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Executive Vice-President and Chief Operating Officer

November 3, 2009

Via Email: eaac@calepa.ca.gov

Dr. Lawrence Goulder, Chair
AB 32 Economic and Allocation Advisory Committee
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Subject: AB 32 Implementation – Economic and Allocation Advisory Committee (EAAC) –
Economic Analysis of the Low Carbon Fuel Standard (LCFS)

Dear Dr. Goulder:

Over the last few months, the Western State Petroleum Association (WSPA) has submitted a number of comment letters on issues related to the design elements of a California cap-and-trade program. As we believe a critical mission of the EEAC is to help CARB develop an economic analysis to support the AB 32 Scoping Plan, WSPA is submitting the following comments regarding the economics of the Scoping Plan complimentary measure – the Low Carbon Fuel Standard (LCFS).

WSPA is a non-profit trade association representing twenty-seven companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California and five other western states.

As part of the regulatory process for the adoption of the LCFS, CARB staff performed an economic analysis of the proposed LCFS. CARB staff concluded that adoption of the standard would result in a cost savings to California motorists of up to \$3.4 billion per year by 2020 (\$11 billion over the period from 2010 to 2020).

WSPA commissioned Sierra Research to review CARB's economic evaluation of the LCFS. The Sierra Research analysis is attached to this letter.

In contrast to CARB's cost saving conclusion, Sierra Research concluded that fuel costs will increase by approximately \$3.7 billion per year in 2020. Further, Sierra Research highlighted that estimates of alternative fuels costs can only be based on paper studies that assume economies of scale yet to be demonstrated in practice.

Sierra Research also highlighted that the CARB economic analysis failed to account for the uncertainty associated with such studies. Sierra noted that this is a significant concern, given that a

study published subsequent to the preparation of the CARB analysis projects higher costs than earlier studies.

Sierra also highlighted that CARB cost estimates for alternative fuels are unrealistically low due in part to unrealistic estimates for feedstock cost, unrealistic estimates of the cost of emissions control requirements on biomass refineries, and unrealistic assumptions regarding the cost of capital. According to Sierra, the combination of these factors leads CARB to underestimate the cost of the LCFS by over two billion dollars per year.

Further, Sierra states that in addition to assuming low carbon intensity biofuels will be available in large quantities with federally subsidized costs below those for gasoline and diesel fuels, CARB assumes that grid electricity and, to a lesser extent, hydrogen will be available as transportation fuels in California at costs below those for gasoline and diesel fuels.

To support this assumption, CARB credits electric and fuel cell vehicles with greater efficiencies than appear warranted based on previous agency assessments. CARB not only ignores the incremental costs of these vehicles, but also in some cases assumes that they will be produced in numbers far greater than required by the current Zero Emission Vehicle (ZEV) regulation.

Depending on the compliance scenario, these incremental costs range from about \$14 billion to \$47 billion over the period 2010 to 2020, as compared to the staff's claimed \$11 billion cost savings for the LCFS.

In addition to the Sierra Research review, the CARB analysis was peer reviewed by a number of scientists and one economist. It is very important to note that only one of the LCFS program peer reviewers, John Reilly of MIT, holds a PhD in economics.

CARB staff concluded that none of the peer reviewers provided comments that would require major modifications to either the proposed rule or the analysis used to support the proposal. This does not appear to be appropriate given statements by Mr. Reilly. For example:

- “The economic analysis was done incorrectly. It does not meet technical standards of economics. The baseline assumptions are mutually inconsistent, ...”;
- “...the estimate of economic impact on the State of California is done incorrectly because the tax and tax revenue implications are dealt with inappropriately”;
- “Thus these tax expenditures should be added on as a cost to Californians, and the expenditures should be increased by an amount to account for the deadweight loss associated with tax collections”; and,
- “Another critical issue is the accounting of only fuel and administrative costs and not of vehicle costs.”

Since the LCFS is an integral part of the Scoping Plan, we urge EAAC to review the possible impacts of the LCFS on the overall economics of implementing the entire Scoping Plan – including complementary measures and the cap-and-trade program.

Thank you for considering our comments.

Sincerely,

A handwritten signature in blue ink that reads "Cathy A. Kelly-Boyd". The signature is fluid and cursive, with the first name "Cathy" being the most prominent.

cc: Linda Adams, Secretary, Environmental Protection
Kevin Kennedy, ARB Office of Climate Change
Lucille Van Ommering, ARB, Office of Climate Change
Richard Varenchik, ARB, Office of Climate Change