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**SoCalGas Comments on the CEC Distributed Energy Resources
Commissioner Workshop**

Additional submitted attachment is included below.



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June 17, 2022

Vice Chair Siva Gunda
California Energy Commission
Docket Unit, MS-4
Docket No. 22-OII-01
1516 Ninth Street
Sacramento, CA 95814-5512

Subject: Comments on the CEC Lead Commissioner Workshop to Launch Distributed Energy Resources in California’s Energy Future Proceeding

Dear Vice Chair Gunda,

Southern California Gas Company (SoCalGas) appreciates the opportunity to provide comments on the June 1, 2022 California Energy Commission (CEC) Lead Commissioner Workshop to Launch Distributed Energy Resources (DERs) in California’s Energy Future Proceeding. DERs will be an integral part of a clean energy system to meet California’s carbon neutrality goals by 2045 while maintaining reliability, resilience, and benefiting communities of concern. SoCalGas has closely monitored DER development across the nation, along with rising interest in the State to implement such technologies to produce power onsite, manage energy bills, and implement resiliency or reliability strategies. SoCalGas agrees with the “Proposed Structure of the Proceeding” as it allows for flexibility to consider solutions that are not currently part of any existing state policy. Specifically, the four topic areas identified in the proposed structure will help identify and consider gaps of other DER policies, technologies, and programs. While SoCalGas agrees and supports cross participation between the CEC and the California Public Utilities Commission (CPUC) DER proceedings, understanding the gaps of existing DER proceedings at the CPUC and exploring alternatives within the CEC Proceeding will be imperative. More clearly, enhancing or only building upon existing policies will continue to eliminate DER technologies that can otherwise increase value to existing DER solutions. SoCalGas believes the right mix of DER technologies and fuel sources will enable electricity to be reliable, resilient, safe, and decarbonized.

To that end, our comments focus on the following topics: 1) Fuel cells present an optimal solution for achieving California’s air quality, public health, equity, climate, and energy goals, 2) A resiliency DER loading order in which lower emission, cleaner solutions are procured first is necessary to achieve the

State’s public health, air quality, and climate goals, and 3) A technology-neutral approach should be considered when developing DER recommendations.

1) Fuel cells present an optimal solution for achieving California’s air quality, public health, equity, climate, and energy goals

Providing resilient, decarbonized energy for all Californians should continue to be a critical aspect of California’s climate, energy, and clean air goals. The State has recognized the current planning shortfalls of electricity, which under one circumstance is as large as 1,700 MW for the summer of 2022.^{1, 2} There is concern that, due to supply chain issues and costs of transportation, this shortfall could be exacerbated over time. Consequently, the Governor’s May Revised Budget includes \$4.2 billion to procure and take out of the market 5,000 MW of electric generators for emergency purposes, as well as another \$950 million for clean backup generation projects and diesel and natural gas back up projects with emissions controls.³ This leads to the potential of further increasing adverse reliance on gasoline and diesel backup generation for electric reliability as expressed by the recent University of California, Irvine (UCI) presentation to the South Coast Air Quality Management District (AQMD) Governing Board.⁴ The UCI presentation illustrated the potential significant air quality degradation and increased public health costs in disadvantaged communities from residential, commercial, and industrial gasoline and diesel backup generation during Public Safety Power Shutoff (PSPS) events in the South Coast Air Basin.⁵ These impacts have also been top of mind for the Disadvantaged Communities Advisory Group (DACAG), the 11-member group that reviews CEC and California Public Utilities Commission (CPUC) policies.⁶ In 2021, the DACAG recommended reducing the use of diesel generators, improving communication about the scope and duration of PSPS events, and exploring ways the grid can remain energized through islanding in PSPS event communities with no wildfire risk.^{7, 8}

SoCalGas recognizes the need for clean energy adoption, especially in those communities that may be disproportionately impacted by climate change and air pollution. As noted during the CEC workshop by Holmes Hummel of Clean Energy Works and Josh Simmons of Prosper Sustainably, respectively, the issue of clean energy adoption is then compounded by the nuance that many of the customers may be hard to reach or have financing constraints that add additional barriers to clean energy adoption.⁹ Fuel cells can help foster a market for clean energy adoption among those that may have spatial or temporal barriers to

¹ See “Summer and Midterm Stack Analysis,” Neil Millar, CEC, May 20, 2022, available at: <https://efiling.energy.ca.gov/GetDocument.aspx?tn=243174&DocumentContentId=76875>.

² See reference for September peak conditions.

³ See “Governor’s May Revised Budget,” May 2022, available at: https://www.ebudget.ca.gov/2022-23/pdf/Revised/BudgetSummary/ClimateChange.pdf?utm_medium=email&utm_source=govdelivery.

⁴ See “Energy Future for South Coast Air Quality Management District” Jack Brouwer (University of California, Irvine), May 12, 2022, slide 42, available at: <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2022/spec-mtg--brd-retreat-agenda-may-2022.pdf?sfvrsn=24>.

⁵ *Ibid.*, slide 42.

⁶ See “Disadvantaged Communities Advisory Group”, CEC, available at <https://www.cpuc.ca.gov/dacag/>.

⁷ See “DACAG 2021 Annual Report,” CEC, p. 8, available at: <https://efiling.energy.ca.gov/GetDocument.aspx?tn=240542>.

⁸ See McNamara et al. (2022), “Seeking energy equity through energy storage”, *The Electricity Journal* 35 (2022), available at: <https://www.sciencedirect.com/science/article/pii/S1040619021001548#bib5>.

