June 23, 2022

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

RE: **Pearson Fuels Comments on Draft 2022 Scoping Plan Update**

Dear Chair Randolph,

RTC Fuels, LLC dba Pearson Fuels ("Pearson Fuels") appreciates the opportunity to provide comments on the Draft 2022 Scoping Plan. Pearson Fuels is the largest distributor of E85 in California. The company supplies 265 retail E85 stations and 46 government locations, resulting in a total E85 station footprint of 311 locations, with several new E85 Stations added each month. Pearson Fuels has also developed two large wholesale biodiesel blending terminals and three biofuel transload facilities. Pearson Fuels is also providing the only E85 fuel rack in California, which replaces the gasoline component of E85 with renewable naphtha – thereby producing a fully renewable, low aromatic E85 with GHG reductions of approximately 68%. ***Pearson Fuels is committed to providing a diversity of cleaner fuels that fit the needs of consumers and the goals set forth by federal and state programs.***

Pearson Fuels supports the Draft Scoping Plan's efforts to achieve carbon neutrality by 2045 or earlier through technologically feasible, cost-effective strategies that reduce petroleum dependence, support economic growth and integrate equity. Pearson Fuels strongly supports the Draft Scoping Plan's recognition of the importance of the Low Carbon Fuel Standard (LCFS) to the transportation sector and its directional support to increase carbon intensity reductions (CI) before 2030, and to extend aggressive CI reductions to 2045. Pearson Fuels encourages CARB staff to undertake the LCFS CI rulemaking with full dispatch. The LCFS program has lost over 60% of its market value due to an oversupplied credit market, and the Oregon market is now trading at 50% higher than California. ***We encourage CARB to work to restore the strong and steady market signal that the LCFS is capable of providing.***

Specific to E85, we have four key points to share with CARB relating to the Draft Scoping Plan:

- ***Ethanol and E85 uses are extremely effective GHG reduction strategies that have delivered massive GHG reductions to California.***
- ***E85 provides tremendous cost savings to consumers who own flex fuel vehicles (FFVs) that can run gasoline or E85, currently in the range of $1.50-$2.50 per gallon.***
- ***The best available analysis has determined that to achieve carbon neutrality, California must substitute bio-based gasoline for fossil gasoline. E85 blended with renewable naphtha (E85/N15) currently is the only commercially available bio-based gasoline.***
- ***In order to transition the legacy fleet from fossil gasoline to bio-based gasoline in the form of E85/N15, CARB must establish new programming to re-establish FFV manufacturing and better enable certification of alternative fuel retrofits.***

Ethanol and E85 use are extremely effective GHG reduction strategies that have delivered massive GHG reductions to California.

Realizing immediate GHG reductions is paramount. As stated in the Draft Scoping Plan (p. 6), avoiding "…the most severe impacts of climate change will not be possible unless we make immediate and large-scale reductions in GHG emissions."

To date, some of the largest GHG reductions achieved by the LCFS have come from integrating ethanol into the state's gasoline supply at 10% and 85% blend levels. While the large majority of spark ignition engines are warranted to E15 blend levels, FFVs can legally and without any risk of regulatory or warranty breach use a wide range of any gasoline-ethanol blends up to 85 percent ethanol. E85 consisting of ethanol and renewable naphtha qualifies as a very low carbon fuel in California and provides immediate and large-scale reductions in GHG emissions. Technological improvements in production processes, warranted by LCFS reduction targets, will continue to make this liquid fuel cleaner.

E85 offers immediate, affordable and scalable GHG emission reductions. Since the inception of the LCFS in 2011, E85 in California has grown from 5.0 million gallons to 62.5 million gallons in 2021 with year on year growth rates ranging from 20% to 50%. Due to skyrocketing gasoline prices, E85 usage in 2022 will likely show another dramatic rise. This growth has occurred despite a stagnant population of FFVs. According to California vehicle registration data, there were approximately 1.2 million FFVs registered in the state in 2016 and about 1.2 million FFVs registered in the state in 2021. The increase in E85 usage with an invariable number of vehicles capable of using the fuel proves further increases are possible – but the continuing decline of FFV manufacturing is severely curtailing E85 market potential. This manufacturing decline is due to the substantial reduction of regulatory incentives to automakers to manufacture FFVs.

E85 provides tremendous cost savings to consumers who own flex fuel vehicles (FFVs) that can run gasoline or E85, currently in the range of $1.50-$2.50 per gallon.

Ethanol is consistently priced below gasoline. With gas prices reaching record highs in California, that spread has widened, with E85 reaching $2.50 per gallon cheaper compared to regular gasoline. This week alone, news stations in Sacramento[1] and San Diego[2] highlighted the marked disparity.

[1] CBS 13 Sacramento, Ethanol Gas Emerging As Cheap Gas Alternative For Those With Compatible Vehicles, available at https://sacramento.cbslocal.com/2022/06/20/what-is-ethanol-fuel/

[2] ABC 10 News San Diego, Flex fuel option for certain vehicles, available at https://youtu.be/yyQ1c1r3SYk

The best available analysis has determined that to achieve carbon neutrality, California must substitute bio-based gasoline for fossil gasoline. E85/N15 blended with renewable naphtha currently is the only commercially available bio-based gasoline.

