BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Microgrids Pursuant to Senate Bill 1339.	Rulemaking 19-09-009 (Filed September 12, 2019)

REPLY COMMENTS OF THE CLEAN COALITION ON THE PRELIMINARY SCOPE OF RULEMAKING 19-09-009, ISSUED AT THE CALIFORNIA PUBLIC UTILITIES COMMISSION ON SEPTEMBER 12, 2019.

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I. INTRODUCTION

Pursuant to the Order Instituting Rulemaking ("OIR") Regarding Microgrids Pursuant to Senate Bill 1339, issued September 12, 2019, the Clean Coalition hereby submits reply comments on the opening comments submitted by thirty-six parties on the Microgrid OIR.

II. DESCRIPTION OF PARTY

The Clean Coalition is a nonprofit organization whose mission is to accelerate the transition to renewable energy and a modern grid through technical, policy, and project development expertise. The Clean Coalition drives policy innovation to remove barriers to procurement and interconnection of distributed energy resources ("DER") — such as local renewables, advanced inverters, demand response, and energy storage — and we establish market mechanisms that realize the full potential of integrating these solutions. The Clean Coalition also collaborates with utilities and municipalities to create near-term deployment opportunities that prove the technical and financial viability of local renewables and other DER.

III. COMMENTS

a. Community Microgrid approaches

There is no clear consensus in the opening comments about the type of microgrid this OIR will focus on. With that being said, the greatest areas of concern surrounded microgrids with multiple different resources, or customers, configurations, and points of interconnection. As the Clean Coalition remarked in its opening comments, these Community Microgrids, referred to in some comments as Multi-Use Microgrids[1] or Multiple-Customer Microgrids[2], are most relevant to the current and future demand in California. PSPS events have made the value of resilience an essential consideration in this proceeding, and areas that are transmission-vulnerable need a reliable solution to potential energy scarcity. Bloom Energy was apt to point out in their comments that Community Microgrids serve not only as a backup but also as "baseload power in communities with constrained transmission, including disadvantaged communities or rural locations."[3] Thus, the Clean Coalition agrees with the Solana Energy Alliance[4] that it is essential to consider avoided costs, including avoided transmission costs. As the Clean Coalition mentioned in its initial comments on the OIR, Transmission Access Charges (TAC) add 3 cents per kWh to the cost of clean local energy[5], and reforming the way TAC are assessed would save California billions of dollars and remove a market distortion that unfairly disadvantages clean local energy, making that energy more cost-effective. A Community Microgrid is financially feasible in part because it allows a community to produce more of its own energy, reducing the amount of energy needed from expensive long-distance transmission lines, thereby lowering costs while also lowering the risk of exposure of the transmission system causing a fire.

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[1] Green Power Institute Comments (Page 4)
http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M318/K667/318667933.PDF
[2] Pacific Gas and Electric Comments (Page 5)
http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M318/K943/318943436.PDF
[3] Bloom Energy Comments (Page 10)
http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M318/K666/318666312.PDF
[4] Solana Energy Alliance Comments
http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M318/K727/318727790.PDF
[5] Clean Coalition R19-09-009 Comments (Page 11)
http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M318/K905/318905255.PDF

Following this logic, the Clean Coalition agrees with Tesla's[6] assertion that microgrids for resilience should be considered comparable with more conventional sources of grid hardening. In a comparison of each hardening option, if a microgrid is the most cost-effective, especially considering long-term benefits and the value of resilience provided by the microgrid, it should be selected over another more expensive option, like undergrounding distribution lines. In PG&E's service territory it can cost around $3 million to underground on mile of distribution lines[7]. Currently PG&E is creating resilience zones and remote grids to harden the grid to protecting communities vulnerable to PSPS events; PG&E acknowledges that these resilience zones may be called "microgrids," but "should not be within the scope of this new implementation proceeding. " The Clean Coalition disagrees with this assertion, since a Community Microgrid includes the physical infrastructure and the DER resources, but also includes:

1. An appropriate method of allocating the cost, benefit, and revenues to support utility coordination of the DER and customer participation.
2. A means to determine where this is cost effective (both informing and reflecting #1).

PG&E's resilience zones are a great example of what a Community Microgrid could look like before a microgrid controller and rate structure were put in place.

