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July 5, 2018

The Honorable Mary D. Nichols
Chair, Air Resources Board
1001 I Street
Sacramento, CA 95812

RE: LCFS 18- Proposed LCFS Regulations Pertaining to Alternative Jet Fuel
(First 15-Day Version of Proposed Regulations Released June 20, 2018)

Dear Chair Nichols:

The alternative jet fuel producers (the “AJF Producers”) appreciate the opportunity to provide comments regarding the Low Carbon Fuel Standard (“LCFS”) regulations under consideration by the Air Resources Board (“ARB”), pertaining to the inclusion of alternative jet fuel (“AJF”) in the LCFS.

This comment supersedes our comment submitted April 23, 2018, as the revised version of the LCFS Regulation released June 20, 2018 (the “LCFS Proposal”) resolved specific concerns that we raised in our prior comment letter regarding crediting issues. We now strongly support all aspects of the LCFS Proposal pertaining to AJF.

The AJF Producers have worked closely and cooperatively with Airlines for American (“A4A”) throughout the rulemaking process, and join the separately submitted comments of A4A.

Overview of AJF Producers

The AJF Producers joining this letter are AltAir Fuels, Fulcrum BioEnergy, Neste, Red Rock Biofuels, and Velocys. California-based AltAir Fuels is the only dedicated renewable jet fuel refiner in the world, and is supplying commercial quantities of alternative jet fuel to United Airlines at Los Angeles International Airport (LAX) from the AltAir production facility in Paramount. Fulcrum BioEnergy is developing a facility in Reno, Nevada, and plans to supply AJF into the California market. Neste is the largest existing producer of renewable diesel for the California market and has the capability to produce alternative jet fuel. Red Rock Biofuels is developing a production facility capable of producing alternative jet fuel in Lakeview, Oregon and plans to supply AJF into the California market. Velocys provides small-scale modular Fischer-Tropsch technology to alternative jet fuel producers, and is itself developing production facilities.

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Strong Support for LCFS Proposal

This letter expresses our strong support for the inclusion of AJF in the LCFS, and of ARB's specific regulatory proposals to facilitate LCFS credit generation through opt-in participation for AJF uplifted in California. We acknowledge and appreciate the exemplary work of ARB staff and management in working with the AJF Producers, A4A, and the aviation industry. We have been cooperatively working with ARB for two years in the development of this rule. Throughout this time, we have communicated steadily through numerous public workshops, meetings, informal written comments, phone calls, and emails. ARB has been actively engaged throughout this process and has thoroughly considered and integrated our input into the proposed rule. We heartily recommend adoption of the AJF regulatory proposal as proposed and concur with the specifics of the proposed regulatory structure pertaining to the rule.

The LCFS has proven to be an effective, market-based program that has driven the development and expanded the supply of low carbon fuels in California. By including low carbon alternative jet fuels in the program, ARB will further expand the supply of less carbon-intense fuels and facilitate attainment of California's greenhouse gas ("GHG") reduction policies. By sending a clear and long-term market signal that AJF is eligible to generate LCFS credits in addition to Renewable Fuel Standard ("RFS") credits ("RINs"), ARB is facilitating investment and development in the decarbonization of the aviation sector. This pioneering work by California is crucial given the anticipated growth of the aviation sector, and the technical and energy intensive demands of this sector.

Revised Carbon Intensity Benchmarks for AJF Crediting

The primary issue raised by our letter of April 23, 2018, and further described in a Power Point presentation delivered at the April 27th Board hearing pertained to the carbon intensity ("CI") benchmarks contained in Table 3 of the LCFS Proposal. These CI benchmarks determine the level of credit generation that qualifying AJF will be eligible generate pursuant to the LCFS program. The changes to Table 3 that ARB made in the LCFS Proposal were responsive to the specific concern we expressed in prior comments. Our concern was that the LCFS CI benchmarks contained in the prior version of Table 3 would have significantly dis-incentivized AJF production as compared to production of on-road renewable diesel fuel. However, with the changes that ARB has proposed to Table 3, the LCFS program will provide crediting parity to AJF beginning in 2023 and in subsequent years. We are therefore in strong support of the revised CI benchmarks contained in Table 3.

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Economic Factors Applicable to the AJF Market

While the revised Table 3 establishes crediting parity under the LCFS, we think it important to note that renewable diesel remains significantly favored over AJF by a number of other California and federal policy structures, as well as by market factors. These policy and market factors pose challenges to the commercialization of AJF, and establish that the integration of AJF into the LCFS does not pose a risk of incentivizing production facilities that currently produce renewable diesel to switch to AJF production. These factors are discussed in more detail in our previously submitted letter of April 23, 2018 but are here summarized as they remain relevant to policy design issues regarding the inclusion of AJF in the LCFS.

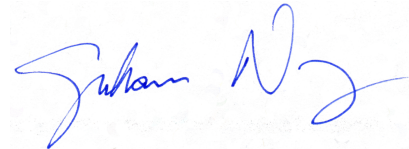
1. Producers forecast less revenue from sales of alternative jet fuel than renewable diesel because jet fuel has historically sold at a discount to on-road diesel in the California market. Future projections predict this trend will continue.
2. Due to the more stringent cold flow specification for jet fuel, alternative jet fuel requires more intensive processing than does on-road renewable diesel. Petroleum jet is relatively less burdened in meeting the jet specifications due to the inherent differences between fossil crude feedstocks and renewable jet feedstocks.
3. Jet fuel is not burdened at the rack by the cost of cap and trade allowances as is petroleum diesel. In today's market, this provides renewable diesel with an effective .15/gallon price discount to petroleum diesel that alternative jet fuel will not receive.
4. Conventional jet fuel pricing is also not burdened with the LCFS compliance cost that is assessed at the rack for conventional diesel fuel resulting in an effective .07/gallon price discount to petroleum diesel in today's market that alternative jet fuel will not receive.
5. Under the federal Renewable Fuel Standard (RFS), AJF receives relatively fewer RINs than on-road diesel with renewable diesel generating 1.7 RINs per gallon and renewable jet fuel generating 1.6 RINs per gallon. This results in a 6% discount on RIN generation representing .06/gallon less incentive per gallon in today's market.

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Conclusion

Thank you for your consideration of our input. Please contact us if any further input would be helpful. We look forward to continuing to provide input to this proceeding.

Sincerely,

A handwritten signature in blue ink, appearing to read "Graham Noyes", is centered on the page. The signature is fluid and cursive.

Graham Noyes