Frequently Asked Questions

Project Details

What kind of solar project is this and who it will serve?

The project is described as a ground-mounted solar electric generating facility. Solar panels that convert sunlight into electricity are mounted on racking and secured to steel I-beams that have been driven into the ground. The rows of racking and panels are connected by a series of wires that lead to inverters. Inverters change the electricity produced by the solar panels from direct current to alternating current so it can be supplied to the utility grid. Transformers, like the ones used for schools, grocery stores, and other large buildings, convert the electricity produced to match the voltage of the electric distribution system nearby.

The project will tie into the existing distribution system and serve local customers of We Energies. Electricity generated by the project will flow to the existing 3-phase electrical lines located along the road. This project is considered a "distributed generation" project because it generates electricity close to where it is consumed and stays on the local distribution system. This is different from coal and natural gas plants, or large-scale solar facilities, where power is generated in one place and transmitted to consumers over longer distances. The project will not cause any changes to the price or quantity of electricity on your household utility bill.

When is the planned or anticipated start date?

Pending availability of key equipment and lead times, the project is expected to begin construction in the spring or summer of 2026. The project is expected to take 4-6 months to construct.

What is the life expectancy of the project?

The warranties on solar panels are 30 years and the panels are expected to work efficiently beyond that, thus projects are designed to last 30-50 years. These projects are considered a temporary land use as the components of the solar electric facility will be removed at the end of the project's useful life. The land surrounding, between, and under the panels will be planted with a deep-rooted perennial pollinator mixture or a grazing pasture mix. Once the project lifespan is complete and the facility is removed, the rested land can return to its original agricultural use.

Please explain why this property is proposed for installation.

We looked for a property owner who is interested in hosting a solar project on land that is close to adequate electrical infrastructure. The property is located close to a substation with adequate transformer size/load and adjacent to a 3-phase distribution line so the solar electric facility can interconnect to the grid. In addition, the land is relatively flat, has favorable characteristics for a solar project, and avoids environmental constraints (outside of wetlands, floodplains, contains appropriate soil type and subsurface conditions, etc.).

Solar Panels

How long do Solar Panels last?

The solar panels we use are warrantied for 30 years. OneEnergy expects panels to have additional useful life at the end of their 30-year warranty, so we design the project to a 50-year lifespan. Our lease has a 30-year initial term with an option to extend for two additional periods of 10 years.

What are the components of the solar panels? What are they made of?

The solar panels are comprised of non-toxic materials. The silicon in solar panels is made from purified silica, which comes from sand. Silica sand is heated and formed into ingots which are then sliced into thin wafers. These solar cells convert sunlight into electricity and are wired together with copper. The solar cells are sandwiched between two layers of tempered glass and enclosed in an anodized aluminum frame. The glass, aluminum, solar cells, and copper wiring, which comprise about 99% of a solar panel by volume, are all recyclable.

What is the procedure if one breaks?

Solar panels themselves are made of non-toxic materials (aluminum frame, tempered glass, copper wiring and silica sand). In product testing, the panels are broken into pieces and ground up to test for any harmful environmental effects. Even under these extreme testing conditions, the solar panels present no harm to children, adults, pets and/or farm animals. Since they are made of tempered glass, the panel surface may fracture but will remain enclosed within the frame. Our remote monitoring system detects faults at the site such as broken panels. We are notified immediately if a panel is not functioning as designed so we can promptly remove and recycle the damaged panel and replace it with a new one.

Are these panels subject to storm damage and what is the risk of damage to other properties if debris is carried onto a residence?

OneEnergy reviews historical weather conditions for each project location and ensures all project materials are rated to withstand maximum wind speeds and snow loads for the area. All solar panels are designed and tested to withstand extreme weather. For example, after Hurricane Sandy, a large solar installer in New Jersey reported just two loosened panels in a large installation out of the tens of thousands they had installed throughout the region. Our projects throughout the Midwest have

withstood Derechos and tornados and have never had panels or other equipment displaced from its racking. That said, OneEnergy carries commercial insurance that covers any damage to other properties that may occur in a worst-case scenario.

How and with what are panels cleaned if needed? Are chemicals used?
OneEnergy does not anticipate the need for cleaning panels during operations. Cleaning is sometimes required in desert environments that are very dusty and experience very little rain. It rains frequently enough in Wisconsin that we have never had (nor do we expect) to ever clean our panels.

