

February 19, 2010

**COMMENTS OF THE RENEWABLE ENERGY MARKETS ASSOCIATION
ON THE WCI PAPER “VOLUNTARY RENEWABLE ENERGY MARKET:
ISSUES AND DRAFT RECOMMENDATIONS”**

Introduction

The Renewable Energy Markets Association (REMA) thanks the Western Climate Initiative (WCI) for the opportunity to comment on issues raised in the design of a regional cap-and-trade system. REMA would like to share our thoughts on the WCI document, “Voluntary Renewable Energy Market: Issues and Draft Recommendations,” dated January 14, 2010.

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.

As the voluntary market is central to REMA’s interests, we are very pleased that WCI is now addressing a program design issue that directly affects voluntary markets. We appreciate the staff effort in understanding the issues and in drafting the paper, and we agree with much that is written and recommended. Specifically, we support the inclusion of a voluntary renewable energy (VRE) set-aside. 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 the development of new renewable energy generation. Without the proposed VRE set-aside, a large part of the expected new renewable energy capacity would be at risk, as explained in our comments to the Allocations Subcommittee on February 1, 2008, to the Electricity Subcommittee February 1, 2008 and February 3, 2009, and to WCI on August 13, 2008. The recent paper under review reflects some excellent thinking on this issue, and a direction that REMA fully supports. Nevertheless we do have a number of comments on the implementation of a VRE set-aside, based in part on experience in the RGGI states.

Our comments are divided into two parts: The first part addresses the implementation of VRE set-asides in WCI jurisdictions (Section 6) and the draft recommendations. The second part addresses general issues and assumptions in the paper.

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Comments on Implementation Recommendations

1. The VRE set-aside should be required of all WCI Partner jurisdictions.

The paper devotes an entire section to recommendations on how to implement a VRE set-aside, but it contains no recommendation on whether to do it. Instead, Section 4 contains a discussion of the rationale for the VRE set-aside, and the rationale for not adopting a set-aside. For a variety of reasons, explained below in our general points 10-15, we believe that many of the assumptions about the VRE market without a set-aside under cap-and-trade are flawed. After reviewing our comments, we hope you will agree that the paper should make an unequivocal recommendation to WCI Partner jurisdictions in support of a VRE set-aside.

The paper states that it should be up to each individual WCI jurisdiction whether or not to implement a VRE set-aside as part of their cap-and-trade program. This recommendation is based on the principle that each jurisdiction has discretion over how the allowances apportioned to that jurisdiction are to be used.

REMA believes that it is critical to effective and efficient VRE markets that the proposed VRE set-aside be operated uniformly. The VRE market in its current form is relatively liquid, transparent, easily tracked and robust. If some WCI jurisdictions adopt the set-aside and others do not, the market will become balkanized—with less transparency, less competition, and higher prices.

Renewable energy from a jurisdiction without a set-aside will not have the same effect and benefits as renewable energy from a jurisdiction with a set-aside. Renewable energy marketers will have to differentiate sales of renewable energy based on the jurisdiction where the generator is located. Renewable energy generated in jurisdictions with a set-aside will be sold with the benefits of emission reductions, while renewable energy generated in jurisdictions without a set-aside will be sold without such claims—or worse may be avoided entirely. Voluntary purchasers that want to make an environmental difference will have to learn to discriminate between renewable energy from jurisdictions with a set-aside and those without a set-aside. This makes it a consumer protection issue, and it would not be good for renewable energy markets.

Further, if some states adopt the set-aside and others do not, Green-e will be forced to discriminate as to what generation they will certify and what they won't—as they did in RGGI states, where one state (Delaware) chose not to adopt a VRE set-aside.¹ Generation located in WCI jurisdictions, but without a set-aside, would not meet Green-e's current standard, which requires that “Green-e Energy certified MWhs (electricity or REC) must contain all the greenhouse gas (GHG) emission reduction benefits, including carbon dioxide (CO₂) reduction benefits, associated with the MWh of renewable electricity when it was generated.” Again, VRE

¹ Green-e Energy is the voluntary certification program run by the Center for Resource Solutions in San Francisco. Green-e certifies a large majority of the voluntary renewable energy market. Its certification standards state, “Green-e Energy certified MWhs (electricity or REC) must contain all the greenhouse gas (GHG) emission reduction benefits, including carbon dioxide (CO₂) reduction benefits, associated with the MWh of renewable electricity when it was generated.” The Green-e Energy National Standard for Renewable Electricity Products addresses the RGGI situation explicitly in Appendix A.2 beginning on page 14 in the following link: http://www.green-e.org/docs/energy/Appendix%20D_Green-e%20Energy%20National%20Standard.pdf.

customers would have to pay much more attention to where their renewable energy is generated and whether their products are certified.

