

**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
(Filed September 12, 2019)

**Reply Comments of Vote Solar and The Climate Center (the “Joint Parties”) on
the Track 2 Microgrid and Resiliency Strategies**

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I. INTRODUCTION

Vote Solar and The Climate Center (referred to hereafter as “the Joint Parties”) respectfully submit these reply comments to the opening comments pursuant to Administrative Law Judge Rizzo’s July 23 Ruling requesting comment on the Track 2 microgrid and resiliency strategies staff proposal, facilitating the commercialization of microgrids pursuant to Senate Bill 1339. Vote Solar is a 501(c)(3) non-profit organization, working to lower solar costs and expand solar access. Vote Solar advocates for state policies and programs needed to repower our electric grid with clean energy. The Climate Center is a California 501(c)(3) non-profit organization founded in 2001 with a mission to deliver rapid greenhouse gas (GHG) reductions at scale, starting in California.

II. COMMENTS

1. Commission adoption of the Staff proposals would fall far short of its obligation under SB 1339 to take actions to commercialize microgrids.

The Joint Parties agree with other parties¹ who made the point that the Staff proposals do not fulfill the Commission’s requirements under SB 1339 or even the narrower requirements of 8371(b) to “take specified actions by December 1, 2020 to

¹ CESA (pp. 1-3), Google (p. 2), MRC (p. 3), Schneider Electric (p. 4).

facilitate the commercialization of microgrids for distribution customers of large electrical corporations.” The Staff proposal states (page 4): “All five proposals presented below address barriers to the commercialization of microgrids, and therefore fulfill the requirements of P.U.C. 8371(b). ... these five proposals, together with the secondary proposals presented in the next section, fulfill all requirements of SB 1339.”² We are concerned that the Commission will adopt the Staff proposals along the lines recommended by Staff and consider their commercialization mandate under SB 1339 to be completed.

SB 1339 is quite specific on the challenges to commercialization of microgrids that the Commission must address:

Section 1(d) Key issues facing commercializing microgrids that must be addressed include all the following:

- (1) How microgrids operate and their value.
- (2) Improving the electrical grid with microgrids.
- (3) How microgrids can play a role in implementing policy goals.
- (4) How microgrids can support California’s policies to integrate a high concentration of distributed energy resources on the electrical grid.
- (5) How microgrids operate in the current California regulatory framework.
- (6) Microgrid technical challenges.

² Chapter 4.5 (commencing with Section 8370) to Division 4.1 of the Public Utilities Code: The commission, in consultation with the Energy Commission and the Independent System Operator, shall take all of the following actions by December 1, 2020, to facilitate the commercialization of microgrids for distribution customers of large electrical corporations: 8371(b) Without shifting costs between ratepayers, develop methods to reduce barriers for microgrid deployment. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB1339

The Staff proposals do not address most of the above challenges. Instead of tackling issues vital to microgrid commercialization, the Staff proposals focus almost entirely on opportunities that favor Investor Owned Utility (IOU) development and operation of microgrids. Neither Section 1(d) quoted above nor P.U.C. 8371, which lists the actions the Commission must take by December 1, 2020, make any mention of advancing microgrid development or ownership by the IOUs. At the same time, the ALJ Ruling and the Staff proposals³ highlight their concern with P.U.C. 8371.5, which says: “Nothing in this chapter shall discourage or prohibit the development or ownership of a microgrid by an electrical corporation.” That sentence is the only reference in the legislation to IOU microgrid development or ownership, and its language clearly does not direct the Commission to prioritize opportunities for the IOUs to leverage their monopoly positions to preempt a robust third-party presence in the arena of microgrid development and ownership.

Thus, although there is no legislative direction for the Commission to focus its regulatory efforts to enhance the ability of the IOUs to develop and own microgrids, the primary Staff proposals are mainly IOU-focused.