Who is responsible for removal and disposal of solar panels?
Our lease agreement obligates the company to remove all the solar facility's components within one year from when the project is no longer producing power.

How are solar panels disposed of and where?
Given the lifespan of solar panels, our projects are all still operating (OneEnergy has not yet decommissioned one of its solar projects). However, OneEnergy Development is a member of the Solar Energy Industry Association (SEIA), a national organization active in developing effective end of life processes for solar panels. The U.S. and Europe already have collection and recycling programs in place and these programs are expected to grow as the solar industry does. Recently, OneEnergy has worked with Ontility to recycle panels that were damaged during shipping or installation. Ontility, a R2v3-certified [1]electronics recycler, collects the palletized modules and recycles the materials as follows: (i) the aluminum frames are recycled like cans and reused for various applications by metal salvagers, (ii) the glass cover is pulverized and used in road glass, construction aggregate, or sand blasting, (iii) and the silicon wafers are processed and extracted for reuse of the silica. OneEnergy intends to partner with Ontility or another similar R2v3-certified recycler to recycle any panels that may need to be disposed of in the future.

[1] R2 is the world's most widely adopted standard for responsible management of used electronics, and is accredited by the American National Standards Institute (ANSI). R2v3 works on a principle of 'Tracking Throughout'. Flows of waste materials have to be audited annually for the final disposition of material for every downstream recycling partner to ensure that no solar panel/electronic parts go to landfills.

Safety of Solar Projects

Will there be glare?

Modern solar panels are designed to absorb (rather than reflect) sunlight and are not considered to produce glare. Further, the panels we use are treated with a non-toxic, anti-reflective coating. When reviewing proposed solar projects on airports, the Federal Aviation Administration concluded that solar panels are much less reflective than a lake or snow-covered ground. OneEnergy has successfully permitted and constructed a solar project on airport property immediately adjacent to the runways of the Middleton Municipal Airport in Wisconsin, and there are numerous other large-scale solar projects adjacent to airports in Madison, Indianapolis, Denver, and elsewhere.

Water run-off issues: Where will the water flow to? What direction and how will it impact the environment/fields and wildlife in area? Has the water flow been assessed by the DNR?

This project is designed with tracking technology, meaning each row of panels track the sun as it tilts from east to west throughout the day. The "drip edge" of the panels, or the edge closest to the ground, changes position as the trackers move. This spreads the panel runoff over a wider area than would be the case if the panels were fixed and drained to a single point, like on a roof. As part of the stormwater permit we submit and obtain through the Wisconsin DNR, we conduct a hydrology study that shows how water flows before and after the project is installed. The hydrology study results show that because the project area will be planted with deep-rooted perennial vegetation, water infiltration increases after installation of the project relative to the pre-construction condition of conventional row-crop farming. This is mainly attributed to the absence of tillage and soil disturbance associated with seeding and harvesting cultivated crops.

Do solar projects cause stray voltage? How is this prevented? How is this monitored by OneEnergy?

Solar projects of the scale OneEnergy is proposing are considered electrical facilities subject to state electrical licensing and inspection in Wisconsin. Our electrical engineering designs must be approved by the Wisconsin Department of Safety and Professional Services. The state sends an electrical inspector to verify the system is being installed per the approved plans during construction and shortly before completion of construction. The facility cannot be energized until this inspection is completed. This inspection ensures that the system is installed and grounded correctly per National Electrical Code, and that the utility interconnection is designed with the appropriate fault detection such that the system de-energizes within 2 seconds if a grid fault is detected.

A letter[2] written by Douglas A. Mutcher, a Professional Electrical Engineer from Westwood Professional Services familiar with solar project design and operation, regarding stray voltage and solar projects, written in support of an application to the Public Service Commission for a 100+MW solar project, concludes that “any concerns associating solar PV plants with increased risk of stray voltage are baseless.”

OneEnergy is not aware of any credible reports of solar projects in Wisconsin experiencing issues relating to stray voltage. Stray voltage is much more likely to occur from many other buildings installed

[2] “Appendix C-12 - Stray Voltage Opinion” Public Service Commission of Wisconsin, Wisconsin Power & Light Company, Docket No. 6680-CE-182 and Docket No. 6680-AE-120 https://apps.psc.wi.gov/ERF/ERFview/viewdoc.aspx?docid=390344

in rural areas such as pole barns, storage warehouses, etc. which have unbalanced single phase loads and are not subject to rigorous design or inspection criteria.

Are there fire risks for solar projects?

