

Microgrid Resources Coalition

California Public Utilities Commission

R. 19-09-009 Microgrid Workshop

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- 501(c)6 non-profit organization formed in 2013 to advocate for policies and regulations that support microgrid deployment – www.microgridresources.com
- MRC promotes widespread implementation of microgrids through laws, regulations and tariffs that compensate them for their services, support their deployment and operations, and do not discriminate among industry participants in the implementation of microgrids.
- MRC is agnostic on technology and ownership. Our members support deployment of efficient, resilient assets, often incorporating thermal energy, storage and CHP.



Current Members



Microgrids: California's Opportunity

Revolutionize the Power Sector

- Achieving true resilience and decarbonization will require us to rethink how we modernize our grid and value distributed energy resources.
- Microgrids necessitate that the Commission rethink the planning, project management and construction process for building a cleaner, safer, resilient, and more technologically advanced grid.
- MRC encourages the Commission to reimagine the roles of the utility, developers, customers, and the regulatory model that governs our energy sector.
- Be bold and forward thinking – embrace and nurture innovation in technology and market diversity.

Mixed Resource Microgrids

- **SB 100 has a goal of 100% carbon free electricity by 2045 – not 100% *renewable by tomorrow***
 - A flexible fuel backbone for microgrids is critical for balancing renewables intermittency and ensuring the level of resiliency required to maintain sufficient and extended operations for public health and safety *today*
- **Projects should be “SB 100 ready”**
 - Developers are planning and preparing to incorporate increasingly higher levels of renewables and cleaner fuels into projects as they become commercially available and financially viable.
- **Industry is following the pathway to achieve CA’s decarbonization goals**
 - In accordance with SB 100 timelines and the well-established emissions guidelines outlined in SB 1339.
- **MRC strongly encourages the Commission not to place additional barriers in the pathway and slow down the progress being made today.**

Do not let perfection become the enemy of the good. We don’t have any more time to waste with climate change.

Urgent Action – Short Term Solutions

- **Remove arbitrary technical barriers to enable single and multi-customer microgrids**
 - **Pairing technologies**
 - Allow multiple DERs to interconnect under one clear policy as long as they meet Rule 21 smart inverter requirements and CARB DG emissions standards
 - Acknowledge generation, storage, and controls as distinguished and different
 - Utilities should view the aggregate performance of microgrids, with multiple resources and sophisticated controls, with respect to interaction with the larger grid
 - **Address sizing issues**
 - Remove nameplate capacity limits and allow sizing flexibility
 - Allow projects to be sized to meet customer/community needs during an emergency.
 - **Streamline interconnection process**
 - Develop standardized microgrid tariff that supports and makes pairing technologies and sizing for resiliency easier in the interconnection process
 - Establish standard and transparent interconnection costs up front
 - Establish more concrete timelines within Rule 21 for each stage of the process and require IOUs to meet those timelines.
 - Consider incentives and penalties to ensure IOU compliance with review timelines

Urgent Action – Near Term Solutions

- **Remove financial barriers that make microgrid projects cost prohibitive to develop and construct**
 - **Departing load charges**
 - Exempt critical facility and public agency microgrids from PCIA charges
 - Open track addressing DLCs for microgrids within R. 17-06-026
 - **Standby charges**
 - SBCs are calculated assuming an improbable worse case scenario that does not reflect the practical reality of grid operations and customer behavior in the real world
 - SBCs should be minimized and develop clear rules for maximum charges based on the aggregate internal capabilities of the microgrid
 - **Interconnection costs**
 - Conduct a thorough review of all IOU interconnection costs and identify opportunities for reduction or elimination of excessive fees
 - Special Facilities Agreements, ITCC taxes, and other costs need to be reexamined in Electric Rule 2 and 21

Longer Term Solutions

- **Create a resilience tariff**
 - Encourage longer duration resources that have the ability to island
 - Promote energy and environmental justice
 - Public agencies
 - DAC and low-income communities
 - Rural communities
- **Support hybrid microgrids**
 - Non-utility operated microgrids that use utility wires are 100% feasible. They require reasonable payment for use of utility wires.
 - In other states payment is determined through *collaborative* negotiation and partnerships between parties
 - The Commission could facilitate the development of utility-public and utility-private partnerships between entities
- **Microgrids prioritized as lower risk alternatives for grid investment**
 - Explore remote grids as alternatives to investments in new transmission infrastructure for rural communities
 - Transmission is very expensive and very high risk in today's world of climate change and year-round fire season
- **Allow microgrids to participate in wholesale markets**
 - The Commission should work with CAISO to explore further

Microgrids: California's Opportunity Revolutionize the Power Sector

- **Microgrids can provide solutions to many of California's climate policy goals:**
 - Resiliency and mitigating PSPS impacts
 - Integrating high penetration of DERs and balancing renewable resource intermittency
 - Building decarbonization and energy efficiency
 - Electric vehicle demand integration
 - Resource Adequacy and capacity constraints
 - Prioritize communities and equity in energy planning
- **California should boldly lead the way in facilitating the commercialization of a robust and diverse microgrid market *as is the statutory intent of SB 1339.***
- **Microgrid market development will have the effect of managing the impacts of PSPS and addressing the critical resiliency needs of California communities.**

Q&A – Thank You!



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