THE NEW LEDE

Proposed decision could deal another blow to California rooftop solar

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By: Shannon Kelleher

California regulators will vote this month on proposed key changes to programs that incentivize solar energy installations at apartment buildings, schools, and farms in a move critics fear will put the benefits of clean, renewable energy out of reach for many people.

“The proposed changes will hurt all rooftop solar, and the state’s decarbonization goals,” said Self Help Enterprises, a low-income housing program in Visalia, California, in an email to The New Lede. “However, low-income populations will be hit especially hard since a higher percentage of their income goes to rent and utilities.”

Hundreds of groups that advocate for clean energy and environmental justice, farms, and schools have signed letters protesting the proposals along with 135 local officials.

The vote is currently set for Nov. 16 after being postponed multiple times in the face of strong opposition. The vote comes about seven months after California’s net metering (NEM) 3.0 policy went into effect, which drastically decreased the value of the solar energy credits that homeowners receive when they share excess energy they produce with the grid.

The latest proposed net metering changes are related to the state’s Virtual Net Energy Metering (VNEM) and Net Energy Metering Aggregation (NEMA) programs, which benefits renters, schools districts, and farmers by allowing customers with properties that have multiple electric meters to install a single solar energy system. The programs enable customers with solar systems to receive credits for sharing the excess energy they produce with the grid.

The California Public Utility Commission (CPUC)'s proposed changes would require properties to sell the electricity they generate to the utility company before buying it back at full retail price.

“The Commission finds the costs and benefits of the new virtual net billing tariff closer to equal for all customers as compared to the costs and benefits of the current VNEM tariff,” said the proposed decision, stating that the current program is not cost-effective.

The CPUC and Pacific Gas & Electric (PG&E), a major California utility company, did not respond to request for comment about the proposed changes.

A threat to utility companies?

Powerful California utility companies are a driving force behind the proposed changes, said Brad Heavner, policy director of the California Solar & Storage Association (CALSSA).

“[The utilities] want to make changes to these tariffs that would make them non-workable, and it's because they see local solar and storage as competition,” said Heavner. “They make their profit from building long-distance transmission lines and sub-stations, and if communities are powering their needs locally, we need the transmission system less. They're fighting to kill this.”

Utility companies including PG&E, Southern California Edison (SCE) and San Diego Gas & Electric have argued through a pre-NEM 3.0 media campaign that rooftop solar creates a “cost shift,” benefiting the wealthy and adding to income inequality by shifting fixed costs from people with solar panels to other grid customers. But a report by the Center for Biological Diversity calls the cost-shift argument “bogus,” saying it is premised on the pre-solar energy grid, when only utility companies generated energy.

For-profit electric utilities are “threatened by distributed solar's impact on their lucrative, guaranteed profits” and are “using their influence with regulators and legislators in a coordinated effort to undermine the expansion of distributed solar,” says the report.

An expert witness for Arizona's largest utility company admitted in a hearing in September that utilities oppose rooftop solar because it cuts into their profits.

Still, some think it's possible for solar and utility companies to work together. Sunrun, a large residential solar panel and storage company, has partnered with PG&E on a project to help their California customers share excess solar energy with their neighbors to make the grid more resilient when energy consumption is high.

“This is an example of ‘radical collaboration’ where partnership is possible and needed,” said Walker Wright, vice president of public policy for Sunrun.

“The updated solar program aims to continue to help customers enjoy bill savings while also aligning the incentives to reflect today's market pricing,” says a fact sheet published on PG&E's website before NEM 3.0 went into effect. “The new Solar Billing Plan will pay solar customers for the solar power they produce, while enabling investments in other critical clean energy technology, like electric vehicle charging, that support California's overall decarbonization efforts.”

The billing structure before NEM 3.0 didn't “encourage storage adoption, which is critical to achieving California's 2045 renewable goals,” the PG&E fact sheet said.

As the solar industry looks to the future, incentives for companies to install batteries will be key, said Heavner.

“Because the export credit that a house going solar now receives under NEM 3.0 is very low, it makes more sense to build solar plus storage going forward,” added Wright, noting that this may be difficult for small companies that lack battery installation experience.

A fight for the future grid

So far, the move to NEM 3.0 has been a painful one for many California solar companies.

“It’s been rough going in the early days and months of NEM 3.0,” said Heavner. “The year-over-year project volume is down 70-80%. We were hoping for a turnaround by now and haven’t seen it yet.”

Solar companies in the state have been forced to lay off 20% of their staff, on average, according to a preliminary CALSSA survey of 130 solar companies, said Heavner, which he said indicates that about 15,000 jobs have been lost in the state’s solar industry altogether. With the typically slow winter season around the corner, Heavner worries smaller solar companies will struggle to make it.

The Center for Biological Diversity, the Protect Our Communities Foundation and the Environmental Working Group petitioned the California Court of Appeal in May to review NEM 3.0. The Court has granted the petition and may hear the case next year.

