BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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REPLY COMMENTS OF MICROGRID RESOURCES COALITION ON THE ASSIGNED COMISSIONER'S AMENDED SCOPING MEMO AND RULING FOR TRACK 3

C. Baird Brown
eco(n)law LLC
230 S. Broad Street, 17th Floor
Philadelphia, PA 19102
p. 215-586-6615
m. 267-231-2310
baird@eco-n-law.net

Attorney for
Microgrid Resources Coalition

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Background

The Microgrid Resources Coalition ("MRC") respectfully files its reply comments in response to the R.19.09-009 Standby Charges Energy Division Staff Questions (the "Staff Questions") provided in conjunction with the Assigned Commissioner's Amended Scoping Memo and Ruling for Track 3 (the "Track 3 Scoping Ruling") issued as a part of the California Public Utility Commission (the "Commission") proceeding instituted in its Order Instituting Rulemaking Regarding Microgrids Pursuant to Senate Bill 1339[1] ("SB 1339") in the above captioned proceeding. The MRC appreciates this opportunity to assists in formulating the issues for this phase of the proceeding.

The MRC is a consortium of leading microgrid owners, operators, developers, suppliers, and investors formed to advance microgrids through advocacy for laws, regulations and tariffs that support their access to markets, compensate them for their services, and provide a level playing

[1] SB 1339 (Stern 2018), *available at*, https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB1339

field for their deployment and operations. In pursuing this objective, the MRC intends to remain neutral as to the technology deployed in microgrids and the ownership of the assets that form a microgrid. The MRC's members are actively engaged in developing microgrids in many regions of the United States including many who are actively engaged in microgrid development in California.[2] MRC members have also been operating sophisticated microgrids over an extended period of time (some for over 30 years). They are at the cutting edge of microgrid technology.

The mission of the MRC is to promote microgrids as energy resources by advocating for policy and regulatory reforms that recognize and appropriately value the services that microgrids offer, while assuring non-discriminatory access to the grid for various microgrid configurations and business models. We generally support disaggregated, fair pricing for well-defined services both from the grid to microgrids as well as from microgrids to the grid. We promote community-based resilience standards and support utilities that are working toward new business models that value resilient distributed resources. We work for the empowerment of energy customers and communities.

Overview of Comments

Our reply comments below reflect responses to three main themes in the initial round of comments.

- There is widespread agreement that accurate pricing of services both to and from microgrids is preferable to an *ad hoc* tradeoff between standby charges and poorly quantified services. However, the notion of cost shifting is being wielded to reject any review of whether current charges are poorly justified.
- We suggest waivers for the standby charge, not based on services, but because the charge seems to be clearly outdated and out of line with cost causation. We need a better breakdown from the utilities as to what types of resources are receiving standby service and when standby services are actually called for, and we note that utilities are not providing standby services during PSPS events when they might be most valuable.

[2] Members of the MRC include: Bloom Energy, Concord Engineering, Eaton, eco(n)law, Emory University, Engie, Icetec, International District Energy Association, Mainspring Energy, Massachusetts Institute of Technology, Princeton University, Reimagine Power, Resilience Plus, Scale Microgrid Solutions, Schneider Electric, Thermo Systems, University of Missouri and the University of Texas at Austin. The MRC's comments represent the perspective of the coalition and should not be construed as speaking for individual members.

Moreover, microgrids with multiple controllable resources have fewer needs for standby service than other behind the meter resources.

- We believe that the Commission should undertake the studies that are needed to correctly value the services provided by microgrids and the services needed by microgrids. In this connection, microgrids stabilized by fuel-based resources are able to provide resiliency, buffer variable renewables, and reduce the need for resource adequacy in a way that most other resources cannot. The Commission should consider values provided to the wholesale grid and local communities in addition to a narrow focus on distribution customers.

These concerns point to a larger conclusion. There is already a robust ongoing market for residential and other small-scale solar plus storage, and with appropriate islanding switchgear the systems can function as microgrids. Such systems are typically limited to around four hours of islanded operation. The MRC supports this ongoing customer independence movement. However, we believe that the biggest benefit to the grid will come from larger microgrids that include diverse resources. They will bring longer-term resilience to critical facilities and are capable of providing a wider array of services. Commercialization at this scale affords a larger opportunity but requires more work from the Commission.

We recognize that the balkanization of the California electric regulatory world results in part from state legislative focus on particular technologies and in part from the strictures of the Federal Power Act. However, other states and other RTOs are doing a far better job of integrating distributed energy in an efficient overall system. California's cap and trade system leads the nation in its economy-wide focus on carbon emissions independent of technology, and that approach should allow the efficient operation of the California grid without distortions arising from technology restrictions. Full function microgrids do not fit easily into California's predetermined regulatory categories, but they represent the future. They deserve a thoughtful review on their own merits.