The Clean Coalition also believes that a Community Microgrid also provides a community with multiple different sources of renewable energy, which is why we agree with the National Fuel Cell Research Center[8] that this proceeding should allow the interconnection of multiple resources at one site or microgrid. The most effective Community Microgrids consider present needs, but also leave an opportunity for expansion due to increased demand in the future.

b. Streamlined interconnection will reduce barriers related to the deployment of renewable resources.

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[6] Tesla Comments (Page 5)
http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M318/K666/318666315.PDF
[7]PG&E "Facts About Undergrounding Electric Lines" Web Page,
http://www.pgecurrents.com/2017/10/31/facts-about-undergrounding-electric-lines/
[8] National Fuel Research Center Comments (Page 6)
http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M318/K666/318666305.PDF

Enel X North America summarizes this point effectively, suggesting, "It is important that projects be evaluated and built with as limited delay as possible, so that these projects can begin to protect consumers and the grid as quickly as possible."[9] The Clean Coalition believes that Solana Energy Alliance[10] is correct in suggesting that the process of deploying microgrids should be even more expedited if the deployments are related to resilience. Community Microgrids are key to quickly deploying local resources for renewables-driven resilience but could easily be delayed with interconnection waiting periods that are months long.

c. Understanding the value of resilience is of central importance in this proceeding.

The Clean Coalition mentioned in its initial comments, as did the Microgrid Resources Coalition, Enel X North America, the California Clean DG Coalition, and the Coalition of California Utility Employees, that the proceeding should include a methodology to properly value and compensate resilience (the Clean Coalition suggested VOR123)[11]. The Redwood Coast Airport Microgrid Parties even suggested modifying the preliminary scoping memo to "more explicitly include consideration of microgrids as a resiliency solution,"[12] a step that the Clean Coalition supports. While the Clean Coalition's VOR123 framework values different tiered loads within a Community Microgrid, on the larger state grid, the Clean Coalition agrees with Form Energy that the first steps toward valuing resilience should include:[13]

1. "The widespread deployment of community microgrids in locations of highest need and value."
2. "Consider the value of grid resilience (or avoided grid outages)."
3. "Consider how utilities should reflect this value in their procurement decisions so they can maximize the overall efficiency of their investments and lower ratepayer costs."

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[9] Enel X North America Comments (Page 5)
http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M319/K001/319001093.PDF
[10] Solana Energy Alliance Comments (Page 3)
http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M318/K727/318727790.PDF
[11] VOR123 Section in the CC Comments (Page 9)
http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M318/K905/318905255.PDF
[12] Redwood Coast Airport Microgrid Parties Comments (Page 5)
http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M318/K666/318666306.PDF

d. Dispatchable Energy Capacity Services (DECS) answers questions about energy storage and resilience.

The Clean Coalition agrees with the Public Advocate's Office[14] that it is important to consider questions about requiring a minimum state of charge for batteries. For true resilience, a contract like DECS (which the Clean Coalition suggested in its opening comments), where the owner of a battery would be paid by the load-serving entity (LSE) in exchange for access to a guaranteed percentage of the energy storage capacity to be cycled daily.. This type of dispatchability adder would incentivize energy storage, providing resilience for the Community Microgrid, while offering a bankable revenue stream for energy storage owners.

e. Coordination with other proceedings

The Clean Coalition agrees with the Green Power Institute that this proceeding should coordinate with R.18-12-006, on Electric Vehicle Charging Infrastructure. Electric Vehicles are an important DR resources and should be considered for deployment along with Community Microgrids. The total number of EVs will continue to increase as California gets closer to de-carbonization and 100% renewable generation of energy.

This proceeding should also coordinate with 12-11-005, which covers all matters related to SGIP. The Clean Coalition supports the Microgrid Resources Coalition suggestion that SGIP should not be used to subsidize any type of GHG. The Coalition of Utility Employees[15] had an interesting idea about, "withholding 50% of SGIP funding until operators could show documented GHG reductions". The Clean Coalition believes that it would be valuable for ideas like this one and other alternatives to be considered as a part of this proceeding.

IV. CONCLUSION

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[14] Public Advocates Office (Page 9)
http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M318/K666/318666313.PDF

[15] Coalition of Utility Employees Comments (Page 3)
http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M318/K943/318943459.PDF

The Clean Coalition appreciates the opportunity to submit its comments and asks the Commission to consider these filings.

Respectfully submitted,

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Dated: November 4, 2019