There is also a consideration of reciprocity, which is key to the whole idea of allowance trading among the multiple WCI Partner jurisdictions. For example, if California establishes a VRE set-aside and agrees to retire allowances on behalf of VRE purchases (of California renewable generation) in Oregon, California should expect that Oregon will also be willing to retire allowances based on California VRE purchases of Oregon renewable generation.

While we respect the right of jurisdictions to determine what is in their own best interests, some essential design elements should be the same for the program to work well. In this case, the jurisdictional determination should be whether to adopt the overall cap-and-trade program, of which the VRE set-aside should be an essential element.

2. VRE set-aside design elements should be harmonized across jurisdictions.

Regardless of whether all WCI jurisdictions are required to adopt a VRE set-aside, or only some choose to do so, it is important to harmonize the rules of the set-aside. The draft paper assigns a high, medium or low importance to harmonizing various elements of the set-aside. We submit that they are all important, based on experience with state-by-state administration of the RGGI VRE set-aside.²

For example, the paper recommends in Section 6.2 that each jurisdiction “define their own eligibility requirements for their VRE set aside programs,” assigning harmonization a low importance. Yet if each jurisdiction adopts a different definition of what resources are eligible (including not only resource type but also when the generator began operation), VRE marketers and buyers will have to pay closer attention to what generation from what jurisdiction is included in the product they are selling or buying. Biomass from one jurisdiction might result in emission reductions, while the same biomass from another jurisdiction might not—even if both jurisdictions operate a VRE set-aside—because they define eligible biomass differently. Indeed, the products themselves will have to be reconfigured so that they do not include resources that are eligible in one jurisdiction but not in another. This will drive the market towards California-based products, Oregon-based products, and Ontario-based products, for example. Buyers may not care which they buy, as long as they will all result in retirement of allowances, but it will narrow the market and increase product prices because there will be fewer generator options available to marketers, and administrative costs will be higher.

Indeed, as the paper suggests, “Marketers of VRE products will adapt to whatever eligibility criteria jurisdictions adopt,” but this may occur with unintended and undesirable consequences for renewable energy development in each jurisdiction, which could be avoided by placing higher up-front priority on harmonizing VRE policy across the WCI region.

If jurisdictions “choose to mirror existing RPS” definitions (as suggested by the paper), that may well include different requirements about the deliverability of energy to the jurisdiction.³ This

² Some of these problems are described in Holt, E., “How Cap and Trade Can Affect VRE Markets,” *North American Windpower*, April 2009 (46-56).

³ WCI jurisdictions do in fact have different requirements about geographic eligibility for their RPSs. See Wisner, R. and G. Barbose, *Renewables Portfolio Standards in the United States*. Berkeley, CA: Lawrence Berkeley National Laboratory, 2008, at p. 10. <http://eetd.lbl.gov/ea/EMS/reports/lbnl-154e-revised.pdf>

could make it impossible for some WCI jurisdictions to enjoy reciprocity with respect to VRE sales from their renewable energy generators. This has happened in RGGI, where Massachusetts requires energy to be delivered into ISO-NE, with the result that Maryland or New Jersey renewable energy generation is virtually ineligible to create an allowance retirement from a REC sale to Massachusetts, even though all three states have a VRE set-aside.

Similarly, the paper suggests that it is of low importance if each jurisdiction adopts a limit (or different limits) on the set-aside amount, or on how shortfalls in the set-aside might be covered. This would make it harder for consumers of VRE products to be certain whether their purchases will in fact result in allowance retirements and support environmental claims.

