

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA**



FILED
10/27/23
04:59 PM
R1909009

Order Instituting Rulemaking Regarding
Microgrids Pursuant to Senate Bill 1339 and
Resiliency Strategies.

Rulemaking 19-09-009

**JOINT COMMENTS OF THE CLIMATE CENTER, CENTER FOR BIOLOGICAL
DIVERSITY, GREEN POWER INSTITUTE, AND 350 BAY AREA ON THE OCTOBER 9,
2023 JOINT IOUS' FILING OF THE COMMUNITY MICROGRID ENABLEMENT
TARIFF**

LORENZO KRISTOV
KURT JOHNSON
THE CLIMATE CENTER
1275 4th St. #191
Santa Rosa, CA 95404
Telephone: (916) 802-7059
Lkristov91@gmail.com

ROGER LIN
CENTER FOR BIOLOGICAL DIVERSITY
1212 Broadway, St. #800
Oakland, CA 94612
Telephone: (510) 844-7100 ext. 363
rlin@biologicaldiversity.org

CLAIRE BROOME
350 BAY AREA
26 Northgate Ave
Berkeley CA 94708
Telephone: 510 248 4095
cvbroome@gmail.com

GREGG MORRIS
THE GREEN POWER INSTITUTE (*a
program of the Pacific Institute*)
2039 Shattuck Ave., Suite 402
Berkeley, CA 94704
Telephone: (510) 644-2700
gmorris@emf.net

October 27, 2023

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA**

Order Instituting Rulemaking Regarding
Microgrids Pursuant to Senate Bill 1339 and
Resiliency Strategies.

Rulemaking 19-09-009

**JOINT COMMENTS OF THE CLIMATE CENTER, CENTER FOR BIOLOGICAL
DIVERSITY, GREEN POWER INSTITUTE, AND 350 BAY AREA ON THE OCTOBER 9,
2023 JOINT IOUS’ FILING OF THE COMMUNITY MICROGRID ENABLEMENT
TARIFF**

Pursuant to Assigned Commissioner Shiroma and Administrative Law Judge Rizzo’s Track 5 Modified Schedule,¹ The Climate Center, Center for Biological Diversity, Green Power Institute and 350 Bay Area (collectively “Joint Parties”) provide the following opening comments on the Joint Investor Owned Utilities’ (“IOU”) Community Microgrid Enablement Tariff (“CMET”).

I. INTRODUCTION

The limitations the CMET imposes on the operation of a multi-property microgrid (“MPMG”) eliminates most of the microgrid’s commercial value, and as a result, the CMET will be ineffective in facilitating the deployment of commercially viable MPMGs in the IOU service areas. This is contrary to the requirements of SB 1339, the Commission’s Environmental and Social Justice (“ESJ”) Action Plan, and other state agency guidance on the need to commercialize microgrids to provide customer benefits and help meet the State’s climate and

¹ Included in the Assigned Commissioner and ALJ’s October 23, 2023 Ruling Denying Joint Parties’ Motion to Amend Scoping Memo and Ruling For Track 5, And Modifying Track 5 Schedule of Activities

equity goals. In these comments we propose guiding principles for a MPMG tariff that will enable MPMGs to be commercially viable by providing clean energy and resilience benefits to participating customers and by participating as resources in the CAISO and retail markets, while contributing to California’s energy and environmental goals and supporting reliable power system operation. We conclude by proposing next steps for the Commission to achieve a resolution of this Track 5 that will advance the commercialization of microgrids as directed by SB 1339 through the removal of onerous constraints inherent in the CMET.

II. THE CMET WILL NOT COMMERCIALIZE MICROGRIDS.

The CMET will not catalyze “commercialization” of microgrids. The plain language and legislative analysis of SB 1339 makes the meaning of “commercialize” clear: “The Public Utilities Commission, Independent System Operator, and State Energy Resources Conservation and Development Commission must take action to help transition the microgrid from its current status as a promising emerging technology solution to a successful, cost-effective, safe, and reliable *commercial product* that helps California meet its future energy goals and provides end-use electricity customers new ways to manage their individual energy needs.”² SB 1339’s straightforward directive to transition the microgrid to a “commercial product” is expanded in the legislative analysis of the bill. “In addition to the increased reliability, microgrids with properly configured controllers have the potential to provide lower electricity bills for the customer and cleaner air by displacing the need for energy generating resources with higher emissions. Specifically, microgrids can control the rate and schedule of distributed energy generation resources, coordinate the use of energy storage, and implement demand response.”³

² SB 1339, Section 1(e) (emphasis added).

