

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA



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

Rulemaking 19-09-009

**COMMENTS OF THE LOCAL GOVERNMENT SUSTAINABLE ENERGY  
COALITION ON THE TRACK 2 MICROGRID AND RESILIENCY STRATEGIES  
STAFF PROPOSAL, FACILITATING THE COMMERCIALIZATION OF  
MICROGRIDS PURSUANT TO SENATE BILL 1339**

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For THE LOCAL GOVERNMENT  
SUSTAINABLE ENERGY COALITION

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## **Introduction**

The Local Government Sustainable Energy Coalition (LGSEC) is pleased to submit the following Formal Comments in response to and as directed by the *Administrative Law Judge's Ruling Requesting Comments on Track 2 Microgrid and Resiliency Strategies Staff Proposal*. LGSEC members include municipalities, regional energy networks (RENs), community choice aggregators (CCA), school districts, Councils of Governments (CoGs), and civically engaged nonprofits. The Coalition represents 14 cities and 23 counties, which have jurisdiction over almost three-quarters of California's population and reflect two-thirds of the state's electricity demand. LGSEC membership extends to 76 of California's State Assembly districts; 36 of 40 State Senate districts.

Local Government's (LG) responsibilities span a wide array of functions related to microgrid deployment, including permitting, reducing greenhouse gas emissions, planning for energy resiliency, and in some cases piloting, financing, and deploying distributed energy resources (DER), including microgrids.<sup>1</sup> LGs are in close relationship with the neighborhoods and communities within their jurisdictions, knowledgeable of their unique characteristics and geographic, economic, demographic, and cultural factors that influence their energy, environmental, and equity needs. A key to commercializing microgrids is to demonstrate that they can provide value to the state's most disadvantaged and vulnerable communities; LGs are well-posed to advance this goal.

LGSECs comments are organized around the following categories, which contain specific responses to the questions posed:

- Policy Context of Local Government and Microgrids

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<sup>1</sup> As with the early stages of photovoltaic deployment, LGs are grappling with how best to support energy resiliency, particularly in the face of preventative outages, including potentially through microgrid deployment.

- Barriers Experienced by Local Governments
- Tariff Impacts in Local Government Microgrid Development and Operation
- Local Government Pilot Recommendations

### **Policy Context of Local Government and Microgrids**

LGSEC encourages the California Public Utilities Commission (CPUC) to continue to expand its vision of how best to foster microgrids as it engages in each proceeding track. As it takes this regulatory journey, it is important for the Commission to be mindful that the underlying structure of present investor-owned utility (IOUs) business models does not favor DER development, including microgrids. Likewise, as the energy system becomes increasingly decentralized, and hopefully community-based, as a means to advance sustainability, resiliency, and equity, the CPUC should recognize the importance of LGs as customers, collaborators and apt alternatives to the IOUs.

Transmission and distribution (T&D) system charges are the largest components of customer bills. These fees are historically based on kilowatt-hours (kWh) passing through the T&D system. As a result, IOUs tend to view small scale generation attached to the distribution system as distributed energy. Distributed energy, in turn, is treated in a similar fashion as large scale power plants that make use of the whole T&D grid, reflective of the IOU's archaic "spoke and wheels" generation, T&D business model, which has been central to profit-making for more than a century.

This grid model tends to disadvantage DER. The laws of physics dictate that electricity flows to the nearest energy demand. DER may make little use of distribution systems, without touching transmission at all, though its existence can serve to degrade T&D's value and

associated profits. When it is assumed that DER is being exported into the grid IOUs can impose high connection and use of system charges on it. This approach makes DER less economic, unable to take advantage of the local supply and embedded generation benefits it should create.

IOUs' hostility towards DER is exhibited by the interconnection process, which, as experienced by many customers, including LGs, seems to be largely stacked towards the for-profit utilities with little hope that any disputes that arise will be resolved in the ratepayer's favor. There is no apparent arbiter to intervene when interconnection request fees escalate; no way to validate if infrastructure upgrade costs borne by customers are fair and just; confusion on equipment approval; and an unlimited array of required ancillary and prerequisite upgrades to the grid infrastructure, including telemetry.

