

STATE OF CALIFORNIA

Public Utilities Commission
San Francisco

M e m o r a n d u m

Date: May 16, 2008

To: The Commission
(Meeting of May 29, 2008)

From: Pamela Loomis, Deputy Director
Office of Governmental Affairs (OGA) — Sacramento

Subject: **AB 2466 (Laird) - Government energy producers
As amended April 16, 2008**

**LEGISLATIVE SUBCOMMITTEE RECOMMENDATION: OPPOSE UNLESS
AMENDED**

SUMMARY OF BILL:

AB 2466 would authorize a new form of generation-only net energy metering, available to "local governments" only (as defined¹). AB 2466 would authorize all local governments in California to receive a bill credit of one or more designated "benefiting account(s)" for energy generated by one or more eligible city-owned or operated renewable generation facility (or facilities). Benefiting accounts must serve property that is owned or occupied by the same local government that owns the eligible renewable generating facility.

The bill contains no explicit MW cap on the generator size which could be used to create a bill credit. However (as amended) there is a cap (unspecified in the current bill version) on the total MW of renewable generation providing bill credits under this legislation. The program would be available to all types of renewable generation. The credit would be set at the generation component of the time-of-use rate applicable to the benefiting account, excluding Department of Water Resources (DWR) cost-responsibility surcharges, if any. If billing credits exceed bills for electric usage in any billing period, the excess credit shall be carried forward to the next billing period, except that any remaining credit after the last billing cycle of a calendar year shall be reset to zero.

¹ "Local government" means a city, county, ..., city and county, town, special district, school district, municipal corporation, political subdivision, joint powers authority or agency created pursuant to Chapter 5 (commencing with Section 6500) of Division 7 of Title 1 of the Government Code, or other local public agency, if authorized by law to generate electricity, but shall not mean the state or any agency or department of the state.

The ownership of the renewable energy credits associated with the electricity generated by the eligible renewable generation facility shall be the same as the ownership of the renewable energy credits associated with electricity that is net metered pursuant to Section 2827.

That is, renewable energy credits remain with the owner of the renewable generation facilities (D.07-01-018).

SUMMARY OF SUPPORTING ARGUMENTS FOR RECOMMENDATION:

- Currently, net energy metering (NEM) is limited to renewable generation that is located on site of a customer's load, and is limited to a maximum generation capacity of 1 MW. NEM currently provides a "full retail rate" compensation to solar and small wind generators. Other eligible renewable generators (e.g., biogas) are compensated at the generation component of the retail rate.
- This bill would create a new type of NEM -- aggregate generation-only net metering for cities -- by allowing cities to aggregate their renewable generation and receive billing credit for deliveries of excess power to the grid. AB 2466 would encourage additional investment in renewable generation. However, crediting energy from specific generators toward meeting a load not on the same meter is problematic in the context of the intent of the existing net energy metering designed to meet only onsite load, as well as current restrictions on direct access. The Commission is engaged in a proceeding to update the regulatory framework for direct access transactions, and is concerned that this bill could inappropriately limit its actions to regulate DA.
- The bill's major problems are:
 - It would introduce a complication to net energy metering laws, and introduces a new "intent" of net energy metering. However, since the bill is outside of the net energy metering code section, it does not fully build on extensive PU Code related to net energy metering.
 - The bill has a limited audience. Currently, only cities, counties, and joint power agencies formed by a city or county. There does not appear to be any justification in the law as to why this would apply only to local government entities. Questions may arise as to whether and why not it could apply to state facilities, universities, non-profits, commercial customers, and residential customers. It is unclear why the bill provides that two city buildings should be able to aggregate net meter but why two businesses should not be able to aggregate net meter.

