



May 7, 2019  
GM 19-109

The Honorable Anthony Portantino  
Chair, Senate Appropriations Committee  
State Capitol, Room 2206  
Sacramento, CA 95814

**Re: SB 288 (Wiener) – OPPOSE Unless Amended, as amended May 1**

Dear Chairman Portantino:

While SMUD supports the installation of customer renewable and storage systems, we must continue to strongly oppose SB 288 unless amended. We appreciate the amendments taken in the Senate Energy Committee to remove the Energy Commission (CEC) oversight of the publicly-owned utility (POU) interconnection process. While an attempt was made to address our concerns, the amended language does not adequately address the cost shift issue, and in fact, may exacerbate it. Passage of this bill would, arguably, limit the options available to our Board to address the existing solar subsidy in the manner that protects low income and other non-solar customers from subsidizing solar customers. In particular, by specifying that utilities may address the cost shift by altering the valuation of energy exported to the grid (e.g. Net Energy Metering price) (an option currently available to utilities), the legislation implies that any other methodology for addressing the cost shift is not allowed (e.g. a flat grid charge, a demand charge, etc.). SMUD is currently engaging stakeholders and customers in a public process to determine how best to address the cost shift issue at the local level. SMUD's concerns with the bill are outlined below and in the attached amendments.

**Section (4)(c): Considering storage-only tariff is not ripe**

While we appreciate that the creation of a storage-only tariff is no longer required, our Board will still be required to undergo a process to “assess” and “consider” a storage-only tariff. The time is not ripe to consider such a tariff – we must first develop our distributed energy resource management system (DERMS) that can provide behind the meter technology dispatch signals to feed energy back to the grid at the times, and in the key locations, that would benefit the grid and our customers as a whole. Electrical grid needs change from day to day and the utility may need energy during peak, or during the evening when electric transportation is charging. Without this expensive technological advancement, considering a new storage-only tariff is futile. Without DERMS, we cannot be certain that any *grid* benefit exists – that exporting energy from a storage-only system will shift solar to peak demand at the right time and in the right locations to help the grid. DERMS, which will help ensure storage-only systems benefit the grid, is a \$23 million investment that will take years to complete. Without this technology, it is unclear how SMUD, or any utility, would be able to consider a tariff for storage in a manner that reduces overall costs to ratepayers.

We estimate the cost to assess items 1,2 & 3 in Section 4 would be \$210k, increasing to \$450k should our Board decide to implement a new rate action.

Arlen Orchard, Chief Executive Officer & General Manager

**Section (4)(d) (1) & (3): Discriminatory fees language exacerbates cost shifting**

This bill prohibits utilities from adopting any rate design that charges solar customers for energy “consumed on-site or stored and consumed at a later date”, effectively tying the hands of POUs who are trying to ensure all customers are treated fairly. The bill also assumes that every fee or charge “levied as a result of installing and using customer-sited renewable energy or energy storage systems” is automatically discriminatory, or inequitable. However, the use of a fee on customer-generators is intended to *provide equity* by addressing the staggering cost shift. A portion of a utility’s fixed charges (e.g., wildfire mitigation and insurance, cybersecurity, reliability, low-income programs, etc.) are only being recovered by non-solar and non-storage customers. We believe all utility customers should shoulder these costs, not just those customers that cannot afford to install a solar or storage system, as solar and storage customers still use the grid, sometimes more due to frequent exporting. We estimate that \$30 million in costs will be shifted from SMUD’s solar customers to non-solar customers in 2019 alone and this subsidy will increase to \$80 million annually in the late 2020s. To provide context, the 2019 subsidy for our 75,000 low income customers is \$30 million – the same amount of money that subsidizes our 25,000 solar customers. We find this solar cost shift unfair and unsustainable.

**Section (4)(e): Undermines publicly-elected board’s rating making authority**

While we believe this section is well-intended to address the cost shift issue, this section arguably restricts how POUs address cost shifting because it implies that the only fixed cost recovery mechanism is through “exports” or one-time interconnection fees. The ability to set a purchase price for excess energy sold to the grid already exists, as does the one-time interconnection fee; however, this does not collect the full fixed costs to serve the customer. Since SMUD must size infrastructure to meet customer peak load when their generating system is not operating (e.g., on a cloudy day, at night), SMUD should be afforded the ability to recover the fixed costs that are avoided by customer generation. This can be done with a flat grid charge or a demand charge, among other options. Regardless of exporting or self-consumption, if a customer is connected to the grid, they must pay their fair share to maintain the grid and the costs described above. In order to protect non-solar and low-income ratepayers, utilities should have flexibility in determining the best way to avoid cost shifts from solar customers onto their neighbors.

