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08/28/20  
02:39 PM

**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

**REPLY COMMENTS OF PACIFIC GAS AND ELECTRIC  
COMPANY (U 39 E) ON ADMINISTRATIVE LAW JUDGE'S  
RULING REQUESTING COMMENT ON THE TRACK 2  
MICROGRID AND RESILIENCY STRATEGIES STAFF  
PROPOSAL, FACILITATING THE COMMERCIALIZATION OF  
MICROGRIDS PURSUANT TO SENATE BILL 1339**

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Dated: August 28, 2020

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Pursuant to the *Administrative Law Judge’s Ruling Requesting Comment on the Track 2 Microgrid And Resiliency Strategies Staff Proposal (“Staff Proposal”), Facilitating the Commercialization of Microgrids Pursuant to Senate Bill (“SB”) 1339* issued on July 23, 2020 (Ruling), Pacific Gas and Electric Company (“PG&E”) respectfully submits this reply to parties’ opening comments.

**I. INTRODUCTION AND REPLY TO KEY THEMES IN OPENING COMMENTS**

Approximately fifty parties filed opening comments on the Staff Proposal and Concept Paper attached to the Ruling, broadly representing customers, vulnerable and disadvantaged communities, microgrid service providers and technology developers, large customers, load-serving entities, and other trade associations for specific energy industry sectors. In PG&E’s view, the primary disagreements between the parties in their comments revolve around three key themes: (1) Section<sup>1</sup> 218’s limits on unregulated, community-level microgrid development; (2) what policies constitute cost shifts prohibited by SB 1339, including whether some or all microgrids should be exempted from generally applicable cost responsibility surcharges (“CRS”); and (3) whether the California Public Utilities Commission’s (“Commission” or

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<sup>1</sup> This and subsequent references to a codified section are to the California Public Utilities Code, unless otherwise noted.

“CPUC”) mandate under SB 1339 to facilitate the commercialization of microgrids requires the establishment of incentives or other financial mechanisms that ensure the economic viability of microgrids. In this section, PG&E addresses these themes at a general level. In Section II of its reply, PG&E responds to comments specific to some of the proposals set forth in the Staff Proposal.

**A. The Commission Cannot Amend, and Should Not Re-Interpret, Section 218 to Permit Unregulated, Private Distribution Systems.**

Several parties, particularly those representing developers, identify Section 218 as a “barrier” to the development of microgrids and argue that it should be amended or re-interpreted. For example, the Microgrid Resources Coalition (“MRC”), while generally recognizing that the Commission’s regulatory authority is constrained by Section 218,<sup>2</sup> sets forth a preferred model for a “partnership microgrid” that would involve a private microgrid operator having a right to “lease” the infrastructure from a distribution utility and become the “sole provider of electricity to customers within the microgrid.”<sup>3</sup> Not only does MRC’s partnership model directly contradict the statutory requirement that a utility “shall continue to be responsible for operating its own electric distribution grid,”<sup>4</sup> but it also fails to directly address Section 218’s general requirement that entities serving more than two adjacent customers or crossing public rights of way must be public utilities subject to the rate, consumer protection, and safety jurisdiction of the Commission. Similarly, the California Solar & Storage Association (“CALSSA”) urges the Commission to “work with the Legislature on reforms of [Section] 218 at the earliest opportunity” in order to enable multi-customer microgrids spanning multiple properties.<sup>5</sup> Tesla, Inc. (“Tesla”) also identifies Section 218 as a “significant impediment to broader utilization of

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<sup>2</sup> MRC Opening Comments, p. 15; p. 32, fn. 32.

<sup>3</sup> *Id.*, p. 35.

<sup>4</sup> Cal. Pub. Util. Code § 399.2(a)(2).

<sup>5</sup> CALSSA Opening Comments, pp. 20-21.

microgrids.”<sup>6</sup> The Solar Energy Industries Association (“SEIA”), while acknowledging Section 218’s purpose to secure “fair and reasonable rates and safe and reliable electricity,”<sup>7</sup> nonetheless goes so far as to propose that the Commission hold a workshop and solicit comment on the amendment of Section 218,<sup>8</sup> an action that if not merely advisory to the Legislature would be outside of the Commission’s legal authority.