- The bill has no cap on the size of allowed renewable generation.
- Even if amended as suggested below, a Commission proceeding may be needed (similar to that required by AB 1613) to determine the price to be paid for net deliveries of power produced in city-owned renewable generation facilities to the grid.
- If the other provisions of current net energy metering do apply to this program, this bill could impose potentially significant costs to non-benefiting ratepayers, because under current regulation, the net energy metered customer-generator does not have to pay for the distribution system upgrade necessary to interconnect the generator. AB 2466 makes the customer responsible for associated metering costs, but does not address interconnection costs.
- If included in the cap of 2.5% net energy metered generation, the generation covered under this bill could compete with other programs (etc. CSI, SGIP) and count against the net metering cap.
- Bill splits the bill credits and the Renewable Energy Credits (REC) ownership – the bill credit goes to the customer and the REC associated with the generation goes to the utility.

SUMMARY OF SUGGESTED AMENDMENTS:

- The bill should be amended to clarify the intent of why it only applies to cities and counties, otherwise there will be pressure to extend beyond local governments.
- The bill should clarify whether generation under this program applies to the State's current NEM cap of 2.5% of total utility load.
- The bill should address what entity pays for interconnection costs under this program.
- The bill should omit any definition or description of “environmental attributes”. The Commission is currently working on REC and related issues in R.06-02-012.
- Section 2830(b)(7) should be amended to clarify that the ownership of the RECs shall be the same as where electricity is net metered pursuant to sec. 2827.
- Limit aggregate size of participating facility to 20 MW
 - Add the following to Sec. 2830 (c) (2): *The Commission may establish a maximum MW limit on the capacity of all renewable generation subject to the provisions of AB 2466. The Commission may establish a maximum MW limit on aggregate capacity of renewable generating facilities that can be credited to a single benefiting account, or all benefiting accounts for which a single local government is responsible. Crediting renewable*

generation facilities under the provisions of AB 2466 must be located within the boundaries of the city, county, city and county, or joint powers agency responsible for the benefiting account(s).

- [Generation facilities larger than 20MW may not be suitable for interconnection at distribution voltages, and should be close to the loads they serve to avoid imposing congestion costs on the grid.]
- Limit bill credit authorized by Commission to the avoided cost of energy
 - Add the following sentence to Sec. 2830 (c) (2): *For benefiting accounts receiving billing credits under the provisions of Sec. 2830 from non-solar renewable generating facilities with aggregate capacity of 1 MW or greater: Billing credits shall be determined at rates to be determined by the Commission and shall reflect the avoided cost of the interconnecting electrical corporation at the time of delivery of electric energy to the grid.*
- [This provision is intended to ensure that credits generated by large renewable generating facilities (particularly non-solar) accurately reflect the costs avoided by the interconnecting utility.]
- Provide for a full 12 month true-up period rather than a calendar year
- Delete 2830 [c] (5): “After the electricity usage charge pursuant to paragraph (1) and the credit pursuant to paragraph (2) are determined for the last billing cycle of a ~~calendar year~~, any remaining credit resulting from the application of this section shall be reset to zero. “
- Replace the deleted sentence with: “After the electricity usage charge pursuant to paragraph (1) and the credit pursuant to paragraph (2) are determined for the last billing cycle of a *12-month period*, any remaining credit resulting from the application of this section shall, be reset to zero”.
- [This provision as stated in the amended April 16, 2008 version may not allow a full 12 months after the installation of generation, for the calculation of a net energy charge.]

DIVISION ANALYSIS (Energy Division):

- The bill would require the Commission to review and approve tariffs (and possibly have a proceeding) to establish the terms at which this program applies to cities and counties.
- Net Energy Metering Policies

