
Thorn Lake Solar Frequently Asked Questions Updated 6.28.2022

The AES team has been working closely with the community over the last several months and we have heard your concerns, questions, and needs. We have listened and adjusted our plans to ensure that the Thorn Lake Solar project reflects our commitment to being a good neighbor, and delivers long-lasting, positive impact to the community. We have responded to the most frequently asked questions in this document.

Health and Safety

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.

These studies include:

- o A delineation of any wetlands and streams
- o A search for any hazardous materials on site
- o An assessment of the cultural resources on site (archeological and architectural)
- o An identification of any threatened and endangered wildlife habitat on site
- o An assessment of local floodplains and hydrology
- o An assessment of soils and geology - including on-site geotechnical and pile load testing studies
- o A survey of terrain, boundary, and real estate encumbrances
- o Infiltration testing to understand soil drainage rate

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 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 fenced and secured with access only by approved personnel.

Are solar panels safe?

- No reports provide evidence that there 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.

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.
- Thorn Lake Solar has a design basis to withstand wind speeds up to 105mph and golf ball sized hail.

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

- Crystalline-silicon solar modules are largely made of glass, aluminum, copper, 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 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 EMFs?

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

Community Experience

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

- The project will provide significant tax benefit to Manchester Township, Washtenaw County, public services, and the school district. Current property taxes for the 159-acre site generate approximately \$5,400 per year. If the project is built, property tax revenues are expected to increase to \$460,000 in the first year and to a total of \$5.87 million between real estate and personal property taxes 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. The local schools are expected to receive approximately 50% of the total tax revenue, creating the opportunity for substantial and continuing funding to support the school district.

What is the total economic impact of this project?

- The Project represents a \$33.7 Million investment in the community (inclusive of property tax impact). This multi-million-dollar investment will create approximately 150 construction jobs and approximately four long-term operational jobs. The construction workers will bring their own economic benefit through lodging, purchasing goods, and dining at local restaurants. We will also employ local contractors to handle long-term vegetation management at the site.

As the project owner, who is AES?

- The AES Corporation is a Fortune 500 global energy company accelerating the future of energy. AES is headquartered in Arlington, Virginia, and is a publicly traded company listed on the New York Stock Exchange (NYSE: AES). With over 8,450 employees in 14 countries, AES has been developing and delivering innovative energy solutions to its customers for 40 years. In the U.S, AES successfully operates more than 400 solar

projects. With 4.4 GW of operating clean energy resources; 3.7 GW of clean energy projects under construction; 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 US and around the world.

Will the project be noisy once operational?

- The solar project will be a quiet neighbor. There are only a few pieces of equipment at the site 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.

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

- The entire construction period for the project is expected to last approximately 12 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, the noise will be limited to the pile driving that happens early in construction, lasting approximately 30 days. 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.

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.

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.

What effect will the project have on property values of adjacent and nearby residences?

- Kirkland Appraisals, LLC and CohnReznick LLP, conducted site-specific studies to analyze the impact of commercial, utility-scale solar projects on neighboring property values in Michigan. Both studies provide data supporting the conclusion that Thorn Lake Solar will not have a negative impact on surrounding property values.

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?

- The electricity generated by Thorn Lake Solar will be sold to Consumers Energy under a 20-year power purchase agreement. Consumers Energy will, in turn, sell that electricity to its customers. Solar energy costs have decreased significantly in the last decade, making solar cost-competitive with other traditional forms of generation. Utility-scale solar offers several advantages, including a stable, no-cost fuel source; scale and efficiency to optimize costs; and the ability (compared to rooftop solar) to share the costs and benefits of renewable energy equitably across the customer base. As is industry standard for many utility-scale solar projects, after the 20-year PPA with Consumers Energy, the project will look to recontract or sell the electricity in the merchant market for the remaining life of the solar project.

Project Design and Site Operations

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

- The landscaping plan is designed to preserve existing trees. Further, the project will incorporate professional and high-quality landscape design with native plants and natural contours around the project perimeter to buffer the view from the road and allow the project to blend into the surrounding community. The project will exceed the existing requirements and use evergreen trees to increase the density of the vegetative screening around most of the site. In addition, a robust natural screen will be added along Herman Road. An agricultural style fence will be used for the perimeter fence. The project will be setback at least 50 feet from all roads and adjacent properties, per the ordinance, and in many cases will exceed the ordinance with setbacks of 100 and 300 ft in several locations. The project will utilize reduced height solar panels that will measure 10 feet at their tallest position.

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 projects. We're currently working to secure sheep grazing contacts on our three other Michigan solar projects that are under construction. Thorn Lake Solar will fit perfectly into the sheep grazing management plan we establish with these other projects.

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 the Washtenaw Drain Commission to ensure that Thorn Lake Solar meets or exceeds all Washtenaw stormwater criteria. Any stormwater that is generated onsite will be treated using best management practices outlined in the EGLE SESC Standards and Washtenaw Drain Commission Standards.

Will the project impact local roads?

- The public may see or hear some construction vehicles transporting material to the site during construction. Once construction is complete, there will be minimal vehicles accessing the site. We will coordinate closely with local and state transportation authorities before, during, and after construction to ensure local roads are cared for and any necessary road improvement or use permits are obtained.

What type of fencing will be used?

- The project will use agricultural style fence with woven wire and wooden posts for the enclosure to preserve the rural character of the existing agricultural community.

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.

How does this project maintain ag land and agricultural use?

- The project area will utilize a 159-acre parcel of land, or 0.08% of the agricultural land in the County. The project parcel is zoned as Rural Agricultural District (AR). The AR zoning is intended to preserve agricultural land and agricultural operations, and to protect natural resources and fragile land. A solar project is a permitted conditional use under AR zoning, and 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.