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SB 843 (WOLK)
Community-Based Renewable Energy Self-Generation Program

Frequently Asked Questions

What problem is SB 843 addressing?

SB 843 addresses the dual problems of enabling voluntary participation in renewable energy self-generation for all Californians and to allow renewable generation to be placed in an optimal location and shared by multiple customers rather than limited to being placed on their own property.

Shouldn't a customer's solar panel go on their roof to decrease demand on the customer side of the meter?

Unfortunately only a small percentage of homes and businesses are appropriate sites for renewable energy. Many customers are interested in using solar energy, but the arrangement at their home or business is not a good match for installing solar. For example, some customer sites – both businesses and residences - are overly shaded or not oriented in the proper direction; in some cases customers are renters who do not own the property at which they live. Under this bill, the actual generation of solar power does not occur on the customer-side of the meter. Instead, the customer has a "financial interest" in a portion of a shared facility (much like a resident may own a plot in a community garden) and the power generated results in a "bill credit" towards the generation charges on a customer's electricity bill. Significant advantages of location flexibility are that the cost can be much lower than rooftop installations and when a customer changes locations, they simply reassign the bill credit to their new address.

What is a "bill credit" and how does it work?

An electricity customer's monthly bill includes charges for electricity generation and for all other costs including distribution, transmission, etc. Only the generation charges are affected. The customer's share of the power generated from the renewable energy facility is subtracted from power they actually used in the same month based on the value of that power on the customer's rate schedule.

The amount of the credit varies by utility, rate plan, volume and time of use. For example, an annual average generation charge per KWH in the PG&E territory for a "typical" low usage customer on their "E-1" rate is $.037/KWH while a high usage customer on rate "E-6" is $.197/kwh. In the SCE territory, the range is between $.127/KWH up to $.154/KWH. If the cost to participate in a renewable energy facility were lower than these amounts, the customer would immediately save money. In addition, the customer can lock in a long-term rate so if electricity rates rise over time, the customer's savings would increase. To read a full analysis of the value of bill credits see: www.e2.org/ext/doc/SB843_Analysis_E3_20June2011.pdf

Not everyone needs solar right now

This bill does not create a new mandate for solar. It just facilitates growth in the renewable marketplace, and gives customers another option to use solar power. The primary interest by the customer is expected to be financial. Customer will be interested only if the facility can offer better long-term economics.

Are there any state or utility subsidies?

None. SB 843 does not need nor qualify for any state or utility subsidies. In addition, the program is designed to make sure that non-participating electricity customers are not paying for any of the costs. The

electricity customer pays for all non-generation costs. The costs associated with connecting a facility to the grid are paid for by the developer using the same CAISO process that any renewable facility uses. The renewable energy credits are assigned to the utility and are part of meeting the 33% RPS requirement – just like any other RPS compliant facility.

How will costs for community-based renewable energy compare with utility PPA?

Estimates done by Blank & Veatch and Energy+Environmental Economics (E3)[1] for 5 to 20 MW ground-mounted solar PV projects provide a range of $.184 to $.209 per KWH for the nominal "levelized cost of energy" including time of day benefits.

Community self-generation facilities are projected to be below these costs with the savings benefiting all electricity customers. A community self-generation customer benefits because their cost to participate is lower than the value of the generation credit they are receiving (otherwise they have no reason to participate). A general electricity customer benefits both because the cost of compliance with the 33% RPS is lower and there is reduced demand for expensive, natural gas peak generation power because solar tends to produce power during peak demand times.

There is an important "market-failure" that community-based renewable energy addresses. Currently there are only three major customers (PG&E, SCE and SDG&E) for utility scale renewable facilities and those utilities prefer to do larger transactions. As a result, the price competition is more limited than would exist in a broad, expanded market that would be created by the community-based renewables. Utilities are required to procure renewables at the best price. Retail customers, by contrast will participate in volume if it lowers their current bills. They are more price sensitive than the utilities and as a result put more price pressure on renewable facilities.

Isn't this bill just a ruse to get retail rates for a wholesale generation system?

Our analysis shows that the maximum wholesale generation rate paid by a utility for peak summer usage is similar to the maximum retail bill credit available (18 to 20 cents/kwh). This bill is an innovative way to expand markets for renewable energy, and to give customers an additional choice for procuring renewables for their homes or businesses. The customer pays the full cost of power with a bill credit for the retail value of the generation portion only. All other costs (distribution, etc) are still paid for by the customer. The bill's sponsors are working closely with many stakeholders to ensure that the final bill reflects a fair, open, and cost-effective arrangement that doesn't result in undue advantage or disproportionate benefits to any party or system.

Won't this bill just complicate a distribution grid that's already over-extended?

Most stakeholders agree that putting renewable energy on the distribution grid will minimize needs for new transmission construction, which is far more costly and time-intensive than distribution improvements.

Many issues with utility rates arise because of transmission and distribution costs, not generation. How would this help?

Through offsite solar, utilities and ratepayers benefit from reducing transmission needs for new centralized facilities (renewable or nonrenewable). While interconnection is not cost free, the costs can and should decline based on improvements and learning by the regulators and utilities. Customers pay the full transmission and distribution.

[1] http://www.ethree.com/documents/LTPP/LTPP%20Presentation.pdf

How does this program expand greening of the grid?

