

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Continue
Implementation and Administration of
California Renewables Portfolio Standard Program

Rulemaking 11-05-005
(Filed May 5, 2011)

**COMMENTS OF THE LARGE-SCALE SOLAR ASSOCIATION
ON PORTFOLIO CONTENT CATEGORIES**

Shannon Eddy
Executive Director
Large-scale Solar Association
2501 Portola Way
Sacramento, California 95818
(916) 731-8371
eddyconsulting@gmail.com

August 8, 2011

SF:316134.1

SB_GT&S_0618957

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Continue
Implementation and Administration of
California Renewables Portfolio Standard Program

Rulemaking 11-05-005
(Filed May 5, 2011)

**COMMENTS OF THE LARGE-SCALE SOLAR ASSOCIATION
ON PORTFOLIO CONTENT CATEGORIES**

The Large-scale Solar Association (“LSA”) submits these comments in response to the July 12, 2011, Administrative Law Judge’s Ruling Requesting Comments on Implementation of New Portfolio Content Categories For the Renewables Portfolio Standard Program (“Ruling”). LSA participated in informal discussions with several parties concerning the new portfolio content categories and supports the consensus positions articulated in the RPS Product Matrix (“Matrix”) that is attached as Appendix A hereto. In these comments, LSA responds to several of the questions set forth in the Ruling and also addresses certain of the unresolved issues reflected in the Matrix.

At the outset, however, LSA urges the Commission to ensure that the rules that it adopts to implement the new portfolio content categories are clear, transparent and easy to implement. As LSA has long cautioned, the lack of significant market experience with unbundled renewable energy credits (“RECs”) presents a challenge in rule development, as the marketplace may produce commercial arrangements that were not contemplated when establishing the Commission’s rules. At the same time, the new portfolio content categories and compliance targets adopted in SB 2 (1x) reflect a careful and thoughtful

balance of important public and private interests. If the Commission rules implementing these categories and limits are complex or opaque, there is an increased risk that the balance struck by the legislature will be disturbed by unanticipated commercial arrangements.

I. RESPONSE TO QUESTIONS IN THE RULING

Question 9 in the Ruling asks whether the term “unbundled renewable energy credit” should be defined as a “renewable energy credit [as defined in new § 399.12(h)] that is procured separately from the RPS-eligible energy with which the REC is associated”? While separate procurement of energy and the “associated” renewable attributes is the key element in defining an unbundled REC, LSA believes that further clarification of the term “associated” is necessary. In particular, in order to avoid any ambiguity concerning whether a given REC is associated with a given unit of energy, an “unbundled renewable energy credit” should be defined as a “renewable energy credit [as defined in new § 399.12(h)] that is procured separately from the RPS-eligible energy that was generated contemporaneously with the REC.”

Question 10 in the Ruling asks whether transactions meeting the portfolio content category established under § 399.16(b)(1) may include unbundled REC transactions (e.g., unbundled RECs purchased from a renewable facility that is directly connected to a California balancing authority). The answer to this question is unequivocally “no”. Simply put, unbundled RECs, whether from an in-state or out-of-state resource, are expressly included within the scope of § 399.16(b)(3). As such, they cannot also meet the requirements of § 399.16(b)(1).

If this were not clear enough, the focus of all of § 399.16(b) is on the electricity product being procured; nowhere, other than in § 399.16(b)(3), does the REC concept,

bundled or unbundled, arise. As such, the Legislature clearly envisioned that what is counting towards each portfolio content category is the energy from the renewable resource that carries with it the associated environmental attributes. For § 399.16(b)(1), it is energy that is delivered directly to a California balancing authority (including via dynamic transfer) or delivered indirectly but without substituting electricity from other sources. In other words, no unbundled RECs are allowed. For § 399.16(b)(2) it is energy that is firm and shaped. And for § 399.16(b)(3) it is energy that does not qualify under the other two sections and specifically unbundled RECs. Had the Legislature intended to include in-state unbundled RECs in § 399.16(b)(1), it most certainly would have done so explicitly, as it did with the inclusion of unbundled RECs in § 399.16(b)(3).