The specific deficiencies of the Staff proposals relative to microgrid commercialization are as follows:

1. Proposal 1 would actually hinder commercialization by expanding an anti-competitive role for IOUs in the arena of customer-sited microgrid equipment and controls, an arena in which competitive industry players have been demonstrating technology and business innovations that offer great potential societal benefits.⁴

³ ALJ Ruling (p.3), Staff Proposal (p. 4): “Proposal 1 explicitly affirms the ability of electrical corporations to develop and own their tariffs, fulfilling the requirement of P.U.C. 8371.5.”

⁴ Schneider Electric N.A. (p. 5), Wild Tree Foundation (pp. 2-3)

2. Proposal 2 offers an extremely narrow exception to the stringent Rule 18/19 prohibitions against customers serving other customers on adjacent properties which far exceed the restrictions imposed by P.U.C. 218. There are many microgrid commercialization possibilities open to the Commission that are currently allowable under 218, but Proposal 2 would allow none of these possibilities.
3. Proposal 3 addresses rates for only one category of microgrids: those located “behind-the-meter” on an individual customer’s premises. Neither the definition of microgrids nor any other language in SB 1339 limits the scope of the Commission’s required action on commercialization to this single category. The implicit premise underlying Proposal 3 is that microgrids receive value from and are a burden on the grid,⁵ that their only value is to the customers they serve, and they provide no value to the grid, to other grid users or to California’s policy goals more generally.⁶ Thus Proposal 3, which is the only Staff proposal to deal with a microgrid rate, completely ignores several key issues identified in Section 1(d) of SB 1339.
4. Proposal 4 framed as a pilot program and limited to a small number of communities explicitly defers commercialization⁷ and postpones provision of resilient electric service facilities to the many disadvantaged communities with sparse resources that face power shut-off risks and need support for microgrid development.⁸
5. Proposal 5, though useful, provides no time frame for when these utility pilots will yield results that can contribute to microgrid commercialization.

Given the concerns outlined above, the Joint Parties believe that the Commission cannot reasonably assert that adoption of these and the secondary Staff proposals constitutes fulfillment of SB 1339’s mandate to advance microgrid commercialization.

Much more is needed, as discussed further below.

⁵ See PG&E (pp. 11-19), SCE (pp. 14-21), SDGE (pp. 11-21). In fact, SCE asserts in its comments on Proposal 3 that customer-sited microgrids should not operate during a PSPS event because it would not be safe. (SCE p. 19)

⁶ Several subsections of Section 6 of Staff’s Concept Paper discuss the potential values microgrids can provide to the grid and to California’s policy goals, but Proposal 3 essentially sets all these values to zero.

⁷ Green Hydrogen Coalition (p. 10), Jt. CCAs (p. 13), NFCRC (pp. 10-11), Schneider Elec. N.A. (p. 9), SEIA (p. 11), Wild Tree Foundation (pp. 8-9)

⁸ 350 Bay Area (p. 10), CESA (pp. 15, 17), GRID Alternatives (p. 11), Jt. CCAs (p. 15), CEJA (p. 6)

2. The central need the Commission must address to advance the commercialization of microgrids is to create IOU rates and tariffs that support microgrid development and operation.

Several parties in their opening comments emphasize the fundamental need for a general microgrid tariff to cover all types of microgrids and offer specific input on what a general microgrid tariff must include.⁹

Section 7.1 of Staff's Concept Paper (pp 38-39) identifies as Regulatory Barrier 1 the lack of a transparent, uniform process to enable community members, and their local governments and tribal authorities, to develop a utility-scale or community microgrid to benefit their community. Staff goes on to recommend formation of a working group to develop a new Electric Rule to remedy this lack and lists some of the essential elements of such a rule. It is noteworthy that Staff mentions the option to defer consideration of this issue until a later track of this proceeding but then rejects that option as causing "inappropriate delays." Unfortunately, the Staff Proposal does not consider this element.

