DTE VANTAGE

March 15, 2023

Liane Randolph
Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Rajinder Sahota
Deputy Executive Officer
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: February 22, 2023 Public Workshop to Discuss Potential Changes to the Low Carbon Fuel Standard

Dear Chair Randolph and Deputy Executive Officer Sahota,

DTE Vantage appreciates the opportunity to provide written feedback on the public workshop held on February 22, 2023, to discuss potential changes to the Low Carbon Fuel Standard (LCFS). DTE Vantage is a developer, owner, and operator of biomass, cogeneration, and landfill gas electricity facilities in California, supplies renewable natural gas (RNG) to the state through the LCFS, and is currently in the process of developing one of the first carbon capture and sequestration (CCS) facilities in California. Within the RNG segment, we currently own and operate 13 dairy biogas and landfill biogas based RNG production facilities across five states. With over 30 years of experience in the renewable energy industry, we are committed to developing projects that improve our environment and the communities in which we live and serve.

As a developer, owner, and operator of projects that supply renewable natural gas (RNG) to the state through the LCFS, we have seen firsthand how the LCFS has encouraged successful partnerships that beneficially use waste resources and transform methane into low-emission transportation fuels. Our company is deeply invested in supporting California's decarbonization goals and believes the LCFS has been, and remains, a critical tool for achieving the state's objectives to reduce the carbon intensity of the transportation sector. We appreciate CARB's efforts to engage stakeholders as it considers updates to the LCFS program and respectfully submit the following comments for your consideration.

Recommendation: Increase the CI stringency of the LCFS program to address detrimental oversupply and achieve state decarbonization goals

DTE Vantage remains highly supportive of CARB's consideration of tightening the stringency of the LCFS program. As mentioned in our December 21, 2022 comment letter, we believe there is a significant opportunity for CARB to accelerate the stringency of the LCFS program to address the current credit oversupply. The LCFS program has been incredibly effective at attracting increasing volumes of diverse low carbon fuels into California, incentivizing further investments and delivering on the State's transportation emission reduction targets. Based on the sustained overperformance of the program and strong future potential for credit generation, a 30% CI reduction should be the lowest target under consideration by the agency, and we strongly recommend CARB adopt the 35% reduction by 2030 previously analyzed by Staff.

CI stringency step-change and acceleration mechanism

As outlined in CARB's 2022 Final Scoping Plan, the State must now target a 48% reduction in GHGs by 2030 with a 1990 baseline.[1] The agency has been very successful at implementing the program to date and delivering on ambitious GHG reduction goals, but CARB has the opportunity to support continued near-term investments and signal its intent to meet these targets with a step-change reduction in the CI stringency target in 2024. This action would create a meaningful reduction in the growth of the credit bank which, left unaddressed, threatens the ability for CARB to achieve its 2045 goal of 90% CI target reduction.

Additionally, DTE Vantage is supportive of CARB's proposal to consider an acceleration mechanism that would automatically increase the CI stringency of the program in response to specified criteria indicating a credit oversupply. This represents an opportunity to accelerate the delivery of economic emissions reductions. An automatic adjustment mechanism, combined with a stronger CI reduction target, will send a positive and clear signal to investors, providing the required confidence to underwrite long-term investments in the clean fuel production projects. Such a signal is necessary for the State to meet its ambitious and essential transportation decarbonization goals.

Recommendation: Continue avoided methane crediting methodology to preserve and promote meaningful GHG emission reductions

During the November 9, 2022 workshop, staff presented scenarios that would discontinue new methane abatement projects in 2030 and phase out all pathways based on avoided methane by 2040. The proposed concept would undercut the incentive-based structure that has underpinned the LCFS program and allowed developers like us to confidently invest in agricultural and organic waste diversion projects. The proposed changes would create significant uncertainty about the consistency of LCFS regulations and meaningfully reduce investor confidence in the market.

DTE Vantage urges CARB to consider the significant investments made by the industry in dairy RNG projects and the resulting progress toward mitigating fugitive methane emissions on farms thanks to the avoided methane crediting construct. The current program is technology agnostic, allowing competition for fuels providing the most economic emissions reductions to flow to California. An arbitrary restriction on biomethane will not only reduce real emissions reductions, but it will also increase compliance costs as more expensive alternatives fill the void left by the exclusion of biomethane.

[1] CARB, Final 2022 Scoping Plan, November 16, 2022.

The agency has stated that biomethane will serve other markets[2], but there are no current or proposed programs to incentivize adoption in those markets. Further, there is no guarantee that new programs will allow RNG to participate. In Minnesota's proposed Clean Transportation Standard Act[3], RNG produced from any new or expanded agricultural livestock production facility would be prohibited from generating credits. Without a clear off-ramp for existing and under-development dairy RNG projects, phasing out avoided methane crediting will result in fewer projects and less GHG emission reductions.

California's SB 1383 targets a 40% reduction in total methane emissions and a 40% reduction in dairy and livestock emissions. In order to meet these goals, we recommend CARB reconsider eliminating this element of the LCFS program and continue to credit methane abatement projects so long as the reductions are in excess of any mandated methane reductions required by the relevant jurisdiction for the project.