The risk of fire at a solar project is no greater than that at the transmission and distribution lines that we all live and work nearby every day. Although very rare, fires at solar projects do sometimes happen, and they typically self-extinguish at the component level. The best preventative measures for fire are workmanship and wire maintenance. Once constructed, further fire prevention and mitigation strategies are in place to ensure no large fire outbreak will occur. This includes regular testing with standardized quality assurance measures to replace any damaged, malfunctioning, or prematurely aged components. The US Department of Energy translated and re-published an extensive report [3]and guidance from the German government about the risks of fire and solar, concluding that "the fire emergence risk in PV systems is very low given planning in accordance with fire protection, use of high-quality components and proper installation." Furthermore, the authors "rule out any hazard to the environment from gaseous pollutants related to burning PV modules."

What are the effects on wildlife?

We design our projects with wildlife and land stewardship in mind. Studies are conducted prior to a project's construction to ensure no critical habitats exist within a solar project's footprint. In addition, we use a deer exclusion type fencing that allows movement of smaller animals through the project. If the project is to be grazed, we work to ensure the fencing is designed to keep out predators but to allow other wildlife movement through the project area. In addition, the project's vegetation of pollinator meadow or grazing mix are beneficial to wildlife in the area as it provides more suitable habitat than the previous land use of conventional row-cropping.

What are other potential problems, issues and/or negative impacts that could occur with the installation of solar panels?

OneEnergy Renewables hires reputable and experienced contractors to install solar panels who adhere to OSHA regulations. Once installed, solar panels operate quietly and do not present harm to people, animals, the environment, or property values. As the solar industry grows, the industry is working hard to address any potential concerns related to the end of life of panels. OneEnergy is a member of SEIA (Solar Energy Industries Association). SEIA and its members are active in developing end-

[3]TÜV Rheinland Energie und Umwelt GmbH. (2018). Assessing Fire Risks in Photovoltaic Systems and Developing Safety Concepts for Risk Minimization. U.S. Department of Energy Solar Energy Technologies Office, Washington, DC. Retrieved from https://www.energy.gov/sites/default/files/2018/10/f56/PV%20Fire%20Safety%20Fire%20Guideline_Translation_V04%2020180614_FINAL.pdf

of-life recycling programs. There are currently several operating recycling facilities throughout the country, including facilities in Arizona, California, Colorado, Georgia, Illinois, Indiana, Massachusetts, Minnesota, New Jersey, New Mexico, New York, North Carolina, Ohio, Texas, Utah, Virginia, and Washington.

Neighboring Properties

Will the project be a nuisance to neighbors or adjacent property owners?
We do not expect the project to be a nuisance to any neighbors. Solar projects do not produce sound that is audible at the perimeter of the project. OneEnergy designs its fencing, vegetation, and other elements of the project to integrate into the agricultural landscapes in which they are located. After construction is complete, the project would only require a visit once or twice a month for vegetation maintenance and other incidental maintenance.

If there is a mortgage on a property where panels are proposed to be installed is the mortgage company informed and adjacent properties owner and their bank/mortgage holders informed as well?
We obtain an SNDA (subordination, non-disturbance and attornment agreement) if there is a mortgage on the property where the solar project is built. This acknowledges the mortgage company and OneEnergy Renewables' relative position in the Title report. No adjacent properties' mortgage holders are informed of the project by OneEnergy Renewables.

What effect does a solar project have on the valuation of property and surrounding properties?
In December of 2024, an analysis[4] of 70 utility-scale solar projects built in the Midwest from 2009-2022 using data from the Lawrence Berkeley National Laboratory and housing value data from Zillow shows that utility-scale solar projects increase nearby property values by roughly 0.5-2.0%. Projects smaller than 20MW have a more positive impact on nearby property values than projects larger than 20MW.

A 2025 study of the effects of solar on property values on 8.8 million homes[5] shows property values in the Midwest and the South

[4] Simeng Hao, Gilbert Michaud, Assessing property value impacts near utility-scale solar in the Midwestern United States, Solar Compass, Volume 12, 2024, 100090, ISSN 2772-9400, https://doi.org/10.1016/j.solcom.2024.100090.
[5] C. Hu, Z. Chen, P. Liu, W. Zhang, X. He, & D. Bosch, Impact of large-scale solar on property values in the United States: Diverse effects and causal mechanisms, Proc. Natl. Acad. Sci. U.S.A. 122 (24) e2418414122, https://doi.org/10.1073/pnas.2418414122 (2025).

increase slightly on average. A 2023 study[6] of the effects of solar on property values on 1.8 million homes shows that the effect of solar on property values is very small and varies by state (and has a positive effect on property values about 1/3 of the time).

