

Rooftop Solar Dims Under Pressure From Utility Lobbyists

By [HIROKO TABUCHI](#) JULY 8, 2017



Rooftop solar panels at a home in Indiana. The state is among several that have rolled back solar incentives. Credit Luke Sharrett for The New York Times

Over the past six years, rooftop solar panel installations have seen explosive growth — as much as 900 percent by one estimate.

That growth has come to a shuddering stop this year, with a projected decline in new installations of 2 percent, according to projections from Bloomberg New Energy Finance.

A number of factors are driving the reversal, from saturation in markets like California to financial woes at several top solar panel makers.

But the decline has also coincided with a concerted and well-funded lobbying campaign by traditional utilities, which have been working

in state capitals across the country to reverse incentives for homeowners to install solar panels.

Utilities argue that rules allowing private solar customers to sell excess power back to the grid at the retail price — a practice known as net metering — can be unfair to homeowners who do not want or cannot afford their own solar installations.

Their effort has met with considerable success, dimming the prospects for renewable energy across the United States.



Uncertainty over net metering in Indiana has “shut us down,” said Michael A. Mullett, a volunteer who has helped two dozen households sign up for solar panels since 2014. Credit Luke Sharrett for The New York Times

Prodded in part by the utilities’ campaign, nearly every state in the country is engaged in a review of its [solar energy](#) policies. Since 2013, Hawaii, Nevada, Arizona, Maine and Indiana have decided to phase out net metering, crippling programs that spurred explosive growth in the rooftop solar market. (Nevada recently reversed its decision.)

Many more states are considering new or higher fees on solar customers.

“We believe it is important to balance the needs of all customers,” Jeffrey Ostermayer of the [Edison Electric Institute](#), the most prominent utility lobbying group, said in a statement.

The same group of investor-owned utilities is now poised to sway solar policy at the federal level. Brian McCormack, a former top executive at the Edison institute, is Energy Secretary Rick Perry’s chief of staff. The Energy Department did not make Mr. McCormack available for an interview.

In April, Mr. Perry ordered an examination of how renewable energy may be hurting conventional sources like coal, [oil](#) and [natural gas](#), a study that environmentalists worry [could upend federal policies](#) that have fostered the rapid spread of solar and wind power.

Charged with spearheading the study, due this summer, is Mr. McCormack.

“There’s no doubt these utilities are out to kill rooftop solar, and they’re succeeding,” said David Pomerantz, executive director of the Energy and Policy Institute, a renewable energy advocacy group. “They’re now driving the agenda.”

A Statehouse Push

Early on a March morning in the Indiana State Capitol, under a mural of the Greek sun god Apollo, solar energy enthusiasts swarmed a committee hearing to defend the state’s embattled solar policy.

A school superintendent said that his underfunded district needed solar power to reduce energy costs. A local farmer pleaded that his pine tree nursery depended on power from his solar panels. A Baptist pastor said he saw drawing energy from the sun as an “expression of our love of God’s creation.”

The coalition was fighting a losing battle.

A week before the Indiana committee hearing, a group of utility lobbyists descended on the statehouse, handing out talking points that said credits for rooftop solar panels lead to higher rates for everyone else. They were there to support a bill, sponsored by [Senator Brandt Hershman](#), that would roll back Indiana’s net metering system by reducing the rate utilities paid to solar consumers for their excess electricity.

Homeowners with solar panels “avoid paying for use of the grid, even though they use it almost constantly to buy or sell electricity,” read a talking point prepared by Indiana’s local investor-led utilities group, the [Indiana Energy Association](#), and circulated among Republican state legislators.

Indiana’s five investor-owned utilities are among the biggest contributors to Indiana’s elected officials, together giving at least \$3 million to mostly Republican candidates over the past four

election cycles, according to campaign finance filings. They are also known to play an outsize role in drafting energy-related bills.

Mr. Hershman said utility contributions had not swayed him against net metering. He said his bill, which was passed and signed into law this spring, protects current solar customers by locking in their rates for many years.

“I receive donations from a wide variety of groups across the ideological spectrum because I tackle tough issues fairly, listen to both sides and promote good policy,” he said by email.

The pushback against renewable energy has been years in the making.

Four years ago, the Edison institute, an industry group made up of the country’s largest investor-owned electric companies, declared that the business of generating electricity was in danger of being sucked into what has since become known as a “utility death spiral.”

As more consumers switched to rooftop solar and bought less electricity from the grid, the trade group worried in a [2013 document](#), the costs of running conventional coal, oil, gas or nuclear power plants would be shared among an ever-smaller customer base. That could cause rates to spike, chasing even more customers away.



Brian McCormack, a former top executive at the Edison Energy Institute, a prominent utility lobbying group, is now chief of staff for Energy Secretary Rick Perry. Credit Southern States Energy Board, via Flickr

The prospect of more customers “fully exiting from the grid,” the group said, “raises the potential for irreparable damages to revenues and growth.”

Since then, the utilities have targeted state solar power incentives, particularly net metering, which credits solar customers for the electricity they generate but do not use and send back to the grid. That offsets the cost of electricity they may still buy from their local utility during cloudy days and at night, reducing or even eliminating their electricity bills.