- AB 2466 proposes a form of net energy metering (NEM) – "virtual" or "aggregate" NEM.
- It differs from current law in that it allows cities to aggregate generation to offset customer loads (allowing billing credits for energy from specific city-owned generators which are physically separated from the billed load(s)- i.e, not on the same meter), and that it does not cap the size of eligible generation.
- Currently, a NEM tariff exists for solar up to 1MW and wind up to 50 kW at the fully bundled retail rate. Similar NEM tariffs exist for biogas, fuel cells and wind up to 1 MW at generation-only rates. This bill would create a new tariff (an aggregated, generation-only form of NEM) that would apply to all renewables and have no size cap.
- At present, net energy metering requires renewable generation to be located on-site of customers' load, and is limited to generators of no more than 1 MW. AB 2466, which contains no explicit MW limit on generator size, would apparently remove these limitations for cities, allowing unlimited aggregation of generation and loads, subject to an as-yet unspecified total megawatt cap. This bill would, all else equal, increase the economic benefit for investing in and operating city-owned renewable generation, and thus, encourage cities to invest in and operate renewable generation. It would also increase the utilization of renewable generation and the fraction of California energy demand met by renewable generation.
- The crediting mechanism proposed in this bill is similar in intent to the net energy metering provisions ("co-energy metering" as defined in P.U. Code Section 2827(b)(5)) applicable to small renewable generation systems in current law, in that it credits power generated on-site against the customer's electric bill.
 - AB 2466 would credit only the generation component of the rate against the customer's bill, in contrast to the full retail net energy metering provisions applicable to solar generation and small wind generators, which credit the full retail rate.
 - Thus, a retail (bundled) net energy metering customer whose generation exactly matched his usage would have a zero bill (excluding fixed charges), while a municipal generation owner subject to AB 2466 would be left with a positive bill consisting of the non-generation components of his rate (e.g., transmission, distribution, and public purpose charges (if any)).
 - Retail (bundled) net-energy metering is limited by current law to solar PV generators up to 1 MW and wind generators no larger than 50 kW;

Current law also provides for generation-only net energy metering for other renewables (Biogas and Fuel cell) up to 1 MW, while AB 2466 contains no size limit.

- Furthermore, total net-energy metered generation is currently capped. Full retail NEM is capped at 2.5% of the peak of utilities' demand of the previous year. Generation only NEM tariffs for fuel cells and biogas each have their own MW caps. This bill does not include a similar cap.
- Direct Access and Community Choice Aggregation
 - Direct Access is currently suspended.
 - By authorizing the crediting of energy from specific generation facilities which are physically remote from the loads to be served, this bill would enable a form of "virtual" direct access.
 - The 2008 update to the Energy Action Plan states: “...*the Public Utilities Commission is investigating the potential to reopen the retail market for direct access to allow consumers to choose electricity providers.*” AB 2466 raises a question of potential conflict with initiatives that the Commission might take in a new DA proceeding and/or with the legislature's future interest in direct access.
 - This bill appears to have similar intent as the Community Choice Aggregation laws and policies that seek to promote municipally owned renewable generation.
- Limitation to only Cities and "Local Governments"
 - Current Distributed Generation and NEM policies are available to all customers, not just cities and other local governments.
 - AB 2466 states no justification for limiting its applicability to cities, counties, and other public agencies. Conceivably, many customers could benefit from provisions contained in AB 2466. If enacted, AB 2466 might create considerable pressure to extend its scope to a larger set of customers, with possible adverse effects on non-participating ratepayers.
 - One possible justification for limiting AB 2466 to cities, which would also apply to other nonprofits, is that public and nonprofit entities do not pay income taxes and hence would not receive the tax incentives available to taxpaying entities which install eligible renewable generation.
- Renewable Portfolio Standard Requirements and Renewable Attributes (or RECs)
 - AB 2466 could further California's policy of encouraging renewables-fueled electric generation, by providing an increased incentive to municipally-owned renewable generation for deliveries to the grid.
 - By encouraging cities to invest in and operate renewable generation, this bill would also increase the utilization of renewable generation and the fraction of California energy demand met by renewable generation. However, if Renewable Energy Credits (RECs) would be retained by the crediting generation owner, this bill would not support the utilities' compliance with the RPS.
 - Subsection 2840(b)(7) contains an outmoded definition of "environmental

attributes". The definition currently in the bill is inconsistent with the direction the Commission is taking in R.06-02-012 and should be stricken from the bill.

