2010 Vintage Renewable Energy Credits and Use for Compliance Under 33% RPS

Issue: Pursuant to SBX1 2, if enacted, could PG&E procure a 2010 vintage REC and use it for compliance in 2011 or subsequent years?

Conclusion: Yes. Nothing in the legislation prohibits use of RECs from vintages prior to 2011 from being used in 2011 or later years, so long as: (1) this use complies with the product content requirements in the bill; (2) the use complies with restrictions on banking between the first and later compliance periods; (3) the REC is tracked in WREGIS;[1] (4) any requirements for the use of (i.e., limits on the amount of) unbundled RECs are met;[2] and (5) PG&E retires the 2010 REC into a WREGIS compliance sub-account within 36 months of the date the associated energy was generated. Requirements (1), (2), and (5) are discussed in more detail below.

Note that to the extent the Commission's RECs Decision (D.11-01-025) continues in effect after SBX1 2 is enacted, the Decision would additionally require that: (1) 2010 vintage RECs be retired into a WREGIS compliance sub-account by December 31, 2012 (earlier than required by statute); (2) no more than $50 per REC is paid for unbundled RECs procured after the effective date of the decision through the period of the temporary cap; and (3) unbundled RECs do not exceed a temporary 25% usage cap. However, PG&E believes that the Commission should repeal these provisions, given that the legislation expressly eliminates the current statutory provision for the Commission to limit the quantity of REC procurement[3] and because the legislation preempts the REC Decision's cap and retirement date through setting a new cap on unbundled REC procurement[4] and deadline for retirement (discussed below).

Analysis:

1) Eligibility requirements – Is a 2010 vintage REC RPS-eligible?

Conclusion: **Yes**. A 2010 vintage REC meets the RPS eligibility requirements as long as it meets certain fuel and capacity requirements and has a COD post-January 1, 2005, or alternatively it can be older as long as it was part of a retail sellers portfolio as of January 1, 2010. Additionally, energy from small hydro facilities must have generally been procured by a retail seller or California POU as of January 1, 2005.

See Item 1. Eligibility requirements in Appendix to this document (contains language from SBX1 2).

2) REC definition – Does the statutory definition restrict REC eligibility to a specific date of creation or vintage?

Conclusion: **No**. The statutory definition of a REC does not provide limitations beyond those referenced above in relation to the eligibility of the generating facility. Accordingly, a REC from any RPS-eligible facility could be procured and used for compliance.

See Item 2. REC statutory definitions in Appendix to this document (contains language from SBX1 2).

3) Banking – Do banking rules restrict the vintage of RECs that can be banked from one compliance period to the next?

Conclusion: **No**. However, RECs cannot be banked between the first and later compliance periods, if the contract is for less than 10 years.

See Item 3. Banking language in Appendix (contains language from SBX1 2 as introduced).

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[1] *See* SBX1 2, Section 21 (399.21(a)(1)), Section 14 (399.12(h)(1).
[2] *See generally* SBX1 2, Section 21.
[3] *See* Pub. Util. Code § 399.16(a)(7) (deleted in SBX 1 2).
[4] *See* SBX1 2, Section 22.

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4) REC Retirements – Will the timing of REC retirements in WREGIS prohibit the use of 2010 vintage RECs for RPS compliance?

Conclusion: **No**. The statute only requires that RECs be retired (no longer traded) within 36 months from the date of generation of the electricity.

See Item 4. REC Retirement language in Appendix (contains language from SBX1 2).

Reasoning: Consistent with the reasoning behind a similar restriction in the Commission's recent RECs Decision, PG&E understands this statutory provision to operate as a restriction on trading, not banking, of RECs.[5] Thus, a REC associated with energy generated on Dec. 1, 2010, would have to be retired into a WREGIS RPS compliance retirement sub-account by no later than November 30, 2013. While PG&E could no longer sell the REC after that date, the statute allows the REC to be banked (under the statutory conditions or limitations) for future RPS compliance use.

[5] *See* D.10-03-021 at 69 (noting that the 3-year-to-retirement rule "will allow an LSE holding TRECs to make a good estimate of its future compliance needs, and either commit or sell its TRECs); *Ibid.* ("Once RECs are retired for RPS compliance within WREGIS, they will be . . . subject to the RPS flexible compliance rules" [e.g., banking]).

