

#### **ANALYSIS**

## CALIFORNIA PUBLIC UTILITIES COMMISSION

## SB 32 (Negrete McLeod) As Amended June 2, 2009

#### **SUMMARY OF BILL:**

This bill would modify the existing feed-in tariff (FIT) program established in Public Utilities Code (PU Code) 399.20 to raise the applicable facility size of the program, from 1.5 MW to 3 MW and to allow the Commission to adjust the price for "any other attributes of renewable generation." The bill would not allow a customer electing this tariff to also be eligible to participate in a net energy metered program, but the bill doesn't preclude a customer from switching from net energy metering to a feed-in tariff. The bill would require that publicly-owned utilities with 75,000 or more customers would be required to offer this tariff. The bill allows third party ownership of generation facilities; requires the Commission in consultation with the CEC to establish the cost of generation values and cost for each technology; allows the Commission to consider ratepayer funded incentive payments previously received by the generator when determining tariffs or standard offer contracts; requires the commission to consider the value for an electric generation facility located on a distribution circuit that generates electricity at a time and in a manner so as to offset peak demand.

The June 2, 2009 amendments add two additional feed-in tariff program cost limitations which will limit the CPUC's authority to appropriately design the program. The bill in its present amended form would now require CPUC to determine technology-specific cost limitation based on the average price of contracts within the past 12 month period. It will also limit the CPUC's authority to change the feed-in tariff project size limitation.

Given the June 2 amendments, the CPUC's position is Oppose Unless Amended.

#### SUMMARY OF SUPPORTING ARGUMENTS FOR RECOMMENDATION:

The CPUC is changing its position from support with amendments to oppose unless amended since the latest amendments create redundancy, additional complexity, and limit the CPUC's authority. The amendments create two additional cost-capping measures, in addition to the 500 MW program limit. The 500 MW program limit is sufficient to control total costs. It sends a clear signal to the market on how much capacity to plan for to supply the California feed-in tariff market. Capping the program to when the above-market cost limitation is reached creates regulatory and market uncertainty. In addition, there are several recommended amendments that we have suggested that have yet to be addressed.

The California Public Utilities Commission (CPUC) has worked to implement a feed-in tariff program since it was first introduced into code by AB 1969 (Yee, 2006), which established Public Utilities Code (PU Code) Section 399.20. The Commission adopted Decision (D.) 07-07-027 to implement this legislation and establish feed-in tariffs for small renewable generators, up to 1.5 MW in size. SB 380 (Kehoe, 2008) modified PU

Code Section 399.20 to expand the tariff to all RPS technologies and to eliminate the requirement that the tariff be made available specifically to water and wastewater customer facilities. We are committed to working with the author and sponsor to address these concerns, as the Commission supports feed-in tariff policy.

## **SUMMARY OF SUGGESTED AMENDMENTS:**

# Delete language requiring CPUC to determine technology-specific cost limitation based on the average price of contracts within the past 12 month period

As currently written, 399.20 (d) (3) requires CPUC to establish an annual maximum cost limitation for each renewable technology based on the average price paid for electricity pursuant to the average price of CPUC-approved contracts for that technology over the 12-month period preceding establishment of the cost-limitation. If there is not a sufficient number of contracts approved over the past 12-month period, then the cost limitation is the average price for all contracts of that technology.

The methodology to determine the limitations is flawed since it relies on average prices of CPUC-approved contracts for that technology from the prior year. Most likely, the sample size for each technology will not be large enough to determine a representative price. The alternative option, which uses the average price of all contracts for the technology, is also problematic since many contracts are carried over from the qualifying facility program and do not represent the cost to build and operate a new project today. In addition, the comparison is incorrect since it uses the contract price of RPS projects, which are mostly large projects, typically 50 MW and greater that, can realize better pricing due to economies of scale. Instead of a per technology cost limitation, the bill could create a revenue requirement for the program, and halt the program once the revenue requirement is reached. This revenue requirement should be coordinated with long-term renewable planning to properly allocate how much spending should be allocated to feed-in tariff contracts versus other renewable contracts.

