



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

Order Instituting Rulemaking to Implement the
Commission's Procurement Incentive Framework
and to Examine the Integration of Greenhouse
Gas Emissions Standards into Procurement
Policies.

Rulemaking 06-04-009
(Filed April 13, 2006)

**COMMENTS OF THE RENEWABLE ENERGY MARKETERS ASSOCIATION
ON PROPOSED FINAL OPINION ON
GREENHOUSE GAS REGULATORY STRATEGIES**

Jonathan Edwards
SmartPower
1120 Connecticut Avenue, NW
Suite 1040
Washington, DC 20036
Phone: 202-775-2040
Fax: 202-775-2042
email: jedwards@smartpower.org
Director, Renewable Energy Marketers Association

Dated: October 2, 2008

www.RenewableMarketers.org

Managed by SmartPower: 1120 Connecticut Avenue, NW Suite 1040, Washington, DC 20036

3Degrees • Bonneville Environmental Foundation • Community Energy
Conservation Services Group • Constellation NewEnergy • FPL Energy Power Marketing •
Renewable Choice Energy • SmartPower • Sterling Planet • SunEdison • SunPower

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

Order Instituting Rulemaking to Implement the Commission's Procurement Incentive Framework and to Examine the Integration of Greenhouse Gas Emissions Standards into Procurement Policies.

Rulemaking 06-04-009
(Filed April 13, 2006)

**COMMENTS OF THE RENEWABLE ENERGY MARKETERS ASSOCIATION
ON PROPOSED FINAL OPINION ON
GREENHOUSE GAS REGULATORY STRATEGIES**

Pursuant to the Proposed Decision of Commissioner Peevey, mailed September 12, 2008, the Renewable Energy Marketers Association (REMA) is pleased to submit the following comments to the California Public Utilities Commission on the cap-and-trade component of the Plan, and in particular the allocations approach.

Pursuant to Rule 1.4(b) of the Commission's Rules of Practice and Procedure, REMA requests to be made a party in the above captioned proceeding. REMA represents the collective interests of both for-profit and nonprofit organizations that sell or promote renewable energy products through voluntary markets, including renewable electricity and renewable energy certificates (RECs), to individuals, companies and institutions throughout North America.¹

¹ Members are 3Degrees, Bonneville Environmental Foundation, Community Energy, Conservation Services Group, Constellation NewEnergy, FPL Energy Power Marketing, Renewable Choice Energy, SmartPower, Sterling Planet, SunEdison and SunPower. *The views expressed by REMA in this regulatory filing do not necessarily represent the views of each individual member company.*

Importance of the Voluntary Market for Renewable Energy

We would like to remind both the CPUC and the CEC that how a cap-and-trade program is implemented will have a direct impact on the sale of renewable energy products through voluntary markets. Accordingly, REMA's members are directly affected by your recommendations to the Air Resources Board, as are thousands of green power customers across California. REMA's comments, therefore, address the allocation of emission allowances and how they may be used to encourage voluntary markets for renewable energy.

The voluntary market for renewable energy is significant in terms of the businesses and utilities currently active in this market, the size of the market (expected to be 40 million MWh nationally by 2010), and the large organizations and corporations buying renewable energy in order to claim a reduction in emissions resulting from their use of electricity. We elaborate on these points in Attachment A at the end of these comments.

When cap and trade rules are put in place, the addition of renewable energy to the grid will no longer reduce greenhouse gas emissions unless the State distributes allowances to renewable energy generation or retires allowances on behalf of renewable energy demand. This is particularly important to the voluntary market because it is largely motivated by the ability to claim that a voluntary purchase actually reduces emissions.

Not including the set-aside or not recognizing the benefits provided by the voluntary renewable energy market will defer the time when obligated parties will take action to reduce emissions.

