Renewable Energy Markets Association

January 11, 2010

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

Re: Renewable Energy Markets Association Comments on the Cap-and-Trade Regulation 32 Preliminary Draft Regulation

Dear Chairman Nichols and Executive Officer Goldstene:

The Renewable Energy Markets Association ("REMA") is pleased to offer comments on the Preliminary Draft Regulation (PDR), in particular with respect to the proposed *Adjustments to the Base Budgets to Account for Voluntary Investment in Renewable Sources of Electricity Generation*.

The Renewable Energy Markets 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.

Our comments on the PDR supplement the points we submitted to ARB in a memo date May 14, 2009, and additional comments dated June 12, 2009 in response to questions raised in the May 18 meeting on "Allowance Set-Asides in a Cap-and-Trade Program."

First, we would like to thank the ARB for including in the PDR the administrative adjustments to the base budget to account for voluntary demand for renewable energy. This is very important not only to the survival of this growing, vibrant market, but also to the significant and real contribution that voluntary purchases of renewable energy make towards reducing greenhouse gas emissions. In previous comments we have stressed the importance of the voluntary market for renewable energy in helping to drive, along with the existing 20% RPS and the planned 33% RES, the development of new renewable energy generation. Without the proposed adjustment mechanism, a large part of the expected new renewable energy capacity would be at risk, as explained in our earlier comments dated May 14, 2009. The Preliminary Review Draft reflects some excellent thinking on this issue, and a direction that REMA fully supports.

Specific Comments on § 95910 Modifications to the Annual Base Budgets

(b) *Adjustments to the Base Budgets to Account for Voluntary Investment in Renewable Sources of Electricity Generation*.

The Discussion of Concept text box on page 34 of the PDR provides a broad outline of how the adjustment mechanism might work. Just to be clear, we believe the intent is (and should be) that this administrative adjustment apply to any California generated RECs retired for voluntary purposes, whether sold as unbundled RECs, utility green power, competitive electricity, or distributed generation. In our specific comments, we recommend further detail regarding how to implement the concept. These details are based to a large extent on experience with the Regional Greenhouse Gas Initiative, which has a similar adjustment mechanism.

1. **The administrative adjustment to the budget should be done annually rather than for a three-year compliance period.**

The Discussion of Concept contemplates an adjustment to the base budget for each compliance period, which is three calendar years. We recommend that the administrative adjustment for voluntary renewable energy demand be made annually so that voluntary buyers and sellers do not have to wait for three years or longer to be certain of the effect of their purchases. Annual reporting, verification and adjustments would also ensure that participants remain familiar with the administrative actions necessary to support environmental claims, and submit timely reports.

Another reason for making the administrative adjustment annually is that it would be more accurate to do a one-year projection of voluntary demand than a three-year projection. Voluntary demand may be more sensitive to annual fluctuations in general economic conditions as well as to price fluctuations based on year-to-year variations in supply and demand. A one-year ex-ante estimate of the budget adjustment needed would be more likely to reflect current conditions.

An annual adjustment and retirement of allowances would also be consistent with the Green-e standard for annual verification of purchases and retirements. This is important because Green-e certifies the vast majority of voluntary renewable energy products.

2. **The ex-ante estimate of budget adjustment needed should be based on WREGIS data.**

The PDR suggests that the National Renewable Energy Laboratory (NREL) provide an estimate of voluntary renewable energy demand for the ex-ante budget adjustment. NREL is an outstanding institution, and is the source of a great many useful reports and analyses, but it has no data on the location of the renewable generators that produce the electricity and renewable energy certificates (RECs). Generator location data is critical for ARB's purpose because any adjustment that is made to the emissions budget should be based only on generation located in California or in WCI states whose emissions are similarly capped.

To create the ex-ante estimate, ARB should first establish the most recent annual demand (we will call it the baseline), then update that using recent growth in demand to estimate the necessary adjustment to the upcoming budget year.

The best source for baseline data—based on accuracy, comprehensiveness and administrative convenience—is the Western Renewable Energy Generation Information System (WREGIS).

Each certificate issued by WREGIS contains vital information about the energy source, generator location, date the generator began commercial operation, and other attributes of the MWh generated. WREGIS also assigns each certificate a unique serial number, a fact which is essential to verification of no double counting.

WREGIS is also ideal to this task because it is comprehensive. It includes all RECs issued to California generators registered in WREGIS, regardless of whether those RECs are sold as an unbundled product, bundled with electricity and sold as green power, or generated by distributed generation and consumed onsite.