# Remove the prohibition on the CPUC from establishing a must-take feed-in tariff that is not expressly authorized in statute.

This amendment in 399.20 (I) limits the CPUC's constitutional authority to expand or modify the program based on the need of the RPS and market response. The CPUC may see a need to increase this limit based on the needs of the RPS program or the small renewables market. For example, small renewable projects on the distribution grid could contribute significantly to meeting a 33% RPS goal since these projects can come online quickly by avoiding the need for new transmission or generation permitting. A 3 MW project limit could artificially restrict this market – as the agency responsible for the RPS, the CPUC should maintain the flexibility to increase this limit if it helps the state reach the RPS goals at a reasonable cost.

# Allow the CPUC the flexibility to establish facility size pursuant to its open proceeding.

The bill modifies the current FIT program for all renewable projects by increasing the facility size cap from 1.5 MW to 3 MW. The size limitation is the subject of an open proceeding at the CPUC, and a determination has not been made. CPUC staff has recommended a FIT project size limit of 10 MW. CPUC staff has analyzed the number of megawatts under a 10 MW size limit that could easily interconnect to the existing distribution substations without the need for costly upgrades and has found that there is significant technical potential to make real progress in reaching the RPS program goals. Commission staff believes projects of this size have fewer environmental permitting and viability issues relative to projects greater than 10 MW. In addition, projects under 10 MW are not expected to need new transmission. As a result, these projects should be able to come online in a short period of time compared to larger projects.

## The bill should allow the Commission flexibility to determine a FiT price.

As written in the bill the price paid under the feed-in tariff would change from the market price referent adjusted for time-of-delivery (TOD) to the market price referent adjusted for TOD and any other attributes of renewable generation. These "other attributes of renewable generation" are undefined and have not been litigated at the Commission. Parties would pressure the Commission to consider a whole range of issues as an attribute of renewable generation. This provision might conflict with other statute or Commission decisions related to the definition of renewable energy credits, which are also "attributes of renewable generation." The language allowing for the MPR plus "renewable attributes" should be deleted and replaced with language that allows the Commission flexibility to determine a FIT price that does not overpay, but is high enough to attract development in key technologies, such as solar PV, that possess sufficient renewable potential and scale to address the state's renewable and climate change goals.

### Delete requirement to determine cost of generation.

The bill requires the Commission in consultation with the CEC to establish the cost of generation values and cost for each technology. This is unnecessary and contradictory, as the bill already requires the commission to determine the value of the electricity. Determining the value of the renewable electricity is more appropriate as it reflects a more accurate net cost to the customer, including the value of the renewable resource, avoided distribution and transmission, or other benefits. Delete lines 5-7 after "circuit." in section 3 (d) of the bill.

Delete requirement for study and report as it is duplicative: The bill would require that the Commission, in consultation with the California Independent System Operator (CAISO), to monitor and examine the impact on the transmission and distribution grid and any effects on ratepayers resulting from electric generation facilities operating pursuant to a tariff or contract approved by the Commission pursuant to this bill. AB 578 (Blakeslee, 2008) added section 321.7 to the Public Utilities Code, and requires the CPUC, CAISO and the CEC to study and submit a report to the legislature on the impact of all distributed generation on the transmission and distribution grid. Given AB 578, the requirements in SB 32 for an additional report on the same policy issue is duplicative and not needed. Delete subsection (1) of section 399.20 (i), page 9, lines 11-16.