³ See SB 1339 Senate Rules Committee, Office of Senate Floor Analyses (August 31, 2018), p. 4; available at https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201720180SB1339#

That legislative analysis points to two state efforts and accompanying documentation that confirm the meaning of commercialize: first, the CEC, CPUC and CAISO roadmap for actions needed to commercialize microgrids in California; and second, the CEC’s funding of research through the EPIC program for “projects that use microgrids to support high penetrations of renewables and the operations of critical facilities.”⁴

On September 29, 2017, the CEC released the draft Roadmap for Commercializing Microgrids in California.⁵ With regard to the economics of microgrids, the Roadmap identifies several high-value uses of microgrids as power system resources that can provide revenue streams to microgrid owners/operators:

“Microgrids can be viewed as a fundamental building block in creating the 21st century “smart” and modernized electric grid, serving as a multi-function grid resource. From the system operator standpoint, a microgrid can serve as:

- A reliable, dispatchable energy resource;
- An ancillary service resource;
- A load shed resource; and/or,
- A consumption resource to handle an oversupply of generation.”⁶

The Roadmap also includes three planning action items that clarify the meaning of “commercialize”:

⁴ *Id.* at 4.

⁵ Draft Roadmap available at <https://efiling.energy.ca.gov/GetDocument.aspx?tn=221347&DocumentContentId=24205>

⁶ *Id.* at 19.

1. “Clarify the microgrid participation rules and requirements to *provide multiple revenue streams*. Where possible, leverage the rules and requirements being developed for the energy storage industry or other DER systems.”⁷
2. “Develop state level strategies to *open wholesale and retail markets* to microgrids that will support California’s future energy policy goals.”⁸
3. “Complete research to identify new opportunities for potential economic revenue streams for microgrids *for services they can provide their owner/operator*, the utilities, and the California ISO.”⁹

In other words, **one critical requirement** of commercialization is to create opportunities for microgrids to earn revenue through participation in open wholesale and retail markets for the benefit of microgrid owners/operators other than the utility and their participating customers and resources. Fundamental to exercising such opportunities is the ability of a microgrid to operate as a “single, controllable entity”¹⁰ under all system conditions, blue sky and black sky, 24x365, so that it can participate as a resource in the CAISO and retail markets. The CMET, by strictly limiting microgrid operation to scenarios involving utility grid outages, completely precludes these revenue opportunities which are essential to commercialization.

On October 2, 2017, the CEC hosted a workshop to present and discuss the Roadmap for Commercializing Microgrids in California.¹¹ The workshop reiterated this first critical requirement for commercializing microgrids, to “[d]evelop state level strategies to *open*

⁷ *Id.* at 22 (emphasis added).

⁸ *Id.* at 22 (emphasis added).

⁹ *Id.* at 23 (emphasis added).

¹⁰ As defined by the U. S. Department of Energy; full definition is provided later in this document.

¹¹ Workshop slides *available at*

<https://efiling.energy.ca.gov/GetDocument.aspx?tn=221364&DocumentContentId=24206>

*wholesale and retail markets to microgrids that will support California’s future energy policy goals.”*¹²

A **second critical requirement** for commercializing microgrids is to serve the energy needs of participating customers beyond just the resilience benefit of islanded operation during utility grid outages. As the draft Roadmap details, microgrids should become “a successful commercial product that helps California meet its future energy goals and provides *end customers new ways to manage their individual energy needs.*”¹³ Certainly, SB 1339 includes practically identical language, emphasizing this second critical requirement. Moreover, as the Roadmap clarifies, “[t]he true value of the microgrid is defined by the individual, organization or team that went through the effort to design, construct and operate a microgrid.”¹⁴

This second requirement is further emphasized by the CEC’s EPIC solicitation for pilot projects to commercialize microgrids, which also informed the language of SB 1339. The EPIC program has incorporated the U.S. Department of Energy definition of microgrids:

a group of interconnected loads and distributed energy resources (DER) with clearly defined electrical boundaries that acts as *a single controllable entity* with respect to the grid [and can] connect and disconnect from the grid to enable it to operate in both grid-connected or island mode.¹⁵

¹² *Id.* at Slide 16.

¹³ Draft Roadmap at 2.

¹⁴ *Id.* at 7.

¹⁵ See e.g. Electric Program Investment Charge 2016 Annual Report at 20 (citing to U.S. DOE definition), available at <https://www.energy.ca.gov/sites/default/files/2021-06/CEC-500-2017-015-CMF.pdf> (emphasis added).

SB 1339 includes comparable language, specifically the capability to operate as a “single controllable entity, and connect to, disconnect from, or *run in parallel with, larger portions of the electrical grid ...*”¹⁶

Overall, commercializing microgrids means establishing provisions in the regulatory framework that enable a community or third party to deploy and operate a MPMG on a commercially viable basis, i.e., with the ability to recover all its costs from a stream of revenues for the services it provides, without relying on grants or some form of philanthropic funding or subsidy.

The CMET fails to meet these critical—and statutorily mandated—requirements. Although SB 1339 directs the Commission to implement provisions to commercialize microgrids, MPMGs implemented under the CMET cannot be commercially viable because of the prohibition on operating as a “single controllable entity”¹⁷ during blue sky conditions. This prohibition precludes the primary sources of commercial viability of a MPMG: namely, the ability to serve its participating end-use customers economically from local generation and storage resources within the microgrid footprint on a 24x365 basis, and to participate as a resource in the CAISO and retail markets. Under the CMET, MPMGs can only be implemented with substantial grant funding because there will be no way to achieve commercial viability through revenues for services provided within a narrowly prescribed window of opportunity.

