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**SENATE COMMITTEE ON ENERGY, UTILITIES AND  
COMMUNICATIONS**

**Senator Ben Hueso, Chair**

**2021 - 2022 Regular**

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<b>Bill No:</b>	AB 2316	<b>Hearing Date:</b>	6/27/2022
<b>Author:</b>	Ward		
<b>Version:</b>	6/13/2022 Amended		
<b>Urgency:</b>	No	<b>Fiscal:</b>	Yes
<b>Consultant:</b>	Nidia Bautista		

**SUBJECT:** Public Utilities Commission: community renewable energy program

**DIGEST:** This bill requires the California Public Utilities Commission (CPUC) to open a proceeding by March 31, 2023, to establish a community renewable energy program that meets specified criteria. This bill also requires the CPUC, as part of the proceeding, to evaluate customer renewable energy subscription programs and to report the findings from the evaluation to the Legislature by December 31, 2023. Upon evaluation, authorizes the CPUC to terminate or modify programs that fail to meet certain requirements, as specified.

**ANALYSIS:**

Existing law:

- 1) Establishes and vest the CPUC with regulatory authority over public utilities, including electrical corporations. (Article XII of the California Constitution)
- 2) Requires every electric utility, defined to include electrical corporations (IOUs), local publicly owned electric utilities (POUs), and electrical cooperatives, to develop a standard contract or tariff for net energy metering (NEM), for generation by a renewable electrical generation facility, and to make this contract or tariff available to eligible customer-generators, upon request on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer generators exceeds five percent of the electric utility's aggregate customer peak demand. (Public Utilities Code §2827)
- 3) Requires the CPUC, for a large IOUs, as defined, to have developed a second standard contract or tariff to provide NEM to additional eligible customer-generators in the IOU's service territory and imposes no limitation on the number of new eligible customer-generators entitled to receive service pursuant to this second standard contract or tariff. (Public Utilities Code §2827.1)

- 4) Requires the CPUC to ensure that the second standard contract or tariff made available to eligible customer-generators by large IOUs ensures that customer-sited renewable distributed generation continues to grow sustainably. Requires the CPUC, in developing this standard contract or tariff, to include specific alternatives designed for growth among residential customers in disadvantaged communities. (Public Utilities Code §2827.1(b)(1))
- 5) Establishes the Green Tariff Shared Renewables Program (GTSR) with 600 megawatts (MW) of renewable resources available to customers of the IOUs on a proportional basis to which a participating customer can subscribe. Prohibits the shifting of costs for the GTSR program to nonparticipating customers. Requires the CPUC to ensure that charges and credits for the GTSR are set in a manner that ensures nonparticipant ratepayer indifference for the remaining bundled service, direct access, and community choice aggregation (CCAs) customers, and ensures that no costs are shifted from participating customers to nonparticipating ratepayers. (Public Utilities Code §2831, et seq.)
- 6) Imposes various requirements on public works projects, as defined, including a requirement that, at minimum, all workers employed on a public works project be paid the general prevailing rate of per diem wages for work of a similar character in the locality in which a public work is performed, as specified. (Labor Code §1720)
- 7) Requires that all low-rise residential subdivisions of ten or more units include solar in new construction starting in 2020. (California Code Regulations Title 24, Part 6 §150.1)
- 8) Allows participation in a community shared solar or battery storage system, approved by the California Energy Commission (CEC), as a compliance option to partially or totally meet the onsite solar electric generation system and/or battery storage system that is otherwise required by Title 24. (California Code Regulations. Title 24, Part 6 §10-115)

This bill:

- 1) Requires the CPUC, on or before March 31, 2023, to establish a community renewable energy program, and requires that the program:
  - a) Comply with the solar requirements in the building standards.
  - b) Ensure at least 51 percent of its subscribers are low-income customers or low-income service organizations.
  - c) Minimize impacts to nonsubscriber ratepayers.

- d) Provide bill credits to subscribers.
- 2) Requires the CPUC to evaluate customer renewable energy subscription programs to determine if those programs meet those criteria, efficiently serve distinct customer groups, minimize duplicative offerings, and promote robust participation by low-income customers, and to authorize the termination or modification of those programs that are duplicative or do not meet those criteria. Requires the CPUC, on or before December 31, 2023, to report to the Legislature the results of its evaluation and its justification for terminating, modifying, or retaining those programs.
- 3) Subjects the construction of community renewable energy facilities pursuant to the program to prevailing wage requirements.
- 4) Requires the CPUC, within 24 months of adopting a decision implementing the program, and annually thereafter for four years, to report to the Legislature on the facilities deployed, and customers subscribed, pursuant to the program, including an analysis of low-income customer participation.