- Small Renewables Feed-In Tariff (AB 1969 – Yee, Chapter 731, Stats. 2006)
 - The crediting mechanism proposed in this bill is also similar in intent to the feed-in tariff provisions enacted in AB 1969 and applicable to small renewable generators owned by wastewater customers and other public agencies.
 - A major difference, however, is that AB 1969 allows customers to receive payment from utilities, when deliveries to the grid exceed the amount of energy received from the grid. The payment for AB1969 is set by law at the Market Price Referent (MPR), as adjusted for time of delivery.
 - In contrast, credit for power delivered under AB 2466 would be at the generation component of the applicable retail rate and can only offset the owning agency's electric bill on one or more designated account(s) - there is no payment for delivery of excess power to the grid.
 - The AB 1969 feed-in tariff is limited to generators no larger than 1.5 MW, while AB 2466 contains no size limit. Under current legislation, net energy metered biogas generators at dairies are allowed to aggregate account for energy offsets.
 - See also Renewable Attribute discussion above.
- The 2008 Update to the Energy Action Plan states: "Renewable energy policy is a cornerstone of our approach to reducing greenhouse gas emissions in the electricity sector. In the first EAP, we committed to reaching 20 percent renewables in California by 2010, In EAP II, we are committed to working together to evaluate the potential for making 33 percent of the power delivered in California renewable by 2020."
- AB 2466 appears directed at fostering this policy, by encouraging cities to invest in renewable generation, both for their own power needs and to receive monetary credit for delivery of excess power delivered to the grid.

PROGRAM BACKGROUND:

- The 2008 Update to the Energy Action Plan states: "Renewable energy policy is a cornerstone of our approach to reducing greenhouse gas emissions in the electricity sector. In the first EAP, we committed to reaching 20 percent renewables in California by 2010, In EAP II, we are committed to working together to evaluate the potential for making 33 percent of the power delivered in California renewable by 2020."

- AB 2466 appears directed at fostering this policy, by encouraging cities to invest in renewable generation, both for their own power needs and to receive monetary credit for delivery of excess power delivered to the grid.

LEGISLATIVE HISTORY:

- AB 2466 provides for a new form of (virtual) net metering for renewable generation, and is thus consistent in its intent with other legislative bills to promote renewables. Other legislation may potentially moot this bill, for example, AB 1714 (McLeod, 2008), AB 1807 (Fuentes, 2008), or AB 1920 (Huffman, 2008) —which are all aimed at paying for excess generation. If any of these bills were enacted, and applicable, or if a feed-in tariff similar to that enacted in AB 1969 (Yee, 2006) were extended, that could moot the impact of AB 2466 since a customer generator could be paid for net exports to the grid. Such payments are not allowed under AB 2466.
- AB 2820 (Laird, 2008) would allow public agencies to wheel electricity. On April 9, 2008, the Commission voted unanimously to oppose AB 2820.

FISCAL IMPACT:

Appropriations of \$104,000 based on one (1) full-time PURA IV to monitor compliance with law and CPUC decisions, as well as impacts of the new net metering program.

STATUS:

AB 2466 was passed by the Assembly Utilities and Commerce Committee on April 7, 2008 to the Assembly Appropriations Committee where it awaits a hearing date. (Vote: 13-0).

SUPPORT/OPPOSITION:

Support: City of San Jose (Sponsor)
Sempra Energy (Support if amended)

Opposition: None on file.

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May 16, 2008

BILL LANGUAGE:

BILL NUMBER: AB 2466 AMENDED
BILL TEXT

AMENDED IN ASSEMBLY APRIL 16, 2008

INTRODUCED BY Assembly ~~Member~~ ~~Laird~~
Members Laird and Huffman

FEBRUARY 21, 2008

An act to add Chapter ~~8~~ 7.5
(commencing with Section ~~2840~~ 2830) to
Part 2 of Division 1 of the Public Utilities Code, relating to
energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 2466, as amended, Laird. ~~Government~~
Local government energy producers.