**Unnecessary Reporting to the CEC**

Section 2 of the bill requires the CEC to collect a significant amount of data and coordination. This section is particularly unnecessary for SMUD’s interconnection process that is lauded by many in the solar and storage industry as being efficient and transparent.

For these reasons, SMUD will continue to strongly oppose SB 288 unless amended to address the issues referenced above.

Sincerely,



Arlen Orchard  
Chief Executive Officer & General Manager

cc: The Honorable Scott Wiener  
Senate Appropriations Committee, and Members

## **SB 288 - (A) Amends the Law**

### **SECTION 1.**

*The Legislature finds and declares all of the following:*

- (a) All California residents, businesses, nonprofits, and government entities have the ability to generate and store renewable energy and to reduce and shape their use of electricity obtained from the electrical grid, whether their facilities are off-grid or interconnected to the grid.*
- (b) The ability to use self-generation and storage resources extends to all Californians, inclusive of all income levels, geographies, and property types.*
- (c) Residential customers have a right to consumer protections that ensure adequate transparency in sales and contracts for renewable energy and storage installations and services.*
- (d) Customer-sited renewable energy and energy storage systems can play a role in helping the state to meet its targets for reducing emissions of greenhouse gases and other environmental goals, promoting equitable participation in the energy, health, safety, career, and financial benefits of the clean energy economy.*
- (e) Customer-sited renewable energy and energy storage systems can be valuable assets for managing the electrical grid efficiently and improving the reliability and resiliency of the grid.*
- (f) Removing barriers to the installation of customer-sited renewable energy and energy storage systems will help reduce costs and facilitate the deployment of these resources.*
- (g) The time required for utility review and approval of interconnection applications and the lack of transparency in interconnection costs have, in some cases, impeded customer adoption of renewable energy and energy storage systems.*
- (h) Developing mechanisms for energy and other services supplied by customer-sited energy resources can facilitate the adoption and deployment of renewable energy and energy storage systems that have the potential to provide greater local reliability and resiliency benefits to individuals and communities throughout the year, including during emergency conditions.*
- (i) Customer-sited solar and energy storage systems can assist customers in mitigating and adapting to some of the negative impacts of climate change, including wildfires. Low-income and disadvantaged communities are likely to bear the greatest burdens of climate change, and stand to benefit significantly from solar and energy storage solutions.*

### **SEC. 2.**

*Section 913.14 is added to the Public Utilities Code, to read:*

#### **913.14.**

*\_(a) (1) On or before June 1, 2020, and on or before June 1 of each year thereafter, the commission shall submit an annual report evaluating electrical corporations' performance of interconnection review to the Legislature containing data of electrical corporations, compiled by year of initial interconnection request and segregated by market segment, including low-income customers and customers located in low-income and disadvantaged communities, and technology type, for customer-sited electrical resources, including energy storage systems proposed for interconnection with the electrical grid, and containing other information that the commission may require.*

~~(2) On or before June 1, 2020, and on or before June 1 of each year thereafter, the Energy Commission shall submit a report on local publicly-owned electric utilities' performance of interconnection review to the Legislature containing data of local publicly-owned electric utilities, compiled by year of initial interconnection request and segregated by market segment, including low-income customers and customers located in low-income and disadvantaged communities, and technology type, for customer-sited electrical resources, including energy storage systems proposed for interconnection with the electrical grid, and containing other information that the Energy Commission may require.~~

~~(b) The reports required pursuant to this section shall include all of the following information:~~

~~(1) The amount of time that the electrical corporations or local publicly-owned electric utilities have taken to complete each step in the review of interconnection requests.~~

~~(2) The number of interconnection requests initially received and the number of interconnection requests deemed complete.~~

~~(3) The amount of fees charged for processing the interconnection requests and the basis for those fees.~~

~~(4) A summary of challenges in reducing the amount of time for interconnection review and improvements to the interconnection review process that occurred in the previous year.~~

Commented [DR1]: Significant coordination and data collection

### SEC. 3.

Section 2817 is added to the Public Utilities Code, to read:

2817.

(a) For purposes of this section, the following terms have the following meanings:

(1) "Customer-sited renewable energy and energy storage systems" means renewable energy systems and energy storage systems located on a customer's owned, leased, or rented premises, interconnected and operating in parallel with the electrical grid.

(2) "Energy storage system" means commercially available technology that is capable of absorbing energy, storing it for a period of time, and thereafter dispatching the energy.

(3) "Local publicly owned electric utility" means a local publicly owned electric utility, as defined in Section 224.3, with an annual electrical demand exceeding 700 gigawatthours, as determined on a three-year average commencing January 1, 2016.

(4) "Renewable energy system" means a renewable electrical generation facility as defined in Section 25741 of the Public Resources Code.

