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# A Political Analysis of Microgrids & California's Over-the-Fence Rule

March 15, 2021

Image credit: Antonio Garcia

**Sustainable Systems Research Foundation**

**Policy paper #21-2**



## Introduction

Of the many topics related to microgrids, California's Public Utilities Code 218, or the "over-the-fence" rule,<sup>1</sup> is an item of interest to many stakeholders in the energy sector. Section 218 has a crucial impact on sophisticated microgrids that span multiple parcels, as it essentially requires any entity that wishes to sell power to more than two contiguous parcels or to parcels across a street to become an electrical corporation, which is defined as a "public utility" in PU Code 216. If an entity becomes an electrical corporation, it is considered a public utility and becomes subject to regulation by the California Public Utilities Commission (CPUC). Consequently, microgrids that serve multiple customers and/or cross rights of way (streets) would be considered public utilities under current California law, which becomes a significant barrier to their development and diffusion.

This definition of an electrical corporation was established in 1951 as part of the state's determination that electricity was a necessity and, therefore, regulation was necessary for this foundational commodity that had revolutionized modern society.<sup>2</sup> The regulatory compact was established that assured reasonable rates for safe, reliable, equal, and fair access to electricity in California.

The California Public Utilities Code has been amended several times over the intervening years to accommodate new energy technologies. A pivotal moment in this history was the passage of SB 1773 in 1984, which provided an exemption for cogeneration from the electrical corporation definition. In adding this exemption, the legislation also included a provision that restricted generators from distributing power to more than two neighboring properties and further prevented sharing electricity if there was an intervening public street. In 2008, AB 2863 created the "Independent Solar Energy Producer" exemption to the definition of an electrical corporation. In both instances, the legislature recognized the potential of and encouraged the advancement of new energy technologies. Some have argued that the legislature was writing legislation with both hands by encouraging competition in the energy sector while simultaneously restricting it with the over-the-fence rule.<sup>3</sup>

Before diving into the implications of the over-the-fence rule for microgrids, it is important to understand the history and evolution of microgrid policy in California, paint a picture of the political landscape facing microgrids, and provide context for the barriers and challenges microgrids face today in the legislative and regulatory arenas.

### The California Energy Commission: The Birthplace of Microgrid Policy in California

Microgrid policy in California was effectively born at the California Energy Commission (CEC) in the early 2010s with the Electric Program Investment Charge (EPIC) Program, which authorized grants for the research and development of microgrid technologies. Many microgrid pilot projects were deployed across the state

with more than \$84 million in funding dispersed to grant awardees over multiple solicitations.<sup>4</sup>

The CEC considers itself more of a steward of energy technology and thought leader on energy policy, rather than a policy-making authority for energy issues. That role is assumed by the CPUC. While the CEC and the CPUC occasionally collaborate, it appears that they are largely siloed in their organizational management structures. It should be noted that while the CEC has presented information to the CPUC on microgrids numerous times, the CPUC seems largely oblivious to the large body of CEC research and development that has been and is being conducted when it issues decisions implementing microgrid regulations.

In 2017, as the CEC was preparing the solicitation for the second round of EPIC-funded microgrids, the Commission started to develop a draft roadmap for microgrid commercialization based on the initial success of the pilots. That roadmap was prepared without any guidance from the state legislature or other state authority.<sup>5</sup> It was submitted in draft format to the CEC docket, but at the time did not receive a lot of attention from many stakeholders.<sup>6</sup> However, one important stakeholder was intrigued by the CEC's R&D for microgrids and the commercialization roadmap: Senator Henry Stern.

### SB 1339: Landmark Legislation for Microgrids

In 2018, after seeing the CEC's robust body of work to fund demonstration projects and develop a roadmap for microgrid commercialization, Senator Stern led the passage of SB 1339, which sought to commercialize the microgrid market. Indeed, much of the language from SB 1339 was taken directly from the CEC's draft roadmap for further consideration by the CPUC. The CEC put the completion of the commercialization roadmap on hold while the bill was going through the legislative process but, until now, no final roadmap has been issued. The CEC's 2020 *Integrated Energy Policy Report* will feature a volume on microgrids and is to be issued in early 2021, so the final roadmap may appear there.