Pricing of Services vs. Cost Shifting

Almost every comment that addressed the issue, and in particular all three large electric corporations ("Distribution Utilities"), agreed with the MRC that disaggregated, fair pricing for

well-defined services both from the grid to microgrids as well as from microgrids to the grid is preferable to fuzzy tradeoffs between unrelated services. However, any examination of the cost justification of existing charges is being rejected as cost shifting. SB 1339 requires that the Commission eliminate barriers to microgrids but to avoid cost shifting.[3] A commonsense reading of that requirement would ask the Commission to examine existing tariffs and eliminate provisions that improperly impose costs or delays on microgrids. In other words, SB 1339 calls for levelling the playing field. Any meaningful attempt to do this will involve amendment of tariffs, and that may, in service of fairness, reallocate the burden of the tariff (at least on a static analysis). The Distribution Utilities (and some others) seem to read the statute as requiring the Commission to reduce impediments to microgrids without changing a word of any existing tariff. This reading renders the statute meaningless and would violate California's rules of statutory construction.[4] We suggest that the Commission take a commonsense approach to the statutory purposes and reduce unjust barriers to microgrids.

The Standby Charge is Outdated

The MRC did not suggest waivers for standby charges as a tradeoff for any particular service, but because they are clearly outdated and seem out of line with cost causation. The "well-litigated process" relating to standby charges referenced in the Track 3 Scoping Ruling and cited in comments of each Utility occurred twenty years ago.[5] The numbers of DER connected at the distribution level have vastly expanded since then. According to the NEM 2 Lookback Study there are more than one million NEM generators representing nearly 8.5 GW of capacity interconnected to the three large electric corporations.[6] In addition, the three utilities report standby customers as follows: PG&E, 711 customers, 451 MW;[7] SCE, 350 customers, 3,002 MW;[8] and SDG&E 68

[3] Pub Util. Code.
[4] "In the construction of a statute or instrument, the office of the Judge is simply to ascertain and declare what is in terms or in substance contained therein, not to insert what has been omitted, or to omit what has been inserted; and where there are several provisions or particulars, such a construction is, if possible, to be adopted as will give effect to all." (*Emphasis supplied*.), Civ. Pro. Code § 1858
[5] D. 01-07-027 (July 12, 2001). *See also,* Unison Energy Track 3 Opening Comments at 6.
[6] Net-Energy Metering 2.0 Lookback Study, Verdant Associates, LLC, at 2, *available at*, https://www.cpuc.ca.gov/General.aspx?id=6442463430
[7] PG&E Track 3 Opening Comments at 10-11.
[8] SCE Track 3 Opening Comments at 11.

customers, (no MW amounts reported).[9] The NEM facilities, while they are the huge majority of installations and the majority of MW, are of course exempt from standby charges.

The utilities provide extensive information on their revenues from standby charges that would become "shifted costs" if charges were waived, but no justification for the current level of charges. An analysis should be conducted as to the *likelihood* of multiple standby resources requiring assistance given the typically high availability of those resources and *when* standby service is being called upon – at times of peak demand or at times of limited demand when the marginal cost of distribution assets is effectively zero. In addition, based on the analysis in our previous comments sophisticated microgrids have multiple generation and storage assets, as well as the ability to shed load internally and act as a single controllable entity. The current construct of standby charges does not take this internal resource diversity or the technical capabilities of microgrids into consideration. Unison Energy point out that standby charges are applied through a "crude and opaque mechanism" and considering the technological advances in grid health sensors over the past 20 years, a thorough review of the relevance of standby charges is in order.[10]

Furthermore, the value of standby services is substantially reduced by PSPS events. The utilities may waive standby charges during outages, but they are unilaterally withdrawing from providing service at precisely the time when it would be most valuable. The Climate Center, Green Power Institute and Vote Solar suggest that the Staff Questions on standby charges are fundamentally flawed. The MRC agrees with the Joint Parties that the Commission should instead be asking whether there is sufficient justification for applying standby charges to microgrids today given the impacts of PSPS events and instead focus on deploying microgrids in all communities in California.[11]

SDG&E states that "as the industry, resource diversity, and customer needs have changed over time, it may be prudent to evaluate existing standby charge design to reflect these changes." We agree. However, the MRC strongly disagrees that standby charges cannot be revised under this rulemaking and must be taken up in the next General Rate Case, as SDG&E suggests.[12] The

[9] SDG&E Track 3 Opening Comments at 16-17.
[10] Unison Energy Track 3 Opening Comments at 6.
[11] "…given the inequitable cost impacts of PSPS and the likely inequitable impact of imposing additional charges for providing resiliency measures such as the formation of microgrids, and given the increasing severity of climate impacts Californian's will face in the near term and indefinitely into the future, the Commission should be seeking to advance microgrid deployment for all people and communities in the state…" Climate Center, Vote Solar, Green Power Institute ("Joint Parties") Track 3 Opening Comments pg. 2-3, 14.
[12] SDG&E Track 3 Opening Comments at 7.

Commission has a duty in this proceeding to reduce the barriers to microgrid commercialization. Standby charges represent a clear and present barrier to the development of sophisticated microgrids. Based on the evidence presented, there is a clear justification for suspending standby charges for microgrids until further analysis is conducted and separate compensation mechanisms for microgrid services can be developed.

