



BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA

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

Rulemaking 19-09-009  
(Filed September 12, 2019)

**FILED**  
08/28/20  
02:49 PM

**REPLY COMMENTS OF THE  
CENTER FOR ENERGY EFFICIENCY AND RENEWABLE TECHNOLOGIES ON  
ADMINISTRATIVE LAW JUDGE'S RULING REQUESTING COMMENT ON THE  
TRACK 2 MICROGRID AND RESILIENCY STRATEGIES STAFF PROPOSAL**

August 28, 2020

**Carleigh Osen**  
**CEERT**  
1100 11<sup>th</sup> Street, Suite 311  
Sacramento, CA 95814  
Telephone: (916) 442-7785  
E-mail: [carleigh@ceert.org](mailto:carleigh@ceert.org)

**Megan M. Myers**  
**Attorney at Law**  
110 Oxford Street  
San Francisco, CA 94134  
Telephone: 415-994-1616  
Email: [meganmmyers@yahoo.com](mailto:meganmmyers@yahoo.com)

**FOR: Center for Energy Efficiency and  
Renewable Technologies**

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA

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

Rulemaking 19-09-009  
(Filed September 12, 2019)

**REPLY COMMENTS OF THE  
CENTER FOR ENERGY EFFICIENCY AND RENEWABLE TECHNOLOGIES ON  
ADMINISTRATIVE LAW JUDGE'S RULING REQUESTING COMMENT ON THE  
TRACK 2 MICROGRID AND RESILIENCY STRATEGIES STAFF PROPOSAL**

The Center for Energy Efficiency and Renewable Technologies (CEERT) respectfully submits these Reply Comments on the Administrative Law Judge's (ALJ's) Ruling Requesting Comment on the Track 2 Microgrid and Resiliency Strategies Staff Proposal, Facilitating the Commercialization of Microgrids Pursuant to Senate Bill (SB) 1339, mailed in this proceeding on July 23, 2020 (July 23 ALJ's Ruling). These Reply Comments are timely filed and served pursuant to the Commission's Rules of Practice and Procedure and the July 23 ALJ's Ruling.

**I.  
MULTIPLE PARTIES SHARE CEERT'S CONCERNS WITH THE  
NEED TO RECOGNIZE AND ADDRESS THE BARRIERS POSED FOR MICROGRIDS  
BY THE COMMISSION'S CURRENT RESOURCE ADEQUACY CONSTRUCT.**

Pursuant to the July 23 ALJ's Ruling, CEERT did organize and submit its Opening Comments on the Staff Proposals in the same order as the topics and questions listed in that Ruling.<sup>1</sup> However, CEERT believes that these Reply Comments should serve as a means to address key barriers to these proposals as a whole that cut across a limited topic area or question and that have been raised by multiple parties. To do otherwise, results in isolating those concerns without full consideration of their implications or consequences for adopting these proposals as a whole or individually.

In this regard, Senate Bill (SB) 1339 provides:

---

<sup>1</sup> July 23 ALJ's Ruling, at p. 2.

“[T]he Public Utilities Commission... must take action to help transition the microgrid from its current status as a promising emerging technology solution to a successful, cost effective, safe, and reliable commercial product that helps California meet its future energy goals and provides end-use electricity customers new ways to manage their individual energy needs.”<sup>2</sup>

While CEERT appreciates and recognizes the time, labor, and effort the Commission Staff put into these Track 2 Proposals, CEERT agrees with parties including, but not limited to, the Solar Energy Industries Association (SEIA), Sunrun, the California Energy Storage Alliance (CESA), and Tesla that the Staff Proposals fall short in thoroughly addressing critical barriers to microgrid commercialization.<sup>3</sup> SEIA accurately addresses this issue in its Opening Comments as follows:

“SB 1339 has a statutory deadline of December 1, 2020 for Commission action[s]... that ‘facilitate the commercialization of microgrids’...[The] Commission appears to be on the path of meeting the statutory deadline on its face, but [fails] to meet the statutory directive.”<sup>4</sup>

Clearly, consideration of the major regulatory barriers to meeting that directive is absent in the Staff’s analysis, especially the failure to consider the inability of microgrids to access the Resource Adequacy (RA) and California Independent System Operator (CAISO) market revenue streams, among other things. Such barriers must be addressed in depth or else the objectives of SB 1339 and Track 2 of this proceeding will not be met.