Question 19 in the Ruling asks when the portfolio content limitations set forth in § 399.16(d) should go into effect. LSA believes that the Ruling intended to refer to § 399.16(c) and that these limitations should apply as of January 1, 2011. The new § 399.16 begins, in the first sentence of subsection (a), with the statement that various electricity products (which are described later in § 399.16) may be used to meet the procurement requirements set forth in § 399.15. These requirements are separated into three compliance periods, the first of which runs from January 1, 2011 to December 31, 2013. § 399.16(c) itself refers to these same compliance periods in describing portfolio content limits for each period. Since the portfolio content requirements established in § 399.16(c) will apply to the compliance periods established in § 399.15, it is only logical that they apply as of January 1, 2011 when the first compliance period begins. It does not matter that SB 2 (1x) has not become effective until after January 1, 2011; the Legislature clearly intended that compliance with the portfolio content requirements be measured, in

the first instance, over the period from January 1, 2011 through December 31, 2013.

For the reasons stated immediately above, the delivery requirement referred to under the first bullet of Question 20 should also be lifted as of January 1, 2011. As of this date, transactions should be viewed using the new portfolio content requirements established under § 399.16.

II. UNRESOLVED ISSUES IN THE MATRIX

One of the issues left unresolved in the Matrix is whether a REC that qualifies initially under § 399.16(b)(1) always qualifies within this portfolio content category irrespective of whether it is subsequently unbundled. This issue poses essentially the same question as that posed in Question 10 of the Ruling. For the same reasons addressed above, unbundled REC transactions are covered under § 399.16(b)(3), whether the REC at one time qualified under § 399.16(b)(1) or not.

The Matrix also leaves unresolved, with respect to § 399.16(b)(1)(A), the time interval over which to measure whether substitute energy was purchased and the fraction of a schedule actually generated. The only fair interpretation of the statute is that the time interval is, at most, hourly. Currently, the California Independent System Operator (“CAISO”) schedules energy imports on an hourly basis. The CAISO, in its renewable integration and product Phase 2 process, has proposed to eliminate the hourly market and move to sub-hourly (e.g. 15 minute) scheduling of imports. It should be expected that as the CAISO moves to more granular schedules, the difference between the resource’s actual energy production and the scheduled amount should diminish. Therefore, the period over which the netting occurs for purposes of § 399.16(b)(1)(A) should anticipate these forthcoming changes.

In order to meet the mandate of § 399.16(b)(1)(A) that the electricity be both (1)

scheduled from the generation resource and (2) not involve energy substituted from another resource, that electricity must be matched with the schedule over the CAISO's hourly scheduling interval. Otherwise, there would be no way to ensure that the energy that is imported was not substituted from another resource. This is made crystal clear by the final sentence of § 399.16(b)(1), which refers to hourly or sub-hourly import schedules and provides that "only the fraction of the schedule actually generated by the eligible renewable energy resource shall count toward this portfolio content category."

III. CONCLUSION

For the reasons stated above, the Commission must implement the new portfolio content categories adopted by the Legislature in SB 2 (1x) as intended. To do so, the Commission must provide (1) a clear definition of an unbundled REC, such as the definition described above by LSA, and (2) strict guidance that any unbundled REC, regardless of where the project from which the unbundled REC originated was interconnected and whether the unbundled REC at one time was eligible for inclusion in the category established by § 399.16(b)(1), will be considered an unbundled REC included in the category established by § 399.16(b)(3). Additionally, the Commission should apply portfolio content limitations effective as of January 1, 2011. Finally, the Commission should measure on an hourly basis (or sub-hourly if the CAISO implements sub-hourly import scheduling) whether substitute energy was purchased and the fraction of a schedule actually generated for the purposes of counting towards the category established by § 399.16(b)(1).