The Joint Parties agree that a comprehensive microgrid tariff is the foundational need to enable commercialization of microgrids, that this need should not be deferred to a later track of this proceeding, and that the needed tariff should be developed through a collaborative working group process to be adopted in the Track 2 final decision to meet the statutory deadline. We therefore urge the Commission to establish a working group process without delay to provide a venue for parties to collaborate on development of a comprehensive microgrid tariff proposal for Commission adoption.

⁹ See the opening comments of the Joint CCAs (pp 2-3), MRC (pp 3-4, 30-38), Solar Energy Industries Association (p. 10), Grid Alternatives (pp 5-9), 350 Bay Area (p. 5), Clean Coalition (pp. 12-13), Schneider Elec. N.A. (p. 4, 7), Scale Microgrid Solutions (letter referenced), SEIA (p. 2), GPI (p 6), CESA (pp 2-3, 10).

Such a process need not start with a blank slate. We have as useful inputs the comments of several parties who have outlined the necessary elements of a microgrid tariff,¹⁰ as well as the experimental community microgrid tariff proposed by PG&E in its Advice Letter AL 5918-E to implement the CMEP proposal. PG&E's CMEP tariff proposal covers many essential elements required to specify the roles and responsibilities of the distribution utility and a third-party microgrid operator. It includes a framework of key studies and agreements that are needed for the design and implementation of a community microgrid structure. The CMEP proposal would therefore be a useful input to the working group process we propose.

The Joint Parties believe that the process proposed by the Joint CCAs¹¹ could be an effective working group process and should be initiated by an ALJ Ruling as soon as possible. Main elements of the Joint CCA proposal are:

- An opportunity for the IOUs and other parties to submit proposals for a community microgrid tariff within 30 days after the ALJ Ruling. The Ruling could draw on the PG&E CMEP experimental tariff proposal, the MRC proposal (MRC Opening Comments pp 30-38) and the GPI proposal (opening comments pp 6-8) to provide a starting outline of the key elements a general microgrid tariff should contain.
- A series of workshops to discuss the proposals, systematically compare their different approaches to the key elements outlined in the ALJ Ruling and any additional elements needed, and arrive at a consensus proposal if possible or a small set of options.
- A round of written comments on the proposal options.
- A Track 2 decision by the statutory deadline that adopts, at a minimum, a conceptual framework that covers all the key elements, the preferred approaches to each element, and if necessary, elements where open questions remain to be decided through a follow-on working group.

¹⁰ Opening comments of MRC (pp 30-38) and GPI (pp 6-8).

¹¹ Opening comments of the Joint Community Choice Aggregators (p. 4)

We agree with the Joint CCAs that this is an aggressive timetable, but not impossible, and it is necessary for the Commission and the parties to undertake a good faith effort to complete the process to meet the requirements of SB 1339 by statutory deadline.

3. A microgrid tariff to enable commercialization of microgrids must enable microgrids to provide and be compensated for the value they can provide to the electric power system and to California's policy goals for decarbonization, resilience and equity.

As we noted earlier with regard to Staff Proposal 3, the implicit premise behind that proposal was that microgrids provide value only to the customers they directly serve, provide no value to the grid, to other ratepayers, or to California's policy goals, and make use of the services of the grid in such a way as to shift costs to other ratepayers if not strictly subjected to a slew of charges. The Joint Parties believe this premise to be false, and that it endures in this proceeding only because of the lack of a regulatory framework that recognizes the values microgrids can provide and establishes mechanisms to provide and be compensated for such values.

Section 6 of the Staff Concept Paper identifies many values that microgrids can provide beyond the immediate value to their internal customers, but these values do not appear in the Staff proposals. We must emphasize that further progress in commercializing microgrids will be stymied as long as the value of microgrids to the electric power system and to the state more generally go unrecognized and uncompensated.¹² SB 1339 Section 1(d) enumerates this issue quite clearly, specifying the need to address: "(2) Improving the electrical grid with microgrids. (3) How microgrids can play a role in implementing policy goals. (4) How microgrids can support California's

¹² This point is emphasized in the opening comments of GPI (p 6), MRC (pp 27-29), Clean Coalition (p 3, 18), CALSSA (pp 17-19).

policies to integrate a high concentration of distributed energy resources on the electrical grid.”