In its Opening Comments, the Local Government Sustainable Energy Coalition (LGSEC) correctly states that the current “grid model tends to disadvantage DER [distributed energy resource].”<sup>5</sup> The lack of accurate counting rules for DERs in the current RA paradigm embodying the various benefits these resources bring to the grid contributes to this disadvantage.

---

<sup>2</sup> SB 1339 (Stats. 2017-2018; ch. 566), Section 1(e).

<sup>3</sup> SEA Opening Comments, at p. 13; Sunrun Opening Comments, at p. 2; CESA Opening Comments, at p. 2; Tesla Opening Comments, at p. 2.

<sup>4</sup> SEIA Opening Comments, at p. 3

<sup>5</sup> LGSEC Opening Comments, at p. 4.

CEERT agrees with parties, including the Center for Sustainable Energy (CSE), CAISO, Enchanted Rock LLC (Enchanted Rock), and the Sierra Club, that consideration of microgrid commercialization in this proceeding should be coordinated with other proceedings affecting microgrid deployment, whether directly or indirectly, including R.19-11-009 (RA).<sup>6</sup> Alignment between proceedings will allow the Commission and stakeholders to fully address and hopefully mitigate how the RA structure in place today effectively disincentivizes the integration of distributed technologies, such as microgrids, into the resource portfolio.

The siloed nature of these proceedings is highly inefficient, and it is in the best interest of the Commission and the public to coordinate them to the greatest extent possible. As mentioned in its Opening Comments, CEERT is well aware that overhaul of the RA system is not going to happen before the December 1<sup>st</sup> statutory deadline of Track 2 of this proceeding.<sup>7</sup> However, the effectiveness of this proceeding in meeting its SB 1339 statutory obligations is contingent upon this coordination. In order for microgrids to be fully commercialized in a timely, cost-effective manner in line with California's climate and clean energy goals, distributed technologies must be able to count and receive compensation for the diverse benefits they bring to the grid.

In this regard, LGSEC correctly states that:

“[T]he 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 [transmission and distribution] system.”<sup>8</sup>

The prevention of parallel integration with the larger grid is a reflection of the lack of accurate valuing mechanisms, such as Net Qualifying Capacity rules, for microgrids and other

---

<sup>6</sup> CSE Opening Comments, at p. 4; CAISO Opening Comments, at p. 6; Enchanted Rock Opening Comments, at p. 6; Sierra Club Opening Comments, at p. 2.

<sup>7</sup> CEERT Opening Comments, at p. 3.

<sup>8</sup> LGSEC Opening Comments, at p. 6.

DERs. CEERT maintains that this is the single largest barrier to widespread microgrid deployment.

CEERT further agrees with Bloom Energy Corporation (Bloom Energy) and the Sierra Club that assigning value to microgrids that only reflects their ability to provide resiliency in outages does not capture either the various benefits of these technologies to the grid during normal operating conditions or the overall benefits to the customer.<sup>9</sup> Preventing parallel integration with the grid creates a huge financial barrier to incentivizing the widespread development of microgrids. The economics of developing these resources purely for back-up purposes are not favorable for investment. In this regard, the Applied Medical Resources Corporation (AMR) correctly states:

“Entities will only invest in microgrids when it makes financial sense to do so. Such entities must justify construction costs balanced against planned savings from their use. If a microgrid is restricted to operating only in certain emergency conditions, the owner cannot make financial plans regarding its use of the microgrid.”<sup>10</sup>

The prevention of full integration with the larger grid combined with the lack of accurate RA counting rules depreciates the value of microgrids tremendously, in turn, disincentivizing investment and hindering development of the technology. Unless DERs can reach the RA and CAISO energy and ancillary services markets, microgrid commercialization will not come to full fruition.