The paper suggests that WCI should work to develop a marginal emissions factor for each major grid region, but that use of this factor should be optional and “specific assignment of emissions left to jurisdictional discretion.” This discretionary approach is similar to the RGGI approach, which we believe is suboptimal. As a result of applying inconsistent emission factors, RGGI states’ emission factors range from a fixed number not varying over time or geography, to average emissions, to marginal emissions, and emission factors reflecting the location of the purchaser rather than the location of the generator. We believe that, as a matter of consumer protection as well as accurate accounting, there should be some uniformity of approach to ensure that VRE consumers be credited an emissions reduction consistent with the emissions of the displaced energy, as accurate as possible consistent with administrative simplicity.

The paper does not discuss the administration of the set-aside, but most of the RGGI states adopted a different date by which claims for the set-aside must be filed with each state. This also places a burden on the marketers to track multiple filing deadlines.

A weakness of the RGGI Model Rule, and in particular the optional VRE set-aside, was that participating states could depart from the VRE set-aside model in many ways. For the nine states that adopted a VRE set-aside, the RGGI Model Rule was not followed in several details, including resource eligibility, emission factors, and the true-up mechanism. In addition, although not described in the Model Rule, generator vintage and the reporting schedule varies from state to state.⁴ WCI should learn from this experience.

All of these differences in the operation of the set-aside will tend to balkanize markets, meaning that they will be less liquid and less competitive, and unnecessarily limit this market’s greenhouse gas reduction potential. A lack of harmonization on these issues will make it harder for marketers to design and sell their products, more confusing for consumers to purchase VRE products (or which ones to purchase), and in general create headaches all around. We recommend that WCI provide clear guidance to Partner jurisdictions by urging them to strive toward harmonization of regional market rules and providing minimum benchmarks for participation.

3. There should be no upper limit on the VRE set-aside.

The draft recommendation in Section 6.4.1 states: “WCI Partner jurisdictions that choose to implement a VRE set aside should choose whatever upper limit (if any) that is found appropriate

⁴ For a table comparing how each RGGI state is implementing the VRE set-aside, see http://www.epa.gov/greenpower/documents/events/rggi_status_table.pdf

for that jurisdiction.”

REMA urges WCI to recommend no upper limit or cap on the set-aside and to allow the set-aside to be determined solely by demonstrated demand from the VRE market. How this demand should be estimated is described in point 8 below.

With the central recommendation in support of a VRE set-aside, WCI recognizes that voluntary demand for renewable energy helps reduce greenhouse gas emissions, and the recommended set-aside 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. It is important that purchasers know what they are getting when they buy renewable energy.

The rationale for a cap on the set-aside 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. In other words, a VRE set-aside is a cost-neutral policy.

If there must be a cap on the number of allowances that can be placed in the set-aside, then there is no need to estimate the number of allowances that should be placed in the set-aside account each year. If WCI jurisdictions adopt a cap, the fixed number or percent of allowances should simply be placed into the set-aside. 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 set-aside accounts, rendering the ex-ante estimate administratively superfluous.

If WCI jurisdictions adopt a cap on the number of allowances that can be placed in the set-aside, REMA strongly recommends that the cap be subject to periodic review and adjustment prior to the start of each 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.

4. Shortfalls in the set-aside should be true up to ensure allowance retirements on behalf of all VRE documented demand.

Section 6.4.1 also recommends that “Partner jurisdictions must determine if they will cover shortfalls by either borrowing allowances from a future year or lowering the per MWh retirement rate.”

Whether or not a WCI jurisdiction places a cap on the size of the VRE set-aside, it is important that they plan to true-up differences between the amount set aside and the amount of claims made from the VRE market. This true-up goes both ways. If actual documented demand is less than the amount set aside, then the excess allowances in the set-aside could be released for distribution in the subsequent compliance period. But if actual documented demand is greater than the amount set aside, it is critical to the expectations of VRE consumers that a mechanism

be established to ensure that allowances will be retired, and emissions reduced, on behalf of that demand. There are a few ways to do this.

REMA recommends that any shortage for a given year be remedied by increasing the succeeding year's set-aside by the amount of the shortage, and immediately (in the new year) retiring allowances commensurate with the shortage.

A second option, suggested in the paper, is that jurisdictions could borrow from a future year, but this will probably only create a "bow wave" of demand in advance of each year, exacerbating the shortage in the next year.

A third option, also suggested in the paper, is for jurisdictions to lower the per MWh retirement rate. If this option is pursued, the result will mean that:

- 1) Customers who purchased prior to the shortfall are now creating lower emissions reductions than they were before the shortfall occurred; and
- 2) Customers who purchased after the shortfall occurred are not creating any net reduction in CO₂. Their purchases are meaningless to the atmosphere.