Section 218 may inhibit some developers from their desires to build private, community-level microgrids without regulatory oversight by the Commission, but this does not mean that SB 1339 requires or authorizes repeal or amendment of the Commission’s statutory authority, or that the Legislature should repeal or amend the applicable statute. SB 1339 requires that the Commission seek to “facilitate the commercialization of microgrids,” through, among other actions, identifying “methods to reduce barriers for microgrid deployment.”<sup>9</sup> First, this language must be interpreted consistent with the other statutory provisions, including the plain meaning of Section 218, and not read in a way that changes or amends those other provisions. Second, the goal of reducing barriers to microgrids does not require eliminating every barrier perceived by the industry, no matter the public interest underlying the perceived barrier. As the Staff’s Concept Paper recognizes, Section 218 serves critical public safety and consumer protection objectives,<sup>10</sup> which are at the core of the Commission’s jurisdiction and mission. The

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<sup>6</sup> Tesla Opening Comments, p. 2.

<sup>7</sup> SEIA Opening Comments, p. 3

<sup>8</sup> *Id.*, p. 5.

<sup>9</sup> Cal. Pub. Util. Code § 8371.

<sup>10</sup> Staff Concept Paper, p. 41 (“PUC 218 serves an important public purpose, in assuring fair and reasonable rates, safe and reliable electricity available to all. Public utilities are responsible for safety, reliability and interconnections to the larger grid, thus consideration must be given to utilities’ grid responsibilities, control, operation and maintenance of their distribution infrastructure, and transparency of microgrid operations that may affect grid operations. If energy exchange were to be allowed between more than 3 contiguous property owners or that cross a public street, an important concern to address is the administration of fair and reasonable rates between microgrid participants, equitable distribution of costs and charges as well as potential cost-shifting concerns between microgrid and non-microgrid participants. If energy exchange becomes allowed behind the point of interconnection, but is not subject to regulatory oversight, ‘private control over basic necessities [such as power] mean[s] that these private firms could effectively subordinate, dominate, and exploit ordinary users.’ (Rahman n.d.)”).

Legislature has already determined the limited circumstances in which private entities may provide electricity to other parties without becoming a public utility, or without regulation under an alternative framework as a micro-utility or electric cooperative. The purpose of these limitations is to avoid the unregulated development of private distribution infrastructure and sale of electricity at unregulated rates to captive customers. The Commission should, and must under statute unless amended by the Legislature, adhere to these limitations on unregulated microgrid development, and it has reasonably interpreted its duty under SB 1339 as identifying and reducing regulatory barriers.

While most parties appear to recognize that Section 218's requirements for the regulation of utilities provides a statutory framework within which the Commission must operate, Google, LLC ("Google") goes a step further by proposing that the Commission may unilaterally re-interpret the plain meaning of Section 218, without amendment of that statute. Google requests that the Staff "reconsider" its legal analysis of Commission jurisdiction under the Public Utilities Code and exempt private microgrids from Commission jurisdiction that provide electricity to more than two customers.<sup>11</sup> Google's request that the Commission ignore the jurisdictional requirements of the Public Utilities Code should be rejected. Unless subject to an express exemption enacted by the Legislature, any private entity that sells or distributes electricity to more than two retail customers, or does so across a public right of way, is an "electrical corporation" under Section 218 of the Public Utilities Code and thereby subject to the direct jurisdiction of the Commission over rates, services, and safety. That Google wishes that its "private lines" would be exempt from Commission safety and reliability jurisdiction does not give the Commission the authority to make it so. Google's argument must be addressed, if at all, to the Legislature, and not through criticism of the Commission Staff's accurate and thorough analysis of what the Public Utilities Code requires.

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<sup>11</sup> Google Opening Comments, pp. 7-8.

**B. Proposals to Exempt Microgrids from Otherwise Applicable Cost Responsibility Surcharges Would Result in Prohibited Cost Shifts.**

Several parties continue to argue for broad exemptions for microgrid projects from CRSs, including departing load charges, non-bypassable charges, and standby charges. PG&E strongly agrees with the well-supported arguments of the Public Advocates Office (“PAO”) that any such exemptions for charges that would otherwise apply would shift costs from the beneficiaries of the microgrid to other customers, in contravention of SB 1339.<sup>12</sup> As detailed by the PAO,<sup>13</sup> each of these surcharges was created for the express purpose of avoiding cost shifts that would otherwise occur and to support broad public interest programs through broad allocation of the costs.

This does not mean that CRSs would be applicable to microgrids in all circumstances. As the Clean Coalition reasonably notes,<sup>14</sup> to the extent a single customer microgrid is solely used to provide emergency backup power, when there is an outage on the broader grid, the rationale for applying the CRSs may not exist. Namely, non-bypassable charges and departing load charges apply to retail sales, which would not occur during the grid outage. Similarly, if the microgrid only functions during grid outages, when the utility is incapable of providing standby service to the microgrid, it would not be reasonable to assess standby charges on the microgrid. Alternatively, a customer may be able to limit standby charges by agreeing to limit the extent of standby service that the utility provides (through, for example, agreeing to shed load on the microgrid as necessary to remain within the standby capacity limit).