# Delete provisions that allow customers to take the SGIP and CSI incentives and then participate in the feed-in tariff.

The bill would allow a customer electing this tariff to also be eligible to receive ratepayer-funded incentives for the capacity needed to offset part or all of the electrical demand of the customer. This provision of the program would be new and would conflict with D.07-07-027. The Commission's policy has been that customer-side of the meter incentives provided through the Self Generation Incentive Program (SGIP) or the California Solar Initiative (CSI) should not be provided to system-side of the meter wholesale generators since this would effectively allow the same project to receive payments twice. Customers that have taken SGIP and CSI should not be eligible for the feed-in tariff, especially if the price under the feed-in tariff is raised above avoided cost. Additionally, the bill as amended allows the Commission to consider ratepayer funded incentive payments previously received by the generator when determining tariffs or standard offer contracts. Although the intent appears to try and balance ratepayer costs by potentially creating a separate FiT contract for customers who are NEM or have taken CSI, those incentive payments are varied as CSI is a declining incentive program. This would create the need for individual contracts, defeating the point of a standard FiT contract. Customers should choose to be on the customer side of the meter or a wholesale generator. Suggested language: "The Commission shall determine a process or program for existing customers that have taken a ratepayer funded incentive but who wish to expand their generating capacity and become a wholesale generator. The Commission shall ensure that the cost to ratepayers for this program is just and reasonable and also meets the State's renewable energy goals.

# Delete provisions that allow customer to take only one program. Customers should be able to sign up different accounts for NEM (and follow all the NEM rules) and for the feed-in tariff (and follow all the feed-in tariff rules).

This bill would not allow any customer receiving service under a tariff or contract approved pursuant to this section to also participate in any net energy metering (NEM) program. Under the current feed-in tariff, a customer could have multiple systems that are separately metered. One system could be eligible for the feed-in tariff, and one or more system(s) could be eligible for NEM.

## Allow the Commission to have flexibility in determining the program cap through long-term renewable planning.

The tariffs would continue to be available for up to 500 MW of new renewable generating capacity, allocated across the investor-owned utility territories. This represents no change from current law. However staff recommends that the Commission be authorized to adjust upwards or downwards this program cap capacity amount based on the needs of the Renewable Portfolio Standard (RPS) program through long-term renewable planning. It is not cost-effective to require this procurement if the IOUs have no need for additional capacity, and likewise it makes little sense to require the Commission to limit this program if it can help meet the state's RPS goals. Likewise, if the applicable facility size is increased, the cap may need to be concurrently increased. Allow the Commission to have flexibility in determining the program cap through long-term renewable planning. The Commission can use long-term renewable planning to determine how much small renewable generation each IOU needs relative to the cost, risk, and timing of other renewable procurement mechanisms.

Delete the customer indifference requirement and allow the Commission full flexibility to determine the price paid for projects under the feed-in tariff, while also ensuring that the price is not so high as to inappropriately burden ratepayers. Allow the Commission to establish a price above the avoided cost.

The current legislation requires that the Commission ensure that ratepayers not participating in the feed-in tariff are "indifferent" to whether a ratepayer with an electric generation facility receives service pursuant to the tariff. Similar language about customer "indifference" is found in AB 1613 (Blakeslee, 2007) which established a feed-in tariff for combined heat and power. The bill states in Section 399.20 (d) "The commission shall ensure, with respect to rates and charges, that ratepayers that do not receive service pursuant to the tariff are indifferent to whether a ratepayer with an electric generation facility receives service pursuant to the tariff." There is no known standard for indifference, and it is unclear whether that standard is meant to refer to the Commission's adopted avoided cost formula.

If the statutory intent is that the payment under this small renewable generation feed-in tariff is meant to be equal to "avoided cost" so that non-participating customers are indifferent to whether the utility signs up a facility on the tariff, then

- (1) there may be a conflict between prescribing the price using the market price referent and the Commission's adopted avoided cost formula, but this has not been litigated; and/or
- (2) the Commission will be unable to authorize a feed-in tariff price at a price higher than avoided cost because presumably that would not leave customers "indifferent" to the new contracts. That would appear to conflict with the intent of the bill to adjust the price for renewable attributes.

## Remove the additional program cap in 399.20 (f).

In addition to the 500 MW limit, the feed-in tariff program will be suspended when the IOUs reach the above market cost limitation pursuant to PU Code Section 399.15. This additional cap creates redundancy and should be removed.

#### PROGRAM BACKGROUND:

Under the existing program, PG&E has 13 signed contracts (one wind, five small hydro, seven landfill gas projects, and no solar projects). SCE has no contracts signed, but has received interest and several projects are actively working toward execution of a contract. SDG&E has no signed contracts.