To put it simply, lowering the per-MWh retirement rate is simply "robbing Peter to pay Paul."

It is unclear if WCI is actually suggesting something different. On page 4, the paper states: "...in order for VRE purchases from facilities in the WCI region to deliver climate benefits beyond those achieved by the cap, those purchases must either lead to a reduction in the total number of allowances in the system or the emissions value of the allowances in the WCI system must be reduced." (emphasis added)

It is unclear if WCI means that the emissions value of *all* WCI allowances would be diminished, or just those in the VRE set-aside. The former would result in real net CO₂ reductions, while the latter would not. WCI's meaning is unclear and should be clarified. If the emissions value of only the VRE set-aside is reduced, that would arbitrarily undervalue the emissions reduction effects of the VRE market, for which there is no logical rationale.

It should also be noted that if VRE is entering the capped system at a rate faster than anticipated when the set-aside account was established, then GHG emissions are also being reduced faster than anticipated. The result is that there is a reduced *need* for allowances in the region and there should be no negative consequences from retiring additional allowances.

If it is uncertain that a VRE purchase will result in the retirement of equivalent allowances, it will be impossible to ensure that the purchase is meaningful. Purchasers have to know that they are going to get what they think they are buying. That depends on a full true-up of any shortfalls in the set-aside.

5. There should be no predetermined time limit on the VRE set-aside.

Section 6.4.2 recommends: "WCI Partner jurisdictions that choose to implement a VRE set aside should choose whatever time limit (if any) that is found appropriate for the jurisdiction. Partner jurisdictions may choose to base time limits on periodic reviews of the cost-competitiveness of the technologies supported by the set aside program."

REMA disagrees that jurisdictions should establish a time limit for the set-aside provision to expire. The rationale for this suggestion appears to be that over time, renewable technologies will

become more cost-competitive. “As technology improves, the cost of renewable energy goes down and allowance price stabilizes...” (p. 25). But the price of RECs, which is what VRE buyers face, is not based only on the cost of the technology. Instead the price of RECs or renewable energy will depend on supply and demand, which will be influenced by RPS demand as well, and will likely be significant.

Further, the discussion behind this recommendation sounds like we’re doing a favor for renewables by creating the set-aside. We should bear in mind that it is through the addition of more renewables that we 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. We see no logical reason to curtail this positive trend.

If jurisdictions nevertheless feel that it may be desirable to end the VRE set-aside at some point, they should not choose an arbitrary sunset date now when we have no evidence to support that move. Instead, they 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 jurisdictions decide to end the VRE set-aside, they 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.

6. VRE set-asides should be based on the location of the eligible generators, not on the location of the purchasers.

REMA fully supports the paper’s draft recommendation in Section 6.3 that allowances should be retired “using a generator-based approach in which allowances are retired whenever RECs from a facility in the Partner jurisdiction’s territory are purchased and retired by a customer in the VRE market with no limitation on the customer’s location.”

The paper is correct that RGGI 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.

- If a consumer located outside the WCI footprint purchases RECs from a renewable generator located within a WCI jurisdiction, that purchaser would have the same effect on emissions in the jurisdiction as an in-state or province purchaser. Both would reduce emissions in the jurisdiction, as long as the jurisdiction adopts a VRE set-aside.
- In addition to lowering emissions in the jurisdiction where the generator is located, focusing on the location of the generator is good for the jurisdiction’s economy by encouraging out-of-jurisdiction demand and offering wider markets to jurisdiction-based generators.

Whether the purchaser is located inside or outside the generating jurisdiction, RECs from eligible jurisdiction generators should be retired. REC retirement should occur in a recognized tracking system (a point we cover separately). Whether the RECs are retired in the tracking system in

which the generator is registered, or are exported to another tracking system that serves the purchaser, either should be accepted as long as the VRE claim includes the necessary information to tie the RECs back to the jurisdiction where the generator is located.