---

<sup>9</sup> Bloom Energy Opening Comments, at pp. 9-10; Sierra Club Opening Comments, at p. 6.

<sup>10</sup> AMR Opening Comments, at p. 7.

**II.**  
**MICROGRID RULES AND TARIFFS MUST BE DESIGNED HOLISTICALLY,  
WITH OTHER PARTIES IN MIND AND IN THE INTEREST OF  
CALIFORNIA’S BROADER CLEAN ENERGY AND CLIMATE MANDATES.**

CEERT agrees with Vote Solar and The Climate Center (Joint Parties) in that the:

“[I]nstallation of microgrid assets and control systems on customer premises should be a competitive activity in which third-party providers compete on a level playing field without having to contend with the anti-competitive advantage inherent in a regulated monopoly utility.”<sup>11</sup>

The Opening Comments of multiple other parties, including, but not limited to, 350 Bay Area, CESA, Schneider Electric (SE), Concentric Power Inc. (Concentric), and Bloom Energy, also highlight this point.<sup>12</sup> Encouraging competition and third-party involvement in microgrid development will encourage private investment and in turn, alleviate some of the financial risks from ratepayers, further incentivizing microgrid development and commercialization.

Additionally, any attempt to further the commercialization of microgrids must be executed to reflect the changing topography of the larger grid as it becomes more and more decentralized.

CEERT agrees with LGSEC, the Joint Parties, SEIA, Sunrun, the Joint CCAs, Concentric, and 350 Bay Area that participation from all components of the grid—including other load-serving entities (LSEs), such as community choice aggregators (CCAs); third-party developers; local governments; and the customer—is imperative to the success of these commercialization efforts.<sup>13</sup>

The importance of microgrid development beyond the utility-centric model also extends into the development of a tariff structure. Like CEERT, Sierra Club has also urged a more

---

<sup>11</sup> Joint Parties Opening Comments, at p. 8.

<sup>12</sup> 350 Bay Area Opening Comments, at p. 5; CESA Opening Comments, at pp. 3-4; SE Opening Comments, at p. 3; Concentric Opening Comments, at p. 3; Bloom Energy Opening Comments, at p. 3.

<sup>13</sup> LGSEC Opening Comments, at pp. 4-5; Joint Parties Opening Comments, at p. 3; SEIA Opening Comments, at p. 10; Sunrun Opening Comments, at p. 2; Joint CCAs Opening Comments, at p. 12; Concentric Opening Comments, at p. 7; 350 Bay Area Opening Comments, at p. 12.

holistic approach in “evaluating the net benefits, costs, and value of policies or programs related to microgrids...[relying] upon available tools and resources to fairly and fully account for costs and benefits, weighing the impact on statewide mandates and goals including those on disadvantaged communities, emissions, land use and other environmental factors, as well as the full effects on customers and ratepayers at large.”<sup>14</sup>

CEERT also agrees with numerous other parties, including the Joint Parties, Joint CCAs, LGSEC, Doosan Fuel Cell America, Inc. (Doosan), Tesla, CESA, The Utility Reform Network (TURN), and 350 Bay Area, that tariff development must be holistic, taking into account the variety of technologies and microgrid types, the impacts of these microgrids on communities and the environment, and the benefits that microgrids bring to the grid. Furthermore, it is essential that there is a fair and sufficient compensation mechanism in place for these services.<sup>15</sup>

However, like CEERT’s Opening Comments regarding the treatment of unbundled customers,<sup>16</sup> TURN is correct in that “it is not clear how a single rate schedule could be applied to a microgrid serving a diverse customer mix.”<sup>17</sup> CEERT encourages the Commission to allow more time, consideration, and feedback from stakeholders, especially other LSEs, before settling on a tariff mechanism or rate structure. Developing a tariff and rate structure in a way that promotes the broader goals of California, including the state’s clean energy goals, in an equitable and just manner is of massive importance to the success of microgrid commercialization. Therefore, CEERT supports CESA’s and the Joint Parties’ recommendation that the Commission

---

<sup>14</sup> Sierra Club Opening Comments, at pp. 2-3.