However, the fact that CRSs would not be charged to the microgrid customer in the first circumstance or be reduced in the second instance does not require any new exemption, since the CRSs would not be otherwise applicable in that case. Some parties go beyond these reasonable, existing limitations on CRSs to argue that microgrids, even when operating in parallel with the

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<sup>12</sup> PAO Opening Comments, p. 11 (*citing* Staff Proposal, p. 13).

<sup>13</sup> *Id.*, pp. 11-15.

<sup>14</sup> Clean Coalition Opening Comments, p. 19.

grid, requiring standby service, and making retail purchases of electricity, should not pay CRSs. For example, Tesla argues vaguely that exemptions should be granted where there is a “credible argument” that the microgrid customer “is already contributing significantly to the provision of public benefits that the surcharge is intended to deliver.”<sup>15</sup> Tesla fails to provide any evidence to support the idea that a microgrid may inherently fund the California Alternative Rates for Energy (“CARE”) Program, may provide its own standby service, may contribute to addressing the tree mortality emergency in California, could reduce in some way the cost burden on a utility for the energy that the utility is already contractually obligated to buy for that customer pursuant to Commission-approved long-term planning processes, help to decommission existing nuclear facilities, or somehow achieve any of the other specific objectives of the CRSs that will otherwise be shouldered disproportionately by non-microgrid customers. In this regard, PG&E agrees with PAO that any such claims for exemption based on offsetting value to other customers must “come with quantitative evidence.”<sup>16</sup> As the record stands, any exemption from otherwise applicable CRSs would violate SB 1339’s prohibition on the shifting of costs.

**C. SB 1339 Does Not Require that the Commission Ensure the Economic Viability of Specific Microgrid Business Models.**

A key issue of contention that arises in parties’ comments relates to what the Commission’s obligations are in implementing the statutory directive that it “facilitate the commercialization of microgrids.”<sup>17</sup> The MRC, for example, argues that the “plain requirement” is to “build a meaningful pathway to the broad commercial deployment of microgrids by private industry . . . .”<sup>18</sup> The Clean Coalition goes further and asserts that the statutory language requires the Commission to identify “potential revenue streams to make economics pencil out.”<sup>19</sup>

These statements must be seen for what they are: Calls for subsidies of whatever

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<sup>15</sup> Tesla Opening Comments, p. 13.

<sup>16</sup> PAO Comments, p. 15.

<sup>17</sup> Cal. Pub. Util. Code § 8371.

<sup>18</sup> MRC Opening Comments, p. 3.

<sup>19</sup> Clean Coalition Opening Comments, p. 2.



magnitude is necessary in order to make a private developer's microgrid economically viable. Such subsidies are neither required by the language of SB 1339, nor were they intended by the Legislature. The Commission's sole tool to create any such "revenue streams" is through ratemaking, and therefore the only way to reduce the cost to build microgrids that is borne by the microgrid proponents to the point that they are economic in all cases is by allocating a portion of that cost through rates to other customers who did not request and do not directly benefit from the microgrid. Such allocation is exactly what SB 1339 prohibits, as described by the legislative analysis itself: "Per the principle of cost-causation, these costs should not be shouldered by ratepayers who do not benefit from the microgrid project. This bill requires the [Commission] and [publicly-owned utilities] to establish tariffs for microgrids, but appropriately prohibits costs shifts to non-microgrid customers."<sup>20</sup>

Where microgrids provide specific benefits and value to particular customers, those customers should bear the costs. Where microgrids provide value to the broader functioning of the grid or address broader public interests on a prioritized basis – such as when a distribution utility develops a program to identify strategic locations where microgrids can serve the greatest number of customers, or the most critical or vulnerable customers on its system – then the costs may be appropriate to allocate more broadly. However, under no circumstances should SB 1339 be read to require that the Commission ensure that the business model of any particular microgrid developer be made economically profitable through subsidies charged to all or a subset of distribution customers. The commercial viability of any particular microgrid development model does not confer broad public benefits. Accordingly, the Commission should reject calls for it to interpret SB 1339 as requiring it to ensure that microgrids are economically viable. Instead, the Commission has correctly interpreted SB 1339 as requiring it to identify and reduce regulatory barriers within the Commission's jurisdiction to help facilitate the

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<sup>20</sup> California Senate Rules Committee Analysis of SB 1339, Aug. 28, 2018, p. 5.  
[https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill\\_id=201720180SB1339#](https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201720180SB1339#)

commercialization of microgrids.<sup>21</sup> The Staff Proposal is well tailored to that objective and should not be expanded to consideration of cost-shifting subsidies.

