

Solar System Purchase and Installation Q&As

Q: What components are included with the solar system that JacksonSolar LLC is selling and installing?

A: Each system will include modules, disconnect, meter socket, and racking. Depending on what is used to convert direct current (DC) to alternating current (AC), it may include power optimizers and a central inverter or microinverters and a combiner panel. The modules are the panels, an inverter converts DC from the solar system to AC for use at your home, the disconnect is required so that load isn't fed back to the grid during an outage, a separate meter is used to track the production of your system, and mounting hardware or framework.

Q: Does JacksonSolar LLC sell ground or roof-mounted systems?

A: JacksonSolar LLC will only sell and install ground-mounted solar systems. Roof-mounted systems are less visible and may cost less to install. However, it's important to remove the snow from your panels so that you can receive optimal performance from your system. A roof-mounted system makes that difficult and dangerous. A roof-mounted system adds extra weight to your roof, not to mention any extra snow that will add weight, and holes need to be drilled into your roof to mount the system.

If you decide on a roof-mounted system, make sure you figure into your payback the cost to remove and replace your roof-mounted system if you need to replace or shingle your rooftop.

It's also important to check with your insurance agent to confirm coverage on your solar panels. Roof-mounted solar is more vulnerable to wind, hail, and lightning; therefore, they're more at risk for damage.

Q: How many systems can I purchase from JacksonSolar LLC?A: Members will be able to interconnect one system.

Q: What is the longevity of the solar modules? Warranty of the modules? **A:** Modules that are designed, installed, and maintained well will produce for approximately 25 years, according to the manufacturer. After that, the output from the modules will be approximately 80% of their nameplate. The best way to ensure and extend the life and effectiveness of your solar system is by having it installed and maintained properly.

We provide warranty information on the modules we install. If the manufacturer of these panels goes out of business, the warranty is void.

Labor costs are not included in the warranty.

There is a one-year warranty on the installation. More is detailed in the Customer Agreement.

Q: What brand of equipment do you use?

A: We are currently installing VSUN 450-watt bifacial modules and can either install Enphase microinverters or a SolarEdge inverter with power optimizers. Most inverter companies are headquartered in the United States, but outsource manufacturing to other countries. The same holds true for the modules. It is also noted the minerals that make up the modules may be imported from other countries.

Q: What is the warranty on the SolarEdge inverter?

A: The inverter has a 12-year warranty. An inverter is an operating piece of equipment which may have to be replaced over time. SolarEdge offers an extended warranty plan for an additional cost. Labor costs are not included in the warranty.

Q: What is the warranty on the SolarEdge power optimizers?

A: Power optimizers have a 25-year warranty. Power optimizers are connected to each solar module. These have the potential to increase energy output from the PV system by constantly tracking the maximum power point of each module individually. They also monitor the performance of each module. Labor costs are not included in the warranty.

Q: What is the warranty on the Enphase microinverters?

A: 25-year limited warranty. Labor costs are not included in the warranty.

Q: What is the difference between Enphase microinverters and a SolarEdge inverter?A: SolarEdge power optimizers are placed on each module to level monitoring and voltage regulation and then sends the power to one inverter where it converts DC to AC power.

Enphase microinverters are placed on each module where the DC to AC power is converted at each module. An AC combiner panel is installed to consolidate the branch circuits and house the monitoring system.

Q: How do I know if I have enough sunlight for a solar system?

A: A solar system needs unobstructed access to the sun's rays during a window between 9 a.m. and 3 p.m. Shading on the system can significantly reduce energy output. JacksonSolar LLC's employees are trained in site assessment to help guide you in selecting the proper location for your solar panel.

Q: What size of system do I need?

A: The size of solar system you need depends on how much electricity you use, and how much you're willing to invest. During the site assessment, JacksonSolar LLC's representatives will discuss with you the size of system that will provide you with the most benefit based on the average of your past 24-month's electric usage. If you are new to your home, we will estimate your usage based on the size of your household and electrical needs. According to Jackson Electric's Policy 305, "The energy generated and backfed by the distributed generation system and energy supplied by Jackson Electric Cooperative for use by the member shall offset each other on a kWh for kWh basis."

Q: What is the physical size of the systems?

A: This varies depending on the system. You will need a minimum of a ½-acre of land, clear of obstructions, to install a system.

Q: What is the cost of a solar system?

A: The cost of a system starts at \$15,000 and goes up from there. The average cost per watt for our systems range between \$2.90 and \$3.50.