## Background

*What is Community Solar?* The U.S. Department of Energy defines community solar as any solar project or purchasing program, within a geographic area, in which the benefits of a solar project flow to multiple customers such as includes from various customer classes: residential, commercial, etc. Community solar can be designed in several ways, but the ultimate goal is to provide residents more options to participate in solar projects. In most cases, customers are benefitting from energy generated by solar panels at an off-site array; however, there are also on-site multifamily community solar options where occupants of apartment and condominium buildings each benefit from the energy produced from the rooftop solar project. Additionally, who pays to plan, construct, and operate the solar project varies across the different community solar models—such as when a utility may own or operate a project that is open to voluntary ratepayer participation, or when customers themselves may collectively sign a contract with a third-party developer and be treated as departing load from their utility.

Community solar customers typically receive a bill credit for electricity generated by their share of the community solar system—similar to someone who has rooftop panels installed on their home and receives the NEM tariff. However, the value of that customer bill credit can also vary widely between community solar programs, with some more generous than others. Community solar can be a great option for people who do not own their homes, have financial constraints, or have insufficient

roof conditions such as shading, roof size, or other factors and who desire to participate in a solar project.

*Existing Community Solar Programs.* There are four main community solar programs currently in place for eligible customers of California's large electric IOUs:

- Disadvantaged Communities-Green Tariff (DAC-GT) program;
- Community Solar Green Tariff (CSGT) program; and
- GTSR program, which is comprised of two subprograms:
  - the Green Tariff (GT) option.
  - the Enhanced Community Renewables (ECR) option.

AB 327 (Perea, Chapter 611, Statutes of 2013) directed the CPUC to develop specific alternatives designed to increase adoption of renewable generation in disadvantaged communities. In 2018, the CPUC created several programs (Decision 18-06-027) aimed at increasing access to solar energy for residents of disadvantaged communities (DAC) located in one of the three large electric IOU distribution service territories. These include:

- DAC-GT program:
  - Renewable facility is a utility-scale, utility-procured project.
  - Open to residential customers in disadvantaged communities.
  - Customers receive a 20 percent bill discount.
  - According to the CPUC, as of the end of 2021, DAC-GT had 20,721 residential customers enrolled across five load-serving entities (electric IOUs and CCAs) Interim RPS capacity may be used until new projects come online; currently, 80 MW serve such a role.
- DAC-CSGT program:
  - Renewable facility is a local solar project.
  - Open to residential customers in disadvantaged communities.
  - Communities work with a local non-profit or government sponsor to organize community interest and present siting locations to their electric IOU or CCA.
  - Project sizes are capped at four MW.
  - Projects must be built within five miles of where customers reside.
  - Customers receive a 20 percent bill discount.
  - The CSGT program does not yet have any customers enrolled, because newly procured projects must be built to begin enrollment

(cannot use RPS projects as stop-gap). According to the CPUC, the first CSGT customers will likely be enrolled later this year.

In order to offset the high costs of these projects, electric IOU greenhouse gas (GHG) auction proceeds and public purpose funds from non-participating ratepayers are utilized.

Prior to the establishment of the DAC programs, SB 43 (Wolk, Chapter 413, Statutes of 2013) directed the CPUC to establish the GTSR program. GTSR has the overall objective of expanding customer access to renewable energy and to build up to 600 MW in additional renewable facilities. GTSR includes both a GT option and an ECR option. Pursuant to statute, the costs of GTSR may not be borne by nonparticipants. The two GTSR programs are similar in structure to the two DAC community solar programs mentioned previously.

- GT program:
  - Renewable facility is utility-scale and utility procured.
  - Open to all customers of states' three largest IOUs.
  - Customer pays the difference between their current charge for generation on their IOU bill and the cost of procuring either 50 or 100 percent renewables.
  - As of September 2019, 153 MW of new renewable capacity had been built.
  
- ECR program:
  - Renewable facility is a local solar project.
  - Project size limited to 20 MW.
  - Facility developers must fulfill a "community interest requirement," where interested customers commit to enroll in 30 percent of the project's capacity or expressed interest to reach a 50 percent subscription rate ahead of time, and must have a minimum of three separate subscribers.
  - Customers agree to purchase a share of a local solar project directly from a solar developer, and in exchange, the customer will receive a credit from their utility for the customer's avoided generation and for their share of the benefit of the solar development to the utility.
  - Customers, in buying the solar generation directly from a third party, are treated as departing load. When an ECR customer moves within the IOU's territory they can retain their ECR subscription at their new service address.

