

**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 UNION OF CONCERNED SCIENTISTS ON THE
IMPLEMENTATION OF NEW PORTFOLIO CONTENT CATEGORIES FOR
THE RENEWABLES PORTFOLIO STANDARD PROGRAM**

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RENEWABLES PORTFOLIO STANDARD PROGRAM**

Pursuant to the July 12, 2011 *Ruling Requesting Comments on Implementation of New Portfolio Content Categories for the Renewables Portfolio Standard Program* (“Ruling”), the Union of Concerned Scientists (“UCS”) respectfully submits these initial comments.

UCS’s comments in this proceeding build upon several sets of comments submitted in R.06-02-012 regarding the use of tradable renewable energy credits (“RECs”) in the California Renewables Portfolio Standard (“RPS”) program. RPS transactions can occur in many different forms, and UCS continues to believe that access to a diverse set of compliance products is an important characteristic of the RPS program that SB 2 (1x) provides. Since different RPS transactions provide varying levels of benefits to the renewable energy marketplace and California ratepayers, the Commission should interpret Section 399.16 of the Public Utilities Code¹, which establishes three distinct portfolio content categories, based on these values. In these initial comments, UCS provides answers to most of the questions posed by the Commission and offers a proposal for how to treat “firmed and shaped” transactions, as established in § 399.16(b)(2). Throughout this document, UCS organizes its responses based on the Commission’s numbered questions, but does not repeat the original questions.

I. QUESTIONS 1-11

¹ Throughout this document, “§” refers to a specific section of the Public Utilities Code.

1. “Eligible renewable energy resource electricity products” are RPS procurement transactions that meet the contracting criteria established in § 399.16 and any additional criteria established by the Commission, and result either in deliveries of RECs and electricity or simply RECs, which have been verified by the California Energy Commission (“CEC”) as RPS-eligible.
2. UCS agrees with the Commission’s interpretation of the new statute.
3. Section 399.12(d), as amended by SB 2 (1x), defines “California balancing authority” (“CBA”).² For the purposes of the RPS, CBAs should include: the California Independent System Operator, the Sacramento Municipal Utility District, the Imperial Irrigation District, the Turlock Irrigation District, and the Los Angeles Department of Water and Power. CBAs should not include PacifiCorp or CalPeco. Furthermore, UCS does not believe the Commission needs to establish a process for identifying new CBAs at this time.
4. No comment at this time.
5. The transactions characterized in Question #4 encompass any RPS-eligible electricity that can be verified as delivered to a CBA without substituting electricity from another source (except for real-time ancillary services which do not receive RPS credit). This includes, but is not limited to, out of state RPS-eligible electricity deliveries that utilize firm transmission. This language resolves the work that Energy

² § 399.12(d): “California balancing authority” is a balancing authority with control over a balancing authority area primarily located in this state and operating for retail sellers and local publically owned electric utilities subject to the requirements of this article and includes the Independent System Operator (ISO) and a local publically owned electric utility operating a transmission grid that is not under the operational control of the ISO. A California balancing authority is responsible for the operation of the transmission grid within its metered boundaries which many not be limited by the political boundaries of the State of California.”

Division staff and parties conducted to determine how to treat real-time out of state energy deliveries using firm transmission, but clarity on how these deliveries- and others that meet the requirements of § 399.16(b)(A)- should be tracked and verified is still needed.

6. No comment at this time.
7. No comment at this time.
8. UCS agrees with the Commission's interpretation of the new statute.
9. An "unbundled REC" as defined in new § 399.12(h) is a REC that has been separated from the RPS-eligible electricity with which the REC is associated, so that the REC and the underlying energy may be sold separately. Additionally, an unbundled REC contains all the renewable and environmental attributes identified by the Commission in Decision 08-08-028.
10. UCS believes that nothing in the statute prevents the combined electricity and RECs that meet the criteria established in § 399.16(b)(1) from being unbundled and sold separately. Any time a REC is unbundled from its underlying electricity and sold separately, all renewable and environmental attributes remain with the REC. This means that any owner of an electricity generation system that sells its RECs and electricity separately is no longer able to claim renewable or environmental attributes about its electricity. Since the WREGIS certificate associated with the REC will contain an RPS code that identifies the source of its electricity, the WREGIS certificate should also be able to indicate whether its underlying electricity comes from a facility that meets the requirements of § 399.16(b)(1).