In part to address the imbalance between the spoke and wheels model and DER, the United Kingdom (UK) removed regulatory barriers to DER in 2001, differentiating between traditional large-scale distributed energy that wanted to trade on the grid, typically high voltage industrial plants, and decentralized energy supplying individuals and communities. Decentralized energy was generally categorized as exempt generation, distribution and supply on private wire networks and/or 'behind the meter' with limited export over the local distribution system. In 2009, the UK further modified electricity distribution and supply rules to allow decentralized energy to export all of its electricity over the local public distribution system to other consumers based on a 'virtual private wire' principle using a new form of stripped down license.

A key principle of decentralized energy is that it does not export to the grid or form part of the grid trading system. It simply replaces electrons from remote power plants with electrons from local generation. This minimizes impacts on distribution systems and avoids the need for upgrades or reinforcement of distribution elements to provide for exports outside the local

distribution network to which the decentralized energy generation is connected. It also supports community-based resiliency efforts.

The CPUC's challenge, then, is to foster the beneficial development of microgrids without stripping these assets of their value by treating them as being redundant to, or even a parasite of, the larger T&D system; and to re-equilibrate as-needed the disproportionate power held by the IOUs relative to their customers. Surmounting extant barriers will require a carefully phased persistent approach, in which DER deployment is matched with thoughtful resizing of the local distribution system in which it is nested, a recalibration of where the most value to ratepayers and society can be created, and regulatory interventions in cases in which the IOUs wield thoughtlessly applied authority. In some situations, microgrids may be able to entirely replace portions of the T&D system, or at least forgo otherwise necessary expensive investments in expansion and reinforcement. In other circumstances, microgrids could serve to more narrowly sustainably supplement the grid, enhancing resilience and reliability.

### **Barriers Experienced by Local Governments**

*Proposal 1: Direct the Utilities to Revise Rule 2 to Explicitly Allow the Installation of Microgrids as Special Facilities.*

1. In response to Proposal 1 to direct the utilities to revise Rule 2 to explicitly allow the installation of microgrids as special facilities, please indicate support or opposition to Option 1, Option 2, or Option 3 and explain your support or opposition.

LGSEC prefers Option 1, creating consistent rules across IOUs, thereby providing transparency and regulatory enforceability.

4. Is there anything more the Commission should consider about revising Rule 2 to allow the installation of microgrids as added/special facilities? Should the Commission consider alternative approach to ease barriers to the development of added/special facility microgrids?

None of the Staff proposals address circumstances in which a microgrid is merited, but local line capacity cannot support the resulting impacts. If a microgrid cannot use existing distribution lines, new lines are quite costly, including capital, installation, utility charges for operation and maintenance (O&M), and the transfer tax of deeding assets to IOU.

Pacific Gas and Electric Company (PG&E) charges O&M for new lines under Rule 2 at a rate of 6.5 percent of project capital costs annually and indefinitely, a fee that equates to more than the project's total capital costs after about 15 years. If this rate was adjusted to better reflect true service costs it could encourage microgrid development. For example, Lawrence Berkeley National Laboratory and Stanford University research found these actual expenses to be approximately 0.5 percent per year of capital costs.<sup>2</sup>

Changing this rule would require either negotiations with the IOUs or a CPUC directive.<sup>3</sup> Although there is a need to address O&M costs for all utility infrastructure across a service territory, if microgrids are to be included as Special Facilities this barrier needs to be addressed.

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<sup>2</sup> Peter H. Larson, *A Method to Estimate the Costs and Benefits of Undergrounding Electricity Transmission and Distribution Lines*. Lawrence Berkeley National Laboratory and Stanford University. October 2016.

<sup>3</sup>For example, the City of Berkeley found project costs for new distribution lines to include construction of new distribution lines at around \$1 million per mile; a one-time transfer tax per the Income Tax Component of Contributions Provision, 24 to 34 percent of capital costs, to cover state and federal taxes for deeding the new lines to PG&E. [https://www.cityofberkeley.info/uploadedFiles/Planning\\_and\\_Development/Level\\_3\\_-\\_Energy\\_and\\_Sustainable\\_Development/BEAT\\_Case\\_Study.pdf](https://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Energy_and_Sustainable_Development/BEAT_Case_Study.pdf)

*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*

1. In response to Proposal 2 to revise PG&E Rule 18, SCE Rule 18 and SDG&E Rule 19, please indicate support or opposition to Option 1, Option 2, or Option 3 and explain your support or opposition.

