

Date of Hearing: April 4, 2011

ASSEMBLY COMMITTEE ON UTILITIES AND COMMERCE

Steven Bradford, Chair

AB 512 (Gordon) – As Introduced: February 15, 2011

SUBJECT: Local government renewable energy self-generation program.

SUMMARY: Increases the capacity of a powerplant from 1 megawatt (MW) to 5 MW that would be eligible for a local government program that allows a municipality to generate electricity at one location to offset electricity usage at another municipal location.

EXISTING LAW: Establishes numerous individual net-energy metering tariffs where the generator may not be located where the energy is consumed:

- 1) Provides that a city, county, city and county, special district, school district, political subdivision, campus, or other local public agency may elect to designate another account or accounts controlled by the governmental entity to receive a bill credit for the electricity generated by a renewable generating facility that has a generating capacity of no more than 1 MW and is located within the boundaries of the governmental entity.
- 2) Authorizes the City of Davis to receive a bill credit for electricity supplied to the electric grid from a specific photovoltaic electricity generation facility selected by the City of Davis (PVUSA), with a peak generation capacity of 600 kW, and as it may be expanded not to exceed 1 MW of peak generation capacity, to offset the electricity at a benefiting account.
- 3) Requires an electrical corporation to transmit and distribute East Bay Municipal Utility District (EBMUD) generated electricity to serve EBMUD load at other locations.
- 4) Allows the City and County of San Francisco to designate a remote renewable generation facility with a total generating capacity not to exceed 15 MW, to supply electricity to specific facilities designated as qualifying remote load.

FISCAL EFFECT: Unknown.

COMMENTS: A 1-MW generation facility can serve about 750 single-family homes. A 5-MW facility can serve almost 4,000 homes.

According to the author, the purpose of this bill is to implement a recommendation from a November 2010 State Assembly Select Committee on California's Green Economy report titled, "How to Grow Jobs and Investment in California's Green Economy." The report noted that the City of Fresno as well as other local governments in the state expressed frustration at the limitations placed on their ability to produce their own renewable energy. In particular, the report states that the City of Fresno had considered generating more of their own energy through renewable projects, but found that they did not work financially due to the 1 MW limit of the existing local government net-energy metering program. The report recommended to increase renewable energy generation by local governmental entities, and to also increase the capacity of an eligible local government generation facility from 1 MW to 5 MW. That suggestion is the

basis for this bill. Another suggestion was to increase the geographic boundary restrictions; however, this bill does not address the boundaries.

1) Background: Net energy metering is an electricity tariff billing mechanism. It allows a customer to place an electricity generation system where it might maximize generation potential, while offsetting electricity usage at another location. An example is placing solar panels over a city parking lot with little electricity needs, to offset a large city-owned user such as City Hall.

There are many existing programs in statute that allow a municipality or public entity to generate electricity in one location and receive a bill credit, or a net-metered tariff, for a meter in another location(s). Each has been added in a piecemeal fashion. For example, in 2002, SB 1038 (Sher) Chapter 515, Statutes of 2002, allowed the City of Davis to use electricity generated from PVUSA to receive a bill credit at a benefiting account or accounts designated by the City of Davis. The same bill allowed California State University (CSU), Fresno to receive a bill credit for the electricity generated at a biomass facility owned by CSU Fresno known as the Dinuba Facility. The CSU Fresno net-energy metering allowance sunsetted on January 1, 2008.

In 2008, AB 2466 (Laird), Chapter 540, Statutes of 2008, created a comprehensive "Local Government Renewable Energy Self-Generation Program." AB 2466 allowed an eligible facility to not exceed 1 MW, and it limited the statewide capacity for the three largest investor-owned utilities (IOUs) to 250 MW. After the IOUs offer service or contracts to its proportionate share of the 250-MW limitation, it does not need to provide net-metering allowances to additional local government generation facilities.

2) Why doesn't 1 MW work: According to Pacific Gas and Electric Company (PG&E), no entity has used the program. AB 2466 was set up with the 1 MW capacity cap as a trial to determine if the distribution system could handle large surges in electricity coming from facilities onto wires that were only intended to serve one-way electricity deliveries.

Southern California Edison (SCE) states that there are considerable costs and barriers associated with moving above 1 MW, which is why the initial limit was set at that point. At 5 MW the program becomes even more uneconomic for customers. In addition, the rationale of a proposal to increase the capacity from 1 MW to 5 MW is unclear if no entity has even subscribed to the existing program.

Most of the state's existing programs limit the qualified projects to those that are less than 1 MW, in part because net-meter customer generation cannot be scheduled by the electric utility. The utility must take the power when it is produced, whether it needs it at that moment or not. The electric utility can easily adapt to small amounts of unscheduled electricity coming onto the grid; however, they may encounter reliability problems if they cannot schedule larger generators.

Reliability concerns were the basis of AB 578 (Blakeslee) Chapter 627, Statutes of 2008, which require the California Public Utilities Commission (CPUC) to study and submit a report by January 1, 2010, and biennially thereafter, on the impacts of distributed energy generation on the state's distribution and transmission grid. This report noted that there were no noticeable impacts on the distribution and transmission infrastructure based on performed studies. Nevertheless, the report recommended to develop consistent interconnection policies and to continuously evaluate the penetration of distributed generation on distribution feeders.

3) Net Energy Metering Cost-Effectiveness Report: Public Utilities Code section 2827 requires the CPUC to submit a report to the Governor and the Legislature on the costs and benefits of net energy metering. In March 2010, the CPUC published its report and concluded that the estimated average net cost of net energy metering is "\$0.12 per kilowatt-hour (kWh) exported, which is relatively high on a cents per kWh basis...." According to the U.S. Energy Information Administration, day-ahead (usually higher) wholesale prices in California at a Southern California hub (SP 15) in a moderate month (October 2010) averaged between \$0.037 to \$0.038 per kWh, or about one-third the price of the net-energy metering price. The CPUC report justifies the higher price by noting that net energy metering is not designed as an energy procurement program, and "the volume of energy exported to the utilities is small compared to the total solar generation and it is de minimus compared to the total energy procured by the utilities."

REGISTERED SUPPORT / OPPOSITION:

Support

City of Santa Rosa
Sonoma County Board of Supervisors

Opposition

None on file.

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