



1211 Connecticut Ave NW, Suite 600 • Washington, DC 20036-2701
202-640-6597 tel • 202-223-5537 fax • www.renewablemarketers.org

**Renewable Energy Markets Association
Before the New Mexico Environmental Improvement Board**

In the matter of proposed new regulations,

20.2.350 NMAC – *Greenhouse Gas Cap and Trade Provisions*

No. EIB 10-04 (R)

Direct Testimony of Karl Rábago

Introduction

I appreciate the opportunity to offer technical testimony regarding the New Mexico proposed greenhouse gas cap and trade regulation on behalf of the Renewable Energy Markets Association (REMA). REMA commends New Mexico for its initiative on this important issue, and strongly recommends including protections for the integrity of voluntary renewable energy (VRE) markets.

REMA represents the collective interests of both for-profit and nonprofit organizations that sell or promote renewable energy products through voluntary markets, including renewable electricity and renewable energy certificates (RECs), to individuals, companies and institutions throughout North America.

We would like to submit for consideration testimony focusing on the need to ensure that cap-and-trade implementation strategies support the continuing vitality of the voluntary market for renewable energy and the reductions in carbon emission that result from that market.

With respect to the design of a carbon cap-and-trade program, REMA's primary objective is to ensure that any cap-and-trade program supports the ability of voluntary renewable energy demand to continue reducing emissions below the cap. To accomplish this objective, voluntary demand for renewable energy must result in either retirement of allowances or in lowering of the cap.

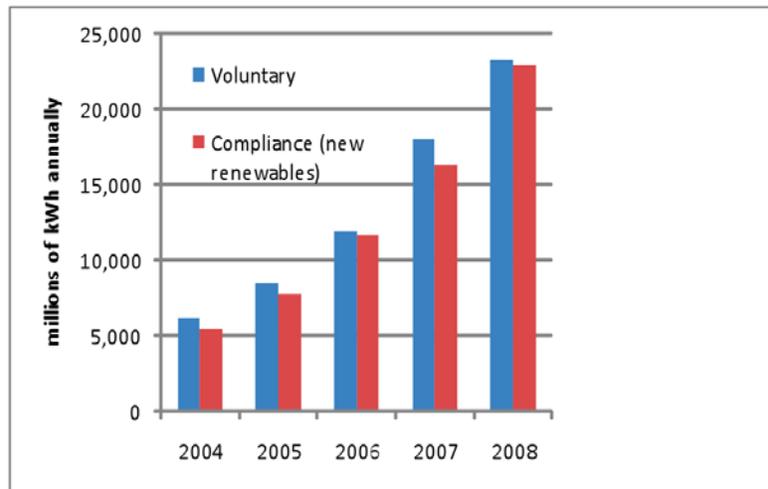
Specifically, we support the inclusion of a voluntary renewable energy set-aside. This is very important not only to the survival of this growing, vibrant market, but also to the significant and real contribution that voluntary purchases of renewable energy make towards reducing greenhouse gas emissions.

The Voluntary Market for Renewable Energy is Significant

There exists today a vibrant market for individual and corporate customers to voluntarily purchase renewable energy in order to encourage the development of renewable energy resources and to reduce greenhouse gas emissions.

According to the National Renewable Energy Laboratory (NREL), there are currently 85 marketers actively selling to small and large customers, and 17 environmental brokers that facilitate REC transactions between buyers and sellers across the U.S. These providers are in addition to utilities that sell renewable electricity differentiated from standard electricity. There are also thousands of photovoltaic (PV) providers in the U.S. who sell PV systems and associated RECs directly to end-use customers.

Comparison of voluntary and compliance markets for renewable energy in the U.S., 2004-2008



Source: National Renewable Energy Laboratory, Green Power Markets in the United States: A Status Report (12th Edition). September 2009

The market for green power (renewable electricity and RECs sold independently of electricity) is strong and growing. In 2008, U.S. consumers made voluntary purchases of renewable energy totaling about 24.3 million MWh. For market credibility reasons, voluntary demand is served almost exclusively by new renewables, meaning renewable generation that began commercial operation since the beginning of 1997. Further, voluntary purchases of renewable energy have grown at an average annual rate of 41% since 2004.¹ These data demonstrate that the voluntary market for renewable energy is larger than most people recognize.

Emissions Reductions are the Primary Motivation for Purchasing Renewable Energy

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

¹ Bird, L., C. Kreycik and B. Friedman. *Green Power Marketing in the United States: A Status Report (2008 Data)*. Golden, CO: National Renewable Energy Laboratory, September 2009.