<sup>15</sup> Joint Parties Opening Comments, at p. 12; Joint CCAs Opening Comments, at p. 3; LGSEC Opening Comments, at p.12; Doosan Opening Comments, at p. 8; Tesla Opening Comments, at p. 10-12; CESA Opening Comments, at p. 13; TURN Opening Comments, at p. 3; 350 Bay Area Opening Comments, at pp. 4, 6.

<sup>16</sup> CEERT Opening Comments, at p. 3.

<sup>17</sup> TURN Opening Comments, at p. 5.

initiate a workshop process to review other stakeholders' proposals in addition to the Staff Proposals before establishing a microgrid rate structure and tariff.<sup>18</sup>

While the nuances of the rate and tariff structures should be transparently decided upon via workshop, CEERT agrees with parties including, but not limited to, Tesla, the Joint CCAs, Sunrun, and CESA, that the tariff must support and incentivize the deployment of microgrids that prioritize clean energy.<sup>19</sup> Clean energy and clear emission standards must be firm criteria in any tariff and rate structure. This not only meets the objectives of SB 1339, but will also help propel California further along in meeting its climate goals.

### **III. ANY MICROGRID PILOT PROGRAM MUST BE CAREFULLY DEVELOPED TO ENSURE THAT IT YIELDS ACTUAL BENEFITS.**

CEERT agrees with many parties, including Tesla, SEIA, Doosan, Enchanted Rock, SE, the National Fuel Cell Research Center (NFCRC), the Joint CCAs, Green Power Institute (GPI), and CESA, that a pilot program seems unnecessary at this time.<sup>20</sup> Grid Alternatives (GRID) and Fuel Cell Energy (FCE) point out that there have already been many successful demonstration projects funded through the California Energy Commission's (CEC's) Electric Program Investment Charge (EPIC) program.<sup>21</sup> Additional redundant pilot projects may hinder market development and slow commercialization. However, if the Commission wishes to develop a microgrid pilot program, the program must be carefully developed with specific criteria to ensure it yields useful research information and actually benefits vulnerable communities to the greatest extent.

---

<sup>18</sup> CESA Opening Comments, at p. 11-12; Joint Parties Opening Comments, at p. 12.

<sup>19</sup> Tesla Opening Comments, at p. 9; Joint CCAs Opening Comments, at p. 12; Sunrun Opening Comments, at p. 11; CESA Opening Comments, at p. 14.

<sup>20</sup> Tesla Opening Comments, pp. 1, 17; SEIA Opening Comments, at p. 11; Enchanted Rock Opening Comments, at p. 5; SE Opening Comments, at p. 9; NFCRC Opening Comments, at p. 10; Joint CCAs Opening Comments, at pp. 13-14; GPI Opening Comments, at p. 11; CESA Opening Comments, at p. 18.

<sup>21</sup> GRID Opening Comments, at p. 12; FCE Opening Comments, at p. 10.



CEERT also agrees with parties such as Tesla, Sierra Club, CESA, and TURN that the pilot program's greenhouse gas (GHG) emission criteria is too vague, lacking clear methodology for how emissions will be measured and therefore, necessitates further development.<sup>22</sup>

Developing stringent and restrictive criteria for project emissions is critical, especially given the disproportionately negative impacts that air pollution has on California's most vulnerable populations. A program created to benefit the State's most vulnerable citizens should not further perpetrate the inequities in air quality and climate change consequences felt by these populations.

