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Sam Wade, Branch Chief  
Transportation Fuels Branch  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

**Re: The addition of alternative jet fuels (AJF) as opt-in credit-generating biofuels**

Dear Mr. Wade:

On behalf of United Airlines, this letter is to express our strong support for inclusion of alternative jet fuel (AJF) within the Low Carbon Fuel Standard (LCFS), as proposed in your draft "Low Carbon Fuel Standard and Alternative Diesel Fuels Regulation" released March 6, 2018. As you know, United strongly supports inclusion of AJF in the LCFS, and appreciates your work and the work of your staff on this issue.

Allowing AJF to generate LCFS credits is intended to support further development of the California advanced renewable fuel industry, bring clean energy jobs to California, and create the greatest opportunities for airlines to support California's GHG emission reduction objectives. While there are steps we can take to reduce GHGs, such as electrification of ground service equipment, increasing the supply and use of AJF is by far the most effective tool airlines have to reduce our carbon footprint.

Although LCFS credits would significantly improve the economics of AJF production, we would like to propose revisions to the proposed carbon intensity (CI) benchmark for conventional jet fuel for AJF credit generation purposes.

First, we suggest reconsidering the proposed 2010 value for conventional jet fuel. Recent analyses by various parties suggest that the 89.75 g CO<sub>2</sub>e/MJ value from Argonne National Laboratory's GREET model may be too low because it does not take into account refinery efficiency in California. More recent analyses submitted by AJF producers looking at California jet fuel in suggest that a value of 94.04 g CO<sub>2</sub>e/MJ would be more appropriate.

Second, we suggest removing the decreasing CI benchmark for jet fuel (initially 84.23 g CO<sub>2</sub>e/MJ in 2019) and maintaining a flat CI benchmark instead. We note that the LCFS is not intended to set jet fuel CI standards and thus should not be proactively reducing the CI benchmark for AJF. However, we do agree that the AJF baseline should begin to decrease along with road diesel when CI benchmark parity is achieved. This would avoid incentivizing AJF more than renewable diesel and thus distorting the LCFS program.

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We recognize that there are concerns about market distortions in favor of AJF with our proposed changes. However, we would like to point out that even with these changes, AJF will remain economically disadvantaged vs. other alternative fuels.

The production of AJF is currently disincentivized in California because it is not eligible for LCFS credits. Providing these credits, which we feel are warranted from economic, technical and regulatory perspectives, would foster the airline industry's role in helping to obtain the necessary financing for AJF facilities through dedicated offtake agreements. In addition, research by the National Renewable Energy Laboratory indicates that incentivizing AJF would likely result in a significant increase in production for renewable diesel as well.

As always, we thank you for the outstanding work you are doing in this area, and look forward to our continued work together towards expanding production and use of low-carbon fuels.

Sincerely,



Aaron Robinson