



CRS

center for  
resource  
solutions

September 24, 2010

Board Administrator  
New Mexico Environmental Improvement Board  
1190 St. Francis Dr., N2153  
Santa Fe, NM 87502

RE: Greenhouse Gas Cap and Trade Provisions Petition (Case Number 10-04)  
New Energy Economy Petition (Case Number 08-19)

Dear Board Administrator,

The Center for Resource Solutions (CRS) thanks the Board for all its efforts to advance the transition to a clean, safe 21<sup>st</sup> century energy economy and, specifically, for its work to move forward with a cap-and-trade program as part of the Western Climate Initiative. We appreciate the opportunity to offer our input. CRS writes to strongly urge you to adopt a Voluntary Renewable Energy Set Aside as enabled under Western Climate Initiative rules. These are the benefits of a Voluntary Renewable Energy Set Aside for New Mexico:

- Promotes clean energy economic development in New Mexico, which will mean more jobs and greater economic growth.
- Leverages private, non-ratepayer funding to speed the transition to renewable energy sources.
- Provides a pathway whereby the appetite for voluntary action can be channeled to clean energy development in New Mexico, and will avoid a situation whereby the willingness to invest in voluntary action is diverted to out-of-state projects.
- Helps to position New Mexico to achieve climate goals beyond 2020 by encouraging in-state, clean energy development.

As is explained in the WCI paper on the topic, without a Voluntary Renewable Energy (VRE) Set Aside approach, once a cap and trade program goes into effect, voluntary renewable energy purchases can no longer reduce emissions below the level of the cap. A CRS Policy Brief provides a graphic illustration of this dynamic.<sup>1</sup>

CRS certifies a large amount of renewable energy that is generated in New Mexico and sold into the voluntary market. ***Through Green-E, in 2007 CRS certified 392,000 MWh (megawatt hours) of renewable energy from New Mexico based generators for sale into the voluntary market, and in 2008 that number increased to 642,000 MWh. This creates meaningful revenue for these New Mexico-based generators. However, if your cap-and-trade program is not designed with the VRE market in mind, the supply of VRE from New Mexico would no longer be eligible for Green-E Energy certification*** under our current national standard. This would be expected to decrease revenue for New Mexico's renewable energy industry, by driving VRE demand to other states, or

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<sup>1</sup> [http://www.resource-solutions.org/pub\\_pdfs/C&T%20Policy%20Brief.pdf](http://www.resource-solutions.org/pub_pdfs/C&T%20Policy%20Brief.pdf)

driving the willingness to pay for voluntary reductions in greenhouse gas emissions to other types of projects, offsets that may come from other states or other countries. CRS no longer certifies VRE from Delaware as this is the one state in the Regional Greenhouse Gas Initiative that has not adopted a VRE set aside.<sup>2</sup> Similarly, the US EPA's Green Power Partnership prohibits participants from implying that there are greenhouse gas emission reduction benefits from VRE purchases in areas where a cap-and-trade program has been implemented without a VRE Set Aside.

To divert the clearly demonstrated appetite for investing in clean energy emission reductions to locations outside of New Mexico would be a particularly unfortunate outcome at this moment in time, when the clean energy industry is poised to deliver badly needed jobs domestically.

### ***Allowance price implications***

Some discussions of the cost implications of a VRE Set Aside fail to recognize the effect that the mechanism will have on the demand for tradable permits. By spurring extra demand for voluntary renewable energy, the demand for tradable permits under a cap-and-trade program is suppressed. This means that, even though the set aside and retirement reduces the supply of allowances, any potential price pressure that this could cause is mitigated by demand side effects. In an Appendix below, we further explore how demand-side effects suppress potential price increases due to a VRE Set Aside.