The intent of SB 1339 was to advance a promising technology—microgrids—from pilot status to a commercial product available to consumers:

*(a) Many electricity customers are seeing the potential benefits of investing in their own distributed energy resources as part of microgrids, both to ensure their own level of reliability and to better manage their own usage. (b) Allowing the electricity customer to manage itself according to its needs, and then to act as an aggregated single entity to the distribution system operator, allows for a number of innovations and custom operations.<sup>7</sup>*

While resilience was seen as one potential benefit of microgrids, it was certainly not the focus of the coalition's advocacy efforts. The 2017 Wine Country fires were still fresh in the minds of lawmakers, but the investigation into PG&E's equipment and role in starting the fires was ongoing throughout 2018 and it was not until near the end of the legislative session that it

became clear that utility negligence was a major factor in that blaze (as well as others). Indeed, nowhere in the final language of the bill does the word “resilience” appear. At that time, resilience was regarded as an ancillary benefit of microgrids, an insurance policy in the event of a grid outage. The main advocacy efforts centered around the benefits that microgrids could provide to the grid and customers if they were commercialized, namely advanced energy management for customer cost savings and better control of intermittent renewables for the benefit of distribution utilities and the macro grid. However, private utility public safety power shutoffs during the fire season of 2019 turned this logic upside down, putting resilience first and all but disregarding the benefits of commercialization.

The biggest challenge in passing SB 1339 was the notion of “cost-shifting.” The original language of SB 1339 directed the CPUC to open a track for microgrids within the NEM 3.0 proceeding, which at the time was slated to begin in 2019. However, the utilities and International Brotherhood of Electrical Workers (IBEW) were opposed to any expansion of net metering due to the supposed shifting of the costs of the electrical grid from wealthier to poorer households and communities that would result. As the former reduced their reliance on the utilities through the deployment of solar and other microgrids, it was claimed, they would pay less for power, leaving transmission and distribution costs to be borne by the latter (note that this was a rather late coming to energy justice moment for the IOUs and IBEW).

The vision of the coalition behind SB 1339 was to create a market signal for microgrids, and its members agreed that net metering was too simplistic a tariff to capture all the value that microgrids could provide to the grid, such as grid services and managing dynamic load. As a compromise, the bill was amended to mandate the creation of “separate rates and tariffs” for microgrids. This would ensure a new price signal that fairly accounted for all the benefits that microgrids could provide, without net metering, which simply provided additional compensation for renewable generation. To further assuage the utilities and reduce opposition to the bill, the provisions “without shifting costs between ratepayers” and “as necessary” were added. This language further satisfied the Chairman of and consultant to the Assembly Utilities & Energy Committee, neither of which was keen to bring the bill forward for a hearing in the face of opposition from the IOUs and IBEW.

With these added provisions, and a heroic lobbying effort by a very small coalition, SB 1339 was passed with only 30 minutes to spare on the night of August 31, 2018, which was the very last day of the legislative session and signed into law by Governor Brown on September 16, 2018. At the time, the coalition behind the bill celebrated its victory in creating a new market signal to advance this promising energy technology. But, in November 2018, the Camp Fire ravaged Northern California and destroyed the town of Paradise, killing 84 people and burning upwards of a billion dollars of property. A few months later, that liability sent PG&E into its second bankruptcy in only fifteen years and stalling the progress promised by SB 1339.

### Other Legislative Proposals for Microgrids

SB 774 was introduced in 2019, written initially to provide more support for customer-supported microgrids. Senator Stern had solicited input from several DER developers to shape the legislation. Unfortunately, he also solicited input from the utilities, which pounced on the opportunity to push the bill in a direction that served their interests. Led by Sempra Energy, the utility group lobbied for a bill that would authorize unlimited spending on IOU-controlled microgrids. San Diego Gas & Electric (SDG&E) had recently seen several of their microgrid applications denied in the AB 2868 implementation proceeding at the CPUC, which viewed utility-owned microgrids as not being cost-effective. To counter those CPUC decisions, SDG&E pushed for language in the bill that would force the Commission to approve any utility microgrid applications in the name of “resiliency.” Although the DER developers tried to push the bill in a more customer-centric direction, they were unable to get enough traction. Ultimately, the bill was shelved because the various stakeholders were unable to come to any compromise on a path forward.