## **II. REPLY TO SPECIFIC COMMENTS ON PRIMARY PROPOSALS**

### **A. Primary Proposal 2: Direct the Utilities to Revise PG&E Rule 18, SCE Rule 18 and SDG&E Rule 19 to Allow Microgrids to Serve Critical Customers on Adjacent Parcels. (Section 2.1.2. of the Ruling)**

The Staff Proposal offers three options to address barriers that may be created to microgrids employing energy storage by utility rules that prohibit one customer from reselling electricity received from the utility to another customer. The Staff Proposal reasons that these electrical rules could be perceived as a barrier by microgrid developers who wish to maximize the use and benefit of their microgrid by supplying power to adjacent premises in the event of grid outages, either owned by them or by someone else. The Staff Proposal also reasons that these rules could be a barrier for microgrids where islandable assets are located on multiple parcels of land. Staff recommends that each of the respective large investor-owned utilities (“IOU”) be required to modify their Electric Rules 18/19 to allow critical facilities owned by municipal corporations to be exempt from those Rules, subject to an initial cap of 10 such projects.<sup>22</sup>

The primary issue raised by parties in opening comments regarding Proposal 2 is whether the limitations included in the recommended changes to the Rules are appropriate. These limitations include initially limiting the exemption to 10 projects and requiring the entities sharing facilities to be critical facilities owned by municipal corporations.

The Clean Coalition provides a good example of how the Staff’s recommended approach may reduce regulatory barriers to a multi-parcel microgrid: It describes the Montecito Community Microgrid that would consist of a fire district and water district, both apparently

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<sup>21</sup> Cal. Pub. Util. Code § 8371(b) (requiring the Commission to “develop methods to reduce barriers for microgrid deployment” without shifting costs).

<sup>22</sup> Staff Proposal, p. 10.

critical facilities owned by a municipal corporation, located on adjacent parcels.<sup>23</sup> If one of the facilities stores electricity provided by the utility, under the proposed Rule change, it could provide that energy to the neighboring facility if needed during an emergency outage of the broader grid.<sup>24</sup> As Clean Coalition further notes, limiting this exception to municipal corporations reduces the likelihood that a for-profit entity would attempt to profit from the resale of the energy it receives from the utility through arbitraging the rate at which it provides that energy to the adjacent facility.<sup>25</sup>

Other parties, however, argue that there should be no policy-based limits on the resale of energy received by one customer of a utility to other customers. For example, CALSSA argues that the exemption to Rules 18/19 should “apply to all [Section] 218 compliant configuration[s] without limitation to the number of projects or types of customers who can participate.”<sup>26</sup> The Joint Community Choice Aggregators (“Joint CCAs”) agree, stating that Rules 18/19 should be revised to allow microgrids “up to the limits imposed by Section 218,” noting that Section 218’s “over-the-fence” exemption to the definition of public utilities is not limited to municipal corporations or critical facilities.<sup>27</sup> Google also argues that the limitations on the Rule 18/19 exemptions are arbitrary and would hinder commercial development of microgrids.<sup>28</sup>

The Staff recommendation to at least initially limit the exemption to the resale prohibitions is good policy. While PG&E is sympathetic to these parties’ concerns about any permanent limitations on the types of microgrids eligible under tariffs being developed and tested under SB 1339, the Staff Proposal for initial limitations on microgrid eligibility is intended to ensure that microgrids that interconnect with the grid meet necessary safety and reliability

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<sup>23</sup> Clean Coalition Comments, p. 9.

<sup>24</sup> *See id.*

<sup>25</sup> *See id.*, p. 10.

<sup>26</sup> CALSSA Opening Comments, p. 1; *see also id.*, pp. 4-5.

<sup>27</sup> Joint CCAs Opening Comments, p. 8.

<sup>28</sup> Google Opening Comments, pp.3-7.

criteria as they are initially tested and demonstrated. For obvious reasons, the Staff proposal focuses on initial microgrids that will serve critical customer needs, particularly for essential municipal services, during outages such as Public Safety Power Shutoff (“PSPS”) events and at a number of initial projects that are manageable. The Staff recommendation appropriately considers the cost and burden of regulators and utilities having to monitor the use of private, unregulated distribution lines for the resale of utility-provided power between customers on adjacent parcels to ensure that such sales are only done during outages of the broader grid for emergency purposes.<sup>29</sup> Importantly, the Staff proposal does not prejudge or bar future uses of microgrids that Google or other microgrid developers may propose beyond these early deployments, but rather allows an opportunity for the program to be reviewed once the initial cap is reached “to determine if exemption should continue and/or if there are any modifications needed based on observing the exempt projects.”<sup>30</sup> Taking this incremental step into territory that could result in unintended cost shifts, unauthorized resale of electricity, price manipulation, and/or safety issues is both good policy and reasonable. The Commission should decline industry parties’ proposals to instead throw the doors wide open to resales of utility-provided electricity over unregulated distribution lines and simply trust that all will work out fine.