Retail sellers of renewable electricity or RECs should have to indicate in their WREGIS accounts the number and serial numbers of the certificates sold to (and retired for) voluntary purchasers.[1] Again, the certificates will indicate whether they were issued to California generators or to generators in other capped states. After the end of a calendar year, WREGIS could then produce a report showing the sum total of voluntary sales from eligible California (or WCI partner) generators.[2]

For the second step in the ex-ante estimate, ARB (or the California Energy Commission, or NREL for that matter) would project the baseline ahead to the upcoming budget year using the percentage change in voluntary renewable energy sales between the two most recent years with full data. To illustrate, let us assume that we are in 2011 and that we need to estimate the adjustment to the 2012 base budget. ARB would obtain a report from WREGIS on voluntary sales from eligible generators for calendar year 2010. The 2010 baseline would be adjusted two years to 2012 by using the annual growth rate in voluntary sales, also shown by WREGIS reports, from 2009-2010.[3] This approach is not complicated, uses highly reliable data, and could be done and reported out by ARB staff showing all data and calculations for transparency.

The final step in the ex-ante adjustment would be as described in the PDR's Discussion of Concept. Using the projection of voluntary demand in MWh, ARB would calculate, using a California-appropriate emissions factor, a commensurate number of allowances representing reduced emissions due to this expected level of voluntary demand for eligible renewable energy. This number of allowances would then be withheld from the base budget, and earmarked and held in ARB's Holding Account.

3. Any voluntary purchase from an eligible California generator should be counted in the administrative adjustment to the budget, and should result in retirement of allowances.

The PDR is unclear whether ARB means to link allowance retirements to the location of the purchaser (limited to purchases within California) or only to the location of the generator (limited to generation within California). For example, the Discussion of Concept describes the

[1] ARB should verify with WREGIS that the functionality currently exists for WREGIS account holders to indicate the purpose for which certificates are being retired (voluntary sale or compliance with a state RPS). If it does not currently exist, ARB should request that WREGIS add this functionality so that WREGIS can create and issue the necessary reports described here.

[2] The data would be aggregated so as not to show voluntary retail sales by any individual utility or marketer.

[3] This proposed schedule would have to be confirmed by WREGIS. There is a lag between the month when generation occurs and the month when certificates are created, and consequently a lag of perhaps six months after the close of a year before reports for the calendar year can be issued.

ex-ante estimate of demand in California, but also "tracking of California generated Renewable Energy Credits" and retiring allowances based on "the claimed amount of renewable electricity generation."

The Regional Greenhouse Gas Initiative based its retirement of allowances for voluntary renewable energy on the location of the buyer. This is a mistake. It should not matter where the buyer is located, but rather on where the generator is located, for two reasons.

- If a consumer located outside California purchases RECs from a renewable generator located within California, that purchaser would have the same effect on emissions in California as an in-state purchaser. Both would reduce emissions in California.
- In addition to lowering emissions in California, focusing on the location of the generator is good for the California economy by encouraging out-of-state demand and offering wider markets to California-based generators.

Whether the purchaser is located inside or outside California, RECs from eligible California generators should be retired. REC retirement will generally occur in WREGIS, but if the RECs are exported to another tracking system that serves the purchaser, these too should be accepted as long as they include the necessary information to tie them back to a California generator whose RECs were originally issued by WREGIS.

The problem with basing the adjustment on the location of the renewable energy customer (i.e., limiting it to California purchasers) is that it would unnecessarily restrict the benefits to California—the economic benefits to California generators noted above, and the emission reduction benefits to California, because out-of state purchasers would be reluctant to buy from California generators if they cannot claim emission reductions.[4] This would lead to smaller and balkanized markets for renewable energy as other states would follow California's lead. Limiting markets in this way would reduce competition and could lead to higher REC prices.

4. Claims on the adjustment should be based on WREGIS reports.

The PDR states, "During the compliance period any party could be allowed to submit a claim of investment in voluntary renewable electricity including an estimate of megawatt hours produced for a given compliance period. This information could be verified by ARB using the Western Region Electricity Generation System (WREGIS) and tracking of California generated Renewable Energy Credits (RECs)."

If claims are to be verified by WREGIS, then two things follow:

- Any generator that wants to sell RECs or renewable electricity into the voluntary market must be registered with WREGIS and have WREGIS issue certificates to the generator. This ensures that no one else is issuing certificates for the same generation, there is no double counting, and that the issuance of certificates is based on WREGIS measurement and verification protocols.

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[4] For example, Green-e Energy will only certify renewable energy generated in a capped state if CO_2 emissions allowances are retired. If purchases from out of state do not result in retirement of allowances, such renewable energy is not eligible for Green-e certification. See http://www.green-e.org/docs/energy/Appendix%20D_Green-e%20Energy%20National%20Standard.pdf (p.15).

