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THE ATTACK ON ROOFTOP SOLAR

*It is the first responsibility of every
citizen to question authority.*

—BENJAMIN FRANKLIN

Putting the Desert Sun to Good Use

When Pat and Craig Carrell got solar panels for their home in sunny Nevada, they wanted to save money and take control over their own energy. But they had no idea that their utility company would try to kill their solar dream.

After a career in higher education, Pat and Craig moved to a retirement community outside of Las Vegas in 2002. “The day we moved here, the temperature was 115

degrees, so that was a welcome to Nevada,” Pat told *PBS NewsHour*.¹

It turned out to be more expensive to retire in Nevada than Pat and Craig had expected. Each year, as summer came on and the thermometer crept past 100 degrees and then kept going up, the air conditioning had to work harder and harder. The couple’s electric bills went through the roof. During the summer, Pat and Craig paid more than \$450 per month for electricity.

To get costs under control, first the Carrells tried to get more efficient with the way they used energy. They added insulation to the attic and sun-blocking ultraviolet film to the windows. That helped some, but the Carrells’ power bills were still high. They’d heard that Nevada was an excellent place to go solar, with more than 300 days a year of sun and strong state incentives. So, in 2014, they decided to get solar panels at home.

Pat and Craig invested \$45,000 to hire a solar installer to put a solar array on the roof of their two-bedroom home. (Note: the price of solar panels has dropped greatly since then. Today, in most states, the average home can get a solar array that will meet most or all of its electricity needs for \$15,000 or less). A solar tax credit from the federal government along with credits from their local utility company cut their initial cost by more than 40 percent. They expected the rest of the investment to pay for itself through lower electric bills over the next few years.

Once the couple’s solar system went live, their strategy started to work just as they’d planned. On average, their bills dropped by about 95 percent, down to just \$15 per month even in the hottest days of summer. Their bill was so low because the Carrells’ solar panels made enough electricity to cover the couple’s needs throughout the year.

Under Nevada’s net metering law, they could sell the extra power their solar panels made during the day to their local utility at the full retail rate. In exchange, since they didn’t choose to have a battery backup at home and remained connected to the electric grid, the utility would provide Pat and Craig power at night, when their solar panels weren’t generating energy.

This was a good deal for everybody. The Carrells saved money and gained more energy independence. The clean power they produced helped reduce the need for dirty electricity from coal and other fossil fuels, cutting pollution for everybody. And they even helped the utility company by offering the company low-cost power during the hottest hours of the day when the utility would otherwise have to buy all its additional power at high prices on the “spot” market to meet high customer demand.

It was good news for Nevada’s homeowners when solar grew 400 percent in the state between 2014 and 2015. It was also good news for the state’s economy, as solar companies created thousands of new jobs, helping to

lower the state's high unemployment rate. But then, dark clouds started to gather on the horizon.

The Empire Strikes Back

Nevada's biggest utility, NV Energy, didn't think that more solar in Nevada was good news. They just saw that solar panels were allowing good customers like the Carrells to make their own energy at home and stop using centralized power controlled and distributed by NV Energy. That kind of competition from rooftop solar could eat into the utility's profits in the future.

As SolarCity's Marco Krapels explained to *PBS NewsHour*,

Now solar is becoming real. The utility monopolies are saying, "Well wait a minute, we've got to crush it before it gets too big."

They want to build more plants so they can make more money, and if we take a little bite out of that apple, and we say, "Hey guys, we've got solar panels everywhere on all these homes, you don't need to build them any more power plants," then the utility goes, "Well, wait a minute, how am I going to make more money next year?"

So, to protect its own business, the utility company decided to strike back at solar.

Employing high-paid lobbyists and using their massive political influence, NV Energy managed to get Nevada's laws changed to punish people who already had solar at home and scare away anyone else who might think of getting solar in the future.

The utility attack on solar worked. In December of 2015, after heavy lobbying from NV Energy, Nevada's three-member Public Utilities Commission decided to triple the fee they allow the utility to charge rooftop solar owners just to stay connected to the grid—from \$12.75 a month, to more than \$38 a month. The Commission also decided that the utility company no longer needed to credit solar customers at the retail rate for electricity, the same rate that those customers would pay to buy energy from the utility. Instead, the utility company would only buy power from solar homeowners at a lower "wholesale" rate of 75 percent off.