It is our understanding of AB 32 that it intends to maximize environmental benefits and greenhouse gas emission reductions. Recognizing the benefits of voluntary renewable energy demand by retiring allowances on its behalf is consistent with maximizing environmental benefits and emission reductions. In contrast, not crediting these benefits to the voluntary renewable energy market would only reduce the cost of compliance to obligated entities by shifting the cost of compliance to voluntary purchasers of renewable energy. This would be inequitable because it would allow obligated entities in essence to free-ride on the backs of voluntary renewable energy consumers.

Summary of Relevant Portions of the Draft Opinion

REMA appreciates that the CPUC and CEC draft reflects an understanding of how the voluntary market for renewable energy would be affected by the adoption of a cap-and-trade program: "...once a cap is instituted, new renewables would not reduce emissions; instead, the replacement of fossil-based generation by renewables would free up allowances to be used elsewhere in the capped sectors." (Opinion at 5.4.3.2)

The fact that the voluntary purchase of renewables by retail customers would no longer reduce emissions would be devastating to this voluntary market—no one would make

such voluntary purchases because they would not reduce emissions, and consequently no environmental claims relating to reducing emissions could be supported.

The CPUC and CEC also took note of the recommendation to create a set-aside of allowances for the voluntary market. “Rather than sell the allowances, ARB could retire allowances from the set-aside reserve at some rate for each MWh sold (or REC retired) in the voluntary market. By this mechanism, voluntary purchases of renewable energy would reduce emissions essentially by ratcheting down the cap: ARB would retire allowances rather than issue them for use by an emitting source.” (Opinion at 5.4.3.2)

In the draft opinion, the CPUC and CEC voice their support for continuing opportunities for voluntary reductions, but hesitate to recommend the creation of a set-aside “at this time,” citing several questions that need to be answered. These include the types of RECs that would count under a set-aside, whether RECs from capped and uncapped electricity markets should count, and how to assign emission reduction values to the RECs, and how this would work in a regional cap-and-trade system.

REMA believes that answers to these questions are readily at hand, and we address each question below.

Implementing a Voluntary Renewable Energy Set-Aside

It is important that the CPUC and CEC recognize that the Regional Greenhouse Gas Initiative (RGGI) has already dealt with these same questions. Although California need not take the same approach, the RGGI experience is certainly informative. In the RGGI

model rule, the voluntary renewable energy set-aside was included as an option that states might choose to adopt. As a result, each state had to affirmatively decide to create the set-aside. Nine of the ten states have included the set-aside in proposed or final rules, or in statute where rules are yet to be finalized. The tenth state, Delaware, has not issued its proposed rules yet so it is uncertain if the set-aside will be included. Nevertheless, the approach of these northeast states is very similar and compatible.

In the questions that follow, we first answer in terms of a California-only cap-and-trade program, and then expand the answer by considering the question in a regional context.

1. What renewable energy would be eligible for the set-aside?

Renewable resource types that are eligible for the California RPS should be eligible for the set-aside. Eligibility should also include a generator vintage requirement consistent with how California has defined new renewables. The reason for this vintage requirement is to ensure that voluntary purchases are leading to new or additional emission-free generation.

For a regional cap-and-trade program, the participating states and provinces could write a standard definition, so that eligibility is harmonized. RGGI did this, and some of the states used the standard eligibility definition while others used a pre-existing (RPS) state definition. Uniformity is easier and simpler, but is not required. Again, a generator vintage eligibility date should be included to support the development of new resources.

2. What requirements would be placed on generator location?

For a stand-alone state program, the ARB should require that the renewable generator be located in California, or if the generator is located outside the state, the ARB should require that the renewable generating unit deliver energy into the California ISO in an amount equal to the RECs purchased by a California voluntary customer. The energy delivery requirement ensures that the purchase of RECs from these out-of-state facilities offsets emissions within the state. It is true that if a California resident were to purchase RECs from an uncapped state, global emissions will be reduced, but we presume that California policy intends that emission reductions be linked to the California electricity system.

