

June 7, 2010

Kevin Kennedy, Assistant Executive Officer
Office of Climate Change
California Air Resources Board
1001 "I" Street
Sacramento, CA 95812

Dear Mr. Kennedy,

We are public interest nonprofits and clean energy industry stakeholders with knowledge of the important role that voluntary renewable energy purchases have had in driving recent clean energy development in the United States, and in particular in California. The voluntary market for renewable energy also has a great potential to contribute to both greenhouse gas emissions reductions and job growth going forward. But this is not a given. These benefits will depend in no small part on whether the design of the anticipated cap-and-trade program is supportive of voluntary renewable energy purchases. Without explicit recognition and attribution of the emission reduction from voluntary renewable market, the principal driver of these investments will be lost. California should design cap and trade to support and not undercut the continued expansion of this job and zero carbon energy producing sector of the economy. Research has shown that green jobs have been a bright spot in a difficult economy, growing 10% since 2005 and up 45% since 1995.¹ To divert the clearly demonstrated appetite for investing in clean energy emission reductions to locations outside of California would be particularly unfortunate at this moment in time, when the clean energy industry is poised to deliver badly needed jobs domestically.

We observe that the recently released American Power Act recognized the importance of this issue in its statement that: "It is the policy of the United States to support the continued growth of voluntary renewable energy markets," and nothing in the bill is "intended to interfere with or prevent the continued operation and growth of voluntary market."

We have previously joined with large coalitions of nonprofit and clean energy industry stakeholders to express our strong support for the approach taken by nine of ten states participating in the Regional Greenhouse Gas Initiative: the set aside and retirement of carbon allowances to recognize the emission reductions induced by voluntary purchases. In a June 12, 2009 letter to CARB, thirty-one signatories joined on behalf of their organizations in response to the invitation to comment on the importance of preserving voluntary renewable energy

¹ Next 10, *"Many Shades of Green: Diversity and Distribution of California's Green Jobs,"* 2009 (December), p. 4.

Next 10, *California Green Innovation Index 2009*, 2009, p. 70.

markets. A similarly broad group of stakeholders, 25 signatories strong, asked for changes in the Scoping Plan to recognize the carbon emission reduction value of the voluntary renewable energy market. We appreciate that the Air Resources Board listened to our viewpoint and made appropriate changes at the time, as we requested. We write again to ask for your consideration as you finalize cap-and-trade design in the coming months.

Thank you,

Gabe Petlin	3Degrees
Rob Harmon	Bonneville Environmental Foundation
Susan Stephenson	California Interfaith Power and Light
Danielle Osborn Mills	Center for Energy Efficient and Renewable Technology
Chris Busch	Center for Resource Solutions
Shankar Prasad	Coalition for Clean Air
Derek Walker	Environmental Defense Fund
Kelly Lentz	Mendocino Wine Company/ Parducci Wine Cellars
Kristin Eberhard	Natural Resources Defense Council
Matthew Marsom	Public Health Institute
Justin Segall	Renewable Choice Energy
Jay Carlis	Renewable Energy Markets Association
Obadiah Bartholomy	Sacramento Municipal Utility District
Kari Smith	SunPower Corporation
Polly Shaw	Suntech America, Inc.
John Humphrey	Sustainable Energy Partners
Erin Rogers	Union of Concerned Scientists
Annie Carmichael	Vote Solar
Dan Galpern	Western Environmental Law Center

Prior letter #1: June 12, 2009

VIA EMAIL: ccworkshops@arb.ca.gov
Claudia Orlando
California Air Resources Board
1001 "I" Street
Sacramento, CA 95812

Dear Ms. Orlando,

We applaud the Air Resources Board (ARB) for changing its Scoping Plan to specifically recognize that voluntary renewable energy set asides could contribute to California's climate goals by providing an incentive for voluntary purchases of renewable energy and additional reductions in the pollution responsible for global warming. Further, we appreciate the early scheduling of a workshop on the topic of the use of allowance set asides to promote voluntary action on renewable energy and energy efficiency, and projects that benefit and reduce emissions in low income or otherwise disadvantaged communities. This letter focuses on the topic of the use of set-asides to promote renewable energy. We urge you to follow the example set by the Regional Greenhouse Gas Initiative (RGGI) by including an off-the-top rule, that is the set aside and retirement of allowances, to account for voluntary action on renewable energy.

Before going further, we wish to note the support of the undersigned for strong energy sector measures to bolster clean energy development, in particular bold renewable portfolio standards. The voluntary market stands apart from compliance efforts. Indeed it is an essential principle that there be no double counting of renewable energy, with only a voluntary or a compliance claim allowed for each MWh sold, not both. The fact that the greatest amount of voluntary market activity occurs in the areas with the most compliance driven renewable energy development indicates that the voluntary market does not interfere with or inhibit the achievement of mandatory renewable portfolio standards.