This bill doesn't reduce the RPS, CSI, or other programs designed to provide renewable energy broadly at a low cost. It proposes a "customer-financing" mechanism. This bill will expand the market since renters and people living in multi-family dwellings can participate in this program while there is no practical way for them to participate in CSI. In addition, the CPUC has started programs to get buildings to net zero energy. Offsite Solar is a very cost effective way of helping reach the goal of net zero energy buildings.

At whose expense will this be implemented? Who is responsible for distribution and expansion costs?

This bill does not require subsidy of any kind from the State. Under current law, the utilities are responsible for maintaining distribution and transmission infrastructure adequate for electricity exports. This bill doesn't propose to change the current cost allocation of interconnection on the distribution grid – so customers should still pay their fair share under any new rate class.

The bill sounds like a direct access program – where an independent energy services provider gets an exemption to provide electricity directly to customers.

Under this bill, a producer/developer of a community-based renewable energy project does not serve as an ESP in a Direct Access arrangement because the "benefiting account" remains a customer of the utility.

- The developer of the renewable facility does not impose or levy its own rates on the customer's account. The utility bears the responsibility to apply PUC-approved rates directly to customer's benefiting utility account through a utility energy credit.
- Metering for the purposes of crediting the customer benefiting account is done by utilities, not the developer. No physical customer-side meters are operated by the developer.
- Energy crediting and account management/billing for the customer's benefiting account is done solely by the utility.
- The customer is contracting with a known, fixed location facility and not a general commitment to supply power

It sounds like this bill results in municipalization. Why not just carry out a CCA?

The bill does not give additional electricity supply authority to municipalities or other entities. The beneficiary remains the customer of the utilities but sees an additional bill credit. This is substantially simpler since it can be done one customer at a time and doesn't require the creation of a CCA. The bill just creates a new customer class for utilities where they will continue to be responsible for customer metering, billing, and crediting under an offsite arrangement. It is narrowly focused to allow customers to participate in financing of distributed renewable generation at lower cost and higher potential penetration than roof-top systems currently allow.

Wouldn't it need more rulemaking at PUC and more staff to carry out?

Careful design of the bill with consultation of the PUC should limit need for any new CPUC rulemaking.

How do other rate payers benefit?

All overhead costs including distribution are paid for by the Offsite Solar customer. This is not the case for roof-top solar customers. In addition, the growth of distributed solar will reduce demand for new transmission. The growth in systems and competition will help drive down the costs for solar since Offsite Solar only makes sense if the economics work. There are big environmental benefits – that affect all ratepayers – to maximizing the low cost of distributed renewable generation. This can help achieve that goal, without a new subsidy program by allowing interested customers to help finance low cost distributed generation.

What is the relationship between the Power Developer and the Utility?

From a systems viewpoint, the community-based renewable energy developer is the same as a renewable energy developer working under the RPS. The same CAISO interconnection process applies, including making power generated fully deliverable. As usual, the utility will be the scheduler of the power. The scheduler requirements may be a separate form schedule agreement or part of the interconnection agreement between the utility and the power producer.

What obligations do the power developers have and who monitors their performance for quality and reliability?

Facility operators will ensure the system performance and contract management – the same requirements as any other renewable energy developer. The maintenance, warranty, interconnection and scheduling agreements will be monitored and supported. Safe, reliable, and efficient are also required in order to service debt and other financing agreements.

What is the relationship between community-based renewable energy customers and bundled ratepayers?

There are no subsidies either from the State or from cost shifting to bundled ratepayers. Unlike roof-top solar, community-based renewable energy customers pay their full share of all non-generation costs. Generation costs to bundled ratepayers will not change as a result of community-based renewable energy coming onto the grid because the utility has to increase its renewable power procurement under RPS in any case. Changes in electricity prices in the future could conceivably benefit or disadvantage community-based renewable energy customers with respect to bundled customers. All customers have the choice to participate or not. Certainly community-based renewable energy has a much lower potential to disadvantage bundled ratepayers compared to other renewable energy programs such as net metering.

Does Offsite Solar conflict with RPS?

No. Community-based renewable energy facilities count toward the utility's RPS requirements. To the degree that community-based renewables cost less than other renewable facilities, they will reduce the cost of compliance.

Don't we currently have excess capacity?

Due to the economic recession, there is excess power generation capacity but not for renewables. The RPS already forces all utilities to shift from current sources to renewables until the 33% is reached. Utilities are required under current law to purchase renewable power first. By increasing available capital and providing more competition, SB 843 should reduce the cost of complying with the 33% RPS.

Do community-based renewable energy facilities pay the full system costs, who administers the facility's application; and does it receive any special treatment?

Community-based renewable energy facilities are subject to the same system rules and payments as any other renewable facility. CAISO administers the application process.

Are the bill credit arrangements a new requirement for a utility?

No. Currently all Investor Owned Utilities are required to offer bill credit arrangements for "Virtual New Metering" (VNM). VNM is an existing mechanism that allows a single building to have rooftop solar and assign portions of the generation value to different tenant meters. SB 843 uses the identical bill credit mechanism. Differences between VNM and Offsite Solar are the location of the generation facility and the ability to reassign the bill credit when the customer moves to a new location in the same utility's territory.