Utilities argue that net metering, in place in over 40 states, turns many homeowners into free riders on the grid, giving them an unfair advantage over customers who do not want or cannot afford solar panels. The utilities say that means fewer ratepayers cover the huge costs of traditional power generation.

A study released this year by the federal [Lawrence Berkeley National Laboratory](#), however, concluded that for the vast majority of states and utilities, the effects of rooftop solar credits on electricity rates for nonsolar customers would be negligible for the foreseeable future. The Edison institute disputes that study’s findings.

To fashion a legislative response, utilities turned to the [American Legislative Exchange Council](#), or ALEC, a conservative nonprofit that receives funding from the billionaire brothers Charles G. and David H. Koch.

In 2014, ALEC adopted model legislation to move away from net metering, which was then circulated among ALEC’s network of state legislators. Mr. McCormack, then the Edison institute’s vice president for political and external affairs, played a role in writing the model [legislation](#).

Utilities found a receptive audience in many states.

Arizona legislators voted in December to move away from net metering, lowering the credit solar

customers receive for the excess energy they generate and limiting how long customers keep their favorable rates.

In Florida last year, the utility industry contributed more than \$21 million to an ultimately unsuccessful ballot initiative to ban third-party sales or leasing of rooftop solar panels. A [leaked audio recording](#) appeared to reveal that the utility campaign deliberately misled pro-solar voters into voting for an anti-solar policy, a tactic one consultant called “political jujitsu.”

Expanding Effort

The latest utility resistance to residential solar in places like Indiana is striking because those states do not yet have big rooftop solar markets, said Autumn Proudlove, an analyst at the [N.C. Clean Energy Technology Center](#) at North Carolina State University. Only about 1,100 of Indiana’s 2.5 million rate-paying households have signed up for net metering.

Driven by sharply falling costs, the United States last year [added a record 15 gigawatts of solar capacity](#), enough to power around 2.8 million homes and more than any other source, including natural gas and coal. The bulk of that growth came from giant solar parks and other large projects run by solar producers and, in some cases, the utilities themselves. Large-scale wind projects have also grown rapidly, many in states carried by Donald J. Trump in the presidential election.

Some of the slowdown in smaller-scale rooftop solar has come in maturing markets in states like California, where rooftop solar companies are having trouble expanding their customer base beyond early adopters. Financial struggles at rooftop solar companies like SolarCity and Vivint have also weighed on growth.

Uncertainty over net metering in Indiana has slowed the market further. “It’s totally shut us down,” said Michael A. Mullett, a volunteer at Indiana’s Columbus Community Solar Initiative,

who has helped two dozen households sign up for solar panels since 2014.

Still, at a January 2016 board meeting of the Edison institute, attended by chief executives of the country’s largest utilities, Thomas R. Kuhn, the group’s president, counseled against complacency.

“Years ago, I think a lot of people said, ‘That’s not going to come to our area,’” he said, according to a recording of his remarks made available by a participant. “And now we see it in each and every state,” he said.



Installing solar panels atop a home in Goodyear, Ariz. In December, Arizona legislators voted to move away from net metering. Credit Matt York/Associated Press

“E.E.I. is happy to come to any state at any time,” he added. “We have two dozen states we are working on.”

On March 14, the Edison institute hosted a fund-raising reception at the Mandarin Oriental Hotel in Washington for Senator Mitch McConnell, the majority leader. The cheapest tickets went for \$5,000.

The reception underscored the utilities’ attempt to cement ties with an administration that already appeared ambivalent toward any rapid shift to renewable energy.

The institute was still cheering the appointment of one from its ranks, Mr. McCormack, to a top job in the Energy Department. One of his first assignments is [a study](#) of how the changing

electric generation mix, including renewables, is affecting the grid.

Proponents of renewable energy fear that the study could threaten policies at the federal level, like the renewables tax credits for businesses and homeowners, which have also spurred investment in wind and solar.

Shaylyn Hynes, a spokeswoman for the Energy Department, dismissed the environmentalists' concerns. "The department has no preconceived notions as to the findings and recommendations that will result from this review," she said.

Mr. McCormack has assigned Travis Fisher, a former economist at the Institute for Energy Research, a nonprofit funded by the Koch family foundations, to be principal author of the study.

Mr. Fisher did not respond to requests for comment. In [a 2015 study](#), he called clean energy policies "the single greatest emerging threat" to the electric power grid. He called for canceling the Obama administration's Clean Power Plan,

federal tax credits for solar and wind, state renewable energy targets and net metering.

"For those who want to ensure that Americans have access to reliable electricity long into the future," Mr. Fisher said in the study, "the time has come to push back."

Correction: July 9, 2017

An earlier version of this article described incorrectly an initiative on the ballot in Florida last November. The measure, which ultimately failed, would have banned third-party leasing of rooftop solar panels, not roll back net metering.

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A version of this article appears in print on July 9, 2017, on Page A13 of the New York edition with the headline: After Rapid Growth, Rooftop Solar Programs Dim Under Pressure From Utility Lobbyists. [Order Reprints](#) | [Today's Paper](#) | [Subscribe](#)