Fortunately, SB 774 was never taken up again. Some in the DER industry viewed that as a defensive victory for preventing the IOUs from asserting dominance over the budding microgrid market. But, as it turned out, there were other ways for the IOUs to achieve such dominance. As noted earlier, during the fall of 2019, PG&E and the other IOUs began implementing Public Safety Power Shutoffs (PSPS), authorized by SB 901, as part of their wildfire mitigation plans. Indeed, the 2019 wildfire season introduced a new paradigm into utility operations: rather than taking action to prevent equipment malfunctions from igniting wildfires, the IOUs would shut off power whenever weather conditions might put their poorly maintained infrastructure at risk of starting one.

Outages were instituted up and down the state, often for days at a time and without much warning, causing severe harm and economic disruption to urban and rural communities. In October 2019, PG&E’s botched PSPS event resulted in more than 2.5 million customers losing power for multiple days, leading the legislature to conduct an oversight hearing in November 2019. The political atmosphere appeared to favor a drastic change to utility policy as legislators heard from constituents that the situation was untenable and that PG&E was a corrupt and negligent corporation. Diesel generators of various sizes were flying off the shelves of stores and appearing in the parking lots of restaurants and markets. The need for clean distributed energy solutions was never more apparent to policymakers.

Thus, at the beginning of 2020, the political environment strongly favoring the increased deployment of microgrids and DERs to mitigate the impacts of PSPS, wildfires, and diesel pollution. Senator Stern decided to introduce a new bill, SB 1215, that would serve as the vehicle for microgrid legislation. This time around, the DER and microgrid industry was ready, and worked with Senator Stern to develop a local government PSPS mitigation grant program that would provide funding for local governments to implement community resilience.

2020 was supposed to be the year of distributed clean energy and resiliency policy with the political winds finally blowing in the right direction.

Unfortunately, events intervened, as the Covid pandemic turned the tide before the ship ever left the port. The state budget, which was originally projected to be in a multi-billion-dollar surplus, was now facing massive shortfalls, as the economy collapsed in the face of statewide shelter in place orders and widespread layoffs. Legislative leadership reduced the number of bills each legislator was allowed to carry forward, asking that any bills introduced focus on public health, economic recovery, housing and wildfire mitigation. While many legislators were forced to shelve their bills for the year, Senator Stern continued to push for SB 1215. However, the bill had to be significantly modified and could no longer focus on creating a grant program. Instead, it would have to focus on actions that could be taken up, at no cost to the state, at the regulatory level.

SB 1215 was amended by Stern to allow microgrids with at least one of its generation or storage resources funded through SGIP or EPIC to pre-empt Rule 218 and be allowed to cross streets. The major energy players supporting this concept were Tesla, Sunrun, and the Microgrid Resources Coalition, in addition to a few other community-focused grassroots groups such as the Indivisible California Green Team.

But this provision quickly drew the attention and ire of the usual suspects: all three IOUs submitted letters of opposition to the Senate Energy Committee, outlining their concerns with SB 1215, especially the Section 218 exemption. Southern California Edison (SCE) claimed that exempting microgrids from the CPUC's jurisdiction, "would cause significant harm to California's utility customers" and there would be "drastic consequences," arguing that "all of the CPUC's regulations regarding safety, reasonable pricing, and reliability, among others, only apply to a public utility."<sup>8</sup> PG&E stated that "contrary to this long-standing cornerstone of public utility regulation in California, SB 1215 would authorize any private corporate to install microgrids with no regulation of safety or reliability, and then charge the public any rate they choose..."<sup>9</sup> SDG&E claimed that "local governments and third parties can already build microgrids" and that SB 1215 "allows for a new class of unregulated electric service providers and creates the possibility of parallel and redundant electric facilities, exactly what existing law is intentionally designed to prohibit." SDG&E went to great length to outline how microgrids "unnecessarily increase wildfire risk and liability" and that "introducing an unregulated utility-like entity in the operation of the grid will reduce safety."<sup>10</sup>

Ironically, perhaps, the IOUs framed their concerns about microgrid safety and reliability as though they all had stellar safety and reliability records and that no other entities could achieve equal or superior electric service in the absence of IOU control.