Potential drivers of negative effects on property values are scarce green space, limited vegetative screening, and high level of public controversy surrounding a project. It is our goal to site and construct projects in such a way as to minimize any effect on property values. We site projects in rural areas with an abundance of green space and we are willing to discuss targeted vegetative screening of our sites with neighbors.

Land Use

Why are these solar panels not put on existing structures (i.e. roofs) in cities and closer to the electric power plant?

Roof-mounted projects produce approximately 40% less energy per panel than ground-mounted facilities using single-axis tracking and bifacial panels.

The cost of installing roof-mounted systems is generally about 55% more expensive per panel.

These two elements combined generally make it difficult for utility-scale projects (like what we are proposing here) to be cost-effective when sited on rooftops. Ground-mounted single-axis tracking systems are able to produce electricity at cost-effective rates that benefit utility customers.

How much land is needed for solar projects? Is solar an effective use of land?

5-7 acres of land typically can accommodate 1MW of solar power generating capacity. Farmers and landowners in Wisconsin are already major energy producers with 37% of the state's corn crop going to ethanol production[7]. Generating electricity with solar is an extremely efficient use of land:

- Net energy production of solar PV is 100x greater than corn-based ethanol[6].
- Corn-based ethanol requires 32x the amount of land to power the same number of vehicle miles as solar PV[8].
    - Put another way, one acre farmed with corn would produce enough energy to run a single car for a year. One acre of solar will produce enough energy to run more than twelve F150s for a year.

To achieve a net-zero carbon emission economy in Wisconsin by 2050, solar could be sited on less than 1.4% of our farmland[9].

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[6] Salma Elmallah, Ben Hoen, K. Sydny Fujita, Dana Robson, Eric Brunner, Shedding light on large-scale solar impacts: An analysis of property values and proximity to photovoltaics across six U.S. states, Energy Policy, Volume 175, 2023, 113425, ISSN 0301-4215, https://doi.org/10.1016/j.enpol.2023.113425.

[7] Wisconsin Corn Growers Association. (n.d.). Corn Facts. Retrieved January 8, 2025, from https://wicorn.org/resources/corn-facts/

[8] Corn Ethanol vs. Solar: A Land Use Comparison. Paul Mathewson and Nicholas Bosch. Clean Wisconsin. January 19, 2023. https://www.cleanwisconsin.org/wp-content/uploads/2023/01/Corn-Ethanol-Vs.-Solar-Analysis-V3-9-compressed.pdf

[9] Stumpf, Nolan. Solar and Agricultural Land Use Report. Renew Wisconsin, May 2023. https://www.renewwisconsin.org/wp-content/uploads/2023/05/Solar-and-Agricultural-Land-Use-Report-1.pdf

Permits

Has the State of Wisconsin been contacted and permits obtained if needed?

The only permit needed from the State of Wisconsin for a solar project of this scale is coverage under the "Construction Site Storm Water Runoff General Permit" Storm Water Associated with Land Disturbing Construction Activity permit through the DNR (Permit Number WI-S067831-6). The Wisconsin DNR requires that our projects have received zoning approval when we apply for a stormwater permit. They do this to avoid people submitting speculative permits for projects that may not happen or may have major design changes. Thus, OneEnergy typically applies for this permit once all engineering is complete and shortly before commencement of construction.

Can copies of the permits obtained from PSCW/DNR be provided?

This project does not require a permit from the Public Service Commission of Wisconsin (PSCW). The PSCW is involved when projects are over 100MW.

As described above, a Construction Site Storm Water Runoff General Permit is obtained from the Wisconsin DNR, and often Wisconsin Counties and Townships will require that we submit a copy of this permit to them once it is obtained/prior to construction as a condition to the zoning approval.

Taxes

Does a parcel where a solar field is installed become exempt from property taxes?

If the project is owned by an independent power producer, the equipment is exempt from personal property taxes like all energy generation equipment for all types of energy generators under 50 Megawatts. The land, however, typically is re-assessed for tax purposes (even though for zoning purposes it remains Agricultural) to commercial, and is taxed at a correspondingly higher rate which varies by jurisdiction but is usually 10-15x higher per acre.

