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**Comments of The Climate Center Following Up on Recent
Microgrid Workshop**

Additional submitted attachment is included below.



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Deliver speed and scale greenhouse gas reductions, starting in California.

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Comments of The Climate Center

Submitted to the CEC
Following the July 7/9 IEPR Workshops
on the Future of Microgrids in California
CEC Docket 20-IEPR-04
July 30, 2020

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Introduction

The Climate Center lauds the work the CEC has done supporting the development of microgrids in California and respectfully submits the following comments in response to the recent IEPR microgrid workshops:

The CEC should prioritize support for microgrid development in low-income communities.

While all communities are disrupted and suffer from power outages, low-income households are most likely to suffer disproportionately. Low-income households have fewer back-up resources in the event of an outage, and are less able to absorb financial losses.¹ As noted by the CPUC in its Microgrids and Resiliency Staff Concept Paper, “recent Public Safety Power Shutoff events have demonstrated that as a percentage of income lost due to economic disruption, low-income and disadvantaged communities are more highly impacted by disruptive energy events. . . . “As an example, a refrigerator full of food for a family of four, costing \$500 represents a higher percentage of a low-income family’s monthly income than a high-income family’s monthly income.”²

Businesses closed during an extended outage can result in lost wages for employees and as shown during the current pandemic, school closures can leave families scrambling to find childcare with lost wages should parents be forced to stay home with their children. Medical care, including access to prescription drugs, can also be compromised. Transportation is compromised when public transport hubs or gas stations don’t function for lack of power. Disadvantaged communities with high rates of respiratory problems are also especially vulnerable to adverse health impacts from high emissions when fossil-fuel backup generators are widely used during power outages.

The CEC should initially prioritize deployment of clean distributed energy resources at critical facilities – including community centers and schools -- serving low-income communities in high fire threat districts, consistent with the funding priorities contained in the Self-Generation Incentive Program Equity Resilience Budget.

The Climate Center has been working to develop a [coalition](#) of organizations advocating for a coordinated policy of increased state resources in support of community energy resilience, and is sponsoring a related [policy summit](#) on August 5th – which will likely yield additional related policy recommendations for submission to the CEC and other key state agencies later this fall.

Local governments should control energy resilience planning in order to optimize distributed energy resource siting.

Installation of clean, distributed energy infrastructure -- including photovoltaics, energy storage, fuel cells and EV charging stations -- will necessarily require compliance with local land use and planning regulations. Local governments need to proactively control this planning process, with

¹ See the NAACP Environmental and Climate Justice Program report, [Lights Out in the Cold: Reforming Utility Shut-Off Policies as if Human Rights Matter](#), March 2017

² California Public Utilities Commission, “[Microgrids and Resiliency Staff Concept Paper](#),” p. 41, including footnote 30.

the assistance of investor-owned utilities in their role as distribution system operators (DSOs), to optimize DER siting and aggregation. The pivotal role of local governments in energy resilience planning was highlighted in the CPUC's June 11th Track 1 decision and recent Track 2 Ruling and Staff Proposal in the SB 1339 Microgrid Proceeding.³

The CEC should support development of a Community Energy Resilience Planning Toolkit

Currently there is a disconnect between local government planning and electric distribution system planning. To synergize the efforts of both local governments and IOUs, it makes sense to identify and utilize the largest and most optimal spaces within communities to generate and store energy. However, there are currently very few resources to guide local governments in this area.

Cities and counties develop general plans and climate action/adaptation plans, typically with little consideration of the electric distribution grid and no involvement by the utility, unless owned by the municipality. Conversely, investor-owned utility distribution planning and integrated resource planning do not typically engage local governments other than on an ad hoc basis. If these programs proceed in isolation from each other and an understanding of local grid capabilities and constraints, customer solar+storage and electric vehicle adoption can create challenges for grid operating and potentially costly but unnecessary infrastructure upgrades. If these efforts are conducted collaboratively, technologies such as dynamic load management, dispatchable microgrids and "vehicle-to-everything" (V2X) capabilities can be designed and implemented to operate within local grid constraints and even provide real-time services to support grid operation.

