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Todd R. Campbell  
Vice President Public Policy & Regulatory Affairs



August 30, 2018

The Honorable Mary Nichols  
Chair, California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

### **RE: Clean Energy's Comments to Amendments to the Low Carbon Fuels Standard**

Dear Chair Nichols:

Clean Energy is thankful for the opportunity to submit comments in response to the latest proposed amendments to the Low Carbon Fuel Standard (LCFS). We commend Staff for the success of the program to date but we are deeply concerned that Staff's proposal for DC fast charging (DCFC) and hydrogen infrastructure crediting poses a significant threat to the integrity of the LCFS program. It is understood that the proposal to include infrastructure crediting in the LCFS program is a directive through the Governor's Executive Order B-48-18, but the inclusion of this provision should not undermine the founding principles of the LCFS. The LCFS, as a fuel neutral performance-based incentive program, has been instrumental in achieving progress towards the GHG reduction goals established in the Governor's 2030 Climate Change pillars (Executive Order B-32-15 and SB 32). If Staff intends to include infrastructure crediting into the LCFS program then it must do so in a way that promotes both fuel neutrality and actual GHG reductions of transportation fuel.

#### **Capacity Crediting for All Low Carbon Fuels**

Clean Energy remains opposed to LCFS crediting for hydrogen and DCFC fueling infrastructure unless Staff agrees to expand infrastructure crediting to all low carbon fueling infrastructure. Staff cites the Governor's Executive Order B-48-18 as the driving force behind the inclusion of DCFC and hydrogen capacity crediting proposal in the LCFS. However, the Governor also set forth a goal for a 50% reduction in petroleum use in transportation fuel by 2030 which was solidified through Executive Order B-32-15. Achieving this ambitious goal will require significant low carbon fueling infrastructure of all types, not just DCFC and hydrogen. Although the Executive Order B-48-18 specifically requires the use of LCFS to expand DCFC and hydrogen fueling infrastructure, Staff should be committed to upholding the performance standard of real GHG reductions established in the LCFS program since inception and required through a separate Executive Order. Allowing capacity crediting to all low carbon fueling infrastructure protects the integrity of the LCFS program through a fuel neutral performance standard while satisfying the both of Governor's executive orders at the same time.

## Capital Costs

Staff has concluded that excessive capital costs have impeded the growth of a robust network of DCFC and hydrogen fueling stations, therefore capacity crediting is necessary to mitigate such costs. Capital risk is not unique to DCFC and hydrogen fueling infrastructure. All fueling infrastructure, low carbon or not, requires significant capital to construct and operate. Clean Energy, for example, has invested hundreds of millions of dollars to build and maintain a robust network of NGV fueling stations in California. Fleet owners have expended significant capital for both fueling infrastructure and low carbon fuel vehicles. Most importantly, waste haulers and municipalities have started investing in organics diversion projects in accordance with SB 1383. These projects carry significant capital risk to which there is zero regulatory relief akin to the proposed DCFC and hydrogen capacity crediting provision. Regardless of end use, these capital investments carry significant risk but also all contribute towards the State's goal which is to reduce GHG emissions from the transportation sector. Regulatory policy should not dictate winners and losers among fuels in the LCFS program.

Allowing capacity crediting for all low carbon fueling infrastructure reduces upfront capital risk for station owners and will significantly advance low carbon fueling options in California. This is especially true for biofuels such as biomethane that can achieve a "carbon negative" well to wheels GHG reduction when consumed as a vehicle fuel through an NGV fueling station. Furthermore, allowing capacity crediting for all low carbon fuels maintains the LCFS founding principle of fuel neutrality underscoring the need for a diversified portfolio of all low carbon fuels in order to meet California's GHG reduction goals.

## Actual GHG Emission Reductions

The LCFS was built as a performance incentive program based on real quantifiable reductions in carbon emissions from the California transportation fuel sector. According to the 2009 Initial Statement of Reasons:

*"The LCFS framework is based on the premise that each fuel has a "lifecycle" GHG emission value that is then compared to a standard. This lifecycle analysis represents the GHG emissions associated with the production, transportation, **and use of low carbon fuels in motor vehicles.**"*

The foundation of the LCFS program has always been based around a lifecycle emissions standard for fuel (not infrastructure) which promotes two key elements of the LCFS program:

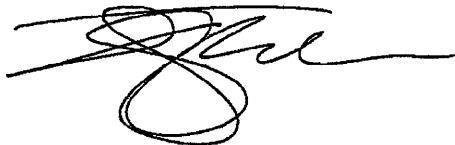
1. Real quantifiable GHG reductions of California transportation fuel;
2. Fuel Neutrality.

Staff needs to maintain these key principles through the implementation of a capacity crediting provision. Capacity crediting should serve as a risk mitigating factor for upfront capital costs for a station owner and not a supplemental credit generating provision that does not represent real reductions in GHG emissions. Capacity crediting needs to be viewed as a “credit advancement program” meaning that a fueling station may not generate credits beyond actual GHG reductions achieved through fuel sales. Essentially, station owners are borrowing against future credit generation (through actual fuel sales) to fund initial start-up capital costs. As fuel deliveries increase, actual fuel credits will surpass capacity credits generated at which point the station owner can generate fuel credits per the normal LCFS operation. This ensures that all credits issued in the LCFS represent an actual metric ton of GHG emission reduction as the program was intended to do. This will prevent a buildup of “phantom” credits that are not tied to actual fuel consumption. Furthermore, this promotes the fuel neutral performance standard of the LCFS because all credits must be tied to actual fuel consumption.

#### **Conclusion**

Clean Energy appreciates the opportunity to provide comment and hope we can continue working collaboratively with Staff to maintain the integrity of the LCFS. Please reach out to us directly should you have any questions or desire any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Todd Campbell', with a stylized flourish at the end.

Todd Campbell  
Vice President, Public Policy and Regulatory Affairs  
Clean Energy Fuels Corporation

cc: Members, California Air Resources Board  
Mr. Samuel Wade, Chief, Transportation Fuels Branch, Industrial Strategies Division