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 GREEN HYDROGEN COALITION ON TRACK 2
MICROGRID AND RESILIENCY STRATEGIES STAFF PROPOSAL

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In accordance with Rules of Practice and Procedure of the California Public Utilities
Commission (“Commission”), the Green Hydrogen Coalition (“GHC”)\(^1\) hereby submits reply
comments on Staff Proposal for Facilitating the Commercialization of Microgrids Pursuant to
Senate Bill 1339 (“Staff Proposal”) submitted in Rulemaking 19-09-009. Pursuant to
Administrative Law Judge’s Ruling Requesting Comment on Track 2 Microgrid and Resiliency
Strategies Staff Proposal, Facilitating the Commercialization of Microgrids Pursuant to Senate
Bill 1339, issued by Administrative Law Judge Colin Rizzo on July 23, 2020, GHC timely files
these comments on August 28, 2020 in R. 19-09-009. GHC was granted party status in this
proceeding on August 18, 2020.

I. INTRODUCTION.

A. Overview of GHC

The GHC is a California educational non-profit organization. The GHC was formed in
2019 in recognition of the game-changing potential of green hydrogen to accelerate multi-sector
decarbonization and combat climate change. The GHC’s mission is to facilitate policies and
practices that advance green hydrogen production and use in all sectors of the economy where it

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\(^1\) [https://www.ghcoalition.org/](https://www.ghcoalition.org/)
will accelerate a carbon-free energy future. Our sponsors include both renewable electricity users and providers and those in the renewable natural gas space. GHC appreciates the opportunity to participate in this proceeding and contribute to the development of a market for microgrids and resiliency solutions.

II. COMMISSION GUIDANCE ON MICROGRID PILOT PROGRAMS SHOULD NOT PRECLUDE SOLUTIONS THAT USE GREEN HYDROGEN, AND INSTEAD SHOULD SEEK TO ACTIVELY PROMOTE THESE COMMERCIALY-AVAILABLE CLEAN SOLUTIONS.

A. Microgrid pilot program eligibility criteria resulting from Track 2 should include solutions that utilize green hydrogen

In opening comments, Pacific Gas and Electric (“PG&E”) recommended that exploration of project eligibility for Staff Proposal 4 (Direct Investor-Owned Utilities (“IOUs”) to Develop a Microgrid Pilot Program) be deferred until the Tier 3 advice letter process. While GHC did not support Proposal 4 in our opening comments, we believe that any such Commission guidance on microgrid pilot programs should incorporate certain critical elements. Whether Staff Proposal 4 is adopted – and whether project criteria is set in a Track 2 Decision or during the Tier 3 advice letter process – GHC strongly recommends that any such Commission guidance on microgrid pilot programs ensure both green hydrogen and clean fuel cell based backup power solutions be considered eligible technologies. We believe the criteria proposed by Staff provides a valuable starting point in allowing these clean green hydrogen-based solutions to participate in resulting

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2 Opening Comments of Pacific Gas and Electric Company (U 39 E) on Administrative Law Judge’s Ruling Requesting Comment on the Track 2 Microgrid and Resiliency Strategies Staff Proposal, Facilitating the Commercialization of Microgrids Pursuant to Senate Bill 1339 at 19.
microgrid pilot programs. If Proposal 4 moves forward, the Commission should ensure that any microgrid pilot program design developed via Track 2 Decision or Tier 3 advice letter process does not preclude green hydrogen use in fuel cell based backup solutions or as a drop-in fuel replacement in backup generators.

B. Microgrid pilot program eligibility criteria resulting from Track 2 should identify solutions that utilize green hydrogen, including fuel cells, as preferred resources

Today, most fuel cells in use in California run on natural gas, however, GHC believes there is an opportunity to promote deployment of commercially-available fuel cells that use green hydrogen in microgrid applications. Notably, as discussed in the August 25 CPUC Workshop on Diesel Alternatives, hydrogen fuel cell manufacturers could scale production of hydrogen fuel cells if provided ample certainty and lead time. However, these solutions have been under-deployed in microgrid applications in California. A focused effort to deploy fuel cell backup solutions in microgrid applications will fulfill the unique energy density needs required to support long-duration islanding (i.e., 96 hours). Additionally, deployment of fuel cell backup solutions as part of IOU programs will support IOU and Commission knowledge transfer, allowing stakeholders to gain increased familiarity and comfort with technical, operational, and economic considerations of new and existing fuel cell solutions. One mechanism for the Commission to promote use of green hydrogen and fuel cell-based backup solutions in microgrid applications is to identify these solutions and enabling technologies as preferred resources within the broader eligibility criteria that may be adopted. GHC therefore echoes Sierra Club’s recommendation to “require that the project use only preferred resources and/or storage.”

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3 Staff Proposal at 19.
5 Sierra Club Comments on the Staff Proposal at 14.
recommends this pathway, as it could maximize benefits by accelerating deployment of these commercially-available technologies to provide clean, long-duration backup power.

C. Commission and IOUs should focus on larger-scale demonstrations, rather than first-of-a-kind pilots, that aggregate demand to minimize ratepayer cost

GHC posits above that it is reasonable to actively promote the use of green hydrogen-based backup power solutions in IOU microgrid demonstration programs due to the commercial availability of the enabling technology and the high potential value to ratepayers of providing clean, long-duration backup power using a diverse set of fuels and technologies. The primary consideration for advancing green hydrogen production and use is the critical need to scale demand. Aggregating demand for green hydrogen across multiple sectors, for example through green hydrogen sites serving as a fueling depot for the transportation sector and above-ground hydrogen storage for use on-site in a microgrid setting, is the key to unlocking sufficiently-scaled clean microgrid solutions. This aggregated demand encourages critical investments needed to facilitate the movement (and storage) of green hydrogen molecules from source to end use. For this reason, GHC recommends the Commission ensure that any microgrid pilot programs take the form of large, commercial-scale demonstrations, which can have the ancillary benefit of promoting cost-effectiveness in the green hydrogen supply chain. The Commission and IOUs should focus on how to align procurement and operations among the various off-takers. This alignment is needed to realize that microgrids and resiliency strategies remain affordable and occur at a lower cost to ratepayers.
III. **GHC SUPPORTS THE JOINT COMMUNITY CHOICE AGGREGATORS (“CCAs”) RECOMMENDED PROCESS TO DEVELOP A GENERAL MICROGRID TARIFF.**

In opening comments, the Joint CCAs recommended the Commission remove barriers to microgrid commercialization by developing a general utility-sited microgrid tariff. Notably, the Joint CCAs offer a reasonable process by which such a tariff could be promptly developed. GHC strongly supports the Joint CCAs’ recommended process to establish a microgrid tariff. Furthermore, GHC believes that although not all parties may develop a proposed framework for a microgrids tariff, providing the opportunity for parties to do so is an incredibly important step in the development of a practical tariff and, in turn, the creation of a microgrid market in California. While we believe there is an urgent need to create a microgrids market, especially in light of recent blackouts and wildfires, GHC also acknowledges the Commission and Energy Division Staff are subject to considerable resource constraints at this time. As such, we are interested in discussing this recommendation further with staff to explore options to advance high-priority elements and critical path items needed to develop a functional microgrid tariff.

IV. **CONCLUSION.**

GHC appreciates the opportunity to submit these reply comments in response to the Track 2 Microgrid and Resiliency Strategies Staff Proposal. We look forward to further collaboration with the Commission and stakeholders on this initiative.

Respectfully submitted,

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6 *Opening Comments of the Joint Community Choice Aggregators on Track 2 Proposals* at 4.