Dated: August 8, 2011

Respectfully Submitted,

/s/ Shannon Eddy _____

Shannon Eddy
Executive Director
Large-scale Solar Association
2501 Portola Way
Sacramento, California 95818
eddyconsulting@gmail.com

VERIFICATION

I, Kristin Burford, am the Policy Director of the Large-scale Solar Association. I am authorized to make this Verification on its behalf. I declare under penalty of perjury that the statements in the foregoing copy of *Comments of the Large-scale Solar Association on Portfolio Content Categories* are true of my own knowledge, except as to the matters which are therein stated on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 8, 2011 at San Rafael, California.

/s/ Kristin Burford

Kristin Burford

Policy Director, Large-scale Solar Association

APPENDIX A

RPS Product Matrix | REFERENCE PROPOSAL OUTLINING AREAS OF BROAD CONSENSUS AND OPEN ISSUES

Note: The following table was produced by a broad group of stakeholders in order to develop a common conceptual framework for discussing the RPS Product Content Requirements, identifying where stakeholder consensus exists, and allowing individual comments to focus on the identified open issues in the last column. The following stakeholders participated in discussions regarding this table and its refinement based on those discussions: Coalition of California Utility Employees; Division of Ratepayer Advocates; enXco; First Solar; Iberdrola; Independent Energy Producers Association; Large-Scale Solar Association; NextEra; Pacific Gas and Electric Company; San Diego Gas and Electric Company; Southern California Edison; Sunpower; The Utility Reform Network; and the Union of Concerned Scientists.

Issue or RPS Portfolio Content Category Requiring Interpretation	New Statutory Language (from SB 2 (1X))	Consensus RPS Product Description	Consensus Illustrative Contract / Interconnection Structures	Open Issues (No Consensus)
<p><u>What Procurement is Affected?</u></p>	<p>399.16(c) <i>“eligible renewable energy resource electricity products associated with contracts executed after June 1, 2010”</i></p>	<p>“bundled purchase” means the purchase of RPS-eligible energy plus the associated Renewable Energy Credit (REC) “unbundled REC” means the REC associated with the RPS-eligible energy separate from the associated energy</p>	<p>(1) Contract amendments or modifications occurring after June 1, 2010 unless such amendment or modification is grandfathered under the provisions set forth in 399.16(d)(3); (2) New contracts with existing facilities (i.e., recontracting) after June 1, 2010, unless such contract is grandfathered under the provisions set forth in 399.16(d)(3); (3) Any contract executed under an approved IOU Photovoltaic PPA program after June 1, 2010; (4) Engineering, Procurement and Construction or Build Own Transfer</p>	

For Reference and Discussion Purposes Only: Information contained herein does not necessarily reflect the views of any party.

RPS Product Matrix | REFERENCE PROPOSAL OUTLINING AREAS OF BROAD CONSENSUS AND OPEN ISSUES

Issue or RPS Portfolio Content Category Requiring Interpretation	New Statutory Language (from SB 2 (1X))	Consensus RPS Product Description	Consensus Illustrative Contract / Interconnection Structures	Open Issues (No Consensus)
			<p>contracts for renewable utility owned generation (UOG) executed after June 1, 2010;</p> <p>(5) Any Feed in Tariff contract (ie., AB 1969, SB 32, Renewable Auction Mechanism, etc.) executed after June 1, 2010;</p> <p>(6) Any enrollment in the IOU net energy metering (NEM) program for surplus distributed generation (i.e., including but not limited to participants in California Solar Initiative and Self-Generation Incentive Program) after June 1, 2010.</p> <p>(7) Bilaterally-negotiated transactions after June 1, 2010;</p> <p>(8) Any new renewable energy resource contract executed after June 1, 2010, including purchases of unbundled RECs associated with generation under any of the above contract structures.</p>	

For Reference and Discussion Purposes Only: Information contained herein does not necessarily reflect the views of any party.