The problem with basing the adjustment on the location of the VRE customer is that it would unnecessarily restrict the benefits to the jurisdiction where the generator is located—the economic benefits noted above, and the emission reduction benefits, because out-of-jurisdiction purchasers would be highly unlikely to buy from jurisdictional generators if they cannot claim emission reductions.⁵ This would lead to smaller and balkanized markets for renewable energy as other jurisdictions would likely follow suit. Limiting markets in this way would reduce competition and could lead to higher REC prices.

7. Claims on the set-aside should be based on reports from recognized tracking systems.

REMA supports the draft recommendation in Section 6.1 that claims on any set-aside be “based, first and foremost, on transactions verified through established REC tracking systems that span some or all of the WCI region.” The exception for “purchases that are not tracked through an established tracking system (or for regions without such a system) is not harmful, but in our view is not necessary. The North American Renewables Registry (NAR) operated by APX is now operational and available for any generator in North America to register for the issuance of certificates. By requiring only reports from recognized tracking systems, WCI would be emphasizing the importance of transparent, easily traceable and verifiable documentation as the basis for allowance retirements.

Reliance only on tracking systems would also bring with it adherence to metering and verification standards that would not be present through audits and attestations.

If claims must be verified by a recognized tracking system, then two things follow:

- Any generator that wants to sell RECs or renewable electricity into the voluntary market must be registered with a tracking system and have that tracking system issue certificates to the generator. This ensures that no one else is issuing certificates for the same generation, and that there is no double counting.
- The party that makes a claim should be required to be registered for an account with one of the recognized tracking system. Having an account with a tracking system means that the party will be able to indicate in their account when RECs are retired for voluntary sales, and they will be able to generate a tracking system report to that effect to substantiate their claim.

In the case of RECs that originated in one tracking system but are exported to another tracking system, the only requirement would be that the importing tracking system can verify that the RECs originated from an eligible WCI jurisdiction generator.

⁵ 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_Green-e%20Energy%20National%20Standard.pdf (p.15).

8. The ex-ante estimate for the VRE set-aside should be based on tracking system data.

Although not addressed in the paper, WCI jurisdictions will need to estimate the level of VRE demand and the number of allowances to place in the set-aside each year (unless a fixed, pre-determined amount is automatically allocated to the set-aside account).

To create the ex-ante estimate, jurisdictions 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.⁶ Each certificate issued by the tracking systems contains vital information about the energy source, generator location, date the generator began commercial operation, and other attributes of the MWh generated. The tracking systems also assign each certificate a unique serial number, a fact which is essential to verification of no double counting.

Tracking systems are also ideal to this task because they are comprehensive. They include all RECs issued to generators registered with the tracking system, 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 tracking system accounts the number and serial numbers of the certificates sold to (and retired for) voluntary purchasers.⁷ Again, the certificates will indicate whether the state where the generator is located, and could easily indicate its eligibility for the VRE set-aside. After the end of a calendar year, the tracking system could then produce a report showing the sum total of voluntary sales from eligible generators in each WCI jurisdiction.⁸

For the second step in the ex-ante estimate, each WCI jurisdiction 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. Each jurisdiction would obtain a report from the tracking system 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 tracking system reports, from 2009-2010.⁹ This

⁶ The best source for baseline data—based on accuracy, comprehensiveness and administrative convenience—is the tracking systems that serve the WCI jurisdictions. For western states participating in WCI, this would be the Western Renewable Energy Generation Information System (WREGIS). British Columbia generators could also register with WREGIS. Manitoba participates in the Midwest Renewable Energy Tracking System. Ontario and Quebec generators could register with the North American Renewables Registry. An exception would have to be made for jurisdictions that do not have a history using NAR or another tracking system. In that case, for the initial year, the jurisdiction could make its own estimate of demand, with review and input by the marketers or buyers, or the jurisdiction could request that marketers provide affidavits attesting to their most recent sales of renewable energy from generators in the jurisdiction.

⁷ WCI jurisdictions should verify with the tracking system their generators use that the functionality currently exists for tracking system account holders to indicate the purpose for which certificates are being retired (voluntary sale or compliance with an RPS). If it does not currently exist, the jurisdictions should request that tracking systems add this functionality so that they can create and issue the necessary reports described here. They could work with the Environmental Tracking Network of North America (ETNNA) for this purpose.

⁸ The data would be aggregated so as not to show voluntary retail sales by any individual utility or marketer.