Analysis of SB 1215 was prepared by the Senate Energy Committee Consultant, Nidia Bautista, who works under Chairman Ben Hueso. She foregrounded concerns about equity, arguing that the grid historically was built

to serve all customers and ensure that even those without the means to afford electrification could benefit from it, by distributing the costs of extending the grid to remote and poor communities across all customer classes.<sup>11</sup> She took a cautionary tone concerning the broader issues that microgrids raise in the context of utility regulation and questioned whether decentralization of the grid would be a wise policy in light of equity and affordability concerns:

*"...the Legislature should proceed with caution to not undermine the larger operation of the electric grid in a manner that could pose safety, reliability, and consumer protections risks. In that regard, efforts to change regulatory oversight of what should be considered an electric utility seem premature. While microgrid developers and communities who seek microgrids are valid in their concerns about the ability to more easily connect these resources, the risks of undermining a bedrock of utility regulation – ensuring safe, reliable service at just and reasonable rates – could outweigh the potential benefits."<sup>12</sup>*

Bautista's analysis minimized potential resiliency benefits and recommended further exploration of the issue by the CPUC before pursuing a change in the law. She further suggested that the Senate Energy Committee not allow over-the-fence bills to be heard and defer to the CPUC until it made an official determination on Public Utilities Code 218.

The daisy-chaining provision was removed after IBEW expressed its non-negotiable opposition to any changes to the over-the-fence rule, fearing that a proliferation of decentralized energy systems would result in massive unemployment among its members. Instead, IBEW proposed that funds from the Self Generation Incentive Program (SGIP) be reallocated to the IOUs to develop microgrids. In making this proposal, the IBEW knew it would incite opposition from the distributed solar and storage industry and perhaps garner enough controversy that Senator Stern would elect not to move forward with the bill.

Eventually, SB 1215 was abandoned when the Chair of Assembly Utilities & Energy Committee, Chris Holden, decided not to bring any bills through his committee that addressed PSPS, citing the need to give the CPUC more time to implement the directives it had already received.

It should be noted that Chair Holden has traditionally aligned with IOUs and IBEW on these issues, despite representing a region with public utilities (Pasadena), while his long-time committee consultant, Kellie Smith, is tough on distributed energy. That said, a new Chief Consultant, Laura Shybut, has recently joined the Assembly Utilities & Energy Committee staff, bringing a different perspective on energy issues. Shybut was Chief of Staff for Senator Jerry Hill and supported his legislative efforts to hold PG&E accountable during their bankruptcy and provide a pathway for PG&E municipalization. While she may prove more helpful and supportive, the Assembly Utilities & Energy Committee is likely still to be a major barrier to progressive and ambitious energy policy proposals.

**R.19-09-009**

In September 2019, roughly a year after SB 1339 was signed into law, the CPUC finally opened the microgrid proceeding mandated by the bill, staffing a new team within the Energy Division to lead the rulemaking. The proceeding would consist of three tracks, corresponding to short-, medium-, and long-term solutions and policy considerations for microgrids.<sup>13</sup> Over 50 organizations became parties to the proceeding, setting it up to be a high-profile regulatory exercise.

Throughout the summer of 2019, PG&E had been executing PSPS events as authorized under SB 901. At first, the shutoffs were discrete, impacting only the most remote areas of the state and resulting in very little press coverage. The beginning of fire season in October brought about widespread intentional outages, which proved a tipping point. The CPUC added "resiliency strategies" to the microgrid proceedings and by doing so, dramatically expanding the scope of the rulemaking. Track 1 would now focus on short-term resiliency solutions that could be deployed before the 2020 fire season, with most of the meaningful regulatory actions for microgrids pushed to Tracks 2 and 3.

As a result, Track 1 accomplished very little in the way of microgrid commercialization, with most of its focus on mitigating the impacts of PG&E's botched outages. The Track 1 decision, finalized on June 11, 2020, approved hundreds of megawatts of temporary diesel generation to be sited at utility substations in the name of keeping the lights on during the next fire season.<sup>14</sup>

But the CPUC also approved PG&E's Community Microgrid Enablement Program which authorized \$60.75 million in matching funds for distribution upgrades and related measures to support the islanding function of any microgrid requested by a community during an outage. This was supposed to enable eligible communities to move forward with community microgrids. In explaining the CMEP, PG&E representatives talked about how "wonderful" this would be because the utility would maintain and operate the distribution system, thus avoiding violations of Section 218. Moreover, this would allow community microgrids to cross streets in partnership with PG&E.