LGSEC generally agrees with Proposal 2, Option 2. However, limiting microgrid operations only to grid outages is not a strategy that any reasonable LG would approve given that it would require the use of local taxpayer revenue to carry significant opportunity costs when the facility is not running. Likewise, no private sector developer or financing entity would be able to demonstrate the economic feasibility of such a project. A much less expensive, if environmentally damaging, option to ensure reliability at specific locations would be to field fossil fuel generators, a choice that has become disastrously popular amongst LGs and private companies because of a lack of viable alternatives.

4. What other considerations should the Commission give toward revising Rule(s) 18 and 19?

Over the past few decades the CPUC and ratepayers have learned the shortcomings of investing in assets that are only occasionally used. For example, demand response (DR) technologies provide much more value than their service during a DR event; for example, they can act to avoid or defer the need to otherwise invest in expensive T&D or generation resources.

In the Energy Efficiency Portfolio and Integrated Resource Planning proceedings the



CPUC and stakeholders are grappling with how to value optimizable interventions. Limiting Proposal 2 would similarly put microgrids on a gangplank to be non-optimizable, disconnected from the value of generation and storage investments, disincentivize public and private sector investment, and fail to facilitate microgrid commercialization, as directed by Senate Bill (SB) 1339.

CPUC 218(b) regulates utility right-of-way and franchise agreements. This rule should be modified to allow commonly-owned buildings to participate in a microgrid across public right-of-ways, thereby allowing LGs to develop microgrids without having to become a municipal utility.

Further, use of a “parcel” is an arbitrary geographic metric as applied to microgrid deployment. Some parcels contain multiple customers, meters, structures and other attributes. The difference between parcels with a single commercial building and residence is less than parcels with multiple and diverse loads and DER access.

No Staff proposal addresses the oversight of IOU decision making in Rules 18 and 19. It is at the discretion of the utility to allow separate buildings within a microgrid to have a single meter at the point of interconnection and allow for aggregation of power during blue sky operations.<sup>4</sup> Without having to change legislative definitions of a public right-of-way, over which LGs have jurisdiction, PG&E Rule 18, Southern California Edison Company (SCE) Rule 18 and San Diego Gas and Electric Company Rule 19 should be modified to create more flexibility to allow any continuity of parcels not interrupted by a public right-of-way to participate in a microgrid. While parcels are the geographic boundary in Rules 18 and 19, the

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<sup>4</sup>[https://www.cityofberkeley.info/uploadedFiles/Planning\\_and\\_Development/Level\\_3\\_-\\_Energy\\_and\\_Sustainable\\_Development/BEAT\\_Case\\_Study.pdf](https://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Energy_and_Sustainable_Development/BEAT_Case_Study.pdf)

IOUs require legal contracts with all customers on the distribution line circuit before a microgrid can proceed.<sup>5</sup>

## **Tariff Impacts in Local Government Microgrid Development and Operation**

### *Proposal 3: Direct the Utilities to Develop a Standardized Tariff for Combinations of Rule 21 Compliant Technologies*

LGSEC supports creation of a microgrid tariff(s) that is flexible, can accommodate multiple customers, provide financial benefits to microgrid customers, and avoid unfair cost shifting. In this context, LGSEC supports elements of Option 5.

3. What other considerations should the Commission give in its consideration of developing a single, standardized rate schedule to govern microgrids and all their component technologies?

LGSEC is pleased that the CPUC is willing to grapple with the complexities of developing economic and equitable microgrid tariffs. New tariffs and other financial mechanisms have regularly been developed to incentivize adoption of specific technologies, such as solar photovoltaic and battery storage, which support California's renewable energy and climate change goals. Microgrids that advance state goals, and create community resiliency benefits, should be offered access to microgrid-specific rates.

Rate structures and associated regulations that enhance the ability of multiple legal entities to share on-site power would significantly influence the feasibility of urban microgrids.