The microgrid tariffs developed in this proceeding must incorporate provisions to optimize the value of microgrids for the power system and all ratepayers, and compensate the microgrids appropriately for that value.

4. The Joint Parties recommend that Proposal 4 be Reframed as a Program Designed to Promote Equity and Support Microgrid Development in Disadvantaged Communities.

In our opening comments we argued that Proposal 4 should not be a pilot program. A pilot program typically is a small-scale, short-term experimental program that helps an organization learn how to design and implement a large-scale, ongoing, permanent program. Microgrids do not need to be piloted. They are a proven mature technology. Instead, what is needed is a new program to incentivize microgrid development to provide resilient electric service to disadvantaged communities and vulnerable populations that may be overlooked in a commercialization effort by the utilities or third-party developers.

The Utility Reform Network (TURN) agrees that this proposal is mislabeled as a “pilot.”¹³ They note that the proposal is not designed to test new technologies or regulatory approaches. Instead, the proposal is intended to be an incentive program that “supports the critical needs of vulnerable populations most likely to be impacted by grid outages.”¹⁴ TURN observes that it does not oppose subsidies that are well-targeted, cost-effective and minimize the potential for cost shifting.¹⁵

¹³ Opening comments of TURN, Page 6.

¹⁴ Staff proposal, page 18

¹⁵ TURN, page 6

Grid Alternatives (GRID) in their opening comments observes that the Commission has the opportunity to value the benefits of improved resiliency in a way that prioritizes low-income customers. GRID expresses concern that microgrid commercialization could be done in a way that allows well-resourced businesses, neighborhoods and communities to deploy microgrids while lower income businesses and communities are more exposed to de-energization events.¹⁶ The Joint Parties agree with GRID that the Commission has a societal mandate to create an equitable policy that enables the full potential of microgrids be available¹⁷ and accessible to all Californians.¹⁸

The California Energy Commission has documented that low-income households and vulnerable communities face difficult and persistent barriers to adopting clean energy technologies. Likewise, the staff concept paper notes that high initial costs of microgrids present equity issues because low income customers and communities that may have the greatest need for a clean energy microgrid may be least able to afford it.¹⁹ The Joint Parties believe that it is reasonable to take into account these historical barriers and “benefit shifts” in developing a program that incentivizes the development of microgrids to provide resiliency benefits to low-income customers and communities.

We agree with GRID that microgrids have the potential to provide health, safety, resiliency, local economic and workforce development and criteria pollutant reduction benefits to low-income communities if the Commission is not indifferent to this opportunity and adopts a proactive approach towards these communities.

¹⁶ Opening Comment of Grid Alternatives (GRID), page 2.

¹⁷ California Energy Commission, Low-Income Barriers Study (Dec. 2016)

¹⁸ Ibid.

¹⁹ Staff Concept paper, page 59

Proposal 4, if recast, has the potential to assure that the development of microgrids will benefit all Californians, starting with those that face the greatest threats from degraded electric service brought about by increasing threats of climate change and other causes of environmental and societal disruption. With the reframing of Proposal 4 as an ongoing program designed to promote equity and encourage microgrid development in disadvantaged communities, the program design elements and administrative details can be evaluated.

The California Environmental Justice Alliance (CEJA) has explicitly called for the creation of an incentive program to fund clean energy community microgrids that supports the needs of vulnerable populations.²⁰ They have recommended that issues of program administration, funding, project eligibility and prioritization and limits on participation should be viewed through a lens of social equity and building an effective and sustainable program. Below are several elements of a reformulated Proposal 4 program that can be designed to prioritize low-income and disadvantaged communities.

