Renewable Energy Markets Association

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Clerk of the Board
Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Renewable Energy Markets Association comments on the proposed California cap on greenhouse gas emissions and market-based compliance mechanisms regulation, including compliance offset protocols

Dear Chairman Nichols and Members of the Board:

The Renewable Energy Markets Association (REMA) appreciates the opportunity to provide comments on the California Air Resources Board's (ARB) Proposed Regulatory Order, released October 28, 2010.

REMA represents the collective interests of both for-profit companies and nonprofit organizations that sell or promote the sale of renewable energy products, including renewable technology, renewable electricity, and renewable energy certificates (RECs), to individuals, companies and institutions throughout North America. REMA actively engages in policy proceedings at the federal and state level.

The California Air Resources Board (ARB) has embarked on an ambitious and worthy goal of reducing the state's Greenhouse Gas (GHGs) emissions. In this pursuit, REMA expresses its support and continued assistance in developing a climate program that encourages meaningful GHG reductions through both compliance and voluntary actions. Over the past two years, REMA has officially submitted eight (8) statements to ARB providing tailored recommendations on methods to implement a cap and trade scheme that preserves the voluntary renewable energy markets. Today's comments are part of that continuing dialogue to ensure that ARB includes regulatory provisions that recognize meaningful voluntary purchases of renewable energy within its compliance mechanism.

ARB has recognized the importance of the Voluntary Renewable Energy (VRE) markets within its *Staff Report: Initial Statement of Reasons*, which has proposed adopting a set-aside process to account for VRE market activity. The report outlines not only the importance of the VRE market in mitigating GHG emissions, but also the potential damaging effect an 'as-is' cap and trade program could impart on the market:

> "Without an allowance set-aside for VRE purchase, once the cap-and-trade program is in place, the voluntary use of electricity generated from renewable resources and delivered to California would no longer contribute additional greenhouse gas emission reductions because the level of allowable emissions is determined by the cap."[1]

Thankfully, ARB's *Proposed Regulation Order* includes two placeholders, §95831 and §95870, which would permit ARB's Executive Officer to execute a VRE set-aside at a later date for both a Holding

[1] California Air Resources Board , *Staff Report: Initial Statement of Reasons (ISOR)*, Part I, Vol. I, pg. II-28 http://www.arb.ca.gov/regact/2010/capandtrade10/capisor.pdf

Account and Allowance Allocations, respectively.[2] REMA applauds this progress and offers the following recommendations on how to best create and operate such a set-aside. REMA's past recommendations from ARB's *Preliminary Review Draft* (released in December 2009) are incorporated in this comment document, and they provide sound guidance on the issue of accommodating VRE purchases and reaping subsequent GHG reductions.

ARB's Cap and Trade regulation presents an opportunity to improve on existing state and regional treatments of VRE market interactivity. Existing regional GHG structures like the Western Climate Initiative (WCI) and the Regional Greenhouse Gas Initiative (RGGI) have made strides in reducing GHG emissions through similar regulatory frameworks; yet adopting either of these systems in their current forms could limit the effectiveness of VRE purchases within California. REMA's recommendations for incorporating a robust VRE set-aside include the following position statements.

Summary of REMA Recommendations on ARB VRE Set-Aside Provisions

I. **Prohibit a VRE cap or limit on the annual budget adjustment;**

II. **Prohibit a time limit on the VRE set-aside;**

III. **Base VRE set-aside retirements on the location of the generator;**

IV. **Coordinate emission reduction activities with the Western Climate Initiative;**

V. **Conduct the administrative adjustment to the budget done annually rather than for a three-year compliance period;**

VI. **Use a two-way budget adjustment for the ex-post true-up of allowances;**

VII. **Base the ex-ante estimate of budget adjustment needed on WREGIS data;**

[2] California Air Resources Board, *Volume 1: Proposed Regulation to Implement the California Cap-and-Trade Program, Appendix A: Proposed Regulation Order*, A-52, A-77, respectively. Posted 28 Oct. 2010. http://www.arb.ca.gov/regact/2010/capandtrade10/capv1appa.pdf

I. Prohibit a VRE cap or limit on the annual budget adjustment

The ex-post true-up description in ARB's December 2009 *Preliminary Review Draft* (PDR) suggested that there would be a fixed cap ("predetermined percent") of the total allowances that could be used for the budget adjustment for VRE demand.[3] 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 mega-watt hour (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.

Should ARB implement a cap on the VRE set-aside, 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.

However, should ARB instead to pursue 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 provision.

II. Prohibit a time limit on the VRE set-aside

ARB should bear in mind that it is through the addition of more renewables that the state will actually reduce carbon emissions in the electricity sector. If renewable technology costs become competitive, and there is sufficient supply relative to demand that REC prices are low, we can put more renewables on the grid, reduce greenhouse gas emissions, and thereby reduce the need for allowances. The growth of demand for renewables, both voluntary and mandatory, will also provide evidence that the overall emissions cap can be lowered. REMA sees no logical reason to curtail this positive trend.