11. UCS agrees with the Commission that “or any fraction of the electricity generated” should be interpreted to mean “any fraction of the electricity generated by the eligible renewable energy resource.” WREGIS certificates will track this generation, and the CEC is responsible for certifying that the eligible renewable energy resources generating the electricity that is represented by the WREGIS certificates comes from an RPS-eligible facility.

II. QUESTIONS 12-16

These questions refer to how the Commission should interpret “firmed and shaped” transactions, as described in § 399.16(b)(2): “Firmed and shaped eligible renewable energy resource electricity products providing incremental electricity and scheduled into a California balancing authority.”

SB 2 (1x) explicitly creates a separate category for “firmed and shaped” electricity products because they provide benefits to California ratepayers that go beyond REC-only transactions, or any other type of RPS transaction that would fall into the category described in § 399.16(b)(3). When structured effectively, “firmed and shaped” transactions provide benefits beyond REC-only purchases including: (1) additional electricity imports that reduce the need to generate fossil-based electricity inside California, which result in air quality benefits; (2) transactions that support the development of new renewable energy resources; and (3) stable, long-term compliance options that protect California ratepayers from price volatility. California ratepayers do not receive these same benefits when they pay for REC-only transactions, which do not drive the development of new renewable energy resources, and are likely short-term compliance options that leave LSEs with the need to procure additional RPS products and

electricity for future RPS compliance and load requirements.

Questions 12 and 13 ask parties to define the terms “firmed” and “shaped.” Intermittent renewable energy is “firmed” when its generation is supplemented by generation from a dispatchable source in order to ensure that the total energy delivered is constant and able to meet load. Intermittent renewable energy is “shaped” when dispatchable generators are backed down to allow for the intermittent resources to generate. When used together, “firmed and shaped” RPS transactions refer to the purchase of RPS-eligible electricity that is integrated into a local balancing area authority, and the RECs associated with the generation are combined with a new substitute energy import to serve California load. In order to receive RPS credit as a transaction categorized in § 399.16(b)(2), the LSE purchases the renewable generation, ensures the intermittent electricity is sold into the local balancing area authority, and through a series of transactions that include the LSE, the renewable generator, and a third party as appropriate, the RECs associated with the RPS-eligible electricity are bundled with a new electricity import that was not already scheduled to serve California load.

Here is an example of a “firmed and shaped” transaction: a California utility signs a contract with a wind generator in Washington for 100 MWh of RPS-eligible wind electricity. This agreement stipulates that the California LSE will pay the wind generator for the electricity it generates, but that electricity will not be transmitted to California because an available transmission path does not exist. Instead, the contract stipulates that a party- it could be the California LSE, the wind generator, or a third party- will sell the wind-generated electricity into a local market and provide the California utility with an import of dispatchable, likely non-renewable, electricity. Since the California LSE paid the wind generator for its electricity, it owns the RECs associated with that electricity, so it can combine the wind RECs and the new

electricity import into a bundled product for RPS compliance.

UCS does not believe that “firmed and shaped” energy transactions occur when a California utility simply buys RECs (no energy) from an RPS-eligible generator and attaches those RECs to a California electricity import without engaging in an agreement to “firm and shape” the renewable electricity into the local market. In addition, UCS does not believe that “firmed and shaped” transactions occur when a California utility purchases RPS-eligible energy and immediately sells it back to the original generator or an affiliate of the generator, but retains the RECs and bundles it with a California electricity import. In both of these cases, the risk of selling the energy that is now null, intermittent power into the local market is still borne by the renewable energy generator. This electricity has not been “firmed and shaped” into its local balancing area authority.

Question 14 asks parties to define “incremental electricity” per § 399.16(b)(2). An “incremental” electricity import provides additional value to ratepayers because the additional electricity may reduce the need to serve load by generating fossil-fueled electricity inside California, which would result in additional air quality benefits. If a “firmed and shaped” transaction is simply comprised of RECs and an electricity import that was already scheduled to come into California- irrespective of the RPS program- the functional result of that transaction is a REC-only product that should fall into the category described in § 399.16(b)(3). For the purposes of RPS compliance, “incremental electricity” should be considered any electricity imports are not otherwise part of an LSE’s portfolio at the time the “firmed and shaped” contract is executed. For example, scheduled electricity deliveries from long-term contracts between LSEs and generation facilities should not be considered incremental electricity.

