



June 12, 2009

Ms. Mary Nichols, Chairman
Mr. James Goldstene, Executive Officer
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Renewable Energy Marketers Association Comments on the California Air Resource Board Staff's Voluntary Renewable Energy Markets under Cap-and-Trade

Dear Chairman Nichols and Executive Officer Goldstene:

The Renewable Energy Marketers Association ("REMA") is pleased to offer these additional comments in response to questions raised in the May 18 meeting on "Allowance Set-Asides in a Cap-and-Trade Program." Specifically, we address the key issues raised regarding a set-aside for voluntary renewable energy purchases. These comments are in addition the points we submitted in a memo dated May 14.

The Renewable Energy Marketers Association (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, renewable energy certificates (RECs), and on-site solar PV to individuals, companies and institutions throughout North America.

Voluntary markets for renewable energy—which are currently equal to demand created for new renewables by RPS mandates—are not accounted for in the Scoping Plan. Unfortunately, many people assume that because renewable energy is emission-free, the use of renewable power will automatically reduce emissions. However, emission reduction policies and programs may fail to produce real greenhouse gas emission reductions from all renewables unless policies are designed to explicitly take into account both voluntary and mandatory demand for renewable energy.

In order to support and strengthen the voluntary market for renewable energy and emission reductions, REMA urges CARB to set aside a small number of allowances that will enable voluntary purchasers of renewable energy to legitimately reduce GHG emissions through their actions. Under this voluntary market mechanism, the program

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administrator would allocate allowances to an administrator-controlled Voluntary Renewable Energy (VRE) account, and would retire allowances on behalf of documented voluntary purchases. Allowances would not be allocated directly to renewable generators, but customers would be able to claim emission reductions.

The following questions reflect the issues that we feel are still misunderstood about the voluntary market for renewable power, and our responses provide REMA's perspective.

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1) Why is an allowance set-aside necessary to support the voluntary renewable energy market? Why are voluntary renewable energy markets more deserving than other activities for an allowance set-aside?

First, the establishment of a cap without a set-aside will harm the renewable energy market because it will remove the ability of a renewable energy purchaser to reduce emissions through the voluntary purchase of renewable energy. There are many meritorious environmental activities that deserve support, but not receiving an allowance set-aside will not be harmful to the continuation of those activities.

How will the voluntary renewable energy market be harmed? As long as California and the Western Climate Initiative (WCI) region does not have a fixed cap on greenhouse gas (GHG) emissions, voluntary purchases of renewable energy (RECs, green power, and onsite generation) displace fossil generation and result in GHG emission reductions. In this uncapped market, purchasers feel confident about the emission reduction impacts of their purchase, and regularly make public statements and marketing claims about how their purchase of renewable energy reduces GHG emissions. These claims and emission reductions can be easily substantiated and certified by accredited independent accounting organizations.

When a fixed cap on GHG emissions is established, voluntary purchases of renewable energy will still displace fossil generation, but the total number of emission allowances—and hence the level of emissions produced—will be unaffected. This is because the number of allowances is fixed and regulated carbon-producing entities will emit up to the cap. Unless allowances are retired commensurate with voluntary renewable energy purchases, these purchases will no longer reduce GHG emissions once the cap is in effect. As a result, emission reduction claims will become problematic, and the voluntary market, which is largely driven by the public's desire to reduce GHG emissions, will be at risk.

Second, the voluntary renewable energy market depends on the ability of purchasers to make credible environmental claims. Voluntary renewable energy markets have thrived for 10 years without an allowance set-aside, growing at a rate of 30-50% per year to the point that voluntary demand is roughly equal with the demand for new renewables created by RPS policies. By displacing fossil generation on the margin, the generation of renewable energy reduces emissions. Once a cap is adopted and the number of allowances is fixed, however, emissions will not be reduced when renewable energy is generated and purchased unless an allowance is retired. Losing the environmental benefits of voluntary purchases is an unintended consequence of cap and trade design choices. Therefore the cap and trade approach to carbon regulation creates special circumstances unique to voluntary markets that must be remedied. The environmental backstop to voluntary renewable energy markets can be restored with an allowance set-aside.

Third, virtually every other competing request for an allowance set-aside is based on selling the allowances to fund a laudable activity. That being the case, there may be other sources of funding to support their activities. In contrast, the voluntary renewable energy market is not asking for an allocation for the money it would provide. The voluntary renewable energy market may be unique in this respect because subsidizing renewable

energy development from other funding sources does not solve the problem. Instead of selling the allowances for the revenue, we want the allowances retired as an environmental backstop to a market that was functioning and growing prior to the imposition of a carbon cap.