For a regional cap-and trade system, RECs purchased by California electricity customers should be accepted from renewable generators located in any of the WCI Participant jurisdictions, without the requirement that energy be delivered into California. This recommendation is based on reciprocity among all Participant jurisdictions. Since the WCI Design Recommendations place the obligation on the First Deliverer of energy into a Participant jurisdiction, WCI clearly anticipates the possibility of importing some energy from outside the region. In the case of such energy imports, RECs from those facilities would count for the set-aside, assuming other eligibility criteria are met. In a regional program, it should be sufficient to deliver the imported energy into any of the participating jurisdictions, not necessarily to the California ISO.

In both situations, we recommend that the general rule be that generators should be located in capped jurisdictions, with the exception that they may be located outside

capped jurisdictions as long as energy is delivered from the renewable generating unit (not just generic energy) into the capped region.

3. Does it matter who purchases the RECs?

If a consumer located outside the capped state purchases RECs from a renewable generator located with the capped state, that purchaser would have an equal effect on emissions as an in-state purchaser. Both would reduce emissions in the capped state. However, tracking and reporting of these out-of-state purchases may be more challenging, especially if the purchaser is served by a different REC tracking system. RECs would have to be exported from WREGIS into another tracking system, and retired in that system. It is possible, but the import-export protocols among the tracking systems are not well-developed. REMA therefore recommends that allowance retirements from the set-aside be based on purchases by electricity customers within California.

A regional cap-and-trade program would operate the same way. Each WCI Participant jurisdiction would have its own voluntary renewable energy set-aside account, and would retire allowances on behalf of purchases by electricity customers located in that jurisdiction. Allowance retirements in each jurisdiction would be tied directly to voluntary purchases within that jurisdiction. This is how the RGGI program works.

4. What emission reduction values would be assigned to the voluntarily purchased RECs?

In a California state program, the ARB should use the same methodology that it now uses to determine CO₂ reductions from RPS renewables. There is no need to reinvent the wheel.

In a regional program, REMA recommends that each WCI Participant jurisdiction use the annual average marginal CO₂ emissions factor for the control area where the electricity represented by the sale was generated. This is similar to the RGGI approach. If this factor is not readily available (for example, if small control areas do not regularly track and report this figure), then the NERC subregion emission factors, as reported by US EPA, could be used. The principle is that the emissions factor should reflect the region where the generator is located.

5. How would this process work administratively?

By a date certain prior to the start of each allocation year, the ARB would estimate, with assistance from the Energy Commission, the volume of voluntary purchases of renewable energy by California customers. The ARB would reserve an equivalent number of allowances in the set-aside account.

By a date certain following the end of each allocation year, “any person” (per the RGGI Model Rule) desirous of supporting emission reduction claims based on a voluntary purchase of renewable energy would report to the ARB final purchases by customers in California. The claiming entity might be a corporation that purchased a large volume of

RECs, but it would more likely be a retail marketer that has sold RECs to California customers. The ARB would evaluate these claims and the documentation provided, and by a date certain would retire the equivalent number of allowances using the agreed conversion factor(s).

The set-aside and the actual purchases would then undergo a true-up. If actual purchases exceed the allocation to the set-aside account for the prior year, the difference would be added to the estimated purchases for the following allocation year. If actual purchases are less than the amount allocated to the set-aside, the difference would be subtracted from the projection for the following year.

The same process would be followed by each jurisdiction in a regional program.

6. What documentation of the purchase would be required?

California should require that documentation be provided by reports from the Western Renewable Energy Generation Information System (WREGIS). WREGIS is a certificate tracking system that includes information about the generator resource type, capacity, generator vintage, geographic location, and direct emissions, among other attributes or characteristics.² All of the attributes necessary to judge whether a generating unit is eligible for retiring allowances in the set-aside account are present and part of each certificate.

² It is true that the CPUC is still considering the acceptability of unbundled RECs for RPS compliance, but unbundled RECs are already in wide use for the voluntary market.