### ***Undercutting potential growth in the VRE market***

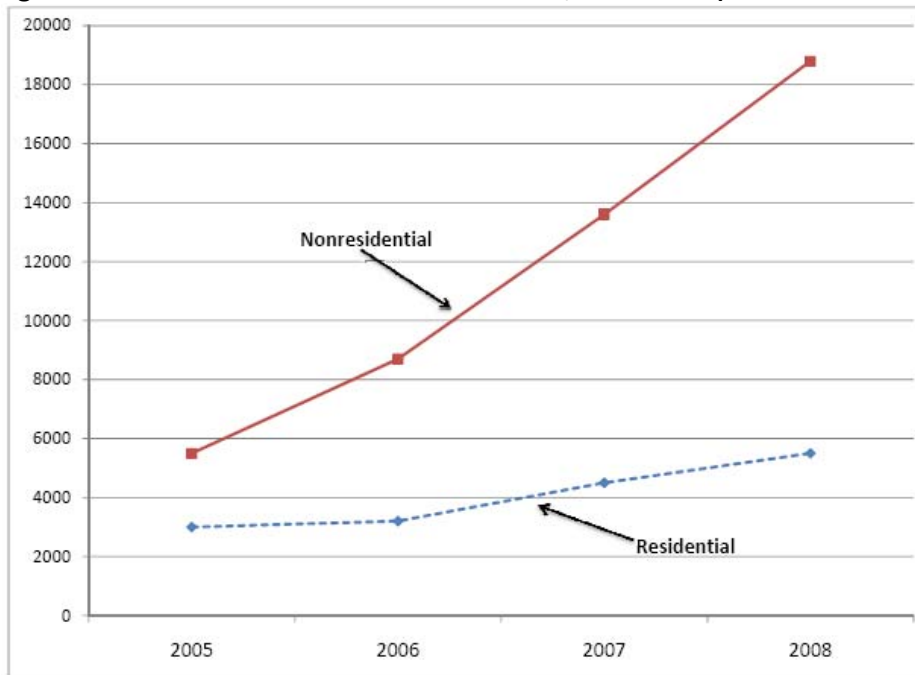
There should be no question that introducing a cap-and-trade program without a VRE set aside will lead to a lower growth in the VRE market. This is what those with the most experience in the market say, uniformly. Suggestions to the contrary are either naïve or are intentionally misleading.

Savvy corporate and other large purchasers have driven the impressive market growth of recent years. The importance of larger, nonresidential purchasers to the growth in the VRE market is evident in data from the National Renewable Energy Laboratory data, which provide the basis for the following graphic.

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<sup>2</sup> <http://www.resource-solutions.org/pressreleases/2008/120508-2.htm>

**Figure 1. Estimated Annual Green Power Sales, 2005-2008 (Millions of kWh)<sup>3</sup>**



Larger purchasers such as those that have driven market growth are also the most sensitive to changes in their ability to make clear claims about making a difference in the effort to curb global warming. There is no doubt that a policy environment characterized by cap and trade without a VRE set aside would impose serious challenges on clean energy marketers and would hinder the market's performance going forward. To be even clearer, potential concerns about greenwashing attacks would chill and potentially kill the market without a VRE Set Aside.

The WCI paper on VRE Set Asides fails to properly grasp this reality. The suggestion is made that generalized claims about being an environmental good would suffice as a substitute for the ability to point to reductions in greenhouse gas emissions. Guidance from the Association of State Attorneys General suggests that the type of generalized benefit claims that the document appears to urge as an approach to overcoming these new hurdles could well be considered misleading and illegal.<sup>4</sup> In keeping with this and in order to encourage the strongest possible consumer confidence in the value of VRE purchases, Green-e has adopted a policy of not recognizing VRE purchases from generation based in Delaware because it is the sole state in the Regional Greenhouse Gas Initiative that chose not to adopt a VRE set aside.

<sup>3</sup> Bird, Lori, Claire Kreycik, and Barry Friedman. 2009. *Green Power Marketing in the United States: A Status Report*, National Renewable Energy Laboratory, Technical Report NREL/TP-6A2-46581 (September)

<sup>4</sup> National Association of Attorneys General. 1999. *Environmental Marketing Guidelines for Electricity* (December)

To provide some concrete evidence on this question – the extent to which the desire to make carbon claims has been a crucial driver of the impressive market growth in recent years – CRS reviewed how the largest business purchasers of green power have trumpeted their purchases. We reviewed the claims of the 15 largest business purchasers from the US EPA’s Green Power Partnership Program, which has provided encouragement and support for the VRE market for years. These largest purchasers are the ones that have been the critical drivers of market growth. The EPA states on its “Top 50” website: “Combined, these top 50 largest purchases amount to more than 13 billion kilowatt-hours annually, which represents more than 70 percent of the green power commitments made by all EPA Green Power Partners.”<sup>5</sup> Our review finds that in every instance the climate benefits of the green power purchase are central. In 10 of 15 instances, specific quantitative claims are made with respect to avoided carbon emissions. In no case is any other benefit emphasized more than making a difference in the effort to curb carbon emissions. See Appendix 1 of our letter to the WCI Electricity Committee for the details of this investigation.<sup>6</sup>

Thank you for considering our comments as you finalize your cap-and-trade program.

