



Solar Energy and South Mississippi Electric

South Mississippi Electric operates solar power generation facilities on the Mississippi Gulf Coast at Coast Electric Power Association (Kiln) and Singing River Electric Power Association (Lucedale) and in the Mississippi Delta at Coahoma Electric Power Association (Lyon) and Delta Electric Power Association (Greenwood). The four smaller-scale installations of 100 kW or less began operating in first quarter 2016 and are the first of several such facilities SME plans to construct and operate.

SME has also partnered with Origis Energy USA for a 52 MW solar facility in Lamar County. The facility will be built and operated by Origis, and SME will purchase all electricity generated there.

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 South Mississippi Electric (SME) decide to build solar generation facilities?

Our members (ratepayers) — who are actually the owners — told us they wanted solar in our energy mix. Secondly, SME'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.

Does SME own the solar facilities?

SME constructed, owns and operate the facilities. We coordinated with Member cooperatives to find the best locations within the SME footprint.

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 SME 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 with these projects. We have also contracted with Origis Energy to construct a 52 MW solar facility in Lamar County, Mississippi, so we should be able to compare the smaller projects with the larger and get specific costs. We do know that there are economies of scale, and the Origis project will be cheaper than the smaller projects.

What is the cost to construct a solar facility?

SME is spending approximately \$250,000 per site to construct the small-scale solar facilities.

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

SME is currently studying various methods of distributing and marketing solar electricity produced at the five sites. But members should know that SME 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 the facility that would generate the member's electricity? How about buying a block of electricity — which is a specific amount — from the facility?

Purchasing a panel or a block of electricity is among the various opportunities that SME is studying at this time. No decision about marketing the electricity has been made. Members also have to understand these are smaller-scale sites and will not have the large number of panels found on a solar "farm."

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

SME has been purchasing solar electricity from our members for five years and at the same time studying the reliability and affordability of solar. SME 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.