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# FuelCell Energy, Inc comments on Draft DSGS Guidelines

Additional submitted attachment is included below.



July 29, 2022

The Honorable Siva Gunda California Energy Commission 715 P Street Sacramento, CA 95814

Re: Draft Demand Side Grid Support Guidelines (22-RENEW-01)

Dear Commissioner Gunda and Commission Staff,

FuelCell Energy (FCE) appreciates the effort the California Energy Commission (Commission) is devoting to create innovative and flexible solutions to meet California's energy supply and grid reliability challenges in 2022 and in the coming years through the Demand Side Grid Support (DSGS) program.

For background, FCE manufactures fuel cells that provide clean and reliable energy to customers around the world. FCE's fuel cells produce power and can deliver solutions with additional features such as biogas clean-up; provide heat recovery for combined heat and power; and produce vehicle quality hydrogen for zero-emission vehicles or for other hydrogen end uses. FCE is also commercializing a solid oxide electrolyzer to be publicly available very soon. FCE is a global leader in the stationary fuel cell market, providing affordable and clean onsite energy to customers including wastewater treatment plants, hospitals, universities, industrial facilities, and serving utilities including at substations.

Recognizing that the draft guidelines published by Commission staff are intended to quickly provide a framework for the DSGS program for this year, FCE seeks to provide constructive feedback for the continued operation of the program into 2023 and beyond.

## **Guidelines for 2023**

As the Commission staff stated in the July 25, 2022 workshop, the current set of draft guidelines are intended to govern the operation of the DSGS program for the late summer in 2022. The Commission staff also explained that Phase 2 of the program would include taking lessons learned in 2022 and applying them to program revisions for 2023.

FCE urges the Commission to begin soliciting input for the 2023 guidelines as soon as possible so that formal guidelines can be adopted giving technology developers, like FCE, adequate time to prepare generation assets to potentially be contracted for and delivered by next summer, in advance of peak demand months in California. Should the Commission wait until next summer to revise and adopt the 2023 DSGS parameters, developers that require any lead-time will be disadvantaged. FCE is concerned that should that happen, the only technology able to respond quickly enough to provide on-call emergency generation capacity will be combustion diesel generators. FCE is optimistic that the Commission and Commission staff will recognize this danger and work to ensure this program is not inadvertently favoring diesel generation.

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## **Limitation of DSGS Providers**

The guidelines as proposed seem to interpret AB 205's authorization language in a way that limits engagement in the DSGS to demand response (DR) aggregators and POUs to the exclusion of entities like community choice aggregators (CCAs). By effectively limiting this program to DR aggregators and POUs, FCE fears that the overwhelming majority of generation capacity will be from diesel generation capacity that currently sits idle, but that could be incentivized to run under this program.

Parties at this week's workshop pointed out that AB 205 language can be read as including customers of investor owned utilities and CCAs. FCE would encourage a broad interpretation, consistent with statutory language.

### **Additional Eligibility Concerns**

FCE urges Commission staff to develop guidelines for interpreting and applying the statutory language that excludes "those that are eligible to participate in demand response or emergency load reduction programs offered by entities under the jurisdiction of the Public Utilities Commission." If the Commission's objective with the DSGS is to achieve incremental load reduction, the terms "eligible" and "demand response" will need further defining. FCE urges clarity in the definition of "demand response" given that this term could reasonably be interpreted to include time of use rates, thus rendering nearly all of California ineligible. Additionally, there are customers or resources that may be deemed technically "eligible" for CPUC jurisdictional DR programs or the Emergency Load Reduction Program (ELRP) that are in effect unable to participate for a variety of practical reasons. The Commission may wish to consider recognizing that some resources have not participated in DR or the ELRP because of insufficient economic incentive or because of other program conditions that effectively exclude them. By adopting eligibility requirements that allow applicants to demonstrate why they cannot participate in one or more DR program or ELRP, the DSGS program could enable these resources to become eligible participants in DSGS. This could bring additional, potentially non-diesel, resources to bear during emergency periods.

#### **Fuel Cells Provide Grid Benefits**

Fuel cell systems can be called on for emergency capacity services, whether installed behind-the-meter or in-front-of-the-meter. Fuel cells can peak shave, operate as firm baseload power in microgrids, and provide emergency capacity services to the grid. All fuel cell systems can be interconnected to the grid to provide backup power during grid outages and can be called on to put electricity back on to the grid during capacity shortfalls. FCE's fuel cells are non-combustion generation devices and already meet California's criteria pollutant and toxic air contaminant emissions standards, with no criteria air pollutants harmful to human health when operating using biogas or hydrogen. This is notable as firm power stationary fuel cell systems are today capable of running on biogas and hydrogen.

However, FCE is concerned that despite all of these demonstrated benefits, the DSGS guidelines do not signal that fuel cells will be a viable generation technology under this program, given low compensation rates, uncertain long-term program guidelines, and significant constraints on program participant eligibility.



## Diesel is not a Viable Solution to Meeting California's Resource Needs

FCE, like many stakeholders in California energy policy, recognize that diesel generation is far from an ideal solution to grid reliability and power supply shortfalls. The logic that has allowed the repeated and wide scale deployment of diesel generators consists of the argument that there is an acute and short-term need to provide power to the grid or key customers to prevent blackouts or the loss of power to critical infrastructure. The California Public Utilities Commission's recent grid reliability efforts are a prime and notorious example of this.

FCE is concerned that California is creating yet another program that will perpetuate the use of diesel as supplemental generation rather than investing in resources that provide durable long-term capacity, that are noncombustion, and that can be fuel flexible, helping advance the state's climate goals.

While recognizing the need to bring on incremental demand response and generation resources to meet demand during emergency net peak demand events, FCE fears that the DSGS program could functionally become another short-term diesel procurement effort unless care is taken to encourage participation by clean resources to the extent possible, consistent with a reasonable interpretation of the statutory authorization.

FCE appreciates the statutory instruction that the guidelines prioritize dispatch of DR and renewable and zero-emission resources before diesel generation, but questions if diesel generation is and will be a cost-effective technology for adding supplemental power to the grid. Aside from the significant social and environmental costs associate with thousands upon thousands of gallons of diesel being combusted into California's air, the cost per gallon of diesel has increased significantly as demand has increased and refining capacity in the United States has decreased. With diesel prices rising, and taking the cost of externalities into consideration, is this resource cost effective in the short-term or in the long-term?

## **Conclusion**

FCE appreciates the opportunity to offer input into the formation of the 2022 guidelines of the DSGS program. FCE looks forward to engaging with the Commission and Commission staff to ensure the success of the program in future years.

Sincerely,

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