Many organizations, households, farms, other businesses, and houses of worship have chosen to voluntarily install on-site solar generation or purchase renewable electricity or renewable energy certificates as part of their social commitment to helping to reverse global warming. They should be encouraged to continue this socially responsible behavior rather than having the environmental fruits of their investments claimed by others, which could occur if cap-and-trade is designed without an off-the-top approach to voluntary renewable energy purchases. The voluntary market has been an important driver of clean energy development in California. In 2007, 2 million megawatt hours of electricity were generated by renewable sources and certified through the Center for Resource Solutions' Green Energy consumer protection

program. This amounted to about 1.2 million metric tons of avoided carbon dioxide emissions, using the US Environmental Protection Agency's emission factor for the western region (based on eGrid, the Emissions & Generation Resource Integrated Database). Yet this number significantly understates the actual reductions as neither the green power programs of six California utilities nor most on-site generation are included in this figure.

As long as California has been without a fixed cap on global warming emissions, these purchases have displaced fossil generation and resulted in emission reductions. When a cap on emissions is established under Assembly Bill (AB) 32, starting in 2012, voluntary purchases of renewable energy will still displace fossil generation, but unless allowances are retired on behalf of this renewable generation, the number of emission allowances—and hence the level of emissions produced—will be unaffected, and emission reduction claims from these voluntary investments will become problematic. A key driver of purchases of voluntary renewable power is customer confidence that this helps reduce the pollution that causes global warming. If the State of California does not implement an off-the-top approach, there is a great risk that this will undermine continued growth in California's voluntary renewable power market and the benefits that this market provides to the State of California, including low cost emission reductions by leveraging non-ratepayer actions.

We expect that an off-the-top approach will be roughly cost neutral in terms of allowance prices in the short term, and will reduce long term costs. Beyond allowance price considerations, it is important to keep in mind the economic and environmental benefits of clean energy investment. While an off-the-top approach reduces the supply of allowances, it also reduces demand for allowances in a roughly commensurate way. The incorporation of an off-the-top system in the RGGI program has not led to high allowance prices. Further, the additional clean energy development that the approach will encourage will put California in a better position to meet our long term goals (i.e. post-2020). The additional, early (i.e. pre-2020), in-state clean energy development will mean less reductions will have to be found in the long term, which would have the effect of reducing future allowance prices. Again, there are many other environmental and economic benefits beyond these reduced allowance prices.

We offer the following specific suggestions for how the process of setting aside and retiring allowances associated with voluntary purchases of renewable energy should work:

- If a California cap-and-trade program is linked with others through the Western Climate Initiative (WCI), California should negotiate reciprocity with other WCI participants. Hereafter we refer generically to a capped region, which could refer to either a stand-alone California program or a California program existing within a WCI program.
- CARB (and the WCI Partners) should consider the location of the renewable energy generator, not the location of the purchaser, for eligibility. The set-aside shouldn't

discourage individuals outside of the capped region from supporting clean energy development within the capped region. The RGGI program mistakenly considered the location of the purchaser, which is an unnecessary barrier to the accumulation of the environmental and economic benefits of renewable energy generation within the capped region. It should not matter if the voluntary purchaser is located in Iowa. It should only matter that the voluntary purchase is of energy generated within the capped region.

- The RGGI program provides useful insight into how an off-the-top system can work.
 - The voluntary renewable energy set-aside should be estimated in advance of each compliance period and then removed from the total pool of allowances created under the cap.
 - At the end of a compliance period, program administrators reconcile voluntary demand estimates with actual sales.
 - The difference between estimated and actual demand can be accounted for by adding to or subtracting from the set aside for the next compliance period.
- Information from the National Renewable Energy Laboratory, the Western Region Electricity Generation Information System, and other public data sources should serve as the basis for determining the quantity of allowances to be set-aside under the cap in advance of each compliance period.
- Sufficient flexibility is necessary to ensure that the final allowance allocation is equal to actual sales. If it is determined after a true up process at the end of a compliance period that an insufficient amount of allowances have been set aside, the difference should be added to the set-aside for the next compliance period.

With the set aside and retirement of allowances for voluntary renewable energy purchases, ARB will ensure that renewable power delivers on its promise to reduce emissions, not simply make it cheaper for someone else to comply with the cap. In this way Assembly Bill 32 cap-and-trade design can encourage all— individuals, businesses, and nonprofit actors—to consider voluntary investment in clean, renewable solar and wind energy.

Thank you for the opportunity to comment and for considering our views.