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<sup>5</sup>[https://www.cityofberkeley.info/uploadedFiles/Planning\\_and\\_Development/Level\\_3\\_-\\_Energy\\_and\\_Sustainable\\_Development/BEAT\\_Case\\_Study.pdf](https://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Energy_and_Sustainable_Development/BEAT_Case_Study.pdf)

Progress in this arena could advance clean energy microgrid communities (CEMCs), particularly if the resulting benefits can be accessed and costs not unfairly incurred by low-income and vulnerable populations.<sup>6</sup>

The following Proposal 3 recommendations to overcome tariff-related barriers to installing local government-owned microgrids are based in part on findings from two California Energy Commission (CEC) Electric Program Investment Charge grants: the Santa Monica Advanced Energy Community (AEC) Case Study<sup>7</sup> and the City of Berkeley BEAT study.<sup>8</sup>

1. **Development of rate structures or tariffs that benefit both microgrid users and utilities in “blue sky” - normal meteorological - and outage conditions should be a central outcome of this proceeding.** Current tariffs for commercial class customers incentivize demand charge reductions. These rate structures do not allow local governments to fully harvest all the benefits a microgrid can provide. When regulating tariffs, the Commission should contemplate what objective - customer adoption; rate optimization - best meets SB 1339’s intent to facilitate microgrid commercialization.
2. **Rate structures that explicitly encourage deployment of clean microgrids over dirty diesel backup generators (BUGs) should be developed.** Tariff elements play a significant role in defining optimal battery size. Steep tariff structures strongly incentivize battery usage under blue sky conditions, while flat tariff structures limit cost-optimal battery usage. Stationary electric battery storage with enough capacity to supply

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<sup>6</sup>[https://www.cityofberkeley.info/uploadedFiles/Planning\\_and\\_Development/Level\\_3\\_-\\_Energy\\_and\\_Sustainable\\_Development/BEAT\\_Case\\_Study.pdf](https://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Energy_and_Sustainable_Development/BEAT_Case_Study.pdf)

<sup>7</sup> <https://ww2.energy.ca.gov/2019publications/CEC-500-2019-032/CEC-500-2019-032.pdf>

<sup>8</sup>[https://www.cityofberkeley.info/uploadedFiles/Planning\\_and\\_Development/Level\\_3\\_-\\_Energy\\_and\\_Sustainable\\_Development/BEAT\\_Case\\_Study.pdf](https://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Energy_and_Sustainable_Development/BEAT_Case_Study.pdf)

an emergency operations center is a critical LG need. The alternative is to proliferate fossil fuel BUGs and pay any resulting air quality penalties. If rate structures do not change, local governments will continue to have little choice but to prioritize public safety over operating within the constraints of tariffs that discourage clean energy.

3. **To increase the value energy storage systems provide the grid, the IOUs could design dynamic rates that align system needs with rate signals.** Critical peak pricing and other demand response incentives offer initial steps to direct storage to discharge when it is needed most, including as a result of Public Safety Power Shutoffs.
4. **Self-generation and storage should be bifurcated from grid-purchased energy.** Energy produced and consumed on-site has negligible line loss compared to grid energy, does not use the T&D network and requires no reactive power. Energy consumed from such a microgrid on the same or adjacent parcel should not be subject to grid-related costs, just as energy efficiency savings do not incur non-bypassable charges.
5. **A microgrid tariff should appropriately recognize the value that these systems can provide related to local generation and by enabling demand flexibility at a customer site.** Before an LG develops a microgrid a feasibility analysis is conducted to determine how best to minimize costs while maximizing solar and storage capacity until an optimal equilibrium is reached. This exercise is often accomplished with software using linear algebra and multivariate regressions. While some tariffs have straightforward volumetric, kWh charges, non-bypassable demand charges can often be quite complex. Time-of-use rates impose multiple demand charges, for monthly peak, facilities-related, as well as seasonal demand price incurred during the month, day of week, or time of day.
6. **Any microgrid tariff should include a Renewable Energy Self-Generation Bill**

**Credit Transfer (RES-BCT)-like component for customers that are already covered by this tariff.** RES-BCT allows LGs with one or more eligible renewable generating facilities to export energy to the grid and receive generation credits to benefit other accounts of the same LG. Under the tariff the customer must be a city, county, special district, school district, university, political subdivision or other local public agency.