[3] Renewable Energy Markets Association, *REMA Comments to the California Air Resources Board on the Cap-And-Trade Preliminary Draft Regulation*, http://www.renewablemarketers.org/pdf/file_104.pdf, 11 Jan. 2009.

Other comparable GHG reduction programs have sent mixed messages on establishing a time limit for a VRE set-aside. While RGGI has not incorporated such as limit—and no RGGI members have embraced it, WCI has recommended that its partner jurisdictions choose "whatever time limit (if any) that is found appropriate for that jurisdiction."[4] The growth of demand for renewables, both voluntary and mandatory, should assist renewable technologies in becoming competitive, thereby increasing supply relative to demand so that REC prices are low, which puts more renewables on the grid, reduces greenhouse gas emissions, and reduces the need for allowances overall. Term limiting a VRE set-aside threatens the investment in and scaling up of renewable energy generation.

If ARB nevertheless feels that it may be desirable to end the VRE set-aside at some point, it should not choose an arbitrary sunset date now when we have no evidence to support that move. Instead, it should undertake a general market review in the future to examine the evidence and determine, through a multiparty stakeholder process, that a sunset on the set-aside is merited.

Finally, if ARB decides to end the VRE set-aside, it should be careful to base the sunset on the date of project *installation*, not on the date of the RECs or output. Renewable developers who make investment decisions based on a set of assumptions about market support should not have the rug pulled out from under them. That kind of risk is a deterrent to new investment.

III. Base VRE set-aside retirements on the location of the generator

REMA fully supports a generator-based approach in which allowances are retired whenever RECs from a facility in ARB's territory are purchased and retired by a customer in the VRE market with no limitation on the customer's location. WCI recently recommended this approach to guide its VRE set-aside.[5] However, it should be noted that RGGI has based its retirement of allowances for voluntary renewable energy on the location of the buyer. We believe this would be a mistake. It should not matter where the buyer is located, but rather on where the generator is located, for two reasons:

- First, 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.

- Second, 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

[4] Western Climate Initiative, *Voluntary Renewable Energy Markey: Issues and Recommendations*, 27 July, 2010, pg. 30.

[5] Ibid, pg. 26

California, because out-of state purchasers would be reluctant to buy from California generators if they cannot claim emission reductions.[6] 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.

IV. Coordinate emission reduction activities with the Western Climate Initiative

REMA would like to emphasize that the creation of a VRE set-aside to support renewable energy is most effective when other geographic partners create reciprocal arrangements. ARB has signaled that it intends to integrate its climate efforts with existing programs like WCI, and that it may also fashion its VRE set-aside on WCI's structure. REMA encourages ARB to press for similar treatment of voluntary renewable energy among WCI's 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, when integrating ARB's design with WCI, there should be no state or province-specific restrictions that balkanize the VRE market. Despite WCI's reluctance to require harmonizing its jurisdictional rules on a VRE set-aside and defining renewable generator eligibility requirements[7], such a uniform definition of eligible resources could account for an administrative adjustment to each partner's base budget.

V. Conduct the administrative adjustment to the budget done annually rather than for a three-year compliance period

The previously published ARB *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.

VI. Use a two-way budget adjustment for the ex-post true-up of allowances

The PDR also addressed the ex-post true-up of budget adjustments. The Discussion of Concept states,

[6] For example, Green-e Energy will only certify renewable energy generated in a capped state if CO2 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_Greene%20Energy%20National%20Standard.pdf, (p.15).

[7] Op. Cit. WCI July 2010, pg. 20.

"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 predetermined 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.

VII. Base the ex-ante estimate of budget adjustment needed 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. *WCI has already recommended its partners use an established REC tracking system like WREGIS* as the basis for allowance retirements from a VRE set-aside.[8]

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.[9] Again, the

[8] Ibid, pg. 18

[9] 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.

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.[10]

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.[11] 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.

Conclusion Remarks

Again, REMA thanks ARB for taking its comments on structuring a VRE set-aside under consideration. Incorporating REMA's recommendations will ensure that ARB responsibly addresses climate change concerns while simultaneously encouraging meaningful purchases of renewable energy that allow individuals and businesses to go above and beyond statutory obligations. Also, REMA's set-aside comments will allow ARB to integrate lessons learned from VRE treatment in similarly structured North American capped markets and improve the renewable energy markets overall.

Should any of the aforementioned comments or recommendations incite questions or require additional clarification, please contact Joseph Seymour, REMA Policy and Governmental Affairs Coordinator, at jseymour@ttcorp.com.

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

[11] 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.