To further enable California to fulfill the goal of carbon neutrality by 2045 established by Governor Brown's Executive Order B-55-18, the California Legislature approved the Budget Act of 2019 (AB 74) that funded two studies, administered by the California Environmental Protection Agency, to: 1) identify strategies to reduce emissions from transportation energy use, and 2) identify strategies to manage the decline in fossil fuel production and associated emissions in parallel with reductions in demand. The study to reduce emissions from transportation use was conducted by the University of California Institute of Transportation Studies ("ITS") at four campuses, UC Davis, UC Berkeley, UC Irvine, and UCLA.

The resulting ITS report is entitled, "Driving California's Transportation Emissions to Zero."[3] While California leads the nation in electrifying transportation and the ITS scenario utilized an aggressive expansion of electrification with robust policy support, the report concluded that

[3] Institute of Transportation Studies, "Driving California's Transportation Emissions to Zero," (April 2021), available at https://escholarship.org/uc/item/3np3p2t0

removing all internal combustion engines from the roads by 2045 would still not be feasible. As a result, the Driving California's Transportation Emissions to Zero report concluded that to achieve carbon neutrality it was necessary for California to make a complete transition by 2045 from petroleum-based gasoline (light blue in chart below) to bio-based gasoline (orange) including ethanol blends as is illustrated by the following chart.

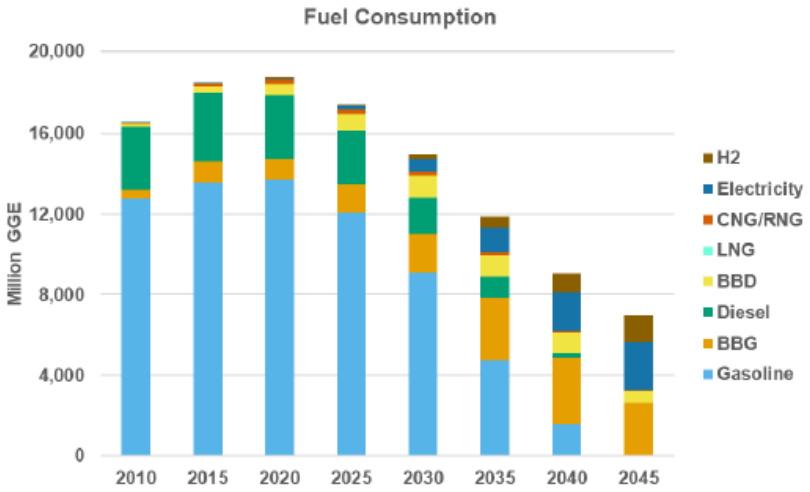

Figure EX-2. CO_2 emissions and fuel consumption projections in the LC1 scenario. The near-zero CO_2 emissions target is reached by 2045, with nearly all fossil fuels replaced by electricity, hydrogen, and biofuels at that date. (MMT, million metric tonnes; SAF, sustainable aviation fuel; H2, hydrogen; CNG/RNG, compressed natural gas/renewable natural gas; LNG, liquefied natural gas; BBD, bio-based diesel, including biodiesel and renewable diesel; BBG, bio-based gasoline, including ethanol blends and drop-in gasoline replacement fuels)

Driving California's Transportation Emissions to Zero

In order to transition the legacy fleet from fossil gasoline to bio-based gasoline (E85/N15), CARB must establish new programming to re-establish FFV manufacturing and better enable certification of alternative fuel retrofits.

Given the importance of the utilization of E85/N15 to meeting California's goal of carbon neutrality, the Scoping Plan should direct CARB staff to look for policy measures that will greatly expand the FFV fleet over the next two decades through the deployment of both more manufactured FFVs as well as vehicles converted to operate as FFVs. CARB should also use its programming to highlight FFV technology as a cleaner option than conventional internal combustion engines for consumers.

The state's Clean Miles Standard (CMS) and Incentive Program should be modified to include an E85/FFV compliance provision to reduce the foreseeable economic harm to low-income drivers and service disruption to low-income communities. There is no more prudent mitigation option than for CARB to recognize in the CMS regulation the GHG reductions that can be achieved from switching existing transportation network company vehicles to a less GHG polluting and less expensive fuel.

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But more can be done. Existing internal combustion engine (ICE) vehicles will be on the road in California for decades. Equipping these vehicles with the potential to use a fully renewable, liquid fuel would provide massive emission reductions. FFV aftermarket conversion kits are relatively new in the U.S. market but have proven to be extremely effective as a GHG reduction strategy in Europe. Pearson Fuels recognizes that the certification of aftermarket conversion kits must be fully approved by CARB before this additional strategy can be implemented. This is another area where CARB policy development will be valuable.

Thank you for your consideration of these comments.

Sincerely,

Doug Vind
Managing Member
RTC Fuels, LLC dba Pearson Fuels