



February 28, 2023

Dallas Burtraw, Ph.D., Chair  
Independent Emissions Market Advisory Committee (IEMAC)  
c/o California Environmental Protection Agency  
1001 I Street  
Sacramento, CA 95812

Dear Dr. Burtraw,

Per your instructions, I'm sending this letter to follow up on a comment that I made during the Public Comments portion of the agenda for today's meeting of the IEMAC. Please feel free to share this letter with the other Committee members.

For those not familiar with us, Center for Resource Solutions (CRS) is a 501(c)(3) nonprofit organization, established in 1997, that creates policy and market solutions to advance sustainable energy. CRS provides technical guidance to policymakers and regulators at different levels on renewable energy and greenhouse gas (GHG) program design, accounting, tracking and verification, market interactions, and consumer protection. CRS also administers the Green-e® programs. For over 20 years, the Green-e® Energy program has been the leading independent certification for voluntary renewable electricity (VRE) products in North America. In 2021, the Green-e® Energy program certified retail sales of over 110 million megawatt-hours (MWh), serving over 1.3 million retail purchasers of Green-e® certified renewable energy, including over 309,000 businesses.<sup>1</sup>

California's cap-and-trade program includes a Voluntary Renewable Electricity Reserve Account,<sup>2</sup> which is a "set-aside" for allowances that will be retired on behalf of renewable electricity generation located or directly delivered into California that is sold to voluntary renewable electricity buyers and substantiated with renewable energy certificate (REC) retirements in the Western Renewable Energy Generation Information System (WREGIS). The way this mechanism works is that allowances have been added to the VRE Reserve Account annually (as a fixed percentage of allowances issued) and an amount of allowances from this account are retired annually, in ascending order of vintage, based on applications to the Voluntary Renewable Electricity Program (VREP) by VRE sellers and customers.

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<sup>1</sup> See the 2022 (2021 Data) Green-e® Verification Report here for more information: <https://resource-solutions.org/g2022/>.

<sup>2</sup> See 17 CCR 95841.1.

This mechanism ensures that VRE generation—renewable electricity generation that is sold to voluntary buyers but that reduces emissions under the cap—can continue to have an effect on statewide emissions via the retirement of allowances. That emissions effect of renewable electricity generation is a key driver of corporate and other voluntary demand for renewable electricity, which is, on top of the Renewable Portfolio Standard (RPS) and other programs, a key driver of renewable electricity development in California. At the time the cap-and-trade regulation was being written, the VRE set-aside was publicly supported by over 50 organizations, including energy companies, project developers, and environmental and public health advocates. Similar programs in Washington state and nine Regional Greenhouse Gas Initiative (RGGI) states also include such a mechanism, again based on the environmental and economic advantages that it provides to states. Use of a set-aside for allowance retirement, or otherwise independent procurement and retirement of allowances, is required by the Green-e® certification program for VRE supply that is located in a capped region, again to maintain the full emissions benefits of renewable electricity generation for voluntary buyers.

In 2017, the California Air Resources Board (CARB) decided to stop allocating allowances to the VREP in 2020—the program would continue to run and allowances for VRE would continue to be retired out of the VRE Reserve Account, but no more allowances would be added to the Account starting in 2020—citing a large volume of allowances in the VRE Reserve Account relative to historical subscriptions, which are mainly from Green-e® certified sales. At that time, we provided CARB Staff with projections of different scenarios of growth for the California voluntary market showing when the VRE Reserve Account would likely be depleted if allowance allocations were stopped and the voluntary market continued to grow in accordance with those different scenarios. Our most aggressive projection for large growth in the California VRE market showed that depletion would occur in 2025, and we provided several different factors that were contributing to an increase in demand to support that kind of growth. The decision was nevertheless made to stop allowance allocations in 2020 and reconsider continuing allocations if and when the account is nearing depletion.