Program Administration: In our opening comments we did not object to the IOUs serving as administrators of the program. We argued that this might be the quickest way to get the program started. On the other hand CEJA points out that a single, third-party administrator is a better fit for community-facing programs where public engagement, education and outreach to underrepresented populations is key to successful administration.²¹ GRID likewise believes that ratepayers would be better served by a third-party administrator since utility organizational structure often results in more costly and less efficient administration. They reason that a neutral program administrator when

²⁰ Opening comments of the California Environmental Justice Alliance (CEJA), page 1

²¹ CEJA, page 2

partnering with local entities can more successfully engage customers with marketing, education and outreach initiatives.²² We are persuaded by this reasoning and thus support the selection of an independent third-party administrator for the program.

Funding and Subscription Limit: In our opening comments we expressed concern that significant subsidies of up to \$15 million would go to just a handful of projects under a 15-project program cap. Our preference was that the Proposal 4 program be modified to support more projects in more communities, with a smaller amount of \$1-3 million available per project. CEJA, in their opening comments, opposed putting a limit on the number of projects that can participate in the program.²³ They correctly argue that the primary purpose of the proceeding is to promote microgrid commercialization. Removing an arbitrary cap on the number of projects, according to CEJA, will provide the Commission “with valuable information about the number of microgrid projects that are able to reach commercial operation by January, 2022.” GRID also notes that if a microgrid can meet all the required operational, safety, and community characteristics by January 2022 then the Commission should not limit the number of projects.²⁴ We agree with CEJA’s and GRID’s arguments on this point and clarify our earlier position to say that the Commission should structure the program to enable all projects that meet the requirements to receive funding.

Project Eligibility and Prioritization: In our opening comments we expressed concern about the need to quickly implement the Proposal 4 program. We argued that if the funding for any individual project were more limited and the funding made available to a much larger number of projects, a first-come-first-served approach would be

²² GRID, page 11

²³ CEJA, page 5

²⁴ GRID, page 12

acceptable. CEJA opposed this approach and argued that it would result in better funded communities and local governments developing project proposals before communities with fewer resources.²⁵ Instead, they recommend that a scoring prioritization system be developed in a stakeholder workshop. Such a scoring system would better ensure that projects serving the most vulnerable communities are given priority access. GRID agrees that a first-come, first-served basis would undercut many of the Proposal 4 program objectives and produce less equitable outcomes.²⁶ GRID recommends a scoring prioritization system where communities with higher populations of low-income households, people with access and functional needs and medical baseline customers are served. We are persuaded that criteria of equity and inclusiveness argues for a more deliberative approach to project prioritization. The Joint Parties support a stakeholder workshop that develops criteria and scoring prioritization rather than leaving these important issues to be worked out by the program administrator.

5. The Joint Parties urge the Commission to interpret the term “cost shifting” in an equitable and inclusive manner that recognizes the need to compensate communities for the environmental damage and injustices that energy policies have inflicted on disadvantaged communities for generations.

Grid Alternatives (GRID) states: “GRID finds it important to discuss a perennial issue with the Staff Proposal that, if remains unchanged, will severely limit the ability of microgrids to meet the health, safety, resiliency, and greenhouse gas (GHG) reduction potential these systems can deliver to low-income households and vulnerable communities. The incomplete assessment of purported cost shifts and the forced ‘indifference’ to the benefits provided by new market entrants like microgrids undermine

²⁵ CEJA, Page 5

²⁶ GRID, page 11

low-income households' and communities' equitable access to microgrids.” (Opening comments p 2)

The Joint Parties believe that a balanced interpretation of the term “cost shift” should preclude utilities from standing in the way of equitable programs and fair tariffs that partially correct prior environmental injustices. The cost shift language in SB 1339 should not be interpreted in such a narrow fashion as to bestow the benefits of microgrids predominantly on affluent communities and large businesses. The Commission should work with the Legislature to establish such refinements in code if and where necessary to better align the achievement of environmental justice goals with the use of public purpose program funding.