VRE demand and are responsible for most of the growth in this industry.² 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.³ 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.⁴ Moreover, on July 14, 2010, the White House Council on Environmental Quality (CEQ) released Draft Guidance for Federal Greenhouse Gas Reporting and Accounting for public comment, which clearly states that RECs are among the limited number of instruments that may be used to reduce the purchaser's Scope 2 emissions associated with conventional energy purchase and consumption.⁵
- 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.⁶
- 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.⁷
- 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.⁸

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

² Bird, L., C. Kreycik and B. Friedman. *Green Power Marketing in the United States: A Status Report (2008 Data)*. Golden, CO: National Renewable Energy Laboratory, September 2009.

³ Bird, L., E. Holt and G. Carroll. *Implications of Carbon Regulation for Green Power Markets*. Golden, CO: National Renewable Energy Laboratory, April 2007.

⁴ 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.

⁵ Page 23, Draft Federal Greenhouse Gas Accounting and Reporting Guidance, released by CEQ July 14, 2010, available: <http://www.whitehouse.gov/sites/default/files/microsites/ceq/Draft-GHG-Accounting-and-Reporting-Guidance-6-30-10.pdf>

⁶ 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.

⁷ 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.

⁸ 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

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.

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

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

Our concern is that carbon regulations that prevent green power purchases from affecting GHG emissions levels may be adopted, undermining the environmental objectives of customers who voluntarily purchase renewable energy. A robust market for renewable electricity, RECs and distributed renewable energy generation, already operates in the State of New Mexico. Green-e Energy, the nation's leading independent certification and verification program for renewable energy, certified renewable power supplies generated in New Mexico of 392,000 MWh in 2007 and 640,000 MWh in 2008.⁹ This is only the voluntary renewable energy supply certified by Green-e, so it does not characterize the entirety of New Mexico's VRE market. In addition, according to the U.S. Department of Energy's Green Power Network, a number of utilities, such as Public Service of New Mexico, Tri-State Generation & Transmission, and Xcel Energy, currently offer voluntary green pricing programs in the State of New Mexico.¹⁰ These programs provide consumers and businesses an option to reduce their carbon footprints through the purchase of renewable energy. Without a link to retirements of allowances under the cap for these voluntary customers, their carbon claims will be negated.

Without an explicit provision recognizing the GHG reduction benefits from renewable energy purchases, the voluntary renewable energy market may cease to exist. The leading market driver – the ability to make a difference in reducing GHG emissions through consumer choice tied to market forces – will have been eliminated.

A Cap-and-Trade Program Can Be Designed to Recognize and Credit Voluntary Demand for Renewable Energy

If, because of the design of the cap-and-trade regime, no direct reduction in GHG allowances can be attributed to new clean renewable generation sold to voluntary buyers, it is not only retailers of RECs, but also developers and owners of renewable energy facilities, whose effect on emission reductions would be ignored. Eliminating the role of voluntary renewable markets in reducing emissions is an unnecessary casualty of a poorly designed cap-and-trade system and

⁹ Data supplied courtesy of the Center for Resource Solutions, via Busch, C. Personal email, August 13, 2010.

¹⁰ Information available: <http://apps3.eere.energy.gov/greenpower/markets/pricing.shtml?page=1>

represents a missed opportunity for non-covered entities (renewable energy generators) to cost-effectively lower the overall level of emissions through voluntary action.

A well-designed cap-and-trade regime can ensure a “best of both worlds” outcome where voluntary markets are additive to compliance targets. This is desirable because not all actors in the economy will be covered by the cap and because it respects the voluntary choice of corporations and individuals to reduce GHG emissions under the cap.

Example Provisions to Protect the Voluntary Renewable Energy Market

Protecting the integrity of the voluntary renewable markets in a cap-and-trade program is not unusual, and there are detailed examples in other state rules. Any design proposal should include explicit language that indicates its specific intent to ensure that the voluntary market for renewable energy will play a role in greenhouse gas emission reductions.

VRE Protections in the Regional Greenhouse Gas Initiative

The Regional Greenhouse Gas Initiative (RGGI) protects the carbon integrity of voluntary renewable energy purchases through its off-the-top allowance rule—an approach that can work everywhere. This is one of several simple ways to ensure that climate legislation protects the voluntary market, and the rule we propose the Environmental Improvement Board adopt is modeled closely after RGGI’s approach. We have included details on the RGGI VRE set-aside provisions in the attached exhibits.