The required documentation should include:

- a. Quantity of RECs (MWh) purchased by retail consumers in the state, by customer class, during the previous year.
- b. Documentation of procurement.
- c. Facility name, generator ID, fuel type and jurisdiction (geographic location) where the RECs were generated.
- d. When the RECs were generated.
- e. Any additional information required to demonstrate that these RECs are not being used or claimed in more than one participating jurisdiction, and are not being used for compliance with any requirement or mandate.

California could work with WREGIS to ensure that each certificate includes information about the annual average marginal CO₂ emission rate for electricity generation as most recently reported by the regional transmission organization or the entity that oversees electricity transmission in areas with no RTO. This would take care of the question of the emissions factor.

For a regional cap-and-trade program, the documentation should be the same except that reports from other recognized certificate tracking systems would be accepted—for example, the Midwest Renewable Energy Tracking System, or the APX North American Renewables Registry, depending on where the generator producing the RECs is located.

Conclusions

The set-aside of allowances to be retired on behalf of voluntary renewable energy purchases is extremely important to the continued viability of the voluntary market.

Omitting the provision of a set-aside for the voluntary renewable energy market will undermine voluntary market as such voluntary demand would not have the effect that customers desire. Even if some customers nevertheless continue to purchase renewable energy, they will be paying a disproportionate share of the cost of compliance with the cap—an unfair redistribution of costs that should rightfully fall on the obligated entities.

Although the Commission voiced support in concept, it hesitated to adopt a set-aside provision because of questions about how it would operate. Yet as we have demonstrated, the mechanics of operating the set-aside are really quite easy, and there are clear models and precedents among the states participating in RGGI.

If the Commission still has questions about the details, it should at a minimum recommend the concept and hold hearings or invite comment to work out details later, or urge the Air Resources Board to do the same.

Not including a set-aside provision (even in concept form) would *de facto* deny a set-aside because the question cannot be reopened once the final opinion is sent to the Air Resources Board. REMA urges the Commission to include the set-aside for voluntary renewable energy now, in its final opinion, to ensure that emission reductions may be maximized.

The views expressed by REMA in this regulatory filing do not necessarily represent the views of each individual member company.

Attachment A: The Voluntary Market for Renewable Energy is Significant

According to the National Renewable Energy Laboratory (NREL), there are some 55 marketers actively selling to small and large customers, and a dozen environmental brokers that facilitate REC transactions between buyers and sellers across the U.S. These providers are in addition to utilities that sell renewable electricity differentiated from standard electricity. Presently, there are nine utility green pricing programs within the state of California.³ Of these programs, six rank in the Top 10 for one or more categories nationwide according to NREL. There are also thousands of photovoltaic (PV) providers in the U.S. who sell PV systems and associated RECs directly to end-use customers.

The market for green power (renewable electricity and RECs sold independently of electricity) is strong and growing. In 2005, U.S. consumers made voluntary purchases of renewable energy totaling about 8.5 million MWh, and 2006 purchases are estimated to total about 12 million MWh. The voluntary market grew by 62% in 2004, 37% in 2005, and 40% in 2006. Currently, the voluntary market represents nearly one-fifth of the overall renewable energy demand from both compliance and voluntary markets on a MWh-basis. If the voluntary market continues to grow at a rate of 35% annually, it will reach about 40 million MWh by 2010 and represent about one-quarter of the total U.S. demand from voluntary and compliance markets.⁴ Those 40 million MWh of renewable

³ These are Anaheim Public Utilities, Burbank Water and Power, Los Angeles Department of Water and Power, PacifiCorp (Pacific Power), Palo Alto Utilities, Pasadena Water & Power, Roseville Electric, Sacramento Municipal Utility District, and Silicon Valley Power.

⁴ Bird, Lori, and Elizabeth Lokey. *Interaction of Compliance and Voluntary Renewable Energy Markets*, Golden, CO: National Renewable Energy Lab, October 2007.

generation would result in a reduction of 31.2 million metric tons of CO₂.⁵ These data demonstrate that the voluntary market for renewable energy is larger than most people recognize.

