

## Solar Energy and Cooperative Energy

Cooperative Energy owns and operates solar power generation facilities on the Mississippi Gulf Coast at Coast Electric Power Association (Kiln) and Singing River Electric (Lucedale); in South Mississippi at Southern Pine Electric (Taylorsville); and in the Mississippi Delta at Coahoma Electric Power Association (Lyon) and Delta Electric Power Association (Greenwood). The five 100 kW sites began commercial operation in 2016.

Cooperative Energy and partner Origis Energy USA began commercial operation of a 52 MW solar facility in Lamar County in December 2017. The Lamar County facility incorporates more than 206,000 polycrystalline solar modules into a single axis ground mounted design on 540 acres. Origis Energy developed, constructed and operates the electric generation site from which Cooperative Energy purchases all the power produced.

### Quick Facts

- Solar is considered one of the leading forms of green, or environmentally friendly, energy. Panels are used to collect sunlight that is converted into electricity.
- Solar energy is the most abundant energy resource on Earth. The sun produces more energy in one hour than the earth uses in an entire year. The trick, of course, is harnessing this energy and converting it into usable power.
- Solar energy can be converted into electricity, heat or lighting.



### Solar FAQ

#### Why did Cooperative Energy decide to build solar generation facilities?

Our members (ratepayers) — who are actually the owners — told us they wanted solar in our energy mix. Secondly, Cooperative Energy's mission is to provide reliable and affordable energy. We also have Environmental Protection Agency (EPA) regulations

that may require us to add more renewable energy. Adding solar as a generation source is friendly to the environment we all live in.

**What is the benefit of solar power to members?**

Having solar as part of our generation mix benefits our members because it means we are not dependent on one source, and Cooperative Energy members will be less susceptible to price spikes in any one sector. Solar power is also a renewable form of energy, which we know is important to Mississippians.

**Is it cheaper than other forms of energy, such as coal?**

That has yet to be determined, and answering this question is one of our goals. Ownership of the five 100 kW solar sites and our partnership in the 52 MW MS Solar 3 site enables us to compare the economics of the two sites and study the true economics of scale associated with larger sites.

**Can a member take steps to ensure they are buying solar-generated electricity?**

Cooperative Energy is currently studying various methods of distributing and marketing solar electricity. But members should know that Cooperative Energy already purchases solar electricity from our members and provides that to the 11 cooperatives we supply.

**Will a member be able to purchase a panel at any of these facilities that would generate the member's electricity? How about buying a block of electricity — which is a specific amount — from one of the facilities?**

Purchasing a panel or a block of electricity is among the various opportunities that Cooperative Energy is studying at this time. No decision about marketing the electricity has been made.

**Why are Mississippi energy companies just now starting to adopt solar power when many states have been utilizing it for years?**

Cooperative Energy has been purchasing solar electricity from our members for eight years and at the same time studying the reliability and affordability of solar. Cooperative Energy believes now is the time to expand locally based solar generation capabilities.

**Is solar effective in the winter months when there is less daylight and sun?**

Naturally, summer days with more daylight will be optimal, but we believe Mississippi is geographically situated so that solar can be an energy source year-round, although certainly less effective in the winter months.