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# Guest Commentary | Community choice aggregators to lead microgrid revolution

By [SANTA CRUZ SENTINEL](#) |

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By Ronnie D. Lipschutz

Sixty-six million years ago, an 8-mile wide asteroid slammed into the Gulf of Mexico, near Chicxulub in the Yucatan. That impact abruptly ended the 180 million year-long Age of Reptiles, forever eliminating dinosaurs from the Earth. Today, large electric utilities are the dinosaurs, and an asteroid is coming.

The recent power shutoffs by PG&E were a clumsy response to the risk of catastrophic fires, one that does not bode well for large utilities. The fundamental reasons for creating monopoly utilities more than 100 years ago no longer exist. And centralized power systems like PG&E's are rapidly becoming unsustainable.

Extinction is driven by instability and obsolescence. First, as the cascading impacts of climate change grow, adverse weather events, combined with decades of fire suppression policies, will increase the frequency of deadly conflagrations. With utility insistence on increasing shareholder dividends rather than maintaining a safe power system, those risks can only grow.

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Moreover, given the size scale of PG&E's service territory and the complexity of its distribution network, even intentional cutoffs will not prevent failures in vulnerable parts of its system.

Second, PG&E's distribution system is aging, while necessary modernization has barely begun. Its system was not designed for the new climate normal and rebuilding from the ground up (or digging into the ground) is the only way to reduce fire hazards and risks. That would be extremely costly—although not as costly as a future of uncontrolled wildfires. And who would pay for rebuilding? PG&E's electricity rates are among the highest in the country, and customers will abandon the company in droves if rates go too much higher. The company's shareholders will not be pleased if the utility's earnings are plowed back into infrastructure rather than dividends. And it seems highly unlikely that the Legislature or the state's voters would approve a utility bailout.

Ultimately, that very distribution network is the problem: PG&E buys electricity from large power plants scattered across California and beyond and it must be sent long distances to customers. When one part of the system goes down, resulting instability threatens the entire network. This arrangement arguably made sense a century ago. Today, it no longer safe or reliable.

Rather than trying to save a broken system, there is a solution that will cost less, be more reliable, and do more to reduce carbon emissions: community-based, renewable energy microgrids. These are generation and distribution systems that serve localities but can also connect with other microgrids to provide power across the state. As the cost of renewable electricity, especially from solar photovoltaics, rapidly declines, we no longer need to rely on large, far away, mostly carbon-powered generating plants. In place of a monolithic, top-down utility linked microgrids offer a bottom-up solution that is far more stable, resilient, and compatible with widespread development of renewable energy resources.

A key benefit of renewable microgrids connected through a large distribution network is that they can disconnect from the grid, if necessary, continuing to deliver safe, reliable power and avoiding arbitrary blackouts of millions of people. The well-being of tens of millions of people will no longer be in the hands of a distant, profit-oriented utility but, rather, local decision-makers committed to their communities.

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But who is going to lead this microgrid revolution? Community choice aggregators (CCAs)! These are municipal enterprises that provide power to local customers. Until now, the role of CCAs has been limited, because they purchase power on regional electricity markets and deliver it through PG&E's power lines. But CCAs could develop local renewable-based generating facilities and eliminate reliance on an increasingly unreliable centralized grid. There are 19 CCAs in California serving more than 10 million customers, and more are being planned. At some point, economics and risks are going to tilt the balance toward local microgrids and CCAs, and big utilities will go out of business. They may be politically powerful enough to delay this, but their fate is clear: Chicxulub is coming!

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