If the project is owned by a utility, the project would contribute Public Utility Aid Payments through the Gross Receipts tax based on project size[10]. At 6 Megawatts, this project would result in a total yearly payment of $30,000 that would be split between the municipality and the County. Utilities pay a Gross Receipts tax in lieu of property tax payments to the Wisconsin Department of Revenue, who then distributes to local jurisdictions.

Is OneEnergy subject to pay tax on revenue gained from their solar panels? To state and/or Federal government?

Yes, OneEnergy is subject to typical corporate income taxes both at the state and federal level for revenues gained from selling the electricity to the local utility. We forecast paying ~$1.4MM in federal income tax and ~$270,000 in state income tax over the life of the project.

Zoning

When solar projects are located in agricultural areas, is the land required to be rezoned to commercial?

OneEnergy's projects in Wisconsin can remain in Agricultural Zoning, and if solar arrays are not permitted by right, a temporary conditional use permit can be issued. Solar projects are a temporary

[10] "Public Utility Aid," Wisconsin Department of Revenue. Division of Research and Policy October 16, 2024. https://www.revenue.wi.gov/DORReports/sharedrevutilityaid2024.pdf

use of the land, and our lease agreements obligate us to remove all equipment at the end of the project life and return the land to a farmable state. In addition, our projects are designed to combine solar electric generation with a vegetation maintenance plan for either a deep-rooted pollinator (a similar mix as found in Conservation Reserve Program (CRP)) or a pasture forage mix. We would use the pasture mix if we can find a local farmer with sheep willing to graze the site. If not, we would use the pollinator mix, and we often are able to find a beekeeper locally to host an apiary on site. This dual use of the land continues an agriculture environment throughout the lifespan of the project.

What is the proposed setback and height of the solar panels?
At their highest point, the solar panels are around 8 feet above ground level. Solar panels will be set back a minimum of 20 feet from the perimeter fence, which will be a deer-exclusion style agricultural fence. At a minimum, OneEnergy commits to following all applicable Setbacks.

OneEnergy Renewables

Is OneEnergy considered a Utility Company?
OneEnergy Renewables is not a utility company. OneEnergy is a solar development company that builds, constructs, and maintains solar projects and either sells the project to a utility as a power generating asset or sells the power generated to utilities through long term power purchase agreements.

In the event OneEnergy would go bankrupt or out of business. What would be the process?
Each project OneEnergy Renewables constructs has project-specific lending established. These projects have a large upfront capital investment. If OneEnergy were to go out of business, in the short term the lender would take over the lease payments and the project management. The lender is highly incentivized to keep the project producing energy so it can generate revenues, keep operating the project and paying down the loan. For the long term, the lender would likely seek out another solar company to continue operating the project, paying lease payments, and continuing to maintain the project consistent with local codes and permits.

Township Benefits

What is the benefit to the Township to have a solar panel field installed on any property aside from OneEnergy selling the product produced to an electric company for profit for OneEnergy?
The proposed project will tie into We Energies' distribution system. Thus, the power produced will go directly to the customers of We Energies. By producing power locally, We Energies saves money because they avoid paying transmission fees for power generated or fuel mined elsewhere. In addition, local power generation helps to build resilience into the electric distribution system by limiting risk of outages and allowing faster restoration of service.

What is the benefit/gain to the residents of the Township and individual property owner(s) if they contract with OneEnergy?
The property owner we are leasing from has decided that the lease payments we offer are preferable to alternative uses of the property.

The project will benefit We Energies customers by stabilizing their cost of electricity. The project will contribute to a more resilient electrical grid, generating more power closer to the point of use that doesn't need to be imported from generating stations far away.

The project represents a significant investment in the community. OneEnergy works primarily with Wisconsin-based contractors to construct solar projects, and these contractors spend money in the area at hotels and restaurants while the project is being constructed.

The main contractors we have used to build our projects are Wisconsin-based Pieper Power, Westphal, and Arch Electric, and these projects have allowed them to hire dozens of new solar installers. These are family-supporting, prevailing wage jobs.

Solar projects produce electricity (which we all use) with a resource that we have (the sun) employing people who live here in Wisconsin to build and maintain the systems. This reduces the amount of money we send out of state to buy coal and gas that Wisconsin doesn't produce. Scott Coenen from the Conservative Energy Forum notes in the letter he sent to Oneida County in support of our Hodag Solar project built in 2021, Wisconsin spends $15 billion dollars importing oil, natural gas, and coal and creating hundreds of thousands of jobs elsewhere.