Public Utilities Code § 399.20 requires each electrical corporation to establish a tariff for the purchase of electricity from an eligible renewable water or wastewater facility at a market price determined by the Commission. The Commission implemented § 399.20 by D. 07-07-027 on June 26, 2007. The decision adopted tariffs and standard contracts for the purchase of this electricity up to 1.5 MW from water and wastewater customers, and additionally it made the same program available to all other renewable customer generators in PG&E and SCE territory. Later, the Commission expanded the program to all customers in SDG&E's territory. The Commission's implementation of § 399.20 is considered phase 1 of the Tariff and Standard Contract Implementation for RPS Generators. The Commission is currently considering phase 2, which includes consideration of expanding the contract to facilities up to 20 MW under R.08-08-009.

On September 28, 2008, SB 380 amended Public Utilities Code § 399.20 to allow purchase of electricity for any eligible renewable electric facility and increased the statewide cap from 250 MW to 500 MW, and it removed any requirement that the tariff be available to water or wastewater facilities. Comments have been filed with the Commission concerning implementing the changes mandated in SB 380, and the Commission is currently working on a Decision to implement SB 380.

The California Energy Commission (CEC) has been investigating feed-in tariffs. They held staff workshops on June 30, 2008 and October 1, 2008 in order to discuss policy directions for feed-in tariffs. Prior to the October 1, 2008 workshop a draft consultant report was issued entitled "California Feed-in Tariff Design and Policy Options". Based on that report and workshops, the CEC has recommended that the Commission immediately implement a feed-in tariff program for all RPS-eligible generating facilities up to 20 MW in size. They recommend that such a program should include must-take provisions as well as cost-based technology-specific prices that generally decline over time and are not linked to the MPR.

As a part of R.08-08-009, the Commission is considering expanding the existing FIT program from 1.5 MW up to possibly 20 MW. On March 27, 2009, the ALJ served ruling with a staff proposal on feed-in tariff program design issues and terms and conditions. Staff recommends that the Commission expand the existing program up to 10 MW and consider changing the FIT price in the next phase of the proceeding. Staff also held a workshop in February on FIT program design and terms and conditions. In designing an expanded FIT program, the Commission needs to carefully balance the cost, risk, and timing of the overall RPS program with the cost, risk, and timing of an expanded FIT program.

#### OTHER STATE AND FEDERAL INFORMATION:

Congress is currently considering proposed feed-in tariff national legislation, in conjunction with national RPS bills. There is currently no federal mandate related to feed-in tariffs.

Several other states are considering feed-in tariffs, and the City of Gainesville, Florida recently enacted a small feed-in tariff in lieu of a program like the California Solar Initiative.

Eighteen European countries have FIT programs and Germany leads the world in terms of installed capacity for both photovoltaics (PV) and for wind energy as a result of its feed-in tariff policies. By the end of 2007, Germany had 22,622 MW of wind and 3,800 MW of solar PV capacity installed in the country, with annual additions of 1,667 MW of wind and 1,100 MW of PV added in 2007 alone. The German FIT has been very successful in building new projects, but as mentioned previously, has come at a high price to ratepayers.

Spain also has a feed-in tariff program that has resulted in much development. By the end of 2007, Spain had installed 15,145 MW of wind capacity, and 500 MW of PV capacity. On the other hand, Spain had to freeze and then revise its feed-in tariff program midcourse because of lucrative payments and unexpected interest. This boom

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and bust hurt the solar market in Spain and has resulted in economic loss and oversupply. Thus, the success of a feed-in tariff is very dependent on the goals of the program and the program's design.

#### **LEGISLATIVE HISTORY:**

- The adoption of AB 1969 (Yee, 2006) led to the implementation of P.U. Code Section 399.20. As aforementioned, this Code Section provides California's only feed-in tariff to date.
- The adoption of SB 380 (Kehoe, 2008) altered P.U. Code Section 399.20 to include all renewables and increased the statewide cap to 500 MW.
- The implementation of P.U. Code Section 399.11 established the RPS requirement of "generating 20 percent of total retail sales of electricity in California from eligible renewable energy resources by December 31, 2010."

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