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Appendix
Language from SB1X 2 (as introduced February 1, 2011) on Eligibility, REC Definition, Banking, and Retirement

1. Eligibility requirements

Summary: Two statutory provisions establish whether a source is an "eligible renewable energy resource" that can produce RECs to be used for RPS compliance. First, the Public Resources Code defines a "renewable electrical generation facility." Second, the Public Utilities Code defines an "eligible renewable energy resource" as a subset of the universe of "renewable electrical generation facilities." Read together, these provisions generally require that a facility meet certain fuel and capacity requirements and have a COD post-January 1, 2005, or alternatively it can be older as long as it was part of a retail sellers portfolio as of January 1, 2010. Additional, energy from small hydro facilities must have generally been procured by a retail seller or California POU as of January 1, 2005. (Sections 25741, p. 10, line 23 through p. 13, line 15; 399.12(e), p. 21, line 35 through p. p. 22, line 33)

Statutory language:

25741. As used in this chapter, the following terms have the following meaning:

~~(a) "Delivered" and "delivery" mean the electricity output of an in-state renewable electricity generation facility that is used to serve end-use retail customers located within the state. Subject to verification by the accounting system established by the commission pursuant to subdivision (b) of Section 399.13 of the Public Utilities Code, electricity shall be deemed delivered if it is either generated at a location within the state, or is scheduled for consumption by California end-use retail customers. Subject to criteria adopted by the commission, electricity generated by an eligible renewable energy resource may be considered "delivered" regardless of whether the electricity is generated at a different time from consumption by a California end-use customer.~~

~~(b) "In-state renewable electricity~~

(a) "Renewable electrical generation facility" means a facility that meets all of the following criteria:

(1) The facility uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and any additions or enhancements to the facility using that technology.

(2) The facility satisfies one of the following requirements:

(A) The facility is located in the state or near the border of the state with the first point of connection to the transmission network ~~within this state and electricity produced by the facility is delivered to an in-state location~~ *of a balancing authority area primarily located within the state. For purposes of this subparagraph, "balancing authority area" has the same meaning as defined in Section 399.12 of the Public Utilities Code* .

(B) The facility has its first point of interconnection to the transmission network outside the state *, within the Western Electricity Coordinating Council (WECC) service area,* and satisfies all of the following requirements:

~~(i) It is connected to the transmission network within the Western Electricity Coordinating Council (WECC) service territory.~~

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~~(ii)~~

(i) It commences initial commercial operation after January 1, 2005.

~~(iii) Electricity produced by the facility is delivered to an in-state location.~~

~~(iv)~~

(ii) It will not cause or contribute to any violation of a California environmental quality standard or requirement.

~~(v) If the facility is outside of the United States, it is developed and operated in a manner that is as protective of the environment as a similar facility located in the state.~~

~~(vi)~~

(iii) It participates in the accounting system to verify compliance with the renewables portfolio standard ~~by retail sellers,~~ once established by the ~~Energy Commission~~ *commission* pursuant to subdivision (b) of Section ~~399.13~~ *399.25* of the Public Utilities Code.

(C) The facility meets the requirements of clauses ~~(i), (iii), (iv), (v), and (vi)~~ *(ii) and (iii)* in subparagraph (B), but does not meet the requirements of clause ~~(ii)~~ *(i) of subparagraph (B)* because it ~~commences~~ *commenced* initial operation prior to January 1, 2005, if the facility satisfies either of the following requirements:

(i) The electricity is from incremental generation resulting from expansion or repowering of the facility.

~~(ii) The facility has been part of the existing baseline of eligible renewable energy resources of a retail seller established pursuant to paragraph (2) of subdivision (b) of Section 399.15 of the Public Utilities Code or has been part of the existing baseline of eligible renewable energy resources of a local publicly owned electric utility established pursuant to Section 387 of the Public Utilities Code.~~

(ii) Electricity generated by the facility was procured by a retail seller or local publicly owned electric utility as of January 1, 2010.

(3) If the facility is outside the United States, it is developed and operated in a manner that is as protective of the environment as a similar facility located in the state.

~~(3) For the purposes of this subdivision, "solid waste conversion"~~

(b) "Municipal solid waste conversion," as used in subdivision (a), means a technology that uses a noncombustion thermal process to convert solid waste to a clean-burning fuel for the purpose of generating electricity, and that meets all of the following criteria:

~~(A)~~

(1) The technology does not use air or oxygen in the conversion process, except ambient air to maintain temperature control.

~~(B)~~

(2) The technology produces no discharges of air

contaminants or emissions, including greenhouse gases as defined in Section 38505 of the Health and Safety Code.

~~(C)~~

(3) The technology produces no discharges to surface or groundwaters of the state.

~~(D)~~

(4) The technology produces no hazardous wastes.

~~(E)~~

(5) To the maximum extent feasible, the technology removes all recyclable materials and marketable green waste compostable materials from the solid waste stream prior to the conversion process and the owner or operator of the facility certifies that those materials will be recycled or composted.

~~(F)~~

(6) The facility at which the technology is used is in compliance with all applicable laws, regulations, and ordinances.

~~(G)~~

(7) The technology meets any other conditions established by the commission.

~~(H)~~

(8) The facility certifies that any local agency sending solid waste to the facility diverted at least 30 percent of all solid waste it collects through solid waste reduction, recycling, and composting. For purposes of this paragraph, "local agency" means any city, county, or special district, or subdivision thereof, which is authorized to provide solid waste handling services.