- As of September 2019, 10 MW of new renewable capacity had been built, six in Southern California Edison's (SCE's) territory and four in Pacific Gas & Electric's (PG&E's).

*Solar on Multifamily Affordable Housing (SOMAH).* Established by AB 693 (Eggman, Chapter 582, Statutes of 2015), the SOMAH program provided incentives for solar energy photovoltaic (PV) systems for multifamily affordable housing. SOMAH provides for up to \$100 million annually from the electric IOUs GHG auction proceeds, up to \$1 billion dollars over ten years, to install 300 MW of capacity. The SOMAH program began accepting applications on July 1, 2019, receiving more than 200 applications on the first day it opened, and waitlists were started in the large electric IOUs' territories. According to the CPUC, by the end of 2020, 406 applications with 71.4 MW of capacity had been submitted into the program, with participation in all five SOMAH-eligible electric IOU territories. In April 2020, the CPUC directed the utilities to continue funding the SOMAH program through 2026.

*Solar ready buildings in the Title 24 Regulations.* In May of 2018, as part of its regulation of building energy efficiency, the CEC adopted a requirement for the installation of solar system capacity on all new low-rise residential buildings. More specifically, the CEC regulations require (a) installation of a certain sized solar system on a newly constructed, low-rise residential building; (b) successful exemption from the installation requirement in the event of excessive shade, roof design or other defined factors; or (c) development of a community solar project that offsets the load of the newly constructed, low-rise residential building. Builders are struggling to comply with the CEC's requirement. In particular, builders are looking to develop community solar projects as a means of compliance, which builders note are much cheaper to develop than rooftop solar.

*Title 24 community solar compliance option.* For a community solar project to comply with Title 24 it must (a) reduce the building's energy bill by an amount greater than the added cost to the building resulting in the building's share in the community solar project; (b) provide energy savings benefits dedicated to the building for no less than 20 years, and (c) be exclusively dedicated to the building. The CEC's community solar compliance option is conceptually analogous to the ECR component of GTSR. Current statute requires electric IOUs to support ECR projects that allow customers to contract directly with a third-party participating renewable developer to subscribe to a specific local renewable facility. The ECR component of the GTSR has been unsuccessful, to date at least, with only 10 MW (of a possible 600 MW) developed.

*The Avoided Cost Calculator (ACC).* The ACC is a complex determination of the benefits resources provide to the grid and all ratepayers. It calculates a monetary amount in \$/kWh to value a resource. The ACC calculates the avoided costs of electricity resources based on generation energy, generation capacity, ancillary services, transmission and distribution capacity, GHG, and high global warming potential gases. For example, using PG&E's E-TOU-C residential rate for simplicity, the summer off-peak retail rate is 42¢/kWh, which corresponds to the hours that solar-only systems would export to the grid. The generation-only portion of that is 0.14¢/kWh. However, the avoided cost value for mid-day hours is closer to 0.01¢/kWh. NEM relies on the generous retail rate to compensate owner-generators, while other CPUC programs provide a generation-only rate. This bill's program compensates based on the far-less generous avoided cost. The ACC is updated annually to improve the accuracy of how benefits are calculated, taking inputs from various CPUC proceedings and CAISO wholesale market data. However, this annual updating may create volatility for programs relying on the ACC to determine credits or incentives values. For instance, the value of solar avoided costs has declined over the last decade. Cost shifts occur when the program's costs outweigh its benefits, and nonparticipants of the program are left covering the difference. This is the controversy associated with NEM—where customers with NEM are subsidized by customers without NEM.

*Net Energy Metering (NEM).* Electric utility customers have long subsidized the cost of customer-sited electricity generation from renewable resources, which is largely electricity generated by rooftop solar. The vast majority of rooftop solar customers are enrolled in NEM (NEM 1.0) or NEM Successor (NEM 2.0) tariffs, established under Public Utilities Code §§2827 and 2827.1, respectively. The NEM program supports onsite renewable energy (largely rooftop solar) installations designed to offset a portion, or all, of the customer's electrical energy usage. Under NEM, customers receive a bill credit (in dollars) based on the retail rate (including generation, transmission, and distribution rate components) for any excess generation (in kWh) that is exported back to the grid. In periods when a customer's bill is negative (because the amount of energy the solar system exported to the grid exceeded the amount of energy consumed by the customer), the bill credits are carried forward up to one year, at which point customers may elect to receive net surplus compensation for any electricity produced in excess of on-site energy usage. Customers taking service under NEM 2.0 pay the cost to connect to the grid, take service on a "time-of-use" rate plan, and pay "non-bypassable" charges that are not offset with surplus energy credits. On August 27, 2020, the CPUC initiated Rulemaking (R. 20-08-020) to develop a successor to the NEM 2.0 tariff, as part of the requirement in statute and a commitment in a previous decision to review the current tariff to address the shift in costs to nonparticipating customers. The CPUC released a proposed decision in December

2021. However, a revised proposed decision is pending as the CPUC is currently soliciting additional stakeholder comments.