RPS Product Matrix | REFERENCE PROPOSAL OUTLINING AREAS OF
BROAD CONSENSUS AND OPEN ISSUES

Issue or RPS Portfolio Content Category Requiring Interpretation	New Statutory Language (from SB 2 (1X))	Consensus RPS Product Description	Consensus Illustrative Contract / Interconnection Structures	Open Issues (No Consensus)
<u>Bucket #1(a)</u>	<p>399.16(b)(1)(A): <i>[addressing point of interconnection of facility]</i></p> <p><i>“Have a first point of interconnection with a California balancing authority”</i></p>	<p>Facility must be an eligible renewable energy resource located within the WECC and Facility must be directly interconnected to a California Balancing Authority (CBA). CBAs include CAISO, LADWP, TID, IID, and Balancing Authority of Northern California (formerly SMUD).</p> <ul style="list-style-type: none"> • Any transaction for a product from an eligible renewable generator physically connected to any CBA • Any transaction for a product from an eligible renewable generator located outside of a CBA, but which directly interconnects to a CBA through a gen-tie. • “gen-tie” means an electrical conductor directly connecting the generation unit to a CBA 	<ul style="list-style-type: none"> • Bundled procurement from eligible renewable generator physically connected to any CBA, including utility-owned generation (UOG) • NEM surplus sales 	<ul style="list-style-type: none"> • Should the CPUC establish a standard in advance for identifying future or additional CBAs now, or should that process wait until there is some change in the current CBA lineup?
<u>Bucket #1(b)</u>	<p>399.16(b)(1)(A): <i>[addressing point of interconnection of facility]</i></p>	<p>Facility must be an eligible renewable energy resource located within the WECC and Facility must be directly interconnected to the distribution system</p>	<ul style="list-style-type: none"> • Bundled procurement from distributed generation facility interconnected at distribution level of any CBA, including UOG 	<ul style="list-style-type: none"> • Do RECs associated with generation within a CBA area that serves load “behind-the-meter” (ie.,

For Reference and Discussion Purposes Only: Information contained herein does not necessarily reflect the views of any party.

RPS Product Matrix | REFERENCE PROPOSAL OUTLINING AREAS OF BROAD CONSENSUS AND OPEN ISSUES

Issue or RPS Portfolio Content Category Requiring Interpretation	New Statutory Language (from SB 2 (1X))	Consensus RPS Product Description	Consensus Illustrative Contract / Interconnection Structures	Open Issues (No Consensus)
	<p><i>“[H]ave a first point of interconnection with distribution facilities used to serve end users within a California balancing authority area...”</i></p>	<p>located within a CBA’s area.</p> <ul style="list-style-type: none"> Any transaction for a product from an eligible renewable generator physically connected to distribution facilities serving end use customers in a CBA. Any transaction for a product from an eligible renewable generator located outside of a CBA, but which directly interconnects to a CBA’s distribution facilities through a gen-tie. “gen-tie” means an electrical conductor directly connecting the generation unit to a CBA 	<ul style="list-style-type: none"> NEM surplus sales 	<p>CSI/NEM or industrial RPS generation serving on-site load) qualify as Bucket 1 if they are sold (unbundled) to a (1) the retail seller that is also buying the energy, or (2) another RPS-obligated retail seller?</p> <ul style="list-style-type: none"> In general, should the “bucket” attribute of a REC remain with the REC until it is retired for compliance, no matter how many times it is traded as an unbundled product in the secondary market? If so, how can the bucket attribute of a REC best be tracked?

For Reference and Discussion Purposes Only: Information contained herein does not necessarily reflect the views of any party.