Now, at the beginning of 2023, two years ahead of our most aggressive growth projections for the California VRE market, and according to the VREP website,<sup>3</sup> there are less than 2 million allowances remaining in the VRE Reserve Account. That is after nearly 1.8 million allowances were retired for 2020 VRE sales and nearly 1.1 million allowances were retired for 2021 VRE sales. We expect similar volumes for 2022 and 2023, in which case the VRE Reserve Account will be depleted and insufficient to meet Green-e® certified VRE sales this year or next year. In short, California is running out of allowances for the VRE market, and that means that voluntary purchases of renewable electricity from California or generation imported to California will not affect statewide emissions and will be subsidizing compliance for emitters, which could affect voluntary demand for renewable electricity in California.

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<sup>3</sup> <https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program/voluntary-renewable-electricity-program>.

Importantly, there are some VRE programs that are required by the state and that are required either to be Green-e® certified, which requires use of the VREP, or are directly required to use the VREP, including the Green Tariff Shared Renewables Program and the Enhanced Community Renewables (GTSR and ECR) Programs (SB 43) and the Disadvantaged Communities (DAC) programs (AB 327). Non-IOUs (e.g. CCAs) can also have a DAC product. It is not clear what these programs will do once the allowances are depleted. We do not know the extent of the California Public Utilities Commission (CPUC) Staff's engagement with CARB Staff on this issue.

Depletion would affect current contracts for VRE in California that extend beyond 2025 and particularly where new projects are proposed to be built, the potential of depleting VRE allowances and either no longer being able to make emissions reductions claims beyond the cap or having to buy allowances after 2025 may affect project development.

We see no argument against reinstating allocations to the VRE set-aside on the basis of increased compliance cost. Our understanding is that continuing historical allocations would not significantly affect allowance prices.

Last but not least, if the set-aside is depleted, VRE in California cannot achieve emissions reductions and voluntary demand may shift out of state or disappear, and the state risks losing an important driver of renewable electricity development and emissions reductions. In the past, CARB Staff have described the VREP as a "transitional" strategy, saying that they expect voluntary use of renewables to continue to increase regardless of whether it reduces the cap because increasing allowance prices will help make renewables the best economic choice. That fails to recognize the value of VRE as a separate market and source of emissions reductions. The voluntary market is currently reducing beyond the cap. There will be those that want to reduce beyond what is required by law. The state can and should facilitate that activity, but at the very least it should not harm or hinder it by forcing VRE purchasers to pay the price of carbon that should be borne by emitters. This will likely disincentivize voluntary reductions.

I am interested in the perspective of the IEMAC on the potential depletion of the VRE set-aside, both as it would impact VRE programs (some of which are required by the state) and as a negative market interaction and carbon market design question more generally, and whether it recommends that allowance allocations to the VREP should be reinstated.

Please see the following for more information:

- Sept 2016 CRS Comments to CARB: [https://resource-solutions.org/wp-content/uploads/2016/10/CRScomment\\_CTAmendments\\_9-19-2016.pdf](https://resource-solutions.org/wp-content/uploads/2016/10/CRScomment_CTAmendments_9-19-2016.pdf). See section on Voluntary Renewable Electricity.

- April 2017 CRS Comments to CARB: [https://resource-solutions.org/wp-content/uploads/2017/06/CRSSuppCommenton45-daychangestoCTrule\\_4-28-2017.pdf](https://resource-solutions.org/wp-content/uploads/2017/06/CRSSuppCommenton45-daychangestoCTrule_4-28-2017.pdf). See section on Voluntary Renewable Electricity and Attachment with Projections for the California Voluntary Renewable Energy Program.
- CRS Fact Sheet on VRE Set-asides for Cap-and-trade programs: <https://resource-solutions.org/wp-content/uploads/2017/11/Voluntary-RE-Fact-Sheet.pdf>

I would be happy to provide additional information or answer any questions.

Sincerely,

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Todd Jones  
Director, Policy