And worst of all for homeowners like Pat and Craig Carrell, the change was retroactive. They weren't grandfathered in for the life of their solar system at the current rates. Instead, in the future, they would now have to pay a higher monthly fee to the utility while taking a big cut in solar payments. This meant that most of the savings that they'd counted on getting from solar would now be taken

away. And 17,000 other homeowners who had gone solar in the state would now also see their savings from solar taken away by NV Energy.

As Pat Carrell explained, “It’s not the rules that we bought into, they changed the game on us. That was hard-earned savings, but we decided it was worth it to put it up on our roof, to have that kind of energy independence, and now it seems like it’s gone.”

The change in solar rates practically killed the solar industry in Nevada overnight. New orders for solar installations dropped to nearly zero. All three of the largest national installers announced that they’d be closing their operations in Nevada, resulting in layoffs for hundreds of solar workers.

Fortunately, the story doesn’t end here. Solar homeowners got angry and helped lead a movement to bring back favorable rates for Nevada solar. And in the spring of 2017, the pro-solar coalition achieved success when the Nevada state legislature voted to reinstate net metering at nearly the retail rate. We’ll talk about that more later.

Yet, Nevada was only one battlefield in monopoly utilities’ war on rooftop solar. Utilities had a battle plan to bring the fight to the rest of the country too, starting with another sunny state perfect for solar—the Sunshine State itself. The next chapter will talk about the secret strategy that utilities hoped would kill the rooftop solar revolution in the state of Florida.



FROM THE REVOLUTION: TAXATION WITHOUT REPRESENTATION

Even before the American Revolution, the thirteen British colonies on the Atlantic seaboard prided themselves on a tradition of self-governance that went back to their founding documents, such as the Mayflower Compact in Massachusetts and the charter of the Virginia Company. But this tradition would be tested when their British rulers needed cash.

After the French and Indian War ended in 1763, the British government was deeply in debt. To pay off expenses incurred during the war, during the 1760s and 1770s King George III and Parliament imposed a series of taxes on Americans. Taxing the colonies was popular in Britain because it allowed the government to reduce land taxes back home. It all started in 1765 with the Stamp Act, which required a paid tax stamp on colonial newspapers, legal documents, and even playing cards. And it ended nearly a decade later with the tax on the Americans’ tea. These taxes were not high. But they angered the colonists because the taxes were imposed from England without the colonists’ participation.

Previously, the colonists had been used to only paying taxes that they decided to levy on themselves. If the

colonists agreed to pay the new taxes imposed from the outside, they would be admitting that British authorities had a right to take the colonists' money without their consent, since Americans had no representatives in Parliament. Also, since Britons back home didn't have to pay these taxes, the Americans, who considered themselves equal to people living in Britain, thought that these taxes discriminated against the colonies. So, to demand fairness and to protect their autonomy, the colonists protested the taxes.

Today, solar homeowners are not facing additional taxes *per se*. But solar homeowners are facing additional fees from utilities approved by state governments, as in the case of Nevada. Yet, the parallel between these government-approved utility fees on solar today and the taxes imposed by the British government on the American colonists before the Revolution is clear.

Monopoly utilities are a kind of private company that has power similar to that of a government. When such a utility levies an extra fee on solar homeowners without the consent of either the homeowners or local citizens, then that utility is acting like an autocratic power. To protect their rights, solar homeowners have begun to stand up to utilities and to the government regulators and elected officials who help those utilities to deprive solar homeowners of their private property without giving them adequate representation in the decision-making process.

Two

THE SECRET PLAN TO QUELL THE ROOFTOP REBELLION

*Justly those we tyrants call who
the body would enthrall.
Tyrants of more cruel kind—those
who would enslave the mind.*

—“CUPID, GOD OF SOFT PERSUASION”
(18TH CENTURY SONG)

It turns out that the attack on rooftop solar in Nevada wasn't an isolated skirmish. It was actually part of a secret plan by the utility industry to kill, or at least slow down, rooftop solar around America. And in the sunny state of Florida, this plan almost worked to fool citizens