⁹ See “CEC Lead Commissioner Workshop to Launch Distributed Energy Resources in California’s Energy Future Proceeding,” CEC, June 1, 2022, available at: <https://www.energy.ca.gov/event/workshop/2022-06/session-2-lead-commissioner-workshop-launch-distributed-energy-resources>.

adopting other forms of clean energy, such as traditional solar photovoltaics that may require adequate roof space.¹⁰ These could be multi-unit dwellings or even high-rise office space. The adoption of fuel cell technologies and programs may help promote the state’s objectives of decarbonization, reliability, resilience, and energy justice.¹¹ The deployment of fuel cells, paired with energy storage and smart controllers, can create a microgrid configuration for homeowners and/or neighborhoods which allows them to disconnect from the electric grid and operate in “island mode” in the case of an outage. Another benefit that these same configurations can provide is reducing energy demand from the grid. Additionally, since fuel cells do not combust the feedstock when generating electricity, they produce negligible to zero associated air pollution emissions,¹² and when fueled with 100 percent renewable fuel, they can have negative greenhouse gas emission impacts.¹³ Moreover, with the proper financial support, fuel cells may provide low-income customers with an additional pathway to become part of the clean energy future.

Lastly, during a decarbonization stakeholder workshop, Los Angeles Department of Water (LADWP) and Power stated that it has researched how much additional geographic space it would need to build out the distribution substations for the levels of electrification LADWP is projecting, and it was orders of magnitudes greater than LADWP’s current substation footprint. Fuel cells located within the distributions system either at the substations or below then could potentially reduce that amount of infrastructure investments needed at the distribution level.

2) A resiliency DER loading order in which lower emission, cleaner solutions are procured first is necessary to achieve the State’s public health, air quality, and climate goals

SoCalGas recognizes the importance of keeping the lights on during periods when the bulk electric grid might be unavailable. Aligning the state’s long-term climate goals with available DER technologies based on emissions can help. SoCalGas respectfully suggests that the CEC consider implementing a resiliency loading order that prioritizes flexible, lower emission, and cleaner solutions before relying on diesel generation. As the CEC, CPUC, and CAISO develop perspectives on the DERs in California’s Energy Future OIIP, a resiliency resource loading order that would put diesel backup as a last resource should be a key consideration.

3) A technology-neutral approach should be considered when developing DER policy recommendations

SoCalGas believes that a diverse portfolio of DER technologies can best achieve many of California’s core objectives, including decarbonization, resiliency, reliability, innovation, community empowerment, and sustainability.¹⁴ However, it may be difficult to achieve these goals without the consideration of

¹⁰ See “Energy Policy,” Elsevier, available at: <https://www.elsevier.com/locate/enpol>.

¹¹ *Ibid.*, CEC DER Workshop, DER Workshop and Proceeding Overview presentation by CEC, slide 5.

¹² See “Catalog of Combined Heat & Power (CHP) Technologies, Section 6. Technology Characterization – Fuel Cells,” U.S. Environmental Protection Agency (EPA) CHP Partnership, March 2015, p. 6-1, 6-7, available at: https://www.epa.gov/sites/default/files/2015-07/documents/catalog_of_chp_technologies_section_6_technology_characterization_-_fuel_cells.pdf.

¹³ See “2016 - 2017 Self-Generation Incentive Program (SGIP) Overall Program Impact Evaluation,” CEC, section 6.3.1, p. 6-12 to 6-14 and December 7, 2018, available at: <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/self-generation-incentive-program>.

¹⁴ *Ibid.*, CEC DER Workshop, Policy Pathways for a High DER Future in California presentation by Microgrid Resources Coalition, slide 3.

flexible and dispatchable technologies such as fuel cells, linear generators, and other distributed generation technologies. As such, it is important to develop a framework that considers which resources can best fill the shortfalls of other DER technologies, while keeping in mind the relative emissions profiles of fuel sources needed to support DERs.

Programs that incentivize microgrids with diverse DER resources can play a role in providing decarbonization, resiliency, and greater grid reliability alike during the most needed times. For example, in response to Governor Newsom’s July 31, 2021 Proclamation of a State of Emergency, SoCalGas submitted a proposal in CPUC Rulemaking 19-09-099 recommending compensation to microgrid customers for responding to capacity shortfall events on “as needed basis.”^{15, 16} This type of program would have provided immediate incremental capacity benefits. SoCalGas supports technology-neutral policies that align with the State’s goals and recommends that it is in the public’s interest to focus on solutions that address the specific issues of a reliable, flexible, and decarbonized energy system. In crafting policies and incentives for DERs, the State should be mindful of the net benefits that DERs provide, and how those are realized for DER participants and nonparticipants. In particular, it is necessary to ensure that policy and incentive design do not inadvertently result in cost shifting to those who do not participate in DER projects.

Conclusion

SoCalGas commends the CEC for its forward-looking efforts to address topics related to DER implementation and looks forward to continued participation in the proceeding. With the proper programs and policies in place, fuel cell and linear generator deployment can help accelerate the transition to clean energy, and especially provide solutions for communities that may be disproportionately impacted by climate change. When considering resources dispatched in the electric system, SoCalGas supports a loading order that prioritizes cleaner and more resilient solutions. Lastly, it is imperative for the CEC to take a technology neutral approach to DER policies and programs to maximize the benefits that various DERs can provide. With the proper mix of DER deployment, California can achieve its core energy objectives. Thank you for your consideration of our comments.

Respectfully,

/s/ Kevin Barker

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¹⁵ Comments of Southern California Gas company on Potential Microgrid and Resiliency Solutions for Commission Reliability Action to address Governor Newsom’s July 30, 2021, Proclamation of a State of Emergency.

¹⁶ See “Comments filed by SoCalGas on 9/10/21,” CPUC, available at:
<https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=407794045>.