**B. Primary Proposal 3: Direct the Utilities to Develop a Standardized Tariff for Combinations of Rule 21 Compliant Technologies (Section 2.1.3 of the Ruling)**

The Staff Proposal offers three options to support the development of a standardized tariff that would enable the installation of an array of component technologies that individually follow Rule 21 interconnection requirements to compromise a microgrid. Staff recommends the adoption of Option(s) 4 and 5.

PG&E addresses two issues raised in parties’ opening comments with regard to Primary

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<sup>29</sup> Staff Proposal, p. 9 (“One may argue that there may be a utility administrative costs to ensuring that the electricity is not being transferred during normal operations. But these costs may be nominal **due to the limited number of projects** (i.e. adjacent municipal critical facilities) **and the fact that municipal facilities are unlikely to purposely operate during normal operations.**”) (emphasis added).

<sup>30</sup> *Id.*, p. 10.

Proposal 3: (1) whether the tariff should be limited to single customer microgrids; and (2) whether exemptions from CRSs should be allowed.

**1. The Microgrid Tariff Contemplated by Proposal 3 Should Be Restricted to Single Customer/Single Meter Arrangements.**

PG&E understands that Proposal 3 is addressing single customer microgrids. Several parties appear to either not understand this, or they believe the Commission should address multi-customer microgrids at this time.<sup>31</sup> In order to have a tariff in place for customers as soon as possible, limiting the tariff to single customer microgrids is a wise restriction at this time.

There are several reasons why tariffs for microgrids should be introduced in phases. The most important reason is safety. Distributed generation that serves customer needs has for many years been primarily designed to operate in parallel with the utility grid. The hundreds of thousands of customers with rooftop solar are required to interconnect safely using the criteria of Rule 21 that are designed to ensure the generator will not island during a power outage. In order to promote individual customer resiliency, this limitation must be addressed. Many of our customers seeking back-up power use a combination of rooftop solar and battery storage at a single meter. PG&E has been working with industry stakeholders to develop requirements to allow customers to safely operate in parallel with the grid, safely island, and safely reconnect to the grid.<sup>32</sup> This use-case serves most of our customers wanting back-up power, and PG&E expects to incorporate this work into the microgrid tariff should the Commission adopt Proposal 3, Option 4 as several parties<sup>33</sup> recommend.

For other use-cases – where there are multiple customers and a more complex mix of

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<sup>31</sup> See, e.g., California Energy Storage Alliance (“CESA”) Opening Comments, p. 2; Clean Coalition Opening Comments, p. 3; MRC Opening Comments, pp. 4-5.

<sup>32</sup> For example, PG&E has worked with Tesla to review and approve its Powerwall product for islanding capabilities. All projects are reviewed individually; however, projects that use pre-approved islanding equipment, such as the Powerwall, require only minimal review and move through the process more quickly.

<sup>33</sup> See, e.g., PAO Opening Comments, p. 10; The Utility Reform Network (“TURN”) Opening Comments, p. 4.

generation technologies and loads -- the move from grid to island to grid has not been properly studied to ensure safe operations in all conditions. PG&E recently submitted a Community Microgrid Enablement Tariff (CMET) as part of its Advice Letter proposing implementation details for its Community Microgrid Enablement Program (CMEP).<sup>34</sup> The CMET can support multi-customer microgrids that rely on use of the utility distribution system during an outage. However, creating a stand-alone tariff that covers multi-customer microgrids that use non-IOU, third-party distribution assets, in accordance with the limitations of Section 218, will require more time – as the Commission has recognized.<sup>35</sup> Multi-customer microgrids are very complex, and many safety concerns around design and operation have not yet been addressed. The CMET three-year pilot program, as part of the CMEP, will allow PG&E and other stakeholders to develop and test the standards, procedures, and processes required to safely interconnect these types of microgrids going forward. The Commission is taking a deliberate approach to ensure safety for participating customers, non-participating customers, utility field workers and the general public. This should not be preempted by parties who would prefer rapid uptake of their specific technologies or services.