Prices are subject to change without notice and are estimates only. A more accurate bid is provided following a site assessment. Please contact your tax preparer to determine if you qualify for a tax credit.

Q: How do I get compensated for my system's production?

A: Jackson Electric Cooperative will off-set (net meter) all consumption first and the remaining production will be banked into the next month to be used toward your consumption. An annual true-up billing will occur with the June usage, July/August billing statement. Excess production at the time of the annual true-up will be credited at Dairyland Power's annual average avoided cost rate. More information will be provided during your site assessment. If you would like to calculate your energy savings at today's rate, our office can provide your past 12-months usage history. You will be responsible for the facility charges, fees, and taxes every month. Therefore, you will continue to receive an electric bill from Jackson Electric.

Q: What is Dairyland Power's annual average avoided cost rate?

A: Energy purchases delivered from a qualifying facility (renewable, such as solar) interconnected directly to Jackson Electric Cooperative will be paid the annual average avoided cost. This is determined from data collected at the end of each month for the actual hourly Day Ahead Locational Marginal Price for energy. Historically, the annual average avoided cost rate has ranged between \$0.02/kWh to \$0.05/kWh.

Q: What is net metering?

A: Net metering allows homeowners with solar systems to use any excess electricity their system produces to offset their consumption. As the homeowner's solar system produces

electricity, it is first used for any electrical needs in the home. If the solar system produces more electricity than the homeowner needs, it is fed into the utility grid.

Q: Does Jackson Electric offer any incentives to install solar?

A: At this time, Jackson Electric does not offer any incentives to install solar. However, the net metering policy is in place where consumption is offset with production at the retail rate. Any excess production is banked to be used toward consumption the following month.

Q: Is JacksonSolar LLC selling storage batteries for these systems?

A: At this time, JacksonSolar LLC is not selling storage batteries. We are always watching the costs and production on battery storage. They continue to be very expensive thus creating a lengthy return on your investment, and storage options continue to be researched and developed.

Q: What is included in a site assessment?

A: JacksonSolar LLC representatives will determine where your array should be mounted to receive the most benefit. Representatives will also discuss the potential energy savings, based on the average past 24-month's energy usage, with you. We feel that face-to-face interaction is invaluable. We like to meet our members to make sure you're comfortable with our service and that your investment will benefit you.

Q: Who maintains the panels?

A: The member/homeowner is responsible for the maintenance of the panels.

Q: What if a panel cracks or something isn't working properly. Who do I contact? **A:** You can contact JacksonSolar LLC if you have questions or concerns with your solar system if it is within a reasonable amount of time after the purchase and installation of the system. We will work with the manufacturer to do our best to correct any issue you may have with the system.

Q: Are there additional charges?

A: The member will be charged \$5.00 per month facility charge for the additional meter that will be used to register the panel's production. This charge could be adjusted per Jackson Electric's board of director's direction without notice.

The cost of the additional meter is included in the price of the system. The member is also responsible to apply and secure building and zoning permits, if applicable. A copy of the member's Certificate of Insurance (minimum of \$300,000 liability) must also be provided.

Frost Charges: If you plan to have JacksonSolar LLC install a solar system on your property after November 1, an additional charge may be applied if the conventional method of electric service installation is not feasible due to frost.

Q: Does JacksonSolar offer financing?

A: At this time, JacksonSolar nor Jackson Electric offers financing of solar systems. We recommend you discuss financing a system with a trusted, local financial institution. If you do finance a system, this will need to be included with the length of your payback calculation. Chances are you will not produce enough electricity with your solar system to pay for your monthly loan payment.

Q: How long will it take to install a system?

A: Once we have all of the materials and the location has been cleared by Digger's Hotline, it will take our crew one to two weeks to complete the project depending on the size of the system. Because we work side-by-side with Jackson Electric, most of the paperwork and line drawings are communicated immediately with the operations department. There's no delay with approvals. Other solar companies tend to put blame on Jackson Electric, when in reality, the company delayed the project.

Q: Why should I purchase from JacksonSolar LLC?

A: It is our goal to educate the member about solar energy. Of course, the sale of a system is great, but we feel it's more important to be a trusted energy resource for our members. We will explain to you the pros and cons of solar energy so that you're able to make an educated decision regarding your investment. We will also show you your current billing statement to show you how it will change after solar is installed.

Jackson Electric, a member of JacksonSolar LLC, is a financially stable cooperative that has been around for more than 85 years. We don't plan to sell you a product and then walk away.