To provide a structure that creates a meaningful distinction between § 399.16(b)(3) products and products that fall into § 399.16(b)(2) because they support the development of new renewable energy generation, contain electricity which reduces the need to generate electricity elsewhere and provide stable, longer term compliance options that protects California ratepayers from price volatility, UCS proposes that “firmed and shaped” RPS-eligible transactions meet the following criteria:

- (i) Are procured by means of an agreement or set of agreements, including an ownership agreement or purchase agreement between a renewable generator and a LSE, for the combined purchase of renewable energy credits and electricity that is not otherwise in the portfolio of the LSE, scheduled into a California balancing authority.
- (ii) Are subject to an ownership agreement, or purchase agreement between a renewable energy generator and a LSE, which is not less than 5 years in duration.
- (iii) Each contract contains a fixed price for the combined purchase of renewable energy credits and the electricity import.

Combining *together* a contract to purchase RECs with a contract to purchase substitute energy will bring all parties involved in the “firmed and shaped” transaction to the table and encourage the LSEs to ensure the intermittent, null power is “firmed and shaped” into the local market. This provides a much higher value contract to the renewable generator, one which can help finance the construction of a new facility, unlike a REC contract which still requires the renewable developer to find a buyer for its null, intermittent power. The Commission has long recognized that long-term bundled contracts are the most effective way to finance the

development of new renewable energy facilities.³ Requiring that the contract between the LSE and the renewable electricity generator is at least five years will also promote the development of new renewable energy resources. Longer-term contracts will allow LSEs to rely on the generation of these facilities for the long-run, as opposed to paying for short-term contracts with renewable facilities that will likely sell their energy and RECs inside their state once their local RPS requirements ramp up, and leave LSEs more desperate for higher priced, short term products to satisfy RPS requirements. Finally, the Commission has identified price stability as an additional value that RPS transactions containing electricity and RECs provide.⁴ A contract that contains a stable price for both the RECs and the substitute energy, over the life of the substitute energy contract, achieves price stability for the ratepayer.

Questions 15 and 16 ask about whether electricity generated inside a CBA could ever be considered “firmed and shaped” and whether “firmed and shaped” electricity could ever qualify as a § 399.16(b)(1) resource. “Firmed and shaped” products, by their nature, are a series of energy trades that result in a sale of renewable electricity to a local market and a electricity import for California that is bundled to the RECs underlying renewable generation. UCS believes that RPS-eligible electricity generated within the boundaries of a CBA should only be treated as “firmed and shaped” if the facility is not directly interconnected or fails to meet the scheduling criteria established in § 399.16(b)(1)(A). Finally, UCS does not think whether a RPS-facility generates intermittent or baseload power should determine which product category the generation falls into.

III. QUESTIONS 17-24

³ D.03-06-071, P.58.

⁴ *Id.*

17. “Any contract or ownership agreement” includes any type of legal contract between an LSE and an RPS-eligible generator that was executed for RPS compliance purposes. “Ownership agreement” refers to any type of legal arrangement where the LSE has whole or partial ownership in a renewable electricity generation facility. For example, a utility could build, own, and operate a renewable generation facility. Or, an LSE could agree to operate the facility once it has been built by an independent developer. The phrase “count in full” should be interpreted to allow any RECs associated with a contract that was executed prior to June 1, 2010 and meets the requirements set forth in § 399.16(d) to count towards an LSE’s RPS compliance obligation, even if that means the LSE exceeds the percentage limits in the portfolio content categories established in § 399.16(c). With respect to the long-term procurement requirements in the new § 399.13(b), UCS believes these requirements should apply to all contracts, and the Commission should take the existing contracts into account when it establishes the appropriate amount of minimum long-term contracts for each LSE. Similarly, the contracts executed prior to June 1, 2010 should not be immune to the banking provisions established in new § 399.13(a)(4)(B), but if an LSE has banked all its eligible long-term deliveries and still has excess deliveries from contracts executed prior to June 1, 2010 that would not otherwise “count in full” in the current compliance period, then the LSE should be allowed to carry those deliveries forward into the next compliance period.

18. Prior to the enactment of SB 2 (1x), the Commission established rules for tradable RECs in D.10-03-021 and D.11-01-026 per its authority in § 399.16: “The commission, by rule, shall authorize the use of renewable energy credits to satisfy the renewables portfolio standard procurement requirements established pursuant to this article...” SB 2 (1x) retains the Commission’s same authority over REC trading rules (now renumbered as § 399.21) but

establishes additional criteria regarding the use of RECs, in the new § 399.16 and § 399.13, notwithstanding D.10-03-021 and D.11-01-026.