Gabe Petlin	3Degrees
Bonnie Holmes-Gen	American Lung Association of California
Blair Swezey	Applied Materials
Rob Harmon	Bonneville Environmental Foundation
Andy Katz	Breathe California
Nancy Rader	California Wind Energy Association
Chris Busch	Center for Resource Solutions
Danielle Osborn Mills	Center for Energy Efficiency and Renewable Technologies
Tim Carmichael	Coalition for Clean Air
Derek Walker	Environmental Defense Fund
Lee Wallach	Faith2Green.com

Kevin Lynch	Iberdrola Renewables
Shannon Eddy	Large-scale Solar Association
Kelly Lentz	Mendocino Wine Company/ Parducci Wine Cellars
Will Coleman	Mohr Davidow Ventures
Kristin Grenfell	Natural Resource Defense Council
Susan Stephenson	Regeneration Project, Interfaith Power and Light
Jonathan Edwards	Renewable Energy Marketers Association
Julia Curtis	Sharp Solar
Bill Magavern	Sierra Club
Brian F. Keane	SmartPower
Obadiah Bartholomy	Sacramento Municipal Utility District
Sara Birmingham	Solar Alliance
Rachel McMahan	Solar Millenium
John Humphrey	Sustainable Energy Partners
Kari Smith	SunPower Corporation
Polly Shaw	Suntech America, Inc.
Erin Rogers	Union of Concerned Scientists
Peggy Hock	United Solar Ovonic
Adam Browning	Vote Solar Initiative
David Olsen	Western Grid Group

Prior letter #2:

November 20, 2008

California Air Resources Board Members,

As the Air Resources Board (ARB) moves closer to adopting a Scoping Plan for capping and reducing global warming emissions, *we urge ARB to include specific language that supports a cap and trade system designed to recognize the ability of voluntary renewable energy purchases to reduce global warming emissions below the level of the cap.*

Many organizations, households, farms, and other businesses voluntarily install on-site solar generation or purchase renewable electricity or renewable energy certificates (RECs) as part of their commitment to reducing their global warming footprint.

As long as California has been without a fixed cap on global warming emissions, these purchases have displaced fossil generation and resulted in emission reductions. However, when a fixed cap on emissions is established under AB 32, starting in 2012, voluntary purchases of renewable energy will still displace fossil generation, but unless allowances are retired on behalf of this renewable generation, the number of emission allowances—and hence the level of emissions produced—will be unaffected. As a result, any emission reduction claims from these voluntary purchases will become problematic. Unless allowances are retired commensurate with voluntary renewable energy purchases, starting in 2012, renewable energy purchases will no longer be able to make emissions reductions claims. Ignoring the emissions benefits of voluntary renewable energy purchases is a policy outcome we hope the State of California will agree is unacceptable.

AB 32 implementation should not undercut customer motivation to invest in clean renewable solar and wind with their private funds. AB 32 implementation rules should be designed so individual, business, and non-profit investment in renewable power delivers on its promise to reduce actual emissions—not simply make it cheaper for someone else to comply with the cap.

The Scoping Plan currently contains no explicit direction for the cap-and-trade program to include the emission reduction value of voluntary renewable power purchases. Since the Scoping Plan is widely recognized as the “roadmap” for future rulemaking, we are gravely concerned that the valuable emission reduction efforts that many stakeholders make by voluntarily purchasing renewable energy will be thereby discouraged. Those purchases that may still occur will not have the effect of reducing emissions, thereby eliminating any emission reduction claims, slowing California’s progress toward reducing greenhouse gas emissions and undermining California’s growing renewable power industry.

We ask, therefore, that the Scoping Plan clearly recognize voluntary purchases of renewable energy, renewable energy certificates and on-site renewable generation for the global warming emissions reduction benefits that they provide. The Scoping Plan should explicitly acknowledge that the role of the voluntary renewable energy market will be developed and described in the cap-and-trade formal rulemaking.

Blair Swezey	Applied Materials
Nancy Rader	California Wind Energy Association
Sue Kately	CALSEIA
Rachel McMahon	CEERT
Arthur O'Donnell	Center for Resource Solutions
Shankar B. Prasad	Coalition for Clean Air
Bernadette del Chiaro	Environment California
Dr. Danniell M. Kammen	Founding Director, Renewable and Appropriate Energy Laboratory, UC Berkeley ²
Denny Larson	Global Community Monitor, National Refinery Reform Campaign & National Bucket Brigade Coalition
Kim Fiske	Iberdrola Renewables
David Felix	MMA Renewable Ventures
Elliott Hoffman	New Voice of Business
Alan Whiting	Open Energy Corporation
Ben Collingwood	Sanyo Energy
Julia Curtis	Sharp Solar Energy
Brian F. Keane	SmartPower
Sara Birmingham	Solar Alliance
Renee Guild	Solar City
David Hochschild	Solaria
JP Ross	Sungevity
Kari Smith	SunPower Corporation
Polly Shaw	Suntech America, Inc.
Cliff Chen	Union of Concerned Scientists
Peggy Hock	United Solar Ovonics
Annie Carmichael	Vote Solar

² *Listed for identification purposes only*