1200 Smith Street, Suite 730
Houston, TX 77002

California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Comments on Proposed LCFS Amendments to Sections 95481, 95482, 95483, 95483.2, 95483.3, 95484, 95485, 95486, 95487, 95486.1, 95486.2, 95488, 95488.1, 95488.2, 95488.3, 95488.5, 95488.6, 95488.7, 95488.8, 95488.9, 95488.10, 95489, 95490, 95491, 95491.1, 95495, 95500, 95501, 95502, 95503 of title 17, California Code of Regulations

Ladies and Gentlemen:

I am writing on behalf of TES US Development LLC ("TES") to share our company's perspective on key aspects of the Proposed Amendments to the Low Carbon Fuel Standard ("LCFS") regulation relevant to electrofuels (e-fuels) producers. TES respectfully requests the California Air Resources Board ("CARB") consider the following topics in the LCFS update, to advance California's transition to cleaner transportation fuels and in furtherance of California's climate goals:

1) **Definition of Biomethane and Synthetic Natural Gas:**

The current and proposed amendments to the LCFS regulation do not clearly define biomethane or renewable natural gas, specifically what CARB considers "synthetic natural gas derived from renewable resources" and whether synthetic natural gas derived from renewable resources of non-biogenic origin (e.g., industrial waste stream or captured CO_2) would be considered biomethane or renewable natural gas. The promotion of recycled carbon fuels is a key contributor towards energy diversification and decarbonization of the transportation sector, especially for drop-in fuels that can significantly reduce emissions in the near future with existing fleet and infrastructure. In addition, such fuels contribute to the recycling of CO_2 emitted to the atmosphere due to the use of waste streams of non-biogenic origin which are unavoidable and an unintentional consequence of industrial processes.

The current and proposed amendments to the LCFS define Biomethane as "methane derived from biogas, or synthetic natural gas derived from renewable resources" but do not define "renewable resources." The proposed LCFS amendment also includes a new definition for Renewable Natural Gas, defined as "an alternate term for biomethane," so for the purposes of commenting, we will refer to the term biomethane.

TES recommends that LCFS include a standalone definition for "renewable resources" to clearly define the feedstocks that are allowed in low carbon fuel pathways and extend the scope to include a broader range of sources beyond the traditional "biogenic sources," in accordance with established federal and international practices. As an example, the United States Department of Energy ("DOE") Office of Energy Efficiency & Renewable Energy defines renewable carbon resources as *"carbon-based resources that are regularly regenerated, either via photosynthesis (e.g., plants and algae), or through regular generation of carbon-based waste (e.g., the non-recycled portion of municipal solid waste, biosolids, sludges, plastics, and CO_2 and industrial waste gases)."* Also, the recently approved Green Hydrogen Standard defines eligible sources of CO2 to include "*biomass, biomass waste, and/or bioenergy, direct air capture, unavoidable industrial emissions, or emissions that have paid*

comprehensive compensation through a credible carbon price." TES recommends expanding LCFS to adopt a similar approach towards the applicability of synthetic natural gas and other e-fuels.

TES would like to highlight the state, federal, and international level recognition of the importance of carbon capture, utilization, and storage ("CCUS") strategies in achieving climate goals and urges CARB to consider how limiting "renewable resources" to biogenic sources would exclude leveraging existing industrial waste streams via carbon capture to produce low carbon fuels.

2) **Book-and-Claim**

TES recommends CARB expand the pathways that can apply book-and-claim accounting ("B&C"), which currently includes low-CI electricity, biomethane or low-CI hydrogen, to include any low-CI methane pathways. The current and proposed LCFS only allows B&C accounting to biomethane based on feedstock rather than physical product characteristics or CI. Given the overarching intent of LCFS to support California's transition to low carbon fuels and drive GHG emissions reductions, TES recommends CARB consider expanding B&C to be feedstock agnostic and focus eligibility based on fuel product (e.g., electricity, biomethane, or hydrogen pathways, where infrastructure exists to support indirect accounting, and use depends upon common carrier infrastructure) and pathway CI.

3) **Availability of Fuel Pathways**

TES would like to note that the current LCFS regulation does not include any Tier 1 or Temporary fuel pathways specific to synthetic natural gas or other e-fuels with CO_2 conversion. TES recommends CARB develop either a Temporary or Tier 1 pathway for synthetic fuels or e-fuels that convert CO_2 to common products (e.g., methane, methanol, liquid hydrocarbon fuels). This would help support technology developers and fuel producers to bring these low-CI, drop-in fuels to market, thereby accelerating California's transition away from fossil fuels while minimizing overall cost of infrastructure development.

We appreciate your review and consideration of our recommendations, and we are ready to provide assistance as needed to support the development of e-fuels and the decarbonization of the transportation sector.

Sincerely,

Cynthia Walker
President
TES US Development