Not everyone wants or has access to a utility-sponsored renewable energy option; some customers choose to purchase renewable power outside the utility offerings. This is particularly true for large customers. There is a large voluntary market for RECs unbundled from electricity and for on-site customer-owned renewable power driven by a commitment to renewable power development and a commitment to GHG reduction. In this regard, many businesses and an unknown number of residential consumers buy RECs separate from electricity, or invest in on-site renewable power. California has more corporate customers of voluntary renewable energy enrolled in the U.S. EPA Green Power Partnership than any other state with the exception of Texas. Of the approximately 950 organizations that participate in the EPA's Green Power Partnership, the California-based Partners represent 113 organizations or 11.9%.

⁵ Based on EPA's e-GRID data for the national average CO₂ emissions resulting from electric generation (0.78 metric tons/MWh). See <http://epa.gov/cleanenergy/energy-resources/egrid/index.html>.

Who's Buying Green Power?

A diverse range of companies are buying renewable energy or RECs. In California, examples include:

- Information Technology (e.g. Intel, Hewlett-Packard, Cisco Systems and Yahoo!)
- Wineries and Breweries (e.g. Sierra Nevada Brewing Co. and Rodney Strong Vineyards)
- Higher Education (e.g. Cal State University System, Loyola Marymount and UC-Santa Cruz)
- Local Government (e.g. City of San Diego, City of Chico and City of Mount Shasta)
- Banking (e.g. Wells Fargo and Key Point Credit Union)
- Media (e.g. KNTV-TV11)
- Consumer Products (e.g. Shaklee Corporation and New Leaf Papers)
- Travel & Leisure (e.g. Los Angeles Convention Center and Sugar Bowl Ski Resort)
- Retail (e.g. Safeway and Macy's)
- Agriculture (e.g. Lundberg Family Farms)
- Industrial Good and Services (e.g. Lockheed Martin)
- Food and Beverage (e.g. Clif Bar and Earth Island)
- Transport & Shipping (e.g. FedEx and Los Angeles World Airports)
- Automotive (e.g. American Honda Motor Company and Toyota Motor Sales)
- Clothing & Textile (e.g. prAna)
- Plus organizations in Health Care, Telecommunications, Real Estate and Non-Profit

Cap-and-Trade Can Have a Significant Impact on Voluntary Demand

Depending on how it is implemented, a greenhouse gas cap can have a significant impact on voluntary renewable energy sales. Specifically, the treatment of renewable energy under a cap-and-trade program could undermine the voluntary green power market. A primary motivation for voluntary renewable energy purchases is to reduce the buyer's greenhouse gas (GHG) footprint. This benefit—the ability of individuals, companies, government entities and non-profits to reduce electric sector GHG emissions—would be eliminated if voluntary market purchases of renewable electricity and RECs are not somehow linked to the retirement of allowances or the reduction of the cap.

Therefore, with respect to the design of carbon cap-and-trade programs, REMA's primary objective is to ensure that any cap-and-trade program supports the ability of voluntary renewable energy demand to reduce GHG emissions. To accomplish this objective, voluntary demand for renewable energy must result in either retirement of allowances or in lowering of the cap. To be additional, emission reductions from voluntary sales should not be double counted by both the customer and the utility.

Our concern is that carbon regulations that prevent green power purchases from affecting GHG emissions levels may be adopted, undermining the environmental objectives of customers who voluntarily purchase renewable energy. A robust market for renewable electricity, RECs and distributed renewable energy generation already operates in California. Without an explicit provision for allowance allocation recognizing the GHG reduction benefits from renewable energy purchases under the proposed AB32 cap-and-trade program, California's voluntary renewable energy market may cease to exist because the leading market driver – the ability to make a difference in reducing GHG emissions through consumer choice tied to market forces – will have been eliminated.

Thank you for your time and consideration of these comments. Please do not hesitate to contact me if I can be of further assistance or if I can answer further questions.

Respectfully Submitted,



Jonathan S. Edwards, Director
Renewable Energy Marketers Association