**2. Exemptions from Non-bypassable Charges, Departed Load Charges and Standby Charges Constitute a Cost Shift and Should Not Be Allowed.**

Energy Division’s recommendation to not exempt microgrids from CRSs appropriately implements SB 1339’s directive to ensure that any microgrid does not create a cost shift,<sup>36</sup> or at least not increase any existing cost shift.<sup>37</sup> The purpose of the statutory language prohibiting cost

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<sup>34</sup> PG&E Advice Letter 5918-E, submitted Aug. 17, 2020.

<sup>35</sup> Staff Primary Proposal 3 explicitly limits the scope to single-parcel microgrids, and during the Commission workshop, Energy Division Staff indicated support for this approach in order to streamline and simplify the process for eligible technologies to come online and to focus on solutions that are realistic and implementable, while recognizing that multi-customer or community microgrids are more complex and are being looked at in various ongoing pilots. *See* Videorecording of August 5, 2020 Energy Division Workshop on R.19-09-009 Resiliency and Microgrids Track 2 Staff Proposals, at time 3:17-3:20 (available at <https://www.youtube.com/watch?v=NApmHqtddfc&feature=youtu.be>).

<sup>36</sup> Cal. Pub. Util. Code § 8371(b), (d).

<sup>37</sup> For instance, PG&E supports NEM customers participating in a microgrid, even though the NEM tariff

shifts is to protect non-microgrid customers from costs created by the microgrid. As was stated in a Senate Rules Committee Analysis of SB 1339:

Interconnections with the electric grid for microgrids, particularly when the microgrids are not standardized themselves, often requires additional studies, potential upgrades to the distribution system to connect and communicate with the microgrid, and costs associated with standby power and others. **Per the principle of cost-causation, these costs should not be shouldered by ratepayers who do not benefit from the microgrid project. This bill requires the CPUC and POUs to establish tariffs for microgrids, but appropriately prohibits cost shifts to non-microgrid customers.**<sup>38</sup>

Many parties suggest that there is no cost shift, due to the value a microgrid provides.<sup>39</sup> As was aptly explained by the PAO, the value of microgrids are unquantified, largely unexplained, and may not appear.<sup>40</sup> In contrast, the charges parties seek to avoid paying reflect responsibilities established by the Legislature that were incurred by the microgrid customers and that will be paid by other customers if microgrid customers avoid them. This is the very essence of a cost shift – the ability to avoid paying one’s fair share. In addition to parties who sought exemptions from certain charges based on a perceived “value” provided by microgrids, there were parties seeking exemptions as a financial incentive to make microgrid development more economic or profitable.<sup>41</sup> Most of the parties were unclear about whether the exemption would be for times when the microgrid was operating in islanded mode or for times of normal grid operation (*i.e.*, a complete exemption). PG&E suggests that the Commission provide clarity that where the microgrid is serving departed load -- such as if it is operational while the grid is also available to serve customer needs – the load being served by the microgrid is departed load and

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creates a cost shift. *See* TURN Opening Comments, p. 2; Itron, et al., *Net Energy Metering 2.0 Lookback Study Draft Report*, Aug. 14, 2020, p. 1-11 (noting that NEM may result in an increase in rates for ratepayers). PG&E believes the legislative intent was to not *add to* any existing cost shift, or create any new cost shift, not to limit microgrid participation to non-NEM resources.

<sup>38</sup> California Senate Rules Committee Analysis of SB 1339, Aug. 28, 2018, p. 5 (emphasis added).

<sup>39</sup> *See, e.g.*, CESA Opening Comments, p. 13; MRC Opening Comments, p. 7; Schneider Electric Opening Comments, p. 8.

<sup>40</sup> *See* PAO Opening Comments, pp. 11-15.

<sup>41</sup> *See, e.g.*, Concentric Power Opening Comments, p. 8

all relevant charges apply. As the PAO pointed out, all microgrids today operating in parallel to the grid rely on the grid for back-up.<sup>42</sup>

PG&E does recognize a valid distinction for customer-facing microgrids where, as PG&E understands is intended in Primary Proposal 3, there is a single customer establishing a microgrid at a single meter. When such a microgrid operates solely to provide back-up power during a grid outage (whether PSPS or other), the responsibility for departed load charges, non-bypassable charges, or standby charges does not arise. The customer pays all charges applicable under their existing tariff during regular grid operation, but during a grid outage, the utility is not providing standby or any other service. There is no “departed load” because the utility would not be able to serve that load at that time. Therefore, the customer would not be responsible for payment of any CRSs during the outage. PG&E does not believe the Staff Proposal contemplated treating microgrid operations during an outage as departed load.

