant days. Before we go to construction, we conduct an on-site annual solar resource study and use that output to do an energy production study. The output from these studies will be used in the financing assumptions of the project which helps us determine how feasible a solar facility would be in any geographical region.

Who permits this project to advance forward?

This project is dependent on receiving a Conditional Use Permit from the Pierce County Land Management Committee. Before we submit our application to the Land Management Committee, we must receive a recommendation from the Hartland Township Board. In addition, we need several additional permits before construction, such as a Pierce County land use permit, Wisconsin stormwater permits, and utility & driveway permits.

Is there any impact on 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 ground cover vegetation. Natural drainage features of the land will be maintained, and the project will observe setbacks from any stormwater retention areas.

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Does the project pose a fire risk?

Solar facilities are governed by the same building, electrical, and fire codes that govern the construction of homes and other buildings with electrical systems. The local fire and rescue departments will be thoroughly informed about the project and all access points available to them. Turn around radius will be reviewed to assure local equipment can operate. The project will be appropriately fenced and secured with access restricted only to approved personnel.

Will the local fire department be adequately trained to respond to any potential fire emergencies within the project area?

Yes. The project team will provide training for local fire and rescue to ensure they are equipped to respond to any potential emergencies. The project will also provide funding to the local fire department through the increased tax revenue for the County.

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

Crystalline-silicon solar modules are largely made 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. All solar panels used by AES are rigorously tested for predictable performance and pass the EPA’s Toxic Characteristic Leaching Procedure (TCLP) test and are classified as non-hazardous and not regulated as toxic materials.

Are solar panels safe?

Yes. No peer-reviewed reports provide evidence that any adverse health concerns have been caused by solar panels or solar projects. 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.

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. The project has been designed to withstand wind speeds up to 105mph and golf ball sized hail.

Who is AES?

The AES Corporation (AES) is a US-based, Fortune 500 global energy company with headquarters in Arlington, Virginia. Founded in 1981, we provide reliable, affordable and sustainable energy in 14 countries around the world. Including the US, through our diverse portfolio of energy distribution and generation businesses. These businesses now include a variety of renewable energy solutions, such as wind, solar, and battery energy storage. In the US, as a leading renewable energy developer in the US, AES successfully owns and operates more than 560 renewable energy projects totaling 9.1 GW of clean energy resources and has more than 53 GW of projects under development.

We have a diverse workforce that is committed to operational excellence and meeting the world's changing energy needs. And to address the world's growing climate challenges, we are committed to accelerating the future of energy, together with our people, our communities and our customers.

How does AES make money on the project?

As a developer that primarily owns and operates the projects we build, AES enters long-term contracts with our customers to sell the electricity generated by the project. These contracts then generate revenue for AES over the life of the agreement.