Recent changes to net metering policy in California are part of a larger battle over the future of solar in the state and across the US, with net metering changes recently adopted or considered in Arizona, Florida, North Carolina, Arkansas, Colorado, Idaho, and Wisconsin.

“It really is a fight over what is the grid going to look like,” said Roger Lin, an energy justice program senior attorney at the Center for Biological Diversity. “Is it going to be the physical monopoly type, centralized, utility-scale status quo one where we see rates increasing? The inequitable grid? Or is it going to be this new grid where we see more local generation happening?”

Lin said more rooftop solar would translate to fewer big transmission lines because energy would not need to be transported long distances.

Rooftop solar projects have several key advantages over utility-scale solar farms, said Lin –it’s much faster to get them up and running and they require far less land.

California’s plan to cut greenhouse gas emissions by 2030 calls for a fourfold increase in solar power capacity, a goal that Lin said will require lots of rooftop solar buildout.

“In the runup to 2020, we were in large part able to get a million solar roofs in California because of the net metering program, how it provided that incentive for folks who were sold rooftop solar,” he said. “Now, if we have a gutted net metering program… it’s putting our climate targets for 2030 in question.”

Worsening “solar segregation”

The VNEM tariff, which serves apartment buildings, helps lower electricity bills for tenants by dividing electricity bills from a single solar panel system on the property among multiple units and common areas. VNEM provides direct financial benefits to California renters, including many living in low-income communities of color.

“We see this proposed decision from the CPUC as a threat to basically worsen ‘solar segregation’ in our state,” said Tyler Valdes, an energy equity manager with the grassroots group California Environmental Justice Alliance, referring to the disparity in access to rooftop solar. “We’re talking about renters who are facing some of the highest housing and energy costs in the country who are being basically locked out of any kind of financial benefits from the transition to the clean energy economy."

The current proposed decision would protect the Solar on Multifamily Affordable Housing (SOMAH) program, which benefits low-income tenants through solar installations by ensuring that the majority of solar credits generated go toward reducing tenants' bills, said Valdes. But many low-income families live in homes that don't qualify for SOMAH, leaving them vulnerable to higher bills from the proposed VNEM changes.

Multifamily housing only started leveraging VNEM to install solar panels in the last two years or so, said Heavner.

"That segment has finally started to take off," he said. "We're concerned that right when it's poised for a lot of growth the Commission could take it off the table."

Concerned farmers and educators

Farmers have made use of a separate tariff, the Net Energy Aggregation (NEMA) program, to make solar energy attainable. While some farmers use solar to run cold storage or onsite processing facilities, it's primarily used for pumping water and irrigation, said Kevin Johnston, associate council at the California Farm Bureau.

"The way agriculture works is you have multiple meters," he said. "So sometimes you have 10, some properties have 50 different meters. And you have all these different irrigation pumps. It doesn't make sense for me to put an array behind every single one of those irrigation pumps."

Plus, farmers' energy demands are much more irregular than those of a single-family household, said Johnston, since they depend on the time of year and the level of rainfall.

When farmers weren't adopting solar because it didn't make sense for farms, the NEMA program, which is also used by schools, arose to meet the agriculture sector's unique needs.

But proposed changes to NEMA would disrupt the program with a new energy equation.

"It just isn't going to pencil out financially to make folks want to participate," said Johnston. "So now you essentially are just going to shut off that sector's continued interest in growth of solar."

"There isn't a [finding] showing that we're shifting costs or doing anything that's detrimental," he added. "And in effect, especially in the wet years, we're probably providing quite a bit of excess energy that we're not being compensated for that just essentially goes back to the grid."

"There just doesn't seem to be a reason why it needs to be abandoned, except that the utilities want to," he said. "I think they've been the main driver of pushing against, and I think their preference would be to just have the whole program collapse."

California educators have also expressed concerns about how changes to NEMA would affect schools. The Oakland Unified School District and the Los Angeles School Trustees Association recently passed resolutions asking the CPUC to reject the proposed decision, saying that it would "hamper or dismantle altogether the ability of schools to avail themselves of the benefits of local, renewable, and affordable energy through rooftop solar and battery storage."

Looking ahead, looking back

In addition to NEM 3.0 and the proposed tariff changes that may pass this week, Californians are bracing for another change – a proposed income-based fixed charge that customers would pay each month regardless of how much energy they use (or save). This “utility tax” may range from about $30-70 per month for most customers –the highest in the US. An end to the $10 cap on fixed charges quietly came to pass in July 2022 as part of a much larger bill.

“A lot of legislators in Cali are also upset about it because it sort of got snuck into a bill at the 11th hour,” said Lin.

For some rooftop solar advocates, including Lin, the best way forward is to wind back the clock to NEM 2.0.

“No crazy policies, nothing too extraordinary,” said Lin. “Just something that’s already been done. We know NEM 2.0 worked.”