

**From:** [Secretary CEA JPA](#)  
**To:** [Faviola Medina](#)  
**Subject:** Fwd: Micro grids  
**Date:** Thursday, September 17, 2020 9:51:21 AM

---

----- Forwarded message -----

From: <  
Date: Wed, Sep 2, 2020 at 7:49 AM  
Subject: Micro grids  
To: Clean Alliance <[secretary@thecleanenergyalliance.org](mailto:secretary@thecleanenergyalliance.org)>

Dear Secretary, I would like these words to be read at the next meeting of the Board of the Clean Energy Alliance:

In the San Diego Union Tribune of 2 September is an editorial describing the utility of micro grids. I would request that the Board read this editorial. I believe that, in order to achieve the goals of the CEA, micro grids will be part of the solution. I would like the Board to appropriately prioritize a discussion on micro grids.

The Secretary has been provide a copy of the opinion.

Gregg Ferry

Microgrids can shore up system

BY CHACE H. BOWER & WILLIAM I.Y. BYUN

The coronavirus pandemic's stay-at-home orders have been driving increased household electricity demand — just in time for the annual fire season to also add to the strains on the power grid. The result has been unfortunate but predictable power outages. The entire state has now been affected by rolling power shutoffs.

The California Independent System Operator (CAISO), which works to maintain the energy grid with utilities services, had announced a loss of nearly 1,000 megawatts in power generation caused by the recent heatwave, and this could perhaps happen again during this fire season. The reality of climate change has also meant an increase in the size of the yearly fires by a factor of five , meaning this problem is likely to occur again in the near future.

Some have attempted to blame California's increasing utilization of renewable energy, noting the intermittency issue of renewables, i.e. the sun doesn't shine at night, making solar panels useless, or the wind doesn't always blow to power turbines. Their prescription? Continue to add large (and expensive) traditional fossil fuel baseload power plants to boost supply and invest the billions needed to upgrade the ancient transmission grid.

As a practical consideration, however, such approaches would cost billions in this time of deficits, take years to build and have to overcome pitched ground battles with civil society because of their reliance on environmentally harmful technology.

But a "small ball" practical approach exists by setting up renewables-based microgrids. Microgrids simply couple renewables such as some solar photovoltaic panels with battery storage and utilize them efficiently via localized control systems. Such a solution is

significantly cheaper especially given the dramatic declines in costs of renewables and batteries. This is in line with the current trend towards a more civil society-based approach to electric power management, such as the "community choice" initiative, which seeks to increase local control over power and the utilization of renewables.

As a local approach, microgrids also bolster local system resiliency, and hence critical demand users such as military bases, hospitals and universities are either setting up or exploring developing microgrids across the country now.

Employers may find that having employees work remotely is actually beneficial to productivity and costs, and might continue to have people work remotely after the coronavirus pandemic has passed. This trend could potentially extend the problems California is experiencing with increased usage during fire season. This creates a problem for utilities, but also opens a new market that has little investment at present. If microgrids are not implemented to solve this problem, it may be the case that solar for individual homes grows.

Already, the major utilities such as Pacific Gas & Electric and Southern California Edison had planned to implement microgrids this year for communities across the state using renewable energy to provide resiliency. However, PG&E canceled its proposed projects and SCE has postponed its own, citing tight deadlines that drove up costs. Both utilities have opted to use more diesel based generation to add the planned resiliency. This move has prompted the Local Government Sustainable Energy Coalition to ask state authorities for authorization to conduct these projects locally. The coalition represents nearly two-thirds of California's population.

The concern from the major utilities is that such smaller localities and community governments may not have sufficient expertise, business management capabilities and appropriate technical operations focus to develop and manage such systems on a commercially practicable basis.

Giant utilities are not structured to develop tiny microgrids, and local communities may not have the focused expertise. As the issues are pressing now, rather than overcoming the other, a practical bridge may increasingly utilize smaller-scale private-public partnerships through the various microgrid startup companies positioned for smaller scale renewables projects, working in conjunction with local communities and with the traditional large industrial companies. Especially when designed for scaled modular setups, costs and management can be dramatically eased and the time frame for rollout could be in a matter of months. Then the series of rolling blackouts, load shedding, etc., that the state frequently experiences could begin to be put behind us.

Bower is chief financial officer at Scylla Microgrid Corp. Byun teaches in the College of Business Administration at California State University San Marcos.

--

Secretary

[thecleanenergyalliance.org](http://thecleanenergyalliance.org)