

September 19, 2016

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

Re: Proposed Amendments to the California Cap On Greenhouse Gas Emissions and Market-based Compliance Mechanisms

Dear Chairman Nichols and Members of the Board:

3Degrees Group, Inc (3Degrees) appreciates the opportunity to offer comments on the Air Resources Board's (ARB) modified text for proposed California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms regulation (Regulation), released August 2, 2016.

3Degrees is a leading environmental commodities sales, trading, and advisory firm that markets renewable energy certificates (RECs) and carbon offsets in compliance and voluntary markets in California and across the United States. 3Degrees serves hundreds of businesses, utilities, and other load serving entities, along with many thousands of residential customers through our utility green power program marketing services.

3Degrees supports ARB in its leadership to develop regulations to reduce greenhouse gas emissions, and particularly commends ARB for implementing a market-based cap and trade program that encourages the cost-effective reduction of greenhouse gas (GHG) emissions.

3Degrees also supports ARB's Regulation for a Voluntary Renewable Energy Allowance (VRE) Set-Aside program. The VRE set-aside program ensures that businesses and residents that voluntarily purchase renewable energy above and beyond what is required by law are the only party to receive the avoided carbon emissions benefits associated with those MWhs of renewable generation.

The following comments provide ARB with recommendations on how to improve specific areas of the Regulation to ensure the protection and growth of both mandatory and voluntary markets for renewable energy.

Voluntary Renewable Energy Allowance (VRE) Set-Aside Program

3Degrees strongly supports the preservation and continuation of the Voluntary Renewable Electricity (VRE) set-aside (Section 95841.1) indefinitely. The VRE reserve account is critically important to California's voluntary renewable energy market because it enables customers without a compliance obligation to promote new renewable energy projects and to reduce carbon emissions in California in excess of AB 32's cap.

The ability to decrease carbon emissions beyond what is required by regulation is a primary benefit associated with purchasing renewable energy for voluntary customers. The existence of the cap on carbon emissions in California ensures that compliance entities in California keep emissions below the cap. In order to credibly claim to decrease emissions in California, voluntary customers need to be able to demonstrate emissions reductions above and beyond what the existing cap already requires. By enabling consumers to retire allowances in a cost effective manner, the VRE set aside enables a California voluntary renewable energy consumer to credibly claim to have decreased carbon emissions in California as a result of their voluntary renewable energy purchase.

If the VRE set aside were to be terminated in 2020, or at any point in the future, California voluntary renewable energy customers would no longer be able to claim to have avoided carbon emissions with their REC purchase. Instead these avoided carbon emissions would benefit compliance entities who will not be responsible for emissions associated with the VRE generation and will have the same number of allowances to purchase for compliance as they would have in the absence of the VRE generation.

In the absence of the VRE set aside, if the California voluntary consumer seeks to maintain the avoided carbon benefits from its purchase, it would need to go into the allowance market and purchase an allowance for retirement. This action would cause the price of a voluntary REC in California to greatly increase. Based on a current market price for a CA Allowance, a REC that is paired with an Allowance (so that it contains all of the environmental attributes) would see an increase in cost in the neighborhood of \$5.00 to \$6.50 per REC (cost of Allowance multiplied by 0.428 MtCO₂e/MWh). This type of negative pricing impact would decrease the purchases of California REC's and could drive voluntary REC buyers to other states' markets or cause voluntary buyers to exit the REC market entirely.

In addition to losing out on the avoided carbon benefits associated with a vibrant voluntary REC market, California would risk losing out on the economic and other pollution avoidance benefits associated with California based renewable energy projects at an inopportune time. The voluntary REC market in California is large, and growing. In 2015, around 520,000 megawatt-hours MWh of renewable energy from California were used to supply Green-e certified voluntary sales, and California end-use customers purchased about 3.8 million MWh. Both of these numbers increased dramatically from 2014, by nearly 500% and over 50%, respectively.

Through Senate Bill 43, California's large investor owned utilities are required to operate Green Tariff Shared Renewables Programs. These programs are just getting started and will provide additional voluntary renewable energy customers in California the opportunity to avoid carbon emissions associated with their energy usage. In order for these programs to promote the entire benefits associated with them, they need to be able to demonstrate avoided carbon emissions. This is best achieved through the integration of these programs into the VRE set aside program and retiring allowances associated with those programs.

The voluntary renewable energy market and specifically voluntary REC demand drives a substantial proportion of renewable build in California. ARB should ensure that California

continues to see the benefits of this production through the continuation of the VRE set aside program indefinitely.

Sending a clear signal that the VRE set aside will continue indefinitely will offer protection to existing and future voluntary renewable energy markets. This does not create a new compliance instrument, does not conflict with current California RPS statute, and does not require that ARB create new systems or processes. Furthermore, it will provide a positive market signal and promote the long term growth in the California renewable energy market.

Conclusion

3Degrees is grateful for the chance to offer its support for ARB's cap and trade regulation, supports the voluntary renewable energy set-aside, and wishes to thank ARB for its recognition of the valuable role played by voluntary purchasers of renewable energy. We also commend ARB staff on their transparency and willingness to engage with stakeholders in the development of its VRE set-aside regulation.

Providing assurance that the VRE program will continue will ensure that ARB protects its cap and trade program and existing and future voluntary renewable energy markets in California, while simultaneously encouraging meaningful purchases of renewable energy that allow individuals and businesses to go above and beyond statutory obligations. We welcome the opportunity to discuss any of these recommendations with ARB.

Sincerely,

/s/

Syche Cai

Manager, Regulatory Affairs

3Degrees

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