Consistent with similar comments filed last year, the Climate Center respectfully urges the CEC to support development of a "Community Energy Resilience Planning Handbook for Local Governments" as a valuable guide for developing local distributed energy resources in harmony with grid requirements. The Climate Center believes that the CEC, in collaboration with staff from ICARP, Cal OES and other agencies, are well suited to develop and distribute such a resource. Local governments, particularly those located in low-income areas, typically do not have the staff or resources needed to conduct project planning to successfully apply for available state incentive funds, including the SGIP "Equity Resilience" funds, which cover much of the hardware costs associated with installation of solar plus energy storage capacity to provide enhanced resilience for community facilities.

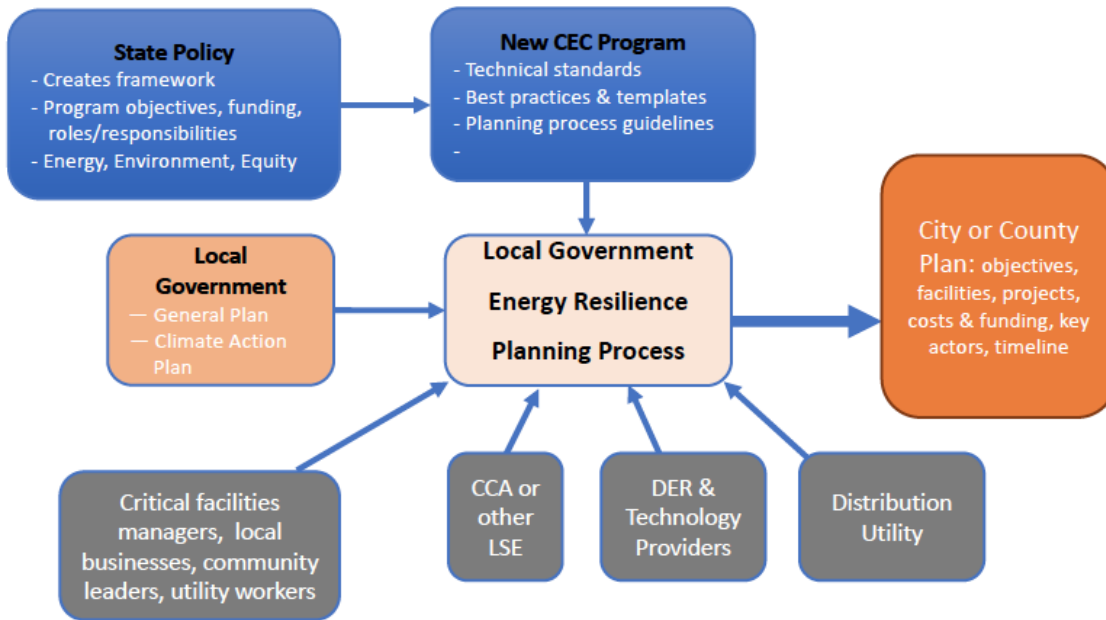
The proposed handbook could include practical design templates and technical guidance for critical facility microgrids as well as collaborative planning approaches to identify local needs and priorities, providing a clearinghouse for best practices in local government energy planning.

The handbook could also include case studies (e.g., including CEC-supported community microgrid and energy projects) that address technical aspects as well as financing models and financial incentives for property owners who can provide large rooftops, parking lots and brownfield areas to generate, store and/or shift energy supply and applications. A companion web portal could continually update these case studies and best practices as more cities and counties gain experience and expertise in planning and implementing local resilience projects.

³ California Public Utilities Commission, "[Resiliency and Microgrids - Microgrid Rulemaking.](#)"

The diagram below provides a process schematic for how a Community Energy Resilience Planning process might work:

Community Energy Resilience Planning Process



Community energy resilience planning would link energy resilience goals with other public policy goals.

By addressing resilience needs using an integrated and collaborative approach, California can accelerate its progress on meeting transportation electrification, clean energy and emissions reduction goals. For example, increased market penetration by electric vehicles can provide a critical back-up power source for homes, businesses and local governments, if coordinated properly as part of an integrated plan. Community microgrids and other local power systems can potentially advance transportation and building electrification with little to no increase in overall energy system demand, even though future electricity consumption will likely be much greater than today. Emerging technologies enable supplying increased demand with local energy generation and storage resources, while new energy efficiency programs reduce on-site load, and customer-side technologies transform customer sites into flexible resources capable of providing a wide range of grid services.

Conclusion

Absent significant state leadership and investment in community energy resilience planning tools and information resources provided by CEC and other related state agencies, public investment in energy resilience will likely continue to focus on new fossil fuel power generation – a short-sighted outcome which endangers public health and safety and is contrary to California’s ambitious GHG reduction goals.