VRE Protections in the Western Climate Initiative

In addition, the Western Climate Initiative (WCI) released a document on July 27, 2010 entitled “Voluntary Renewable Energy Market: Issues and Recommendations” that specifically addresses the challenges associated with cap-and-trade program design and its potential direct negative effect on voluntary renewable energy markets.¹¹ This paper makes a number of important points, and which are in concurrence with REMA’s positions on VRE and interactions with cap-and-trade programs. Particularly, the WCI report highlights the potentially destructive impact greenhouse gas cap-and-trade programs could have on VRE markets and identifies many of the necessary considerations for implementing a VRE set-aside.

Our primary area of disagreement with the WCI recommendations is its failure to require all WCI Partner jurisdictions to establish VRE set-asides. 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. We believe the existence of the VRE market is too important for its protection to not be considered an essential element of a cap-and-trade program.

¹¹ This paper is available from the WCI website: <http://westernclimateinitiative.org/component/remository/function/startdown/275/>

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. REMA will continue advocating that all WCI jurisdictions should adopt the set-aside.

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 will not—as they did in RGGI states, where one state (Delaware) chose not to adopt a VRE set-aside.¹² 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 emission reduction benefits, including carbon dioxide reduction benefits, associated with the MWh of renewable electricity when it was generated.” Again, VRE customers would have to pay much more attention to where their renewable energy is generated and whether their products are certified.

We have included the WCI’s document on protections for the voluntary renewable energy markets as one of the attached exhibits.

VRE Protections in the State of California

As an example of action in another state, the California Air Resources Board (CARB) released its “Preliminary Draft Regulation for a California Cap-and-Trade Program” on November 24, 2009.¹³ Section 95910 of this preliminary draft regulation specifically addressed adjustments to account for voluntary investment in renewable sources of electricity generation:

¹² 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 emission reduction benefits, including carbon dioxide 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

¹³ Available: <http://www.arb.ca.gov/cc/capandtrade/meetings/121409/pdr.pdf>

§ 95910 Modifications to the Annual Base Budgets

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

Discussion of Concept – Adjustments to the Base Allowance Budgets for Voluntary Investment in Renewable Sources of Electricity Generation

For each compliance period, an estimate of voluntary renewable electricity purchases could be determined and the base allowance budgets adjusted according to the following steps:

- **Ex-ante Estimate of Budget Adjustment Needed:** For each compliance period, an estimate of voluntary renewable energy expected to be generated in California could be determined by ARB using National Renewable Energy Lab (NREL) data. To do this, ARB could calculate a commensurate amount of allowances representing reduced emissions due to this expected level of operation of voluntary renewable energy projects. This amount of allowances could then be withheld from the base budget (earmarked and held in ARB's Holding Account).
- **Submission of Claims:** 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). ARB could determine a methodology for calculating the amount of emissions displaced by the claimed megawatt hours of voluntary renewable electricity.
- **Ex-Post True-up of Budget Adjustments:** At the end of a compliance period ARB could retire (from the earmarked allowances in its Holding Account) an amount equivalent to the displaced emissions from the claimed amount of renewable electricity generation. In no event could the size of this adjustment exceed a pre-determined percent of the total allowances from the compliance period in question. Any earmarked allowances that resulted from the overestimation of expected reductions vs. claimed reductions could be released in the subsequent compliance period.

Following CARB's release of this preliminary draft regulation language, REMA submitted detailed comments¹⁴ recommending they provide further detail in these six areas:

1. The administrative adjustment to the budget should be done annually rather than for a three-year compliance period.
2. The ex-ante estimate of budget adjustment needed should be based on WREGIS data.
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.
4. Claims on the adjustment should be based on WREGIS reports.
5. The ex-post true-up of budget adjustments should true-up in both directions.
6. There should be no cap on the budget adjustment for voluntary renewable energy.

Protecting the integrity of the voluntary renewable markets in a cap-and-trade program is not unusual, and we strongly encourage New Mexico to follow the precedent set by these examples.

¹⁴ Available: http://www.renewablemarketers.org/pdf/file_104.pdf



1211 Connecticut Ave NW, Suite 600 • Washington, DC 20036-2701
202-640-6597 tel • 202-223-5537 fax • www.renewablemarketers.org

Conclusion

There exists today a vibrant market for individual and corporate customers to voluntarily purchase renewable energy in order to encourage the development of renewable energy resources and to reduce greenhouse gas emissions. The adoption of a cap-and-trade program should not hinder the ability or efficacy of voluntary renewable energy purchases. Adopting a VRE set-aside is becoming a commonplace method to ensure that voluntary renewable energy purchases and a cap-and-trade system work together towards reducing greenhouse gas emissions.

I appreciate the opportunity to present this testimony on behalf of the Renewable Energy Markets Association. We urge the Board to include a set-aside mechanism for protecting voluntary purchases of renewable energy in an adopted cap-and-trade program.