*Evaluations of GTSR and related programs are underway.* On June 1, 2022, the three electric IOUs have filed applications with the CPUC for review of their community solar programs. The proceedings that will be initiated by these applications are expected to review the program's goals, budget, capacity, design, implementation, and consumer protections. It is also likely that the proceedings will draw upon the 2021 DAC-GT and CSGT Program Evaluation Report which was completed at the end of March 2022.

*NEM proceeding and community solar.* Coalition for Community Solar Access (CCSA), the sponsors of this bill, filed a proposal similar to what is included in this bill into the CPUC's NEM proceeding. The CPUC's December 2020 proposed decision declined to adopt CCSA's proposal, stating it was premature and reiterating the CPUC's intent to review the broader aspects of community solar across the various programs. However, the CPUC more recently has solicited specific comments from parties regarding issues related to community solar proposal.

*Prevailing wages.* In California, the prevailing wage rate is an hourly rate paid on public works projects that is often set in the terms of a collective bargaining agreement. Prevailing wage creates a level playing field by requiring an across-the-board rate for all bidders on publically subsidized projects. According to the Department of Industrial Relations, the wage rate relies upon such factors as:

“the particular craft, classification or type of work within the locality and in the nearest labor market area (if majorities of such workers are paid at a single rate). If there is no single rate paid to a majority, then the single or modal rate being paid to the greater number of workers is prevailing.”

*Rooftop solar wages.* Residential rooftop solar installation does not currently require payment of the prevailing wage, as such, rooftop solar installers are generally making below the wage rate paid to other building and construction trade workers. According to the Bureau of Labor Statistics, Occupational Employment Statistics, the median hourly wage in 2015 for a solar installer was a little under \$21 an hour. According to a UC Berkeley Labor Center report on solar jobs:

“residential rooftop solar companies, whether they directly employ workers or subcontract out the work to other installation crews, essentially compete in the residential construction market where barriers to entry are low, unionized contractors are absent, and contractors who comply with



employment laws and building codes must compete with many who skirt these regulations. All of this puts downward pressure on wages.”

## Comments

*Another program?* This bill proposes another community solar program. The proponents point to the short-comings of the numerous programs noted above. Under this bill, renewable energy projects—which are specified as solar plus storage (and intended to also include solar plus wind)—interconnected to the distribution system will receive monetary credits that can be applied to the bills of customers who subscribe to the project. This bill credit rate would be based upon the project’s value to the grid at the time of generation. The program would be open to any distribution customer of an electric IOU, so both IOU and CCA customers could participate; unlike GTSR. Each eligible project would need to subscribe at least 51 percent of its capacity to low-income customers. Additionally, the program would seek financial incentives—either ratepayer funded or from an alternate source, if available—for low-income subscribers.

*Cart before the horse.* In order to minimize duplicative efforts, the Legislature may wish to allow this bill’s proposed evaluation of the existing programs to occur prior to requiring the CPUC to launch an additional related program. *The author and committee may wish to move the date by when the CPUC must open a proceeding to establish the new program by March 1, 2024, or sooner if the evaluation has completed and the findings result in identifying a need for a program as proposed by this bill.*

*Need to consider load migration in evaluation.* As the experience in San Diego has demonstrated with the loss of load-serving customers from the electric IOU to the newly launched CCA, load migration can have a significant impact on the ability to sustain a program. *The author and committee may wish to require the CPUC to consider load migration of bundled and unbundled customers when evaluating the existing programs.*

*Addressing costs on nonparticipating customers.* As noted by the supporters of this bill, the intent is to minimize costs on nonparticipating ratepayers. However, as currently drafted this bill lacks the clear protection of other related bills to not shift costs on nonparticipating customers. The absence of this language raises concerns for utilities and others about the prospects of costs shifting to nonparticipating customers. The proponents of this bill argue that the only cost shifts may be due to slight inaccuracies of the avoided cost calculator. *As such, the author and committee may wish to explicitly state that the only cost impacts to*

*nonparticipating customers may be due to any inaccuracies associated with the avoided cost calculator.*