⁹ This proposed schedule would have to be confirmed by the tracking system. 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.

approach is not complicated, uses highly reliable data, and could be done and reported out by WCI jurisdictional 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, each jurisdiction would calculate, using the appropriate emissions factor for their jurisdiction, 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 the VRE set-aside account.

9. WCI should require the use of emission factors that reflect marginal emissions avoided, yet are relatively easy to determine.

The draft recommendation in Section 6.5 recognizes the value of a marginal analysis, and recommends development of a marginal emissions factor for each major grid region, yet the use of this emissions factor would be optional.

REMA supports the use of marginal emission factors. Average emission factors can be very misleading and may discount the carbon benefits of renewable energy. Further, the approach of using emission factors relevant to the region where the generator is located works very well with the generator-based responsibility for determining allowance retirements.

The value of the recommended marginal analysis for each major grid region is seriously diminished, however, if jurisdictions can choose to ignore them. If jurisdictions agree to develop these factors, they should also agree to use them. That would help ensure that all jurisdictions are using consistent approaches to determining displaced generation and emissions reductions.

While we have no objection to an original region by region marginal dispatch analysis, we would also like to point out the importance of using factors that are easy to determine and verify, and that are easily updatable. The U.S. EPA, for example, in its Climate Leaders and Green Power Partnership programs, recommends the use of eGRID non-baseload emission factors for each eGRID subregion. The choice of a "non-baseload" emission factor is meant to approximate the marginal resources that would be displaced in the subregion. eGRID data, although it suffers from a lag in updating, is easily accessible and consistent. If it does not include factors for all WCI jurisdictions, then data for these jurisdictions not included in eGRID would have to be analyzed to determine conceptually similar approaches.

General Comments on Arguments Made in the Paper

10. Emission reductions are currently, and will be for the foreseeable future, the primary motivation for purchasing renewable energy.

The paper questions whether reducing emissions is in fact a critical motivator to the purchase of renewable energy. "If VRE consumers do not strongly prioritize reducing greenhouse gas emissions, then it is possible that the introduction of a cap-and-trade program may not have much impact on the VRE market" (p. 5); "If it is believed that most participants in the VRE market are not motivated primarily by the desire to reduce greenhouse gas emissions...or that no public policy is served by VRE once a cap and trade program is implemented, then an argument can be made that the VRE market does not need policy support, and no intervention in the VRE

market is necessary” (p. 10); and “If most purchasers of VRE are not primarily motivated by total greenhouse gas reductions implementation of a VRE set aside may pull more allowances out of circulation than is necessary to ensure the continued viability of the VRE market” (p. 11).

It is true that many consumers, especially small consumers, have multiple motivations for the purchase of renewable energy, and that there are many benefits to putting more renewable energy on the grid. Large corporations and organizations, however, are primarily motivated by the ability to make greenhouse gas reductions claims, and these buyers constitute 77% of the VRE demand and are responsible for most of the growth in this industry.¹⁰ The importance of emission reduction claims to these large purchasers is substantiated by the evidence that claims of reducing emissions are seen in most, if not all, press releases announcing the purchases.¹¹

Further, this motivation is likely to become even stronger. Several examples substantiate this point:

- Executive Order 13514 requires federal agencies to make greenhouse gas emission reductions a priority for federal agencies, and to begin reporting greenhouse gas emissions from direct and indirect activities.¹²
- The U.S. Securities and Exchange Commission recently issued a rule requiring the assessment, by publicly traded companies, of material risks related to climate change, and disclosure in public corporate filings.¹³
- On January 1, 2010, the Environmental Protection Agency began, for the first time, to require large emitters of greenhouse gases to collect and report data with respect to their greenhouse gas emissions.¹⁴
- Because climate change is considered the number one risk facing the insurance industry, the National Association of Insurance Commissioners recently promulgated a uniform standard for mandatory disclosure by insurance companies to state regulators of financial risks due to climate change and actions taken to mitigate them.¹⁵

We see no evidence that VRE customers are motivated in any *significant* way by factors beyond CO₂ emissions reductions. VRE customers see renewable energy as a simple and valuable way to reduce CO₂ emissions and that is what they say in their press releases. While we may wish that customers will remain in the VRE market if CO₂ reductions cease, it is simply wishful thinking.

¹⁰ Bird, L., C. Kreyzik and B. Friedman. *Green Power Marketing in the United States: A Status Report (2008 Data)*. Golden, CO: National Renewable Energy Laboratory, September 2009.