Finally, REMA believes that set-asides are especially meant for capped sector activities carried out by non-capped entities so that the environment integrity of these non-capped actions is whole post-cap. No other activity can make or is making such an argument in their request for allowance set asides

2) Won't setting aside allowances for the voluntary renewable energy market increase the cost of compliance for capped entities?

We expect that an allocation to a voluntary renewable energy set-aside will be roughly cost-neutral in terms of allowance prices in the short term. While a set-aside reduces the supply of allowances available to capped entities, it also reduces the demand for allowances in a roughly commensurate way but displacing emitting sources. If the voluntary renewable energy purchases are less than expected, the unused allowances would be made available to the allowance market via auction; and if voluntary purchases are greater than expected, the renewable energy generated will displace other generation.

In the long term, in addition to the equal and offsetting effect of renewable energy reducing the need for allowances, the additional renewable energy development that the set-aside will encourage above and beyond the RPS will put California in a better position to meet its long-term carbon reduction goals (i.e. post-2020). The additional, early (i.e. pre-2020) in-state renewable energy development will mean fewer reductions will have to be found in the long term, which will have the effect of reducing future allowance prices. And there are many other environmental and economic benefits beyond these reduced allowance prices.

3) What should the size of the allowance set-aside be for voluntary renewable energy purchases?

The number of allowances set aside for the voluntary market should be based on an annual estimate of voluntary sales from California generators made prior to the start of each compliance year. To give stakeholders an understanding of the magnitude of our request, we know that voluntary sales of Green-e certified renewable energy in California in 2007 were about 2,000,000 MWh. In addition, about 650 MW of customer-sited photovoltaics is operating in California and not used for RPS compliance, amounting to about 850,000 MWh¹. Finally, we know that six California utilities made voluntary sales of green power that are not included in the Green-e certification program. Thus we estimate that sales in 2007 were about 3,000,000 MWh. According to NREL, national sales of voluntary renewable energy have grown 43% per year from 2004 to 2007, but we would expect this growth to moderate in the coming years. Assuming that sales will continue to grow at a more modest annual rate of 30%, voluntary sales in California would be about 11.1 million MWh in 2012, the first year of the cap-and-trade program.

¹ Based on an assumed 15% capacity factor.

Using an average emissions factor (from EPA's eGRID) for WECC of 1033.12 lbs/MWh, and converting to metric tons, we estimate that voluntary sales in California will avoid about 5.2 million metric tons of CO₂ in 2012.

4) If CARB provides a set-aside for voluntary renewable energy purchases, what certainty do we have that emission reductions are really occurring?

Unlike many other activities, the generation of renewable energy is metered. Because financial payments for electricity trades hinge on the accuracy of these measurements, there is a high degree of reliability to the measurement. The data is also verified by either CAISO, in the case of generators that are dispatched, or according to WREGIS protocols for small generators.

Second, California and other western states have created the infrastructure (the Western Renewable Energy Generation Information System) to issue RECs based on verified generation data, to track their ownership from one party to another, and to retire the RECs once they are sold to a retail purchaser or are used by a utility for compliance with an RPS. Each certificate issued by WREGIS has a unique serial number, making it easy to ensure that the same REC does not exist in more than one account at any time, or is not retired or claimed by more than one party, thereby ensuring that no double-counting occurs.

We cannot think of another activity that may be requesting a set-aside that can offer the same degree of assurance and integrity against imperfect measurement or duplicate claims.

5) Will the monitoring and verification costs be expensive and impose high transaction costs?

Monitoring and verification costs are minimal, from any relevant perspective. As described above, monitoring and verification of voluntary renewable energy purchases is supported by WREGIS. These costs are already built into renewable energy sellers' and buyers' costs. Allowance monitoring and verification will be performed by CARB using whatever database or tracking system it chooses, and will be incurred regardless of whether or not an allocation is set aside for voluntary renewable energy purchases.

Transaction costs for purchasing renewable energy are already borne by market participants and there would be no incremental cost to them. Transaction costs for requesting that allowances be retired on behalf of voluntary purchases would be borne by the retail sellers who would have to document these purchases to CARB. These requests, however, will be greatly simplified by the use of reports from WREGIS verifying the quantity of sales made from eligible California facilities according to the rules specified. CARB would have to check the requests from the retail sellers and retire the allowances. If CARB trusts the WREGIS tracking system, as it should, this information check will be relatively easy.

