## "The Grid" is the Problem, Not the Solution

On October 9, Pacific Gas & Electric began shutting down power to about 750,000 customers (affecting as many as 2 million people) in California. The company claims the shutdowns are necessary to reduce the risk that its power lines and other infrastructure will cause wildfires like last year's Camp Fire, which killed 85 people and and caused \$16.5 billion in damage.

The Camp Fire was an extreme , and the blackouts are an extreme response, but they're far from the only indicators that Americans should no longer trust aging "grid" distribution systems to reliably and safely supply electricity to their homes and businesses.

Fortunately, just as the problems seem to be getting really bad, the solutions are coming online fast.

Unfortunately, states' response to the problem are a strange mix of unneeded mandates and subsidies and unjustifiable barriers, driven by cronyism and hostility to free markets.

Solar panels, wind turbines, large batteries for power storage, and gasoline generators for short-term backup are getting cheaper and cheaper. Unfettered, markets would proliferate these solutions to most Americans in a fairly short time.

But government can't resist putting its finger on the scales.

The California Energy Commission has ordered the inclusion of solar panels on all new homes beginning in 2020, citing climate change rather than independence from the grid as justification. A nice subsidy to the solar industry, at the expense of homeowners for whom wind or other solutions might work better.

Nationwide, many localities require homeowners to attach their houses to the grid whether they want to or not — then require those homeowners' solar systems to shut down during grid outages for utility worker safety, leaving them powerless too.

Extreme weather often results in power loss to large numbers of people. I've experienced multi-day outages from thunderstorms, blizzards, and ice storms in the midwest and hurricanes in the southeast. Most Americans probably recall similar outages. That's what happens when you string wires and transformers all over the place then pray nothing knocks them down or stresses them out.

The increasing sprawl and automation of grids, initially touted as a feature, turned out to be a bug. In 2003, a software failure in Ohio turned what should have been a local blackout into a two-day outage in two Canadian provinces and eight US states, shutting down more

than 100 power plants and leaving 55 million without electricity. Lately the fear (thus far apparently unrealized) is that grids are vulnerable to hackers of both state and freelance varieties.

"The grid" needs to go. We've got the means to replace it. If politicians and bureaucrats just got out of the way, the market would do the rest. Instead, they'll probably drag it out for decades, at a cost of trillions of dollars and thousands of lives.