¹¹ Bird, L., E. Holt and G. Carroll. *Implications of Carbon Regulation for Green Power Markets*. Golden, CO: National Renewable Energy Laboratory, April 2007.

¹² Executive Order 13514 of October 5, 2009, “Federal Leadership in Environmental, Energy, and Economic Performance,” *Federal Register* Vol. 74, No. 194. Thursday, October 8, 2009.

¹³ U.S. Securities and Exchange Commission, 17 CFR Parts 211, 231 and 241, “Commission Guidance Regarding Disclosure Related to Climate Change; Final Rule.” *Federal Register* Vol. 75, No. 25. Monday, February 8, 2010.

¹⁴ U.S. Environmental Protection Agency, 40 CFR Parts 86, 87, 89 et al. “Mandatory Reporting of Greenhouse Gases; Final Rule.” *Federal Register* Vol. 74, No. 209. Friday, October 30, 2009.

¹⁵ National Association of Insurance Commissioners, Press Release, “Insurance Regulators Adopt Climate Change Risk Disclosure.” March 17, 2009, at

http://www.naic.org/Releases/2009_docs/climate_change_risk_disclosure_adopted.htm

In this case, the WCI drafters should not hold out false hopes that are not supported by the evidence. *We urge them to re-write those portions addressing the alternative to no set-aside, and to put forward a straightforward recommendation in support of each jurisdiction adopting a VRE set-aside.*

11. General environmental claims are insufficient to motivate the VRE market.

The paper at p. 10 suggests that consumers may be satisfied making claims about their personal carbon footprint even if total greenhouse gas emissions are not reduced. This could easily be construed by the media or corporate critics as greenwashing—claiming an environmental benefit without making a real difference. We believe that large purchasers will avoid making such claims because they recognize the weakness of them.

Similar to this type of claim, some have argued that VRE marketers can simply make “general environmental claims” about the product. In 1999, after looking at the emerging green power market, the National Association of Attorneys General (NAAG) issued Environmental Marketing Guidelines for Electricity. The NAAG guidelines on this point are clear:

“It is deceptive to misrepresent, directly or by implication, that a product or company offers a general environmental benefit. Unqualified claims of general benefit are difficult to interpret, and, depending on their context, may convey a wide range of meanings to consumers. In many cases, such claims may suggest that the product or company or their associated processes have specific and far-reaching environmental benefits. Every implied representation that the general assertion conveys to consumers must be substantiated. Unless this substantiation duty can be met, broad environmental claims should either be avoided or properly qualified, as necessary, to prevent deception about the specific nature of the environmental benefit being asserted. When a claim of general environmental benefit is made, the environmental impacts that will be considered in evaluating that claim include all significant environmental impacts.”

The NAAG guidelines indicate that customers must be fully informed that their purchase does not accomplish what the vast majority of customers have expressed as the most important accomplishment of VRE. Such necessary disclosure will reveal the meaninglessness of the purchase and will significantly undermine the VRE market. We urge the WCI make recommendations that are consistent with NAAG guidelines.

12. Purchasing emission allowances and bundling them with renewable energy is unfair and unacceptable.

It is suggested in Section 4.2 that generators or marketers of VRE products can buy emission allowances and retire them or convey them to the buyers of the VRE products as a way to ensure that emission reduction claims can be made.

This is a factual option, but it should be presented as an undesirable option, for the following reasons:

- It would be more expensive, which would discourage the purchase of the VRE products. This would have the opposite effect of what policy-makers expect from renewable energy and want to encourage.

- Asking VRE purchasers to pay the above-market costs of renewables and also buy an allowance from an emitting generator could be viewed as asking them to pay twice for the same benefit.
- Existing contracts for RECs specifically state that the REC buyer, not the buyer of the electricity, owns the environmental benefits. Requiring the REC buyer to then go purchase those environmental benefits again would probably void these contracts.
- The public has a broad understanding about the relationship between non-emitting renewable energy and carbon reduction. Severing that relationship would be confusing to consumers and would set the region back significantly and unnecessarily.

13. Energy efficiency and hybrid vehicles do not need to make claims on the set-aside.

Section 4.1 raises a concern that creating a set-aside for VRE will set a precedent for other actions and products that reduce emissions, citing energy efficiency and the purchase of hybrid vehicles as examples. Compared to VRE, these examples are dissimilar in several ways.