Under existing law, the Public Utilities Commission is vested with regulatory authority over public utilities. Existing law permits a private energy producer to generate electricity not generated from conventional sources, as defined, solely for its own use or the use of its tenants, or to or for any electrical corporation, state agency, city, county, district, or an association thereof, but not the public, without becoming a public utility subject to the general jurisdiction of the commission. Existing law requires the commission to review the charges paid by electrical corporations to private energy producers for electricity not generated from conventional power sources and to review standby and transmission charges made by electrical corporations to private energy producers and, after the review, to adjust those charges to encourage the generation of electricity from other than conventional power sources. Existing law authorizes the City of Davis to receive a bill credit, as defined, to a benefiting account, as defined, for electricity supplied to the electric grid by a photovoltaic facility located within and partially owned by the city and requires the commission to adopt a rate tariff for the benefiting account.

This bill would authorize a ~~city, county, city and county, or joint powers agency formed by a city, county, or city and county~~ *local government, as defined*, to receive a bill credit, as defined, to a *designated* benefiting account, as defined, for electricity supplied to the electric grid by an eligible renewable generating facility, as defined, and requires the commission to adopt a rate tariff for the benefiting account.

Under existing law, a violation of the Public Utilities Act or an order or direction of the commission is a crime. Because the provisions of this bill would require an order or other action of the commission to implement and a violation of that order or action would be a crime, the bill would impose a state-mandated local program by creating a new crime.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: yes.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Chapter ~~8~~ 7.5 (commencing with Section ~~2840~~ 2830) is added to Part 2 of Division 1 of the Public Utilities Code, to read:

CHAPTER ~~8. Governmental~~ 7.5
LOCAL GOVERNMENT ENERGY PRODUCERS

~~2840.~~ 2830. (a) As used in this section, the following terms have the following meanings:

(1) "Benefiting account" means an electricity account, or more than one account, mutually agreed upon by a ~~governmental entity~~ local government and an electrical corporation.

(2) "Bill credit" means credits calculated based upon the electricity generation component of the rate schedule applicable to a benefiting account, as applied to the quantities of electricity generated by an eligible renewable generating facility.

(3) "Eligible renewable generating facility" means a generation facility that is an eligible renewable energy resource pursuant to the California Renewables Portfolio Standard Program that is owned or operated by a ~~city, county, city and county, or joint powers agency formed by a city, county, or city and county.~~ local government.

(4) "Environmental attributes" associated with an eligible renewable generating facility include, but are not limited to, the credits, benefits, emissions reductions, environmental air quality credits, and emissions reduction credits, offsets, and allowances, however entitled, resulting from the avoidance of the emission of any gas, chemical, or other substance attributable to the eligible renewable generating facility.

(5) "Local government" means a city, county, whether general law or chartered, city and county, town, special district, school district, municipal corporation, political subdivision, joint powers authority or agency created pursuant to Chapter 5 (commencing with Section 6500) of Division 7 of Title 1 of the Government Code, or other local public agency, if authorized by law to generate electricity, but shall not mean the state or any agency or department of the state.

~~(b) A city, county, city and county, or joint powers agency formed by a city, county, or city and county~~

(b) Subject to the limitation in subdivision (h), a local government may elect to designate a benefiting account, or more than one account, to receive bill credit for the electricity generated by an eligible renewable generating facility, if all of the following conditions are met:

(1) A benefiting account receives service under a time-of-use rate schedule.

(2) The benefiting account is the responsibility of ~~the same city, county, city and county, or joint powers agency~~ , and serves property that is owned or occupied by, the same local government that owns the eligible renewable generating facility.

(3) The electrical output of the eligible renewable generating facility is metered for time of use to allow allocation of each bill credit to correspond to the time-of-use period of a benefiting account.

(4) All costs associated with the metering requirements of paragraphs (1) and (3) are the responsibility of the ~~city, county, city and county, or joint powers agency formed by a city, county, or city and county.~~ local government.

(5) All electricity delivered to the electrical grid by the eligible renewable generating facility is the property of the electrical corporation that provides for interconnection.

(6) The ~~city, county, city and county, or joint powers agency formed by a city, county, or city and county~~ local government does not sell electricity delivered to the electrical grid to a third party.