PG&E claimed it was supportive of communities developing microgrids through this program, even as it continued to push for the authorization of unlimited diesel generation use during PSPS events. In effect, the CMEP was nothing more than an attempt to distract stakeholders from the main event and force them to waste resources fighting a rearguard action. Along with authorizing matching funds, PG&E submitted an Advice Letter stating that it would be developing a tariff for the program. This caused an uproar from the microgrid industry, which advocated that the CPUC develop a statewide tariff with meaningful proper input from stakeholders. The Microgrid Resources Coalition protested the Advice Letter, as did the CCAs, who expressed their concerns about the program, characterizing it as PG&E's attempt to "sneak a tariff in." PG&E was directed to integrate the CMEP into the newly

adopted Microgrid Incentive Program, authorized in Track 2.

Track 2 opened expeditiously, following the conclusion of Track 1, with the release of a Staff Proposal and an accompanying Staff Concept Paper.<sup>15</sup> The latter is an exploratory analysis of longer-term policy questions to be addressed in future tracks in the proceeding, including a discussion of the over-the-fence rule. In its analysis of Rule 218, the Concept Paper sheds light on the fact that microgrids themselves raise important policy questions regarding the bedrock of electric service and utility regulation. It suggests that the CPUC could recommend that the legislature change the law, which many parties have advocated. The paper outlines two other avenues for potentially allowing microgrids to serve more than two customers or cross streets: electric cooperatives and micro-utilities, both of which are interesting regulatory mechanisms. However, it is curious that neither the CEC roadmap nor the CPUC's own 2014 regulatory assessment of microgrids are referenced at all in the Concept Paper. In the Track 2 Order, the Administrative Law Judge permits parties to comment on the Concept Paper but states that those comments will not be entered into the record since the Concept Paper was meant to be a guide for Track 3.

In comments submitted on Track 2 documents, several parties outlined the need for the CPUC to reassess its interpretation of the over-the-fence rules as presented in the Concept Paper. The Microgrid Resources Coalition and others called on the CPUC to communicate with the legislature that Section 218 represents a barrier to commercialization and to not restrict microgrid development further than permitted under the current law (Rule 18).<sup>16</sup> Sunrun argued that the CPUC has ample legal authority to exempt microgrids from public utility status through a "correct" interpretation of the public dedication doctrine.<sup>17</sup> Google provided a very thorough legal analysis, coming to the same conclusion and arguing that the CPUC errs in claiming that 218 requires the Commission to regulate every private enterprise which deviates from a narrow interpretation of what constitutes an electrical corporation. Google proposed that, unless a private company holds itself out as dedicating its facilities and services to the public, it should not be regulated as a public utility.<sup>18</sup> Google took a bold step further by sending its letter to the CPUC before the voting meeting, calling on the Commission to break down the traditional utility company monopoly over the distribution grid to allow for the commercialization of microgrids.<sup>19</sup>

As might have been expected, the usual suspects weighed in, opposing any changes to the over-the-fence rules. The same tired arguments that maintenance of safe, reliable electric service would be jeopardized were unregulated entities allowed to transmit power through the utilities' transmission and distribution grids without direct utility control. It was at this point that the Coalition of California Utility Employees (CUE), who had been conspicuously absent from the microgrid proceedings, weighed in. CUE disparaged both Sunrun and Google's comments, citing the tenets of utility regulation and stating that the over-the-fence rule "exists for good reason."<sup>20</sup> Their comments concluded by essentially daring Sunrun and Google to

make their case in Sacramento for relief from the over-the-fence rules and "convince the legislature to amend the Public Utilities Code.". This threat suggests that CUE might be prepared to destroy any proposal to change Section 218 that surfaces at the legislature in the future.

### CPUC Regulatory Capture

The Track 2 Proposed Decision is a gut-punch to the microgrid industry and the admonishments of these stakeholders are quite revealing. In its commentary in the Track 2 final decision, the CPUC ignores all the case studies of microgrids deployed across the state, citing the "need for caution" in deploying these "new technologies."<sup>21</sup> Instead, the CPUC directs third-party developers to contract with the utilities if they want to build microgrids that cross rights of way or serve multiple customers, thereby ceding control over microgrid development to the utilities.<sup>22</sup> The CPUC responses also suggest that stakeholders who were pushing to go further in microgrid commercialization were making unreasonable demands that would compromise safety, reliability, and fair costs of service. The CPUC goes to great lengths to further justify its decision for why it cannot and will not go further than absolutely necessary to commercialize microgrids. Despite multiple letters from Senator Stern and a letter signed by 16 legislators encouraging the CPUC to take bold action, only meager steps were taken by the CPUC to create a market for microgrids.<sup>23</sup> The Track 2 final decision was a great disappointment to nearly all non-utility stakeholders involved and interested in the proceeding.