7. **For microgrid-based electric supply to be cost-competitive, the nature and amount of standby charges need to be reevaluated.** Participating in ancillary energy services may lower energy costs, as it would enable the microgrid to be paid for its potential grid benefits.<sup>9</sup>

8. **Rule 21 tariff elements should clarify the governance of microgrid operation in islanded mode.** While BUGs may be allowed to operate during a grid outage, there is no guidance to support a utility for microgrid-generated power or nonutility operation of inter-facility distribution lines during an outage. This limits the ability of multi-facility microgrids to recover project costs and/or distribute power to third-party customers. Clarification of this rule element would help to advance microgrids.<sup>10</sup>

9. **The CPUC should amend the IOUs' Interconnection Agreements and tariffs to allow for greater flexibility to export active power beyond internal facilities.**<sup>11</sup> Single, master, meter or virtual single meter tariff structures would allow for renewable energy resources and storage to offset coincident peak demand at multiple facilities, even if solar and storage are not co-located, and could be key to maximizing potential energy savings for CEMCs. Currently there are no tariffs that would allow a CEMC to

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<sup>9</sup> <https://ww2.energy.ca.gov/2019publications/CEC-500-2019-032/CEC-500-2019-032.pdf>

<sup>10</sup> Ibid.

incorporate multiple facilities owned by different parties to share power or credits. The CPUC has offered limited guidance related to this issue; it may be solely at the utility's discretion to allow for more favorable metering arrangements.<sup>12</sup>

10. **Greater transparency of the true cost of generation procurement is needed so that stakeholders can fully understand the value a microgrid can provide in terms of avoided costs and benefits to IOU electricity infrastructure.** Procurement contracts entered into between IOUs and utility-scale generation developers are often redacted. Ratepayers do not have clarity on contract details, pricing or true generation costs and cannot be certain that the tariffs appropriately value the benefits and/or costs microgrids provide to the grid. Any rate case related to microgrids should enable Commission staff to apply the appropriate level of rigor and transparency to examine IOU filings and stakeholder submissions.

### **Local Government Pilot Recommendations**

#### *Proposal 4: Direct the Utilities to Develop a Microgrid Pilot Program.*

1. In response to Proposal 4 to direct the utilities to develop a microgrid pilot program, please indicate support or opposition to each of the options. Explain your support or opposition.

The proposed Microgrid Pilot Program structure suggests a top-down, IOU approach to developing CEMCs. In Track 1, IOU attempts to deploy microgrid pilots resulted in requests for

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<sup>12</sup>[https://www.cityofberkeley.info/uploadedFiles/Planning\\_and\\_Development/Level\\_3\\_-\\_Energy\\_and\\_Sustainable\\_Development/BEAT\\_Case\\_Study.pdf](https://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Energy_and_Sustainable_Development/BEAT_Case_Study.pdf)

proposals that lacked transparency and, in SCE's territory, ultimately did not occur. Microgrid initiatives that did proceed relied on diesel generation, with directives in two proceedings to immediately study clean BUG alternatives. In R.14-08-013 an example<sup>13</sup> of a rural and hard to reach (RHTR) microgrid in Mono County was never deployed.

5. What other considerations should the Commission give to support the development of a utility microgrid pilot program?

Consistent ongoing barriers to data access, including delay of D.20-06-017 ordering paragraph 11,<sup>14</sup> omission of a budget for the California Analysis Tool for Locational Energy Assessment (CATALENA), and a one year delay on updating Distributed Energy Resource Interconnection Maps in R.14-08-013<sup>15</sup> are reflective of the systemic challenges LGs continue to face in deploying microgrids to enhance public safety and resiliency. As evidenced in the IOU advice letters meticulously ordered by D.20-06-017, any directive given to for-profit utilities may result in mostly airy compliance language, without meeting LGs' urgent needs and the greater intent of commercializing microgrids. This is particularly reflected in SCE's response to the County of Los Angeles Comments on Advice Letters 4254-E, 4255-E, 4256-E, 4259-E, and 4260-E. IOUs' deep reluctance to recognize or give merit to LGs' needs will likely continue unless the CPUC acts to remedy the situation.

Simply put, the present top-down IOU-driven approach to fostering microgrids, principally through pilots, is not working.