~~(c) "Procurement entity" means any person or corporation that enters into an agreement with a retail seller to procure eligible renewable energy resources pursuant to subdivision (f) of Section 399.14 of the Public Utilities Code.~~

399.12 (e) “Eligible renewable energy resource” means an electrical generating facility that meets the definition of an ~~“in-state renewable electricity~~ a “*renewable electrical* generation facility” in Section 25741 of the Public Resources Code, subject to the following ~~limitations~~:

(1) (A) An existing small hydroelectric generation facility of 30 megawatts or less shall be eligible only if a retail seller or local publicly owned electric utility ~~owned or~~ *procured the electricity from the facility as of December 31, 2005. A small hydroelectric generation unit with a nameplate capacity not exceeding 40 megawatts that is operated as part of a water supply or conveyance system is an eligible renewable energy resource if the retail seller or local publicly owned electric utility* procured the electricity from the facility as of December 31, 2005. A new hydroelectric facility *that commences generation of electricity after December 31, 2005*, is not an eligible renewable energy resource if it will cause an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow.

(B) Notwithstanding subparagraph (A), a conduit hydroelectric facility of 30 megawatts or less that commenced operation before

January 1, 2006, is an eligible renewable energy resource. A conduit hydroelectric facility of 30 megawatts or less that commences operation after December 31, 2005, is an eligible renewable energy resource so long as it does not cause an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow.

(C) A facility approved by the governing board of a local publicly owned electric utility prior to June 1, 2010, for procurement to satisfy renewable energy procurement obligations adopted pursuant to former Section 387, shall be certified as an eligible renewable energy resource by the Energy Commission pursuant to this article, if the facility is a "renewable electrical generation facility" as defined in Section 25741 of the Public Resources Code.

(2) A facility engaged in the combustion of municipal solid waste shall not be considered an eligible renewable energy resource unless it is located in Stanislaus County and was operational prior to September 26, 1996.

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2. REC statutory definitions

Summary: REC not defined to be a particular vintage. Pages 23-24 of SBX1 2, Section 399.12(h)(1).

Statutory language:

(h) (1) "Renewable energy credit" means a certificate of proof associated with the generation of electricity from an eligible renewable energy resource, issued through the accounting system established by the Energy Commission pursuant to Section ~~399.13~~ *399.25* , that one unit of electricity was generated and delivered by an eligible renewable energy resource.

(2) "Renewable energy credit" includes all renewable and environmental attributes associated with the production of electricity from the eligible renewable energy resource, except for an emissions reduction credit issued pursuant to Section 40709 of the Health and Safety Code and any credits or payments associated with the reduction of solid waste and treatment benefits created by the utilization of biomass or biogas fuels.

(3) ~~No~~ *(A) An* electricity generated by an eligible renewable energy resource attributable to the use of nonrenewable fuels, beyond a de minimis quantity used to generate electricity in the same process through which the facility converts renewable fuel to electricity, shall *not* result in the creation of a renewable energy credit. The Energy Commission shall set the de minimis quantity of nonrenewable fuels for each renewable energy technology at a level of no more than 2 percent of the total quantity of fuel used by the technology to generate electricity. The Energy Commission may adjust the de minimis quantity for an individual facility, up to a maximum of 5 percent, if it finds that all of the following conditions are met:

~~(A)~~

(i) The facility demonstrates that the higher quantity of nonrenewable fuel will lead to an increase in generation from the eligible renewable energy facility that is significantly greater than generation from the nonrenewable fuel alone.

~~(B)~~

(ii) The facility demonstrates that the higher quantity of nonrenewable fuels will reduce the variability of its electrical output in a manner that results in net environmental benefits to the state.

~~(C)~~

(iii) The higher quantity of nonrenewable fuel is limited to either natural gas or hydrogen derived by reformation of a fossil fuel.

(B) Electricity generated by a small hydroelectric generation facility shall not result in the creation of a renewable energy credit unless the facility meets the requirements of subparagraph (A) of paragraph (1) of subdivision (e).

(C) Electricity generated by a conduit hydroelectric generation facility shall not result in the creation of a renewable energy credit unless the facility meets the requirements of subparagraph (B) of paragraph (1) of subdivision (e).

(D) Electricity generated by a facility engaged in the combustion of municipal solid waste shall not result in the creation of a renewable energy credit unless the facility meets the requirements of paragraph (2) of subdivision (e).

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~~(f)~~

3. Banking language
Section 399.13(a)(4)(B) states: (p. 28, lines 28 to 37)

(B) Rules permitting retail sellers to accumulate, beginning January 1, 2011, excess procurement in one compliance period to be applied to any subsequent compliance period. The rules shall apply equally to all retail sellers. In determining the quantity of excess procurement for the applicable compliance period, the commission shall deduct from actual procurement quantities, the total amount of procurement associated with contracts of less than 10 years in duration. In no event shall electricity products meeting the portfolio content of paragraph (3) of subdivision (b) of Section 399.16 be counted as excess procurement.

4. REC Retirement language
Section 399.16(a)(6), page 44 of SBX1 2

(6) A renewable energy credit shall not be eligible for compliance with a renewables portfolio standard procurement requirement unless it is retired in the tracking system established pursuant to subdivision (c) of Section 399.25 by the retail seller or local publicly owned electric utility within 36 months from the initial date of generation of the associated electricity.

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