RPS Product Matrix | REFERENCE PROPOSAL OUTLINING AREAS OF BROAD CONSENSUS AND OPEN ISSUES

Issue or RPS Portfolio Content Category Requiring Interpretation	New Statutory Language (from SB 2 (1X))	Consensus RPS Product Description	Consensus Illustrative Contract / Interconnection Structures	Open Issues (No Consensus)
<p><u>Bucket #1(c)</u></p>	<p><i>[399.16(b)(1)(A): re specific types of commercial transactions]</i></p> <p><i>"... or are scheduled from the eligible renewable energy resource into a California balancing authority without substituting electricity from another source. The use of another source to provide real-time ancillary services required to maintain an hourly or subhourly import schedule into a California balancing authority shall be permitted, but only the fraction of the schedule actually generated by the</i></p>	<ul style="list-style-type: none"> • Energy must be scheduled to a CBA from an eligible renewable energy resource ("ERR") located within the WECC and documented using E-tag information for generator source and delivery sink. • Schedule into the CBA may be day-ahead, hourly, or sub-hourly. • No specific transmission rights are required. • Only the lesser of ERR metered-data and the final adjusted E-tags is eligible as "Bucket 1(c)". • Import schedules may be firmed within the hour through the use of ancillary services markets, including intra-hour balancing services. 	<ul style="list-style-type: none"> • Generator located in the Pacific Northwest schedules 100 MWh into CAISO over time period X. In that time period, generator meter data shows generation of 90 MWh, and final adjusted E-Tags show delivery of 100 MWh. Retail seller will receive 90 MWh of Bucket 1(c) credit from this resource over this time period. • Over time period Y, Generator scheduled 100 MWh, but 110 MWh is actually generated; 100 MWh would be reflected on the E-tag and is counted for "Bucket # 1(c)." 	<ul style="list-style-type: none"> • Over what period of time may the facility's meter data be netted against the final adjusted E-tags from the contract? Hourly? Monthly? • What additional technology, data, or systems, if any, are needed to track, compute, and produce for verification these comparisons of meter data with final adjusted E-tags? How does the answer to this question impact the feasibility or reasonableness of any particular netting period, as discussed in the bullet above?

For Reference and Discussion Purposes Only: Information contained herein does not necessarily reflect the views of any party.

RPS Product Matrix

REFERENCE PROPOSAL OUTLINING AREAS OF
BROAD CONSENSUS AND OPEN ISSUES

Issue or RPS Portfolio Content Category Requiring Interpretation	New Statutory Language (from SB 2 (1X))	Consensus RPS Product Description	Consensus Illustrative Contract / Interconnection Structures	Open Issues (No Consensus)
	<p><i>eligible renewable energy resource shall count toward this portfolio content category.”</i></p>			

For Reference and Discussion Purposes Only: Information contained herein does not necessarily reflect the views of any party.

RPS Product Matrix | REFERENCE PROPOSAL OUTLINING AREAS OF BROAD CONSENSUS AND OPEN ISSUES

Issue or RPS Portfolio Content Category Requiring Interpretation	New Statutory Language (from SB 2 (1X))	Consensus RPS Product Description	Consensus Illustrative Contract / Interconnection Structures	Open Issues (No Consensus)
<u>Bucket #1(d)</u>	<p>399.16(b)(1)(B):</p> <p>[re dynamically scheduled transactions]</p> <p><i>“Have an agreement to dynamically transfer electricity to a California balancing authority.”</i></p>	<ul style="list-style-type: none"> Any transaction in which the energy from an ERR located within the WECC is dynamically transferred into a CBA; Able to show agreement between generator and CBA (and, if necessary for a pseudo-tie, with the host BA) that allows for the CBA to dynamically transfer the electrical output from the eligible renewable resource to serve CBA load. 	<ul style="list-style-type: none"> Qualifying interconnection agreements include pseudo-tie agreements and dynamic scheduling agreements (or functional equivalent). Bundled deliveries pursuant to a dynamic transfer agreement (or functional equivalent). 	
<p><u>Bucket #2</u></p> <p><u>“FIRMED AND SHAPED TRANSACTION S”</u></p>	<p>Section 399.16(b)(2):</p> <p><i>“Firmed and shaped eligible renewable energy resource electricity products providing incremental electricity and scheduled into a California balancing authority.”</i></p>	<ul style="list-style-type: none"> Electricity products must derive from eligible renewable energy resources located with the WECC. REC must be “E-tagged” to energy scheduled for delivery to a CBA; Energy to which the REC is “E-tagged” must be “incremental” Energy to which the REC is “E-tagged” must have been delivered to the CBA within the same calendar year of the 	<ul style="list-style-type: none"> Retail seller buys bundled product of energy and RECs from an ERR not located in a CBA. Energy is immediately sold off locally. Retail seller tags the RECs from the RPS PPA to the E-tags for the imported incremental energy within the same calendar year that the RECs were generated. Procurement of bundled product from ERR outside of a CBA. ERR intends generally to qualify as 	<ul style="list-style-type: none"> What is the definition of “incremental electricity?” Are there any additional attributes or contract structures that must be included to qualify procurement as a “firmed and shaped” product (i.e., concurrent procurement, fixed price agreement, etc)? Should there be a grace