19. In this question, UCS believes the Commission meant to refer to the portfolio content limitations set forth in § 399.16(c) (not “d”) and believes the limitations should pertain to any contract or ownership agreement executed after June 1, 2010.

20. SB 2 (1x) replaces the “delivery” requirement with portfolio content requirements, so any contract executed once SB 2 (1x) takes effect should not have to conform to a delivery requirement. Even though SB 2 (1x) has not yet taken effect, the Commission should be encouraging the LSEs to execute contracts now that conform to the new portfolio content requirements, to ease transition from the old RPS program to the new one.

21. Generally speaking for all portfolio content categories, UCS believes it would be useful for each LSE to include in its advice letter an estimate of how the current proposed contract contributes to its portfolio content limits. UCS is relying upon other parties in this proceeding to suggest contracting requirements in order to classify a transaction as falling into the category established in § 399.16(b)(1). Pages 6-7 of these comments identify and rationalize three contracting requirements that would be required in an advice letter in order to classify a transaction as falling into the category established in § 399.16(b)(2). These requirements are:

- i. Each advice letter would contain an agreement or set of agreements, including an ownership agreement or purchase agreement between a renewable generator and a LSE, for the combined purchase of renewable energy credits and electricity that is not otherwise in the portfolio of the LSE, scheduled into a California balancing authority.
- ii. Each advice letter would contain an ownership agreement or purchase agreement

between a renewable energy generator and a LSE which is not less than 5 years in duration.

- iii. Each advice letter would contain an agreement that fixes the price for the combined purchase of the renewable energy credit and the electricity import.

Finally, transactions that would fall into the category described in § 399.16(b)(3) should provide evidence that the RECs are generated from RPS-eligible facilities.

22. UCS believes the CEC is ultimately responsible for verifying RPS compliance actions for all retail sellers, including whether deliveries fell within the portfolio content limitations established in § 399.16(c). According to § 399.399.12(j), “retail seller” includes ESPs and CCAs. For tracking purposes, UCS believes it would also be helpful if the Commission continued to track procurement through the electronically available “RPS Project Status Table”⁵ and indicated into which portfolio content each transaction falls.

23. UCS has addressed these issues in its responses to prior questions.

24. SB 2 (1x) was passed by the Senate on February 24, 2011 and the Assembly on March 29, 2011. Governor Brown signed the bill into law on April 12, 2011. Even though SB 2 (1x) will not become effective until 90 days after the conclusion of the special session, the requirements of the 33% RPS program have been established for some time now. To the fullest extent possible, the Commission should move forward on developing rules for the new RPS program and encourage LSEs to submit contracts that will conform to the 33% RPS program once SB 2 (1x) is in full effect.

⁵ Current available at: <http://www.cpuc.ca.gov/PUC/energy/Renewables/>

IV. CONCLUSION

UCS thanks the Commission, especially the ALJs and Energy Division staff that have worked on past RPS implementation proceedings, for their continued dedication to the success of California's RPS program, and looks forward to continued participation in this proceeding.

Respectfully submitted,



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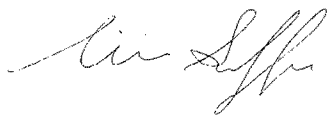
Dated: August 8, 2011

CERTIFICATE OF SERVICE

I, Miriam Swaffer, certify that on this date, I have caused the foregoing COMMENTS OF THE UNION OF CONCERNED SCIENTISTS ON THE IMPLEMENTATION OF NEW PORTFOLIO CONTENT CATEGORIES FOR THE RENEWABLES PORTFOLIO STANDARD PROGRAM to be served by electronic mail, or for any party for which an electronic mail address has not been provided, by U.S. mail on the parties listed on the service lists for the proceeding in California Public Utilities Commission Docket No. R.11-05-005

I declare under penalty of perjury, pursuant to the laws of the State of California, that the foregoing is true and correct.

Executed on August 8, 2011 in Berkeley, California.



Miriam Swaffer

VERIFICATION

I, Laura Wisland, am a representative of the Union of Concerned Scientists and am authorized to make this verification on the organization's behalf. The statements in the foregoing document are true to the best of my knowledge, except for those matters which are 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 in Berkeley, California.



Laura Wisland