Respectfully,



Chris Busch, Ph.D.  
Policy Director, Center for Resource Solutions

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<sup>5</sup> <http://www.epa.gov/grnpower/toplists/top50.htm>

<sup>6</sup> [http://www.resource-solutions.org/pub\\_pdfs/Center for Resource Solutions on VRE.pdf](http://www.resource-solutions.org/pub_pdfs/Center_for_Resource_Solutions_on_VRE.pdf)

## Appendix

In this appendix, we demonstrate the importance of considering demand side effects on the market for allowances through a simple economic graph. The graph shows that the price of an allowance (PRICE) under a cap-and-trade program is the same in both cases, with and without VRE set aside. This would be the particular outcome of a scenario that produces a reduction in demand exactly commensurate with the reduction in supply. This is not a prediction. Other results are possible and depend on the extent to which the VRE market survives in the face of an inability to state that VRE purchases make a difference in the fight against global warming.

We use the following notation in our graphical analysis:

$S_0$  = the initial supply of allowances, before accounting for VRE purchases

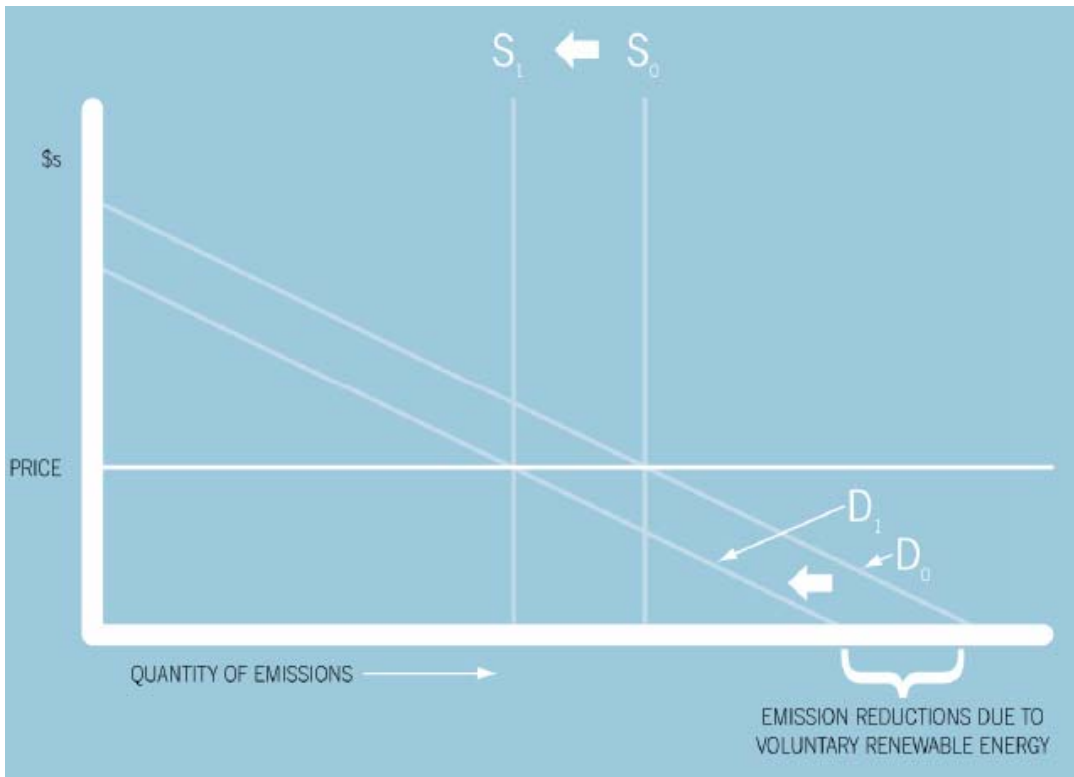
$S_1$  = the supply of allowances, after adjustment via the VRE set aside

$D_0$  = the initial demand for allowances without reductions from VRE purchases

$D_1$  = the demand for allowances with reductions from VRE purchases

PRICE = price of allowances

**Figure 2. Supply and Demand Interactions Could Leave Allowance Prices Unchanged**



A few other notes on the graphical analysis: The x-axis reflects the quantity of emissions (i.e. tons of carbon dioxide equivalent) and the supply curve is vertical (in economic terms, it is inelastic) because the analysis is static and in a given year a certain number of allowances will be made available. In reality, with banking of allowances, the amount of allowances available in any particular year could change. Such a simplifying assumption is necessary for a graphical analysis.

The demand curve is reflective of the price capped entities would be willing to pay for permits at different levels of emissions, which in turn will be a function of the amount of reductions implied at different emission levels and the marginal abatement cost curve that reflects the cost of the marginal ton reduced. The demand curve hits zero at business as usual emissions (no willingness to pay because no reductions are being required of polluters). The demand curve shifts left in the graph after counting for reduced emissions due to VRE purchases.