**C. Primary Proposal 4: Direct the Utilities to Develop a Microgrid Pilot Program. (Section 2.1.4. of the Ruling)**

The Staff Proposal recommends that the utilities develop a pilot program that seeks to remove financial barriers for clean energy community microgrids that support the critical needs of vulnerable populations most likely to be impacted by grid outages. Under this proposal, Staff recommends the adoption of a Microgrid Pilot Program Proposal (“MPPP”) with the following general characteristics and requirements:<sup>43</sup>

- PG&E, San Diego Gas & Electric Company (“SCE”), and Southern California Edison Company (“SCE”) would administer the MPPP to all customers within their respective territories.
- The projects would be funded by the ratepayers from the same county the project is located in. The cost recovery accounting treatment for the program incentives will be designed to come directly from the participant’s county ratepayers.

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<sup>42</sup> PAO Opening Comments, p. 14.

<sup>43</sup> Staff Proposal, pp. 20-21.



- The funding would be dispersed on a “first come, first served” basis to projects that are able to demonstrate their eligibility.
- The program would be paused when the when the project subscription reaches 15 projects.
- In addition to the eligible technology costs described in the Proposal, customers within SCE and SDG&E territory will also have access to a one-time matching funds payment to offset some portion of the utility infrastructure upgrade costs associated with implementing the islanding function of the microgrid. PG&E’s approved CMEP would provide similar funding.

Parties opening comments reflect significant disagreement, and potentially confusion, regarding the interpretation and implementation of Staff’s MPPP framework. In PG&E’s view, the Staff Proposal is a strong start toward the development of a viable Program, but the broad framework set forth leaves a number of critical details to be further addressed. PG&E therefore urges the Commission to move forward deliberately and carefully to complete the design of the MPPP by ordering a series of workshops to address these details, culminating in an advice letter process to finalize the MPPP design. In the following comments, PG&E replies to parties’ interpretations and concerns regarding the MPPP framework and sets forth PG&E’s understanding of how the Staff Proposal envisions the MPPP working.

# **1. The Intent of Staff’s Proposal is Clear: Address Financial Barriers.**

Many parties seem to have misinterpreted the intent of Staff’s MPPP. From PG&E’s perspective, Staff explicitly describes the MPPP objectives in the first sentence of Primary Proposal 4: “Like Proposal 3, this proposal addresses the financial barriers to microgrid commercialization.”<sup>44</sup> Two sentences later, the Staff Proposal adds further detail describing the MPPP as intended to “mitigate project costs and alleviate upfront project costs.”<sup>45</sup> Together,

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<sup>44</sup> Staff Proposal, p. 18.

<sup>45</sup> *Id.*

these statements make clear that the Staff Proposal is intended to further the commercialization of microgrids by addressing two distinct financial barriers: (1) utility infrastructure upgrade costs associated with implementing the islanding function of the community microgrid; and (2) high up-front cost of these capital-intensive projects that include generation and storage resources.

Some parties object to Staff’s proposal on the basis that it is duplicative of other programs. The Joint CCAs suggest that it is a technology pilot.<sup>46</sup> Google suggests that it would “duplicate existing pilot projects and real-world microgrid models.”<sup>47</sup> PG&E views the MPPP as a potential opportunity to expand the geographic reach of PG&E’s CMEP model by introducing a new, innovative financing model for microgrids, and thus addressing financial barriers.

## **2. Staff’s Proposal Includes Two Distinct Components, Each Targeted to Address Financial Barriers to Commercialization.**

Based upon a careful reading, PG&E interprets the MPPP as having two distinct components, one to mitigate utility infrastructure upgrade costs associated with implementing the islanding function of the microgrid; and one to address high up-front cost of these capital-intensive projects that include generation and storage resources. Each is described below:

### **(1) Mitigate Utility Infrastructure Upgrade Costs Associated with Implementing the Islanding Function of the Microgrid through One-Time Matching Cost Offsets –**

The MPPP seeks to lower overall project costs for qualifying projects by expanding PG&E’s CMEP one-time matching funds cost offset structure, which lowers or eliminates up-front costs of utility infrastructure upgrades necessary to enable safe islanding for qualifying<sup>48</sup> projects that otherwise would be borne by the customers or community. There would be no requirement to pay back over time these costs for the utility infrastructure component of projects, except as embedded in distribution rates recovered from all customers. This thereby lowers

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<sup>46</sup> Joint CCAs Opening Comments, p. 13.

<sup>47</sup> Google Opening Comments, p. 10.

<sup>48</sup> See PG&E Advice Letter 5918-E, submitted Aug. 17, 2020, pp. 11-12 (describing Community Microgrid Eligibility Criteria).

the community's project costs associated with utility distribution infrastructure, consistent with the objective of PG&E's CMEP program.