- The party that makes a claim should be required to be registered for an account with WREGIS. Having an account with WREGIS means that the party will be able to indicate in their WREGIS account when RECs are retired for voluntary sales, and they will be able to generate a WREGIS report to that effect to substantiate their claim.

The only exception to this requirement would be for parties that (1) are registered with another recognized REC tracking system, (2) have imported RECs from WREGIS into that other tracking system, and (3) can verify, from that other tracking system, that the RECs originated from an eligible California generator.

5. The ex-post true-up of budget adjustments should true-up in both directions.

The PDR addresses the ex-post true-up of budget adjustments. The Discussion of Concept states, "Any earmarked allowances that resulted from the overestimation of expected reductions vs. claimed reductions could be released in the subsequent compliance period." That is a true-up in one direction, when voluntary demand is less than the ex-ante adjustment, but there is no equivalent true-up in the other direction, when voluntary demand exceeds the ex-ante adjustment. In fact, the PDR states, "In no event could the size of this adjustment exceed a pre-determined percent of the total allowances from the compliance period in question."

This is not a real true-up if it only goes in one direction. REMA recommends that any shortage for a given year be remedied by increasing the succeeding year's ex-ante adjustment by the amount of the shortage, and immediately (in the new year) retiring allowances commensurate with the shortage. If this cannot be done, then ARB should adopt a policy of not releasing any excess allowances in the Holding Account, and instead carrying them forward to be used in any year when voluntary demand exceeds the ex-ante adjustment for that year.

This issue is critical because it will be impossible to ensure that a purchase is meaningful if it is uncertain that it will result in the retirement of equivalent allowances. Purchasers have to know that they are going to get what they think they are buying.

6. There should be no cap on the budget adjustment for voluntary renewable energy.

The ex-post true-up description in the PDR also suggests that there would be a fixed cap ("pre-determined percent") of the total allowances that could be used for the budget adjustment for voluntary renewable energy demand. REMA urges ARB not to adopt a pre-determined cap and to allow the budget adjustment to be determined solely by the ex-ante estimate of need based on demonstrated demand.

ARB recognizes that voluntary demand for renewable energy helps reduce greenhouse gas emissions, and the proposed administrative adjustment seeks to ensure that renewable energy supported by the voluntary market in fact reduces emissions by retiring allowances. It should not be the case that only some voluntary demand reduces emissions; every emission-free MWh of renewable energy supported by voluntary demand offers the same greenhouse benefits and should be recognized by eligibility to retire allowances. A pre-determined cap would introduce risk and uncertainty regarding environmental claims. Again, it is important that purchasers know that they will get what they think they are purchasing.

The rationale for a cap on the administrative adjustment is usually to protect emitters from having to acquire scarcer (and possibly more expensive) allowances. But every renewable MWh generated to the grid reduces the number of MWh (and emissions) generated from other sources, thereby reducing the need for allowances. When both supply of and demand for allowances are reduced by an equal amount, the price of allowances should be unaffected.

If there must be a cap on the number of allowances that can be placed in the Holding Account as an administrative adjustment, then there is no need to do the ex-ante estimate of budget adjustment for the voluntary market for renewable energy. If ARB goes with a cap, the fixed number or percent of allowances should simply be placed into the Holding Account. RGGI provides an example. Although the RGGI model rule envisioned that each state would conduct an ex-ante estimate of demand, most RGGI states (the exception being Massachusetts) opted to place a fixed number or percent of allowances in their administrator's accounts, rendering the ex-ante estimate administratively superfluous.

If ARB adopts a cap on the number of allowances that can be placed in the Holding Account, REMA strongly recommends that the cap be subject to periodic review and adjustment prior to the start of each three-year compliance period, or that an automatic review be triggered whenever demand exceeds the cap for two years in succession. Several RGGI states have adopted a similar proviso.

Coordination with Western Climate Initiative

We would like to emphasize that this adjustment to base budgets to reflect voluntary support for renewable energy is most effective when other WCI partners create reciprocal arrangements. REMA encourages ARB to press for similar treatment of voluntary renewable energy among its WCI partners. Just as renewable energy generated in California and sold to voluntary buyers in Oregon should result in retirement of California allowances, so should renewable energy generated in Oregon and sold to voluntary buyers in California result in the retirement of an Oregon WCI allowance.

Further, there should be no state- or province-specific restrictions that balkanize the voluntary market. To that end, WCI partners should be encouraged to adopt harmonized rules, such as a uniform definition of eligible resources that could be counted for the administrative adjustment to each partner's base budget.

Conclusion

Once again REMA would like to thank ARB for its thoughtful work. We stand ready to assist ARB in fleshing out further details of this mechanism as needed.

Sincerely,

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