SANTEE COOPER CASTS A SHADOW ON SOLAR

While private utilities like SCE&G and Duke Energy are making home-grown solar power more accessible and affordable for South Carolina families and businesses, state-owned Santee Cooper is proposing excessive charges that would squash solar in its territory.

The fees make solar a losing proposition for customers even with the incentives that Santee Cooper proposed separately. Santee Cooper should instead follow the lead of other South Carolina utilities, and offer its customers simple 1:1 credit for the power produced by rooftop solar.

Santee Cooper's High Solar Fees Don't Work for Customers

The charges that Santee Cooper has proposed would cost a 5 kilowatt (kW) household more than $300 per year. Specifically, the proposed charges single out solar customers for a monthly metering charge and $4.70 per kW monthly "standby" charge. That would wipe out much of the savings incentive to go solar and make payback periods prohibitively long.

Adding Small Incentives on Top of Big Charges Won't Fix the Problem

The proposed charges are so large that they make solar uneconomical, even when Santee Cooper's newly proposed solar rebates and additional 3-cent energy credits are added in.

For example, a Santee Cooper customer who installs a 5 kW system and provides 30% of their power to the grid won't recoup their investment for approximately 20 years, or longer.[1] Even with Santee Cooper's proposed rebate and performance-based incentives, the standby and metering charges are *that* high.

If Santee Cooper got rid of the solar-specific charges and adopted retail rate net metering, the payback period for this same customer would be 11 years instead of more than 20 years, even with no additional incentives offered. An 11 year payback is more in line with programs offered by SCE&G and Duke Energy in South Carolina.

Net Metering Makes Customer Economics Easier to Evaluate

Instead of simply crediting solar customers at the retail electricity rate, around $0.11 per kilowatt hour (kWh), Santee Cooper has proposed a complex equation of incentives and penalties that will confound most customers and further deter them from investing in solar.

Net metering is a simpler proposition, used by utilities all over the country, including South Carolina.

Here's how it works:

- At the end of each month, any electricity provided by a customer's solar system to the grid is credited to the customer's next bill to offset power consumed, on a 1-to-1 basis.
- For a 5 kW solar system that generates 7,000 kWh annually and a standard $0.11 per kWh rate, this would equal $770 in yearly savings.

In contrast to that simplicity, Santee Cooper's proposal—an equation of solar charges, non-retail rate compensation, hourly netting of electricity, and mix of rebate and performance-based incentives—is overly complicated. A Santee Cooper customer installing a 5 kW solar system would have to go through the following analysis to see their annual savings:

- retail rate x 7,000 x % of generation consumed behind the meter
- + energy credit rate x 7,000 x % of generation provided to grid
- + performance-based incentive rate x 7,000
- – metering charge
- – standby charge

This requires customers to know their *hourly* electric consumption data and estimate what percentage of power they will export to the grid in order to assess payback—information beyond most customers' knowledge.

Santee Cooper Customers Are Getting Left Behind

Santee Cooper's proposal falls dramatically short of solar targets set by Act 236—a pro-solar bill the South Carolina General Assembly passed in 2014 without one single dissenting vote. Applied to Santee Cooper's retail customers, Act 236's goals would equate to approximately 29 megawatts (MW) of solar, 14.5 MW of that being rooftop solar.

Because Santee Cooper's cumbersome proposal is likely to incentivize few if any customers to install solar panels, it will bring Santee Cooper customers nowhere near those goals.

What's more, it will effectively stifle solar leasing—an arrangement that allows customers to adopt solar with no up-front costs and enjoy immediate savings. A main aim of Act 236 was to make solar leasing available statewide, and it is working—leasing is now available for Duke and SCE&G customers. It effectively won't be for Santee Cooper's customers.

Santee Cooper has yet to publicly commit to a solar-specific MW goal, but South Carolina investor-owned utilities (IOUs) are moving full steam ahead. The IOUs expect to see at least 206 MW of solar installed by 2021 under Act 236.

	Duke/SCE&G Plan	Vs.	Santee Cooper Plan
Approximate Residential Solar Payback	10 years or less		20 years or more
Net Metering Credits	Retail rate 1:1 credit per kWh		Less than half of retail rate
Comp with EE	Similar treatment for Renewable Energy (RE) and Energy Efficiency (EE) customers		Energy savings from RE are penalized, EE not penalized
Solar commitments	206 MW rooftop and utility-scale solar by 2021 (2% peak demand)		No solar commitment, but rooftop will be much less than IOUs

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COASTAL CONSERVATION LEAGUE

ENDNOTE

[1] These calculations include the following parameters: 18% AC capacity factor with 0.25% annual degradation, a 90% DC-AC conversion efficiency, retail electric rate of 11 c/kWh for 3 years with 2% annual growth thereafter, an energy credit rate of 4 c/kWh for 3 years with 2% annual growth thereafter, installed photovoltaic costs of $3.75/watt DC, and fixed operation and maintenance costs of $15/kW-yr-DC with 2% annual growth.