Finally, CEERT agrees with parties such as the Joint Parties, SEIA, Doosan, GPI, and the California Solar & Storage Association (CALSSA) that expanding the use of microgrids to a community scale will help truly commercialize microgrids and that the Commission should work to facilitate the development of these types of microgrids.<sup>23</sup> CEERT agrees with the California Environmental Justice Alliance's (CEJA's) urging the Commission to "design this pilot program with eye towards the eventual construction of true community microgrids, serving multiple customers and community members in blue sky conditions..." As CEJA states: "While these types of community microgrids may be more complex than a single-customer critical facility microgrid, this pilot program is an ideal opportunity to pilot community microgrids, and the Commission should prioritize community microgrid pilot projects that have the potential to serve multiple customers."<sup>24</sup>

The Commission should, therefore, utilize this pilot program as a research and development opportunity. Thus, these projects should be zero-emission and help further the

---

<sup>22</sup> Tesla Opening Comments, at p. 19; Sierra Club Opening Comments, at p. 14; CESA Opening Comments, at p. 19; TURN Opening Comments, at p. 9.

<sup>23</sup> Joint Parties Opening Comments, at 5-6; SEIA Opening Comments, at p. 13; Doosan Opening Comments, at p. 6; GPI Opening Comments, at p. 2; CALSSA Opening Comments, at p. 13.

<sup>24</sup> CEJA Opening Comments, at p. 8.

development of lesser utilized but important microgrid arrangements, such as community microgrids.

**IV.  
POST-WORKSHOP PARTY COMMENTS ON THE STAFF  
CONCEPT PAPER SHOULD BE INCLUDED ON THE TRACK 2 RECORD.**

CEERT appreciates the immense amount of time, research, and resources that went into compiling the Staff Concept Paper. CALSSA correctly states that: “having a standard nomenclature and taxonomy for microgrids will be valuable in assisting the Commission and stakeholders to think more clearly about the regulatory issues that pertain to various microgrid configurations.”<sup>25</sup>

However, CEERT and other parties including the Joint Parties, SEIA, and CESA, disagree with Staff’s exclusion of stakeholder comments regarding the Concept Paper from the Track 2 record, especially considering the Staff Proposals are based primarily on the Staff Concept Paper.<sup>26</sup> Therefore, CEERT emphasizes the Joint Parties’ and CESA’s recommendations for the Commission to hold a workshop in the near future to allow parties and Staff to discuss the Concept Paper at length, with post-workshop comments submitted by parties to be included in the Track 2 record.<sup>27</sup>

**V.  
CONCLUSION**

CEERT again states its appreciation for this opportunity to comment and reply to comments of other parties on the Track 2 Staff Proposals. There is, however, no escaping the fact, as adduced by many parties, that the current RA structure is a major regulatory barrier to the success of this proceeding and any of the Track 2 proposals and, in turn, is a fact that the

---

<sup>25</sup> CALSSA Opening Comments, at p. 14.

<sup>26</sup> Joint Parties Opening Comments, at p. 2; SEIA Opening Comments, at pp. 4-5; CESA Opening Comments, at p. 3.

<sup>27</sup> Joint Parties Opening Comments, at p. 2; CESA Opening Comments, at p. 3.

Commission must recognize and account for in Track 2. Distributed resources must be valued accurately to incentivize their development to the greatest extent. Without access to the CAISO markets and RA revenue streams, microgrid commercialization is an impossible feat.

Respectfully submitted,

August 28, 2020

/s/ MEGAN M. MYERS

Megan M. Myers

Attorney for the

Center for Energy Efficiency and Renewable Technologies

Megan M. Myers

Attorney at Law

110 Oxford Street

San Francisco, CA 94134

Telephone: 415-994-1616

E-mail: [meganmmyers@yahoo.com](mailto:meganmmyers@yahoo.com)