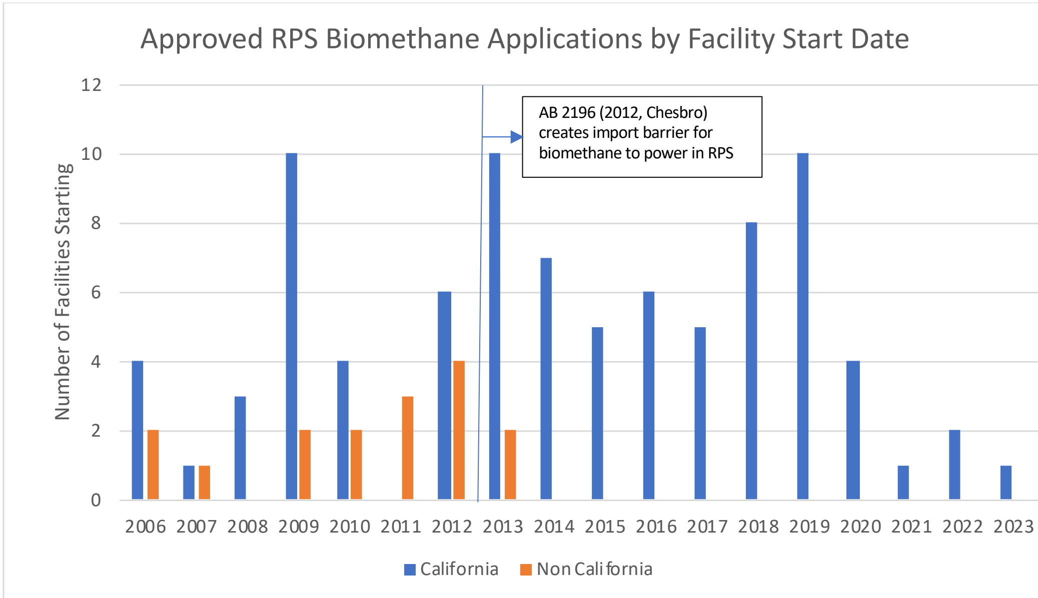
Recommendation: Reconsider proposal to align deliverability requirements of biomethane as a transportation fuel with RPS and CPUC 1440 programs in 2028

DTE Vantage strongly opposes CARB's proposal to eliminate RNG pathways that rely on book-and-claim delivery mechanisms starting in 2028, as suggested in Example Modeled Scenario II[4]. Billions of dollars have been invested in this program based on the premise that access to the LCFS was possible and sustainable through this delivery mechanism. Not only is the book-and-claim accounting model commonly used in other North American and European clean fuels markets, but we do not believe CARB has identified any programmatic issues to warrant this proposed change.

DTE Vantage sees several areas of concern for the agency with this proposal:

1. Harmonizing delivery requirements of biomethane under the LCFS program to those of the RPS program (i.e. the removal of the book-and-claim delivery mechanism) will result in an effective ban of out-of-state biomethane. The below chart depicts approved biomethane applications both inside and outside of California under the RPS. Following the implementation of RPS deliverability language (CPUC Code Section 651(b)(3)), non-California RNG participation dropped to zero. The fact that California RNG continued to participate (and still participates) in the RPS points directly to the removal of book-and-claim (and not, for instance, other factors such as alternative end markets) as the cause for the immediate cessation of out-of-state RNG pathways.

[2] CARB Presentation, slide 30, February 22nd Public Workshop to Discuss Potential Changes to the Low Carbon Fuel Standard.
[3] State of Minnesota Senate, S.F. No. 2584, Line 5.12 of the Clean Transportation Standard Act, March 1, 2023
[4] CARB Presentation, slide 47.



2. While we understand that CARB's stated goal is directing RNG to other end uses that are more difficult to decarbonize than transportation[5], there are insufficient opportunities and programs currently available to effectively incentivize that transition. We are concerned that out-of-state RNG projects currently delivering into the LCFS program may be forced to discontinue operations and GHG emissions abated by these projects will resume.

3. There will still be natural gas vehicles on the road in California in 2028, and currently, many investments are being made to make these vehicles cleaner, including by running on RNG. With the proposal to end book-and-claim by 2028, this operating fleet of natural gas vehicles will, by necessity, turn to fossil natural gas for the remaining commercial life of those vehicles/engines. Conceivably, California could ultimately increase the CI of its fuel mix due to the elimination of book-and-claim and the avoided methane crediting, resulting in a reversion towards the use of conventional natural gas.

4. Erecting barriers for continued participation targeted at a fuel that competes well in the market today will result in an increase to credit prices, making compliance more costly for Californians as those credits will presumably be replaced by more alternatives.

DTE Vantage strongly encourages CARB to reconsider eliminating this proven and commercially practical approach for delivering RNG into the state. As noted in our comments in response to the November 9, 2022 workshop, we encourage the agency to focus on identifying ways to reduce the regulatory and financial barriers currently hindering the development of more RNG projects within the state of California.

If CARB does intend to proceed with ending book-and-claim delivery mechanisms, DTE Vantage urgently requests clarification from the agency on its intended phase out procedures for the existing pathways that were approved using this delivery mechanism. With a hard stop in

[5] CARB Presentation, slide 47

2028, the agency will disrupt many existing contracts and create significant uncertainty in the market for investors. These contracts, with CARB's explicit approval, will become economically infeasible, rendering some assets stranded if CARB were to proceed without grandfathering existing pathways. In our view, this arbitrary action would undermine investor confidence in the LCFS program more broadly as prospective investors will have to consider that CARB could, in subsequent rulemakings, effectively cancel a project's pathway, regardless of the expectations when the project was initially approved.

Recommendation: Remove barriers to the use of biomethane as a feedstock

DTE Vantage supports creating practical approaches for ensuring that both in-state and out-of-state biomethane is commercially incentivized to be utilized as a feedstock for hydrogen and other advanced alternative fuels. We urge CARB to continue to remove barriers to biomethane feedstock use and to ensure that these types of uses are properly rewarded to ensure the supply of green hydrogen and other zero-carbon, versatile energy fuels is in sync with the State's goals of increasing reliance on these fuels.

Thank you for your consideration of our comments.

Sincerely,

Philip O'Niel
Vice President - DTE Vantage