The Commission Must Undertake Studies

The preamble of SB 1339 assumes that the Commission, in consultation with other agencies, will take an active role in supporting the widespread adoption of microgrids:

> "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."[13]

The MRC believes that the Commission, at a minimum, needs to undertake the studies required to understand the cost effectiveness of microgrids and the tariff barriers that they face. Bloom Energy, by providing the MRW & Associates, LLC report as a part of its Track 3 comments, has made a significant contribution to understanding the very limited demands that microgrids deploying their fuel cells make on standby services. However, the report is limited to a single technology and it simply takes Distribution Utility standby charges as given. If, as the analysis we were able to provide suggests, current Distribution Utility standby charges substantially overstate the costs to utilities of being prepared to provide standby service, that is not covered by the report. A thorough analysis would include the number of times that standby service is called for at coincident peak times of day and year. Given the high improbability of coincident failures involving multiple DER, the relatively small size of most DER, and the ability of microgrids, in particular, to manage internal loads through use of multiple resources and extensive controls, we believe that the current allocation of distribution system costs is unwarranted.

The same kind of questions arise with respect to many other barriers to microgrid deployment. No convincing evidence has been given that interconnection for non-NEM microgrid

[13] SB 1339 Section 1. (e).

interconnections cannot be expedited; departing load charges for microgrids have not been justified; and allowing microgrid exports at actual wholesale rates has not been examined. Much of the information required for the analysis is uniquely in the control of the Distribution Utilities. We respectfully request that the Commission undertake these studies in a disciplined manner to provide a meaningful basis for its deliberations in the balance of this proceeding.

Looking Ahead to a New Grid

California deserves an efficient grid that delivers lower prices for all customers. It should also provide incentives to meet the state's laudable decarbonization goals and should provide price protection for those who cannot afford the risks of full daily price swings. An efficient grid would be characterized by markets in which all generators faced common pricing for exports and larger commercial, industrial and institutional consumers faced common prices for power purchases. The most effective way of combining efficient markets with decarbonization is to price carbon with a declining emissions goal so that market participants can make their own decisions about how to meet those goals and be competitive. California's cap and trade system leads the nation in its economy-wide focus on carbon emissions independent of technology, and that approach should allow the efficient operation of the California grid without distortions arising from technology restrictions.

One version of this future is going to come to California. FERC Order 2222 will open all wholesale markets to all participants.[14] FERC did not elect to impose requirements on the interconnection processes for wholesale market participation but said it would monitor the markets to see if intervention was necessary.[15] While the MRC strongly supports empowering DER in this way, it results in pricing all power generation at the transmission node rather than reflecting its local value (or its possible local potential to overload or imbalance the distribution system). The Commission has taken good but small steps to move toward local valuation of generation services.[16] We suggest that the state needs to adopt a broader approach to moving the utilities toward a role as distribution system operator that welcomes and encourages DER generally and

[14] 172 FERC ¶ 61,247.
[15] *Id*. at 83-84.
[16] R14-10-003, E-Mail Ruling Introducing Distributed Energy Resources Tariff Staff Proposal and Directing Comments and Responses to Questions (October 6, 2020); Energy Division Staff Proposal at 21.

microgrids in particular consistent with broader state policy.[17] To do that the Commission must encourage utilities to take a different view of their integrated resource planning, and must revise and eliminate outmoded tariffs that create barriers to entry.

California has already conducted one disastrous experiment in forcing all generation to be purchased in daily markets. Balancing long term preparedness with efficient markets is an ongoing challenge. The MRC believes that the Commission should empower customers and communities to take on those choices for themselves and make investments, or plan projects that draw private investment, so that the risks of poor utility choices are mitigated, and the risks of those choices are not borne entirely by ratepayers. Microgrids that include diverse resources will bring longer-term resilience to communities, critical facilities and a broad array of customers and are capable of providing a wide array of services to the larger grid. Commercialization of microgrids is an investment in the grid California needs, made by customers and communities, that will benefit all ratepayers.

Conclusion

The MRC respectfully requests that the Commission (i) exempt small microgrids from standby charges entirely, (ii) take interim action to exempt all microgrids from the distribution component of the reservation charge of the standby tariff, and (iii) initiate a thorough study of the benefits and costs to the grid of microgrids prior to and as a necessary basis for reinstatement of any reservation charge and to support its further deliberations in this proceeding.

Dated: March 10, 2021

Respectfully submitted,

C. BAIRD BROWN

By: /s/ C. Baird Brown

C. Baird Brown

Attorney for
Microgrid Resources Coalition

[17] *See e.g.,* Pub. Util Code § 454.51. *See also,* Gov. Code § 4217.10 *et seq.* which extends the policy adopted for state agencies in Pub. Resources Code § 25008 to all local government entities: "it is the policy of the state to use available resources at state facilities which can substitute for traditional energy and water supplies or produce electricity or water at its facilities when use or production will reduce long-term energy or water expenditures."