~~(7) The right, title, and interest in the environmental attributes associated with the electricity delivered to the electrical grid by the eligible renewable generating facility are the property of the electrical corporation.~~

(7) The ownership of the environmental attributes shall be the same as the ownership of the environmental attributes associated with electricity that is net metered pursuant to Section 2827.

(c) A benefiting account shall be billed on a monthly basis, as follows:

(1) For all electricity usage, the rate schedule applicable to the benefiting account shall be the rate schedule of the benefiting account, including any cost-responsibility surcharge or other cost recovery mechanism, as determined by the commission, to reimburse the Department of Water Resources for purchases of electricity, pursuant to Division 27 (commencing with Section 80000) of the Water Code.

(2) The rate schedule for the benefiting account shall also provide credit for the generation component of the time-of-use rates for the electricity generated by the eligible renewable generating facility that is delivered to the electrical grid. The generation component credited to the benefiting account may not include the cost-responsibility surcharge or other cost recovery mechanism, as determined by the commission, to reimburse the Department of Water Resources for purchases of electricity, pursuant to Division 27 (commencing with Section 80000) of the Water Code.

(3) If in any billing cycle, the charge pursuant to paragraph (1) for electricity usage exceeds the billing credit pursuant to paragraph (2), the ~~city, county, city and county, or joint powers agency formed by a city, county, or city and county~~ local government shall be charged for the difference.

(4) If in any billing cycle, the billing credit pursuant to paragraph (2) exceeds the charge for electricity usage pursuant to paragraph (1), the difference shall be carried forward as a credit to the next billing cycle.

(5) After the electricity usage charge pursuant to paragraph (1) and the credit pursuant to paragraph (2) are determined for the last

billing cycle of a calendar year, any remaining credit resulting from the application of this section shall be reset to zero.

(d) The commission shall ensure that the transfer of a bill credit to a benefit account does not result in a shifting of costs to bundled service subscribers.

~~—(d)~~

(e) Not more frequently than once per year, and upon providing the electrical corporation with a minimum of 60 days' notice, the ~~city, county, city and county, or joint powers agency formed by a city, county, or city and county~~ local government may elect to change a benefiting account. Any credit resulting from the application of this section earned prior to the change in a benefiting account that has not been used as of the date of the change in the benefit account, shall be applied, and may only be applied, to a benefiting account as changed.

~~—(e) A city, county, city and county, or joint powers agency formed by a city, county, or city and county~~

(f) A local government shall provide the electrical corporation to which the eligible renewable generating facility will be interconnected with not less than 60 days' notice prior to the eligible renewable generating facility becoming operational. The electrical corporation shall file an advice letter with the commission, that complies with this section, not later than 30 days after receipt of the notice, proposing a rate tariff for a benefiting account. The commission, within 30 days of the date of filing, shall approve the proposed tariff, or specify conforming changes to be made by the electrical corporation to be filed in a new advice letter.

~~—(f) The city, county, city and county, or joint powers agency formed by a city, county, or city and county~~

(g) The local government may terminate its election pursuant to subdivision (b), upon providing the electrical corporation with a minimum of 60 days' notice. Should the ~~city, county, city and county, or joint powers agency formed by a city, county, or city and county~~ local government sell its interest in the eligible renewable generating facility, or sell the electricity generated by the eligible renewable generating facility, in a manner other than required by this section, upon the date of either event, and the earliest date if both events occur, no further bill credit pursuant to paragraph (3) of subdivision (b) may be earned. Only credit earned prior to that date shall be made to a benefiting account.

(h) An electrical corporation is not obligated to provide a bill credit to a benefiting account that is not designated by a local government prior to the point in time that the combined statewide cumulative rated generating capacity of all eligible renewable generating facilities within the service territories of the state's three largest electrical corporations reaches ___ megawatts. Only those eligible renewable generating facilities that are providing bill credits to benefitting accounts pursuant to this section shall count toward reaching this ___ megawatts limitation.

SEC. 2. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only 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.