III. THE CMET FAILS ON A KEY PROVISION OF THE ESJ ACTION PLAN.

One further consequence of the CMET’s limitation of MPMG operation to limited scenarios involving utility grid outage as determined by the utility is that it violates a key

¹⁶ SB 1339, section 8370(d) (emphasis added).

¹⁷ *Id.*

objective of the Commission’s ESJ Action Plan: to “Increase investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health.”¹⁸

As discussed in the previous section, a MPMG implemented under the operational restrictions of CMET will not be commercially viable. This means that investment in clean energy resources for ESJ communities under CMET will require grant funding, which typically involves competitive application processes that ultimately fund only a small percentage of the needs of the ESJ communities throughout the state. ESJ communities are especially disadvantaged in competitive grant processes due to the lack of internal expertise or the financial resources to obtain outside technical expertise to develop winning project proposals.

Commercial enterprises will not finance MPMG projects for ESJ communities because they simply won’t pencil out under the CMET. Moreover, in those ESJ communities that do receive grants to deploy clean DERs, those DERs will not provide any economic benefits to the communities if the MPMG is not allowed to operate as a single controllable entity under blue sky conditions.

Thus the CMET is a formula for minimizing the deployment of MPMGs based on the availability of grant funding to finance them, which will disadvantage ESJ communities most in need of resilience resources.

IV. PROPOSED PRINCIPLES FOR AN EQUITABLE AND EFFECTIVE MPMG TARIFF

The Joint Parties propose the following guiding principles for designing a MPMG tariff that will facilitate commercial deployment of MPMGs and maximize their benefits for the

¹⁸ CPUC ESJ Action Plan Ver. 2.0, Goal 2 at 22 available at <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf>.

communities that deploy them, especially ESJ communities. The logic of these principles is to create a regulatory framework that makes MPMGs commercially viable by enabling them to earn economic revenues from the services they provide. This will enable local governments, tribes, third-party developers and communities of various types to implement MPMGs on a commercial basis, where the revenues from the services the MPMG provides can allow the project to move forward without requiring substantial grant funding or other types of subsidies. The proposed principles are as follows:

1. Establish the right of a community, including tribes, local governments and community-based organizations, to deploy a MPMG consisting of electrically contiguous resources and end-use customers connected over IOU distribution facilities.
2. Establish the right of the community to engage a qualified third party to be the developer and operator of the microgrid. Define a new entity called “microgrid operator” that has the necessary technical and organizational capability to work with a community and with the IOU to plan, deploy and operate a MPMG.
3. Establish the right of the community to operate a MPMG microgrid as a single controllable entity at all times, 24x365, in either grid-connected (blue sky) or islanded mode at the discretion of the community.
4. Require the IOU to provide network and other technical information to the community and its chosen microgrid operator as needed to facilitate the design, deployment and operation of the microgrid.
5. Through coordination with the CEC and CAISO, clarify the procedures and resolve any outstanding issues to enable a MPMG to participate as a resource in the CAISO markets and economically provide services to support grid operation. This will address the planning action items cited earlier from the CEC’s Roadmap.

V. SUGGESTED PROCEDURAL NEXT STEPS

For the foregoing reasons, we recommend that the Commission adopt the following procedural next steps.

1. Amend the scoping ruling to allow parties to submit alternative MPMG tariff proposals for discussion in public workshops and allow formal comments and reply comments on these proposals. However, in contrast to the opportunity provided in the October 23, 2023 Assigned Commissioner and ALJ’s Ruling, the Commission should restore the Energy

Division staff proposal with a due date of January 22, 2024, as per the July 18, 2023 Scoping Ruling, and have parties' proposals due at the same time. The Commission should then conduct public workshops to present and discuss these proposals, followed by written public comments and reply comments.

2. Recognize the commercial viability of MPMGs as a criterion for evaluating all tariff proposals, so that MPMG can be deployed and operated without depending on grant funding.

3. Authorize Energy Division staff to develop an independent proposal that is not constrained to the CMET or other tariff concept that restricts MPMG operation or commercial viability.

Dated: October 27, 2023

Respectfully submitted,

By: _____/s/_____
LORENZO KRISTOV
KURT JOHNSON
THE CLIMATE CENTER
1275 4th St. #191
Santa Rosa, CA 95404
Telephone: (916) 802-7059
Lkristov91@gmail.com

By: _____/s/_____
ROGER LIN
CENTER FOR BIOLOGICAL DIVERSITY
1212 Broadway, St. #800
Oakland, CA 94612
Telephone: (510) 844-7100 ext. 363
rlin@biologicaldiversity.org

By: _____/s/_____
CLAIRE BROOME
350 BAY AREA
26 Northgate Ave
Berkeley CA 94708
Telephone: (510) 248-4095
cvbroome@gmail.com

By: _____/s/_____
GREGG MORRIS
THE GREEN POWER INSTITUTE

(a program of the Pacific Institute)
2039 Shattuck Ave., Suite 402
Berkeley, CA 94704
Telephone: (510) 644-2700
gmorris@emf.net