First, states and regions have established robust accounting and tracking systems to measure and verify renewable energy, including WREGIS and NAR, and Green-e has standards for verifying the vast majority of the VRE market. Similar infrastructure for administering a set-aside for energy efficiency and hybrid vehicles does not exist.

Second, hybrid vehicle owners can already make direct emission reduction claims if the vehicles are owned by the reporting entity. They have no need for an allowance set-aside to make emission reduction claims.

Third, unlike the building owner that installs energy efficiency measures, or the owner of a hybrid vehicle, the VRE buyer gains no direct or immediate economic advantage through the purchase of renewable energy. For example, energy efficiency, by reducing electricity use, will always have cost reduction as its primary motivation, whether or not emission reduction claims can be made.

According to Figure 2 in the paper, the VRE market is expected to constitute at least a third of the demand for renewables in the U.S. WCI should not remove this pillar of support for renewable energy. Renewable energy is the basis of reducing greenhouse gases in the energy sector, and WCI rules should do no harm to this well-established market.

14. RGGI states accept (and in some cases require) the purchase and retirement of RECs to qualify for the retirement of allowances.

In Section 6.1 the paper states, “The RGGI Model Rule only retires allowances for purchases of renewable electricity, and therefore does not accommodate sales of unbundled RECs” (p.15). The paragraph goes on to imply that the VRE set-aside is not worth the effort because most VRE sales are of unbundled RECs that are not eligible under RGGI. The paragraph at the top of p. 16 concludes, “Therefore, the RGGI model may not be optimal for stimulating new renewable development.”

This statement leaves the unfortunate and incorrect impression that there is a problem using unbundled RECs to qualify for the VRE set-aside under RGGI. In fact, the Model Rule states,

“To be considered, data must be verifiable and document the following for voluntary renewable energy purchases: (a) Documentation of voluntary renewable energy or renewable energy attribute credit purchases by retail customers...” (emphasis added).¹⁶

In implementation, each RGGI state requires documentation of sales, and all states accept reports from the REC tracking systems, which do not differentiate between bundled vs. unbundled RECs.¹⁷ Maine actually requires reliance on reports from the REC tracking systems, unless the generator is in that part of Maine that is not part of ISO-NE and is therefore not served by the NEPOOL Generation Information System.

The entire paragraph from the bottom of page 15 to the top of page 16, headlined “RGGI Model Rule,” should be stricken from the paper.

15. Carbon offsets are not the same thing as RECs, and suggestions that they are part of the VRE market should be removed from the paper.

At the bottom of page 3 and top of page 4, the paper discusses briefly the voluntary market for carbon offsets because some carbon offsets have been created from renewable energy projects. This paragraph should be stricken for the following reasons:

- Carbon offsets are not the same thing as RECs. One is denominated in tons of emissions, the other in MWh. The two should not be confused.
- Renewable energy projects may qualify as offset projects if they pass certain tests, but if their RECs are converted to offsets, those RECs must be retired and are not available for sale as RECs.
- Qualified projects can produce RECs or offsets, but cannot claim both for the same MWh of output.
- The paragraph is irrelevant because no one is suggesting that the VRE set-aside be used to retire allowances on behalf of offsets. If renewable energy qualifies as an offset, it can be retired to make an emissions reduction claim against direct emissions. There is no need to claim that an offset should result in a WCI jurisdiction retiring an allowance from the VRE set-aside. Using an offset to claim an allowance retirement under the VRE set-aside would be claiming a double emission reduction benefit.

Conclusion

REMA appreciates the effort that has gone into this draft paper. We appreciate that the paper considers the implementation of a VRE set-aside, but believe the paper would be strengthened by revisions to some of the assumptions and arguments. We stand ready to assist WCI in fleshing out further details of this mechanism as needed.

¹⁶ Regional Greenhouse Gas Initiative Model Rule, August 15, 2006, at p. 47. The definition of “voluntary renewable energy purchase” includes the same language.

¹⁷ For a summary each RGGI state’s VRE rules, and the rules themselves, see http://www.epa.gov/greenpower/documents/events/rggi_status_table.pdf

Sincerely,

The Renewable Energy Markets Association