DOCKETED	
Docket Number:	22-RENEW-01
Project Title:	Demand Side Grid Support Program
TN #:	244241
Document Title:	Bloom Energy Comments on DSGS Guidelines
Description:	N/A
Filer:	System
Organization:	Bloom Energy Corp./Brady Van Engelen
Submitter Role:	Public
Submission Date:	7/29/2022 10:50:44 AM
Docketed Date:	7/29/2022

Comment Received From: Brady Van Engelen
Submitted On: 7/29/2022
Docket Number: 22-RENEW-01

Bloom Energy Comments on DSGS Guidelines

Additional submitted attachment is included below.

Bloomenergy

July 26, 2022

California Energy Commission
Docket Unit, MS-4
Docket No. 22-RENEW-01
715 P Street

Re: Docket 22-RENEW-01. Bloom Energy Corporation Comments on June 25, 2022, Workshop on the Demand Side Grid Support Program.

Dear Chair Hochschild,

Bloom Energy (Bloom) appreciates the opportunity to comment on the Demand Side Grid Support Program guidelines as proposed on July 25, 2022. The July 25, 2022 workshop provided stakeholders with an opportunity to seek clarity on a component of AB 205 (Ting, Chapter 61, Statutes of 2022), which will incent customer load net reduction during extreme events. Bloom respectfully offers the following comments as a partner in delivering clean energy to support California's energy demands.

Bloom is a provider of solid oxide fuel cell technology that produces always-on, reliable, resilient, and cost-effective electricity both behind-the-meter and in-front-of-the-meter. We have deployed almost 300 MW of firm power to Californians to date.[1] We are proud to be a California company, with manufacturing facilities in the Bay Area, that is exporting leading-edge energy technology worldwide, including fuel cells and hydrogen electrolyzers.

Summary of Recommendations

Over the past decade, extreme weather events have become a more regular occurrence and a constant reminder of the devastating impacts of climate change. As the Energy Commission further develops guidelines that are intended to address these daunting challenges via the Demand Side Grid Support Program Bloom Energy respectfully submits the following proposals

1. Create the appropriate market signals for BTM generation that can permanently reduce load on the grid
2. Establish a fourth category specific to diesel generators to increase transparency and

[1] Our systems produce near zero criteria pollutants (NOx, SOx, and particulate matter) and far fewer carbon emissions than legacy technologies. When running on renewable fuels, electricity produced by Bloom Energy Servers can be RPS-eligible and SB 100 compliant.

Bloom Energy Corporation
4353 North First Street, San Jose, CA 95134
408 543 1500
www.bloomenergy.com

accounting of backup diesel generator usage

Incent for Permanent Load Reduction

Bloom Energy commends the Energy Commission for drafting guidelines to an innovative approach to addressing the anticipated electric system challenges. Supporting grid reliability during extreme events remains critical to advancing California's economy and ensuring continuity of operations of infrastructure that Californians depend on every day. However, Bloom Energy contends that a broader application of Behind the Meter (BTM) generation could further efforts in maintaining grid reliability during extreme events. Unlocking the full potential of BTM generation will require recognition of Distributed Energy Resource (DER) incentives for permanent load reduction.

BTM generation from a technology such as a Bloom fuel cell removes a significant portion of their load from the California electric grid, and thereby reducing the amount each utility needs to pay to produce energy. High capacity factor and a remarkably high availability when used a BTM generation asset, mean that the load served by a fuel cell is essentially removed from the grid. This means that the grid now supports less load, which in turn reduces transmission and generation capacity needs.

Rather than solely focusing on procuring assets that will be called upon in a very limited nature, the State should also consider reducing overall demand needs of the electric system. Strategically placed BTM DER's can offer permanent load reduction, thus reducing demand on the grid. Bloom Energy encourages the Energy Commission to consider incorporating incentives for permanent load reduction via BTM generation.

The focus on procuring resources that would support grid reliability during extreme events would create a long-term commitment of resources from the state budget; likely the General Fund. Unfortunately, it does not seem likely that the frequency of extreme weather related events that might cause grid strain is going to reduce in the near future. As noted in Governor Newsom's recent letter to Liane Randolph, Chair, California Air Resources Board (CARB), climate related events are now an 'everyday reality'.[2] This means that the State will be required to pay for resource availability via the Strategic Electric Reserve for the foreseeable future. This represents an ongoing funding commitment to support the Strategic Electric Reserve. Due to the volatile nature of the State's budget, it would be prudent to simultaneously incent BTM generation that can permanently reduce demand of the electric system. Particularly if done in a methodical fashion that targets areas where capacity constraints are already present. Otherwise, it is likely that the Strategic Electric Reserve will need to keep pace with

[2] *Letter dated July 22, 2022 from Governor Newsom to Liane Randolph, Chair, California Air Resources Board,* https://www.gov.ca.gov/wp-content/uploads/2022/07/07.22.2022-Governors-Letter-to-CARB.pdf?emrc=1054d6*)*

growing demand.

Create a Fourth Eligibility Category Specific to Backup Diesel Generators

The proposed guidelines do not appear to differentiate between technologies that rely on natural gas or diesel for backup generation. The Commission may wish to create a fourth eligibility category dedicated to backup diesel. Doing so would add a layer of transparency to overall backup diesel generator usage. Backup diesel generators are generally perceived as a least cost solution, meaning the capital required to obtain a backup diesel generator is typically less than other, cleaner technologies. Further, the Commission may wish to reduce the incentives available to backup diesel generation and simultaneously increase the value of incentives available to cleaner technologies that participate. Doing so would send the appropriate signal that this program was not intended to foster growth of backup diesel generation throughout the state.

Bloom appreciates the Energy Commission's rapid pace in developing guidelines for the Demand Side Grid Support Program. As a company that calls California home, Bloom is a committed partner that believes we can support the state in meeting our energy needs while not ceding ground on our climate and energy goals. We appreciate the opportunity to participate and to provide comment.

Best Regards,

Brady Van Engelen
Policy Manager, Bloom Energy

Bloom Energy Corporation
4353 North First Street, San Jose, CA 95134
408 543 1500
www.bloomenergy.com