(b) (1) The commission shall establish a streamlined and standardized process for electrical corporations' review of interconnection requests for customers seeking to install renewable energy and energy storage systems on the customer side of the point of interconnection to minimize uncertainty and the amount of time and cost of the review while maintaining electric system safety and reliability.

(2) The governing board of each local publicly owned electric utility shall establish a streamlined and standardized process for local publicly owned electric utilities' review of interconnection requests for customers seeking to install renewable energy and energy storage systems on the customer side of the point of interconnection to minimize uncertainty and the amount of time and cost of the review while maintaining electric system safety and reliability.

*(c) In establishing the streamlined and standardized interconnection review processes pursuant to subdivision (b), the commission and the governing boards of local publicly owned electric utilities shall ensure that those processes reflect, at a minimum, all of the following principles:*

- (1) Minimization of the interconnection fees and timelines for processing and reviewing interconnection applications.*
- (2) Provision of certainty and transparency in interconnection review timelines, fees, distribution upgrade costs, project status, engineering analysis, and billing.*
- (3) Maintenance of a clear, efficient, and accessible process for resolving disputes.*
- (4) Recognition that equipment or systems certified to national standards will perform as certified when installed to applicable codes.*
- (5) Keeping interconnection rules updated to adapt to changing circumstances and technological advances.*
- (6) Recognition that a prioritization mechanism may be instituted for responding to interconnection requests that require additional engineering or circuit upgrades, or both types of upgrades, to the grid to enable the interconnection.*

#### **SEC. 4.**

Section 2829.5 is added to the Public Utilities Code, to read:

**2829.5.**

*(a) For purposes of this section, the following terms have the following meanings:*

- (1) "Customer-sited renewable energy and energy storage systems" means renewable energy systems and energy storage systems located on a customer's owned, leased, or rented premises, interconnected and operating in parallel with the electrical grid.*
- (2) "Energy storage system" means commercially available technology that is capable of absorbing energy, storing it for a period of time, and thereafter dispatching the energy.*
- (3) "Local publicly owned electric utility" means a local publicly owned electric utility, as defined in Section 224.3, with an annual electrical demand exceeding 700 gigawatthours, as determined on a three-year average commencing January 1, 2016.*
- (4) "Renewable energy system" means a renewable electrical generation facility as defined in Section 25741 of the Public Resources Code.*

*(b) By January 1, 2021, the commission shall do all of the following:*

- (1) Consider whether to create one or more tariffs for customer-sited energy storage systems that export electricity to the electrical grid in a manner that ensures a reduction in emissions of greenhouse gases and reduces overall costs to ratepayers served by the electrical utility.*
- (2) Consider one or more tariffs for customer-sited renewable energy and energy storage systems to support grid reliability and community resiliency in the event of emergencies or grid outages that ensure there are not cost shifts to nonparticipating customers.*
- (3) Assess whether to modify existing tariffs, interconnection rules, and programs to remove barriers to the participation of customer-sited renewable energy and energy storage systems intended to provide*

energy, capacity, and ancillary services in a manner that ensures a reduction in overall costs to ratepayers served by the electrical utility. These barriers include, but are not limited to, prohibitions on exports from energy storage systems in commission interconnection rules and the lack of clear and consistent guidelines on quantifying the incremental capacity of customer-sited energy resources.

~~(c) By January 1, 2021, the governing board of each local publicly owned electric utility shall perform those actions specified in subdivision (b).~~

(d) The commission and the governing board of each local publicly owned electric utility shall ensure all of the following:

(1) Customers with customer-sited renewable energy or energy storage systems are not prohibited by the utility from generating and storing electricity from the renewable energy system for onsite consumption ~~and are not charged for electricity from the renewable energy system that is consumed onsite, whether it is used simultaneously with its generation or stored and consumed at a later time.~~

(2) Customers with customer-sited renewable energy or energy storage systems can interconnect to the electric grid in a timely and cost-effective manner if the system is in accordance with requirements established by the commission or the local publicly owned electric utility, as applicable, to ensure reliable grid operation and the safety of utility workers, and if the systems meet all applicable state and local safety and electrical code requirements.

~~(3) Customers with customer-sited renewable energy or energy storage systems are not subject to discriminatory fees or charges levied as a result of installing and using customer-sited renewable energy or energy storage systems.~~

~~(e) This section and Section 2817 do not limit the ability of the commission or the governing boards of local publicly owned electric utilities to alter the valuation of energy exported to the distribution grid from customer-sited renewable energy systems or to assign one-time fees based on the costs of connecting renewable energy or energy storage systems to the distribution grid.~~

#### SEC. 5.

No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because a local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act or because costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.