*Subscriptions – more than one?* As currently drafted, this bill would allow a customer to subscribe to multiple projects. The supporters of this bill note that large commercial customers with multiple meters may wish to have multiple subscriptions. However, they acknowledge these are rare instances and residential customers need only one subscription. *As such, the author and committee may wish to strike reference to more “one or more” subscriptions and replace with one subscription.*

*Subscriptions by program.* As currently drafted, this bill requires the program in the aggregate maintain 51 percent subscriptions for low-income customers. However, maintain such a requirement in the program aggregate is better measured in capacity, not subscriptions. *The author and committee may wish to clarify the 51 percent measurement is in capacity of the program, not number of subscriptions.*

*Need for additional clarifying amendments.* The language related to the solar requirement for building code compliance is related to the community solar option. *The author and committee may wish to amend this bill to clarify the program is required to comply with the community solar option in the standard.*

*Definition of low-income customer.* The definition needs fine-tuning as it reflects some inapplicable criteria for this program related to the AB 841 school energy efficiency program. *The author and committee may wish to remove criteria that is not applicable to this program.*

*Double Referral.* This bill is also referred to the Senate Committee on Labor, Public Employment and Retirement.

### **Prior/Related Legislation**

AB 2838 (O'Donnell, 2022) authorizes the CPUC, beginning April 1, 2023, to authorize IOUs to terminate the GTSR programs. The bill is pending in the Senate Committee on Appropriations.

SB 1385 (Cortese, 2022) establishes, by January 1, 2024, a new 1,500 MW multifamily housing local solar program that requires each large electrical corporation, as specified, to construct solar and storage systems in front of the customers' meters on or near multifamily housing. The bill sunsets the program as

of January 1, 2027. The bill is pending in the Assembly Committee on Utilities and Energy.

AB 693 (Eggman, Chapter 582, Statutes of 2015) created the Multifamily Affordable Housing Solar Roofs Program, to provide financial incentives for qualified solar installations at multifamily affordable housing properties funded from IOU's GHG allowances.

SB 43 (Wolk, Chapter 413, Statutes of 2013) established, until January 1, 2019, a Shared Renewable Self Generation Program allowing IOU customers to purchase an interest in a "community renewable energy facility" and receive a bill credit for the generation component of the customer's electrical service.

AB 327 (Perea, Chapter 611, Statutes of 2013) among other provisions, required the CPUC to develop specific alternatives to the net energy metering tariff to ensure that customer-sited renewable distributed energy is available to residential customers in disadvantaged communities.

**FISCAL EFFECT:** Appropriation: No Fiscal Com.: Yes Local: Yes

**SUPPORT:**

Coalition for Community Solar Access, Sponsor  
350 Silicon Valley  
Arcadia Power  
Asian Pacific Environmental Network  
BlueGreen Alliance  
Building Owners & Managers of California  
California Apartment Association  
California Building Industry Association  
California Business Properties Association  
California Environmental Justice Alliance  
California Environmental Voters  
California Wind Energy Association, if amended  
Coalition of California Utility Employees  
Cypress Creek Renewables  
E2 (Environmental Entrepreneurs)  
Environmental Defense Fund  
GRID Alternatives  
Natural Resources Defense Council  
Prologis Management  
Sierra Club California  
The Utility Reform Network

Union of Concerned Scientists  
Vote Solar

**OPPOSITION:**

California Community Choice Association, unless amended  
California Solar & Storage Association, unless amended  
Pacific Gas and Electric Company  
Southern California Edison

**ARGUMENTS IN SUPPORT:** According to the author:

California has some of the most ambitious renewable energy goals in the world, including being powered by 60% renewable energy by 2030 and 100% carbon-free electricity by 2045. Equal access to solar and equality in the clean energy economy are essential to achieving these goals.

Unfortunately, of the majority of California households do not have access to local solar power, including some of California's most disadvantaged communities. Assembly Bill 2316, would create a cost-effective community renewable energy program that leverages the ability to combine distributed renewable resources with energy storage to provide all Californians with an option to access the benefits of distributed generation.

**ARGUMENTS IN OPPOSITION:** In opposition this bill, the California Solar and Storage Association contends this bill would undermine the state's standard to require solar on all new buildings. They suggest explicit statutory limitations to limit the buildings that would be eligible to utilize this compliance option.

California Community Choice Association opposes this bill as it does not explicitly place the requirements of the new program exclusively on electric IOUs. They argue that program design and offerings for CCA customers should be a local decision.

The large electric IOUs oppose the bill due to potential costs on their customers, both participating and nonparticipating. They also express concerns that the proposed program is not necessary and duplicative of existing related programs.

**-- END --**