California policy priorities clearly recognize the importance of addressing environmental and social justice as we transition to a clean energy economy. Justice or equity concerns rightfully single out communities that have been adversely impacted by previous energy practices that have gone on for decades, and other communities disadvantaged by low income levels or other vulnerabilities. The question is how best to address the needs of these communities in the arena of electricity policy and regulation, and in particular in the context of this proceeding to commercialize microgrids.

The Joint Parties emphasize our concern that an excessive focus on the “no cost shifting” provisions of the legislation can be antithetical to environmental and social justice objectives by preventing the use of electricity rates to address systemic and historic injustices that are directly related to energy policy, and to bring the benefits of clean, resilient electricity to all California communities.

Interpreting “cost shifting” narrowly in terms of utility rates ignores existing forms of cost shifting that have harmed disadvantaged and low-income communities for decades.

For example, locating a fossil fuel power plant in a low-income community inflicts adverse health impacts which impose a significant and cumulative cost burden on that community in order to provide a benefit — the energy output of the power plant — to the entire utility or entire ISO service area. There should be no question that this is a cost shift. Yet by focusing narrowly on rates, it is never treated as a cost shift and is instead relegated to the nebulous bucket of “externalities” that are typically omitted from regulatory consideration because they are difficult to articulate and quantify. Of course, the decisions to locate such facilities in low-income communities and communities of color clearly reveal an intent to shift costs onto those with little political influence.

This is not to say that cost shifting through rates should be ignored. The question is what constitutes “excessive” focus on cost shifting to other ratepayers? SCE states in their opening comments (p 21): “As a starting point, all parties are under an obligation to comply with the statutory mandate prohibiting cost shifting, which is absolute and does not permit any deviation.” We doubt whether SCE’s reading of the statute is correct, but if it is correct, then in our opinion such an interpretation is not consistent with California’s commitment to environmental justice.²⁷ Such an interpretation would essentially invalidate any attempt to provide benefits through rates to communities who have suffered health and other adverse impacts resulting from providing energy to all ratepayers as a violation of the cost-shifting prohibition.

GRID offers an approach to a solution (p 3): “To rectify the issue, GRID believes there is room for discussion on how to accurately account for the benefits and costs

²⁷ SCE goes on to argue with regard to Staff Proposal 4 that allocating ratepayer money for microgrids pilots in disadvantaged communities is not necessary because “a municipality has taxing authority over its constituents and is able to directly recover the costs of its investments without the complications of establishing a utility mechanism to do so.” (SCE opening comments p 23)

microgrids can deliver to society other than defining a cost-shift as ‘preserving bundled customer indifference from new market development’ and ending the conversation there.” And (p 4): “Since microgrids have the potential to deliver multiple positive benefits to Californians (health, safety, resiliency, local economic development (e.g. tax receipts) and local workforce development, GHG reduction, efficient, participatory, and complimentary technology deployment, etc.) the Commission should recognize this potential and take the bold steps to safely craft thoughtful and strategic microgrid policy.”

One important final point. If community A of a population has for decades been receiving ongoing benefits that are partially subsidized by community B of the population, then community A will become accustomed to the subsidy and will not recognize it as such, so that its members will view any regulatory measure to reduce community A’s subsidy and correct the benefit-cost imbalance as cost shifting. This phenomenon is known as a sense of “entitlement to the status quo.” This is especially relevant to the environmental and social justice issues that now require effective policy and regulatory measures to address. And it is further relevant to the cost shifting issues in this proceeding because although the long-term subsidy from less affluent to more affluent ratepayers has not been effected through rates directly, a rate-funded mechanism may be a highly effective and expedient way to correct the long-term injustice. All the more reason for a deliberate and transparent Commission effort to expeditiously refine the definitions and provisions about cost shifting.

The Joint Parties urge the Commission to address these concerns openly and transparently, to consider the approaches recommended by GRID on this subject, and if necessary work with the Legislature to refine the meaning of cost shifting in the relevant statutes to enable utility rate mechanisms to be an effective tool to accurately align cost