The CPUC's commentary in the Track 2 decision suggests it does not trust the private sector (outside of the IOUs) or support the expansion of unregulated markets in electricity. The CPUC appears unlikely to enact meaningful or favorable regulatory changes to commercialize microgrids required for California to make swift progress on its decarbonization goals. Despite the calls of community-based organizations such as Reclaim Our Power and public commenters asking that the Track 2 decision be rejected in favor of changes that would allow meaningful community participation in the development process, the CPUC ignored them in adopting the decision. It seems that the CPUC prefers to keep itself relevant and to exercise control over the market by authorizing the devil it knows rather than the one it does not via incentive programs that deploy microgrids in a piecemeal fashion while continuing to enrich utility shareholders. The CPUC does not want communities to be able to build, own and control microgrids because that would eliminate its control over utility service.

In 2014, the CPUC's Electricity Policy & Planning Division conducted a microgrid assessment calling for bold action to transform the utility business model to a Distribution System Operator (DSO) model<sup>24</sup> and providing incredible analysis and identification of opportunities for microgrid market expansion in California. This assessment is not mentioned in the Staff Concept Paper. Why not? A likely reason is that it raises uncomfortable questions about the role utilities should and should not play in developing microgrids which, by extension, questions the role of CPUC governance over microgrids. Conversations with the Resiliency &

Microgrids team indicated that at least one staff member was familiar with 2014 the report, but the team noted that the Electricity Policy & Planning Division has since been disbanded, as if to suggest that made the assessment outdated and irrelevant. This begs the question as to why that Division, tasked with forward thinking and planning for a transitioning electric sector, was disbanded at such a pivotal moment, precisely during the rise of CCAs and increasing DER adoption by customers.

### Trials and Tribulations of CEC EPIC Grant Awardees

While the CPUC, IOUs, and stakeholders were battling it out in the regulatory arena, the California Energy Commission grant awardees were hard at work implementing EPIC-funded microgrid projects and running into predictable roadblocks from the utilities with little support from the CPUC.

Arguably, Berkeley was the first local government to experience the pain of understanding the full implications of the over-the-fence rules with its BEAT project, undertaken in partnership with the Center for Sustainable Energy.<sup>25</sup> The City wanted to connect several nonadjacent downtown municipal buildings outfitted with solar and storage and operated as a microgrid, but was stymied by cost and regulatory barriers. Eventually, Berkeley is pursuing individual solar and storage systems at critical facilities and foregoing the microgrid project. The Center for Sustainable Energy supported SB 1339 in 2018 and was an early voice calling for the creation of a robust microgrid tariff and changes in the cost-of-ownership fees levied on projects. CSE's Senior Policy Advisor and Berkeley Lecturer, Steve Weissman, submitted a briefing to the legislature in January 2020 requesting the over-the-fence issue be addressed and proposing approaches as to how this could be accomplished. It is unknown whether any feedback was provided to Weissman on the proposal.

Oakland's EcoBlock has faced similar challenges in attempting to implement a microgrid project as originally proposed.<sup>26</sup> The original project involved the development of a DC microgrid in a low-income residential Oakland neighborhood which would be owned by the block's homeowners' association and span multiple parcels on a cul-de-sac. PG&E has pushed instead, for an AC microgrid utilizing the utility's infrastructure under an agreement similar to that developed for the Redwood Coast Airport,<sup>27</sup> even though the use cases are not very similar. Moreover, the agreement proposed by PG&E would not allow EcoBlock to maintain ownership of the infrastructure.

In December 2019, EcoBlock's principals participated in the first workshop held by the CPUC's Resiliency & Microgrids team and clearly outlined the challenges to the completion of their DC-powered microgrid and allowing it to serve the entire block in Oakland. In September 2020, the City of Oakland sent a letter to the CPUC outlining its frustration with PG&E's blocking the project from going forward as planned and calling on the CPUC to provide clear guidance to the utilities to

allow EPIC projects to proceed, so as not to undercut the intent of the funding program.<sup>28</sup>