- (2) Alleviate High Upfront Project Costs for Remaining Non-Utility Infrastructure Costs (i.e., "Eligible Technology Costs"<sup>49</sup>) – The MPPP acknowledges that remaining non-utility related costs of a community microgrid still present a financial barrier requiring significant upfront capital. The MPPP proposes a community-level surcharge for non-utility infrastructure microgrid costs (e.g., generation, storage, customer-side of the meter costs, etc.) that would allow a community the elects to build a community microgrid to pay for Eligible Technology Costs over time, rather than upfront.

PG&E agrees with other parties that there are significant issues to work through and details to be developed prior to any final Commission authorization.<sup>50</sup> PG&E discussed a number of those areas in its Opening Comments, including transparency, consumer protection, equity, access, asset ownership, entitlement to project value streams, cost recovery and integration with PG&E's existing CMEP proposal.<sup>51</sup> Having just submitted the detailed program design proposal for CMEP,<sup>52</sup> PG&E recognizes that working through these issues will be challenging. PG&E also believes that the MPPP is worthy of the time and resources necessary to fully evaluate it, make necessary modifications and develop detailed program design. In Opening Comments,<sup>53</sup> PG&E outlined a proposal for an intensive yet accelerated approach to engaging stakeholders through workshops to work through these issues and develop a detailed

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<sup>49</sup> Staff Proposal, p. 19.

<sup>50</sup> See, e.g., PAO Opening Comments, pp. 21-23 (noting, among other issues, the need to address cost recovery timing and processes and per-project cost cap); California Environmental Justice Alliance ("CEJA") Opening Comments, p. 2 (arguing for a workshop to further develop community criteria and a scoring prioritization system); TURN Opening Comments, pp. 6-10 (arguing for further program development to, among other things, limit total MPPP funding and prioritize projects).

<sup>51</sup> PG&E Opening Comments, p. 22-23

<sup>52</sup> See PG&E Advice Letter 5918-E, submitted Aug. 17, 2020.

<sup>53</sup> PG&E Opening Comments, p. 23-24

design for the MPPP. Given the confusion among parties regarding the intent and content of Staff's proposal, PG&E reiterates support for PG&E's proposed MPPP development approach.

**3. The MPPP Has the Potential to Help Facilitate the Commercialization of Microgrids While Meeting the Anti-Cost Shifting Requirements of SB 1339.**

SB 1339 includes both a goal to facilitate the commercialization of microgrids and certain criteria (*e.g.*, avoid shifting costs to non-participants) that must be adhered to when doing so. To be clear, SB 1339 does not direct the Commission to commercialize microgrids at any cost or to ensure that all microgrid development proposals are economic. Rather, the statute directs the Commission to facilitate commercialization by removing barriers without shifting costs between customers.<sup>54</sup> PG&E must respectfully disagree with MRC's perspective that Staff proposes that the "utilities giv[e] free microgrids to a few customers at the expense of other customers"<sup>55</sup> Rather, PG&E takes Staff at their word and interprets the MPPP as a good faith proposal focused on "avoid[ing] the cost shifting from one county to another" while facilitating the commercialization of microgrids.<sup>56</sup> Whether the specific mechanism proposed by Staff is the optimal way to adhere to statutory requirements to avoid cost-shifting concerns depends upon a number of considerations.<sup>57</sup> Nevertheless, Staff's proposal is a logical starting point for a discussion on how the high up-front cost barrier associated with installing generation and storage technologies could be addressed without impacting non-participating customers.

PG&E commends staff for planting the seeds of innovation and commercialization with the MPPP proposal. The difficult work of fully developing a pilot to achieve Staff's stated objectives will require a detailed pilot design process that engages stakeholders in focused solution development. Thus, PG&E reiterates its request that the Commission adopt the

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<sup>54</sup> See Cal. Pub. Util. Code § 8371.

<sup>55</sup> MRC Opening Comments, p. 6.

<sup>56</sup> Staff Proposal, p. 21.

<sup>57</sup> These consideration include, but are not limited to: transparency and consumer protection; equity and access; ownership of assets and associated value streams; and ensuring implementation costs, such as billing system upgrades, of any solution are reasonable.

stakeholder engagement and detailed development process proposed by PG&E in opening comments. Finally, PG&E calls on all parties to come together and work in good faith to explore the potential for the MPPP to further enable community resiliency and customer choice.

### **III. CONCLUSION**

PG&E appreciates the opportunity to provide this reply to parties' opening comments on the Staff Proposal. In general, PG&E continues to support the well-reasoned Staff Proposals and disagrees for the reasons set forth above with the justifications put forward by other parties to alter or abandon the Staff Proposals on legal or policy grounds.

Respectfully Submitted,

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Dated: August 28, 2020