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<sup>13</sup>[http://www3.sce.com/sscc/law/dis/dbattach5e.nsf/0/6FD1E20E19E32DEC882580F800036063/\\$FILE/R1408013%20et%20al-SCE%20Comments%20Proposing%20Demo%20Project%20E.pdf](http://www3.sce.com/sscc/law/dis/dbattach5e.nsf/0/6FD1E20E19E32DEC882580F800036063/$FILE/R1408013%20et%20al-SCE%20Comments%20Proposing%20Demo%20Project%20E.pdf)

<sup>14</sup> <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M340/K748/340748922.PDF>

<sup>15</sup> <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M343/K070/343070041.PDF>

A more effective approach to piloting community-based microgrids would be to develop them in the context of communities, empowering LGs to take the lead on designing, developing, and executing community microgrids. If an alternate party were to administer microgrid pilot funds, the Commission may expect a more proactive approach to addressing barriers and commercializing microgrids.

In this respect, LGSEC makes the following recommendations:

1. **A modified version of Load Serving Entities Option 2 should be adopted, in which LGs that have a demonstrated capacity to serve as program administrator (PA), should be fast-track selected in each of the IOU service territories.** Eligible PAs should include CCAs, RENs, and other LGs that have exhibited a substantial ability to manage multi-million-dollar energy projects. These entities should be asked to nominate and select a single entity within each service territory to serve as a PA by the first quarter of 2021, through an expedited process in which LGs provide notice of their interest through the proceeding service list, and resolve a final nominee amongst themselves by a time-certain. The California Public Utilities Commission should confirm the nominated entities' capacities to effectively serve as PA. Should no suitable PA emerge or be selected in this fashion the PA role should devolve to the relevant IOU.
2. **Project Eligibility Option 1 should be adopted, with the additional element that the PA, should it be an LG, be tasked with cultivating pilot sites that meet preferred characteristics, with the IOUs and CEC providing technical assistance to ensure success.** These efforts should be funded through the overall pilot program.
3. **Pilot monies should be carved out to provide sufficient funds for especially**



**vulnerable LGs to engage dedicated “resiliency officers” as a means to expedite microgrid development.** Building an advanced energy community requires that the LG understand its value. However, the technical ability of elected officials and municipal staff to comprehend, appreciate, and deliver advanced energy projects is in many cases limited. Funding and technical assistance from the IOUs and CEC is required to develop local government capacity to advance microgrids.<sup>16</sup> LGs need additional resources to be able to effectively engage in energy resiliency efforts and help ensure that necessary measures are implemented expeditiously. In this context, **the Commission should authorize the IOUs to fund LG-hired or contracted dedicated resiliency officers in every governmental jurisdiction in which wildfire-related outages lasted more than four hours at a given substation in 2019 and 2020, under a not to exceed \$5 million budget.**

4. **Several of the pilots should include tests of potential tariffs, as discussed previously, similar to the Statewide Pricing Pilot.**<sup>17</sup> The pilots offer an opportunity to examine how different tariffs would perform in real situations, including as part of specific resiliency and equity strategies.
5. **The deadline for fully operational microgrids should be extended to 2023.** It would be quite challenging for any project that is not already designed to be completed by the end of 2022; and unclear why additional ratepayer funds should be invested in work already in progress or to expedite pilot projects, unless used as an active platform to examine issues of interest (e.g., tariffs). Even to achieve a 2023 completion would

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<sup>16</sup> See for example <https://ww2.energy.ca.gov/2019publications/CEC-500-2019-032/CEC-500-2019-032.pdf>

<sup>17</sup> See for example, [https://www.nwcouncil.org/sites/default/files/drrc\\_presentation.pdf](https://www.nwcouncil.org/sites/default/files/drrc_presentation.pdf)

require that the IOUs execute all interconnections promptly. Continually imposing unrealistic deadlines that have in the recent past resulted in the fielding of fossil fuel BUGs or avoidance of resiliency projects entirely is a poor strategy.

- 6. Pilot cost-effectiveness study should be conducted over a 12 to 24-month time period.** The value of resiliency can only be effectively tested in outage conditions and will likely include non-quantitative financial benefits, which should be considered in the analysis. Capturing these outcomes requires more than six months.

## **Conclusion**

As the CPUC evaluates stakeholder comments, and proceeds with this and subsequent tracks, LGSEC encourages staff, the administrative law judge and Commissioners to closely observe the pilots to deepen their insights into customer frustrations, as well as the constraints that IOUs and distribution system operators face.

Short term and systematic streamlining of the microgrid development process is within reach. LGSEC appreciates this opportunity to submit these Formal Comments to the Commission. We look forward to continuing to productively engage in these issues.

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Respectfully submitted

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