In 2016, the City of Lancaster was awarded a CEC grant for an Advanced Energy Community project to develop a residential microgrid. Lancaster has been frustrated by the lack of cooperation by Southern California Edison and its unwillingness to allow master metering so that the project can connect all the homes in the residential microgrid service area. Lancaster engaged a legal team to fight for its position, which appears to have significantly delayed the project. Lancaster stated in one of their Technical Advisory Committee meetings that it is interested in providing support and resources to changing the over-the-fence rules so the microgrids can be developed as originally planned, although the city does not feel that Lancaster should be "the tip of the spear" in an effort to change the law.<sup>29</sup>

After seeing the Track 2 Proposed Decision in December 2020, EcoBlock sent another letter to the CPUC, outlining significant concern with the direction it was taking and arguing that, if the decision were adopted as written, the project would face such great regulatory uncertainty that it would be in jeopardy of not moving forward. The EcoBlock team outlined a potential path forward with a white paper analyzing the Own Use exemption for the over-the-fence rule and how it could be interpreted to allow for projects like EcoBlock to build microgrids that may cross a public street.<sup>30</sup>

The CPUC is well aware of the issues with these ratepayer-funded projects, but its response has been lackluster at best. Multiple conference calls with Energy Division staff and grant awardees have been held. Letters to Commissioners have been sent. Lawyers have been involved. These projects went through a robust vetting process with the CEC. That makes it all the more frustrating that the CPUC has failed to provide commonsense support in the form of clear direction to the utilities to allow these communities to implement their showcase projects as the EPIC program intended. It also illustrates how regulatory capture has eclipsed the CPUC.

These EPIC-funded communities may have more luck in finding sympathetic ears at the legislature, but they will have to participate actively in advocating for any legislation that might come forward. That is difficult for local governments with constrained resources. Those cities are interested in building microgrids that serve their citizens and are keenly aware of the challenges that the over-the-fence rules represent to community energy resilience efforts. But it is increasingly clear that local governments and community groups will have to lead the way to get any meaningful reform of the public utilities code that will allow microgrids to serve multiple customers and cross streets.

#### **Political Outlook:**

With a broad coalition of local governments, community-based organizations, and the microgrid and

DER industry, it will be possible to change the Public Utilities Code to accommodate microgrids for community-driven resilience. A precedent already exists with cogeneration and distributed solar. When those technologies and solutions were introduced into the energy sector, the legislature was forced to reassess how technology was evolving and expanded access to the electric grid by changing the law. Amending the Public Utilities Code to exempt microgrids from the over-the-fence rule is neither radical nor unprecedented; indeed, it would be a completely natural progression and logical next step for the legislature to take, given the history and forward view of the energy sector in California.

It is unlikely, however, that the over-the-fence laws will be changed soon due to the political challenges of passing controversial legislation in California. While such change is not impossible, it would be met with strong opposition from many powerful forces in Sacramento, with the utility workers' labor union leading the charge.

A broad coalition of community organizations and local governments is needed to overcome this fierce opposition, and that will require a carefully coordinated effort among strong-willed advocates whose agendas are not always lined up.

Enacting change for microgrids at the agency level, while still difficult, might be the path of least resistance in the near-term. The concept of micro-utilities and electric cooperatives has piqued the interest of many parties. Future tracks of the proceeding will be spent exploring how regulations could be modified to enable microgrids to serve multiple customers without changing existing statutes. The CPUC will continue to be the main venue for microgrid policy development in 2021.

Looking ahead to 2022, it may be possible to mount a legislative campaign to change PU Code 218, however the opposition in Sacramento is not to be underestimated. Given the supermajority of Democratic legislators and the strength of unions in Sacramento, especially the building trades and utility workers, any legislative proposal brought forth by stakeholders will have great difficulty making it to the floor or will be so watered down as to be ineffective or will be twisted to benefit the utilities monopolistic control over the transmission and distribution system. California is a "pay to play" state and political donations buy votes. Labor unions can buy many votes and exercise heavy influence on state and local elections. Legislators are very cognizant of labor's power and influence and most will not want to risk their individual careers tackling an issue as complex as the over-the-fence rule.

*This policy paper was commissioned by the Sustainable Systems Research Foundation. The author, an expert on and active participant in California energy issues, prefers to remain anonymous for political reasons. This paper may be reproduced and redistributed, provided credit is given to SSRF*

## Endnotes

<sup>1</sup> Letting Solar Shine: An Argument to Temper the Over-the-Fence Rule, Tim Lindl, *Ecology Law Quarterly*, Vol. 36, No. 4 2009 <https://www.jstor.org/stable/24114954>

<sup>2</sup> CPUC Resiliency & Microgrids Track 2 Staff Concept Paper Historical Analysis, pg. 98 (of consolidated document), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M344/K03/8/344038386.PDF>

<sup>3</sup> Lindl, op cit.