6) Will the set-aside increase the risk of price volatility?

No. Price volatility is caused by uncertainty and speculation. The set-aside would be a known quantity, held in a reserve by CARB, and not subject to speculation. Price volatility, if it occurs, would not be caused by the voluntary renewable energy set-aside because although the supply of allowances is reduced, that reduction will be offset by reduced demand for allowances due to the displacement of emitting generation by renewable energy generation. One should be careful not to worry only about the effect of the set-aside on supply, without also remembering the effect on demand.

7) What renewable resources should qualify as eligible for the voluntary renewable energy set-aside?

For a California-only program, it is quite simple: We recommend relying on the resource types eligible under the California RPS.² No additional work is necessary. As we stated in our written comments of May 14, however, if the cap-and-trade program encompasses the WCI, then a consensus definition should be adopted that all WCI Partners can live with. Harmonization of the eligibility definition across all participating states and provinces helps to create a larger, more liquid and competitive market, and is much simpler for market participants.

Further, to ensure that the voluntary market and allowance retirements are driving the development of new renewables, eligibility should be further conditioned by a moving 15-year window of eligibility beginning with facilities that began operation or after January 1, 1997 (the vintage eligibility for Green-e Energy certification). After 15 years of operation, the generator should no longer be eligible. The 15-year eligibility is also intended to ensure that new projects are not abandoned by the market before they can amortize most of their capital investment costs. Establishing a fixed-length, moving window at the outset also gives predictability to renewable generators and the marketplace in general.

Finally, eligible generators should be located within the capped region. If the capped region includes more than the state of California, then WCI Partners should establish a reciprocal voluntary market mechanism that is consistent across the member states. The reason for this eligibility requirement is that the emission reduction must be felt within the capped region. Imports of RECs from other non-capped regions need not be eligible for allowance retirement in California because without a cap, they will reduce emissions in their own uncapped region, thus supporting a claim of emission reductions.

8) How will CARB be able to determine the additionality of eligible renewable energy or RECs?

California RPS rules state that “A renewable energy credit shall be counted only once for compliance with the renewables portfolio standard of this state or any other state, or for

² California Energy Commission, Renewables Portfolio Standard Eligibility (Third Edition), CEC-300-2007-006-ED3-CMF, January 2008, at <http://www.energy.ca.gov/2007publications/CEC-300-2007-006/CEC-300-2007-006-ED3-CMF.PDF>

verifying retail product claims in this state or any other state.”³ Following this rule, RECs sold in the voluntary market RECs must be additional to the RPS. This California RPS rule to prevent double counting RECs and ensure additionality is now implemented by the WREGIS tracking system that allows account holders to retire a REC for only one purpose. The WREGIS reports that will be required to document the voluntary renewable power purchases provide the necessary assurances.

Additionality is also a concept used to determine the viability and acceptability of carbon offsets, but offsets are different from RECs because emission reductions from “offsets” occur outside capped sectors. We are not asking for treatment of RECs as carbon offsets. Instead, because emission reductions from renewable power occur within the capped electric sector, emission allowances should be retired on behalf of voluntary renewable energy purchases.

9) Are voluntary markets in conflict with the RPS mandates?

No, voluntary markets are not in conflict with RPS mandates. Instead, we believe they are actually mutually synergistic as long as they are separate and additional to each other, with no overlap or double counting. Having both markets allows developers to build larger projects to take advantage of economies of scale, knowing that they have demand from both markets, and utilities subject to an RPS find it easier to manage their renewable supply portfolio if they also have the opportunity to sell to the voluntary market. REMA strongly supports measures to bolster renewable energy development, including the 33% RPS in the Scoping Plan. On an analytical basis, a study by the National Renewable Energy Laboratory found that RPS and voluntary markets are complementary.⁴

Respectfully Submitted,



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

³ California Public Utilities Code, Section 399.16.

⁴ Bird, L. and E. Lokey, 2007. *Interaction of Compliance and Voluntary Renewable Energy Markets*, NREL/TP-670-42096. Golden, CO: National Renewable Energy Laboratory, October.
<http://apps3.eere.energy.gov/greenpower/pdfs/42096.pdf>