For Reference and Discussion Purposes Only: Information contained herein does not necessarily reflect the views of any party.

RPS Product Matrix | REFERENCE PROPOSAL OUTLINING AREAS OF BROAD CONSENSUS AND OPEN ISSUES

Issue or RPS Portfolio Content Category Requiring Interpretation	New Statutory Language (from SB 2 (1X))	Consensus RPS Product Description	Consensus Illustrative Contract / Interconnection Structures	Open Issues (No Consensus)
		creation of the REC within WREGIS.	<p>Bucket #1(c) by scheduling imports directly into a CBA. However, ERR cannot transmit its full contract quantity into a CBA within the time period specified for Bucket #1(c). In the same time period, ERR delivers a firm schedule for import into the CBA using some substitute energy. The "stranded" RECs are tagged to the substitute energy within the same calendar year and qualify as Bucket #2.</p>	<p>period beyond the calendar year during which the tagging process may be "trued up?"</p> <ul style="list-style-type: none"> • Must the term of the firming and shaping agreement described in the first illustrative contract structure match the term of the RPS PPA producing the RECs? • What other contract structures or variations on the consensus contract structures qualify as bucket #2?
<p><u>"Bucket #3"</u> <u>All Other RPS Products</u></p>	<p>[Section 399.16(b)(3):] <i>"Eligible renewable energy resource electricity products, or any fraction of the electricity generated,</i></p>	<ul style="list-style-type: none"> • Any certificate registered within the Western Renewable Generator Information System (WREGIS) that does not qualify as Bucket 1 or Bucket 2. • No energy and/or capacity need be associated with this type of 	<ul style="list-style-type: none"> • Retail seller procures unbundled RECs from an ERR located within WECC, but not in a CBA. Retail seller does not "tag" these RECs to any energy. • Energy to which a REC generated by a non-CBA facility is tagged is 	

For Reference and Discussion Purposes Only: Information contained herein does not necessarily reflect the views of any party.

RPS Product Matrix

REFERENCE PROPOSAL OUTLINING AREAS OF
BROAD CONSENSUS AND OPEN ISSUES

Issue or RPS Portfolio Content Category Requiring Interpretation	New Statutory Language (from SB 2 (1X))	Consensus RPS Product Description	Consensus Illustrative Contract / Interconnection Structures	Open Issues (No Consensus)
	<i>including unbundled renewable energy credits, that do not qualify under the criteria of paragraph (1) or (2)."</i>	transaction.	imported outside the same calendar year or is not "incremental."	

For Reference and Discussion Purposes Only: Information contained herein does not necessarily reflect the views of any party.

Certificate of Service

I hereby certify that I have this day served a copy of the:

COMMENTS OF THE LARGE-SCALE SOLAR ASSOCIATION ON PORTFOLIO CONTENT CATEGORIES

on all known parties to R.11-05-005 by sending a copy via electronic mail and by mailing a properly addressed copy by first-class mail with postage prepaid to each party named in the official service list without an electronic mail address.

Executed on August 8, 2011, at San Francisco, California.

/s/ Marcus Hidalgo

Marcus Hidalgo