<sup>4</sup> Justin Gerdes, "Lessons Learned from California's Pioneering Microgrid," *Greentech Media*, May 13, 2019 at: <https://www.greentechmedia.com/articles/read/lessons-learned-from-californias-pioneering-microgrids>

<sup>5</sup> Justin Gerdes, "Wanted in California: A Healthy Market for Microgrids," *Greentech Media*, October 10, 2017, at: <https://www.greentechmedia.com/articles/read/california-taking-steps-to-build-a-market-for-microgrids#gs.9olr85>

<sup>6</sup> California Energy Commission, Draft Roadmap for Commercializing Microgrids, September 2017 [http://docketpublic.energy.ca.gov/PublicDocuments/16-EPIC-01/TN221347\\_20170929T154043\\_Roadmap\\_for\\_Commercializing\\_Microgrids\\_in\\_California.pdf](http://docketpublic.energy.ca.gov/PublicDocuments/16-EPIC-01/TN221347_20170929T154043_Roadmap_for_Commercializing_Microgrids_in_California.pdf)

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<sup>8</sup> Andrew Baldonado, Southern California Edison, to Chair Ben Hueso, Senate Committee on Energy, Utilities & Communications, "Senate Bill 1215 (Stern) As Amended 5-12-20—OPPOSE," May 19, 2020.

<sup>9</sup> Valerie Turella Vlahos, Pacific Gas & Electric, to Chair Ben Hueso, Senate Committee on Energy, Utilities & Communications, "SB 1215 (Stern)-Oppose," May 20, 2020

<sup>10</sup> Israel Salas, San Diego Gas & Electric/Sempra Energy to Chair Ben Hueso, Senate Committee on Energy, Utilities & Communications, Senate Bill 1215 (Stern) as Amended May 12, 2020: Microgrids – OPPOSE," May 21, 2020

<sup>11</sup> SB 1215 Senate Energy Committee Bill Analysis, May 24, 2020 [http://leginfo.ca.gov/faces/billAnalysisClient.xhtml?bill\\_id=201920200SB1215#](http://leginfo.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201920200SB1215#)

<sup>12</sup> SB 1215 Senate Energy Committee Bill Analysis, op cit.

<sup>13</sup> CPUC Order Instituting Rulemaking Regarding Microgrids Pursuant to SB 1339, September 12, 2019 <http://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=314274617>

<sup>14</sup> R. 19-09-009 Track 1 Final Decision, June 11, 2020 <https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=340748922>

<sup>15</sup> R. 19-09-009 Track 2 Staff Proposal & Concept Paper, July 23, 2020 <https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=344038386>

<sup>16</sup> Microgrid Resources Coalition Comments on Track 2 Proposed Decision, 1/04/21, at: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M357/K99/7/357997201.PDF>

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<sup>22</sup> The much-vaunted Redwood Microgrid Project at the Arcata airport is an illustration of how this happens; see Redwood Coast Energy Authority, "Airport Solar Microgrid,"

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<sup>23</sup> Joint Letter from Legislators to Genevieve Shiroma, CPUC, from Members of the California Legislature Stern, Berman, Allen, Bonta, Becker, Burke, Cortese, Chiu, Eggman, Kalra, Skinner, Low, Wieckowski, Mullin, Wiener, Wood, Irwin, , "Regarding CPUC Proposed Decision under Rulemaking 19-09-009," December 18, 2020.

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<sup>28</sup> Libby Schaff, Mayor of Oakland, to Genevieve Shiroma, CPUC, "CPUC Microgrid Proceeding Docket No. R. 19-09-009," September 4, 2020

<sup>29</sup> Lancaster Advanced Energy Community Technical Advisory Committee Meeting, July 21, 2020.

<sup>30</sup> Von Meier & Daniel M. Kammen, UC Berkeley Oakland EcoBlock to Assigned Commissioner Genevieve Shiroma and Administrative Law Judge Rizzo, CPUC, "Proposed Decision Adopting Rates, Tariffs, and Rules Facilitating the Commercialization of Microgrids Pursuant to Senate Bill 1339 and Resiliency Strategies," December 24, 2020

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