December 5, 2014

The Honorable Janea Scott, Commissioner
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814


Dear Commissioner Scott:

I am writing on behalf of the Bioenergy Association of California (BAC) to thank you and the Commission for the excellent 2014 Draft Integrated Energy Policy Report (the “Draft IEPR”). The Draft IEPR’s focus on the transportation sector is very timely and necessary to help California meet its greenhouse gas reduction, air quality, energy independence and other goals. The Draft IEPR is particularly helpful because it integrates the discussion and proposals for both greenhouse gas reduction and protection of air quality. Integrating these two important mandates and maximizing steps to achieve both is essential to their success. BAC supports many of the Draft IEPR’s proposals to achieve these goals and recommends several additional areas for inclusion in the 2014 IEPR, described more fully below.

BAC is an association of more than fifty public agencies, local governments, private companies and others working to convert organic waste to energy, including transportation fuels, renewable electricity and pipeline biogas. BAC’s public sector members include air quality, solid waste, wastewater and environmental protection agencies, as well as city and county governments. BAC’s private sector members include bioenergy, solid waste, engine, technology, carbon, agriculture and other sectors involved in bioenergy development.

I. GENERAL COMMENTS ON THE 2014 DRAFT IEPR

The Draft IEPR provides a very helpful overview and discussion of the
transportation sector in California. Its presentation of the state of vehicle technologies, status of low carbon fuels, infrastructure development and other aspects of the transportation sector provide very helpful data, trends analysis and recommendations. BAC especially supports the following elements of the Draft IEPR:

A. Integration of Greenhouse Gas and Air Pollution Reduction Strategies.

The Draft IEPR very helpfully provides data and analysis of the relationship between greenhouse gas reduction and protection of air quality, and strategies to maximize both. As technologies improve and new, lower carbon fuels are introduced, it is particularly important for both the Energy Commission and the Air Board to continue to maximize reductions of both climate change and criteria pollutants and not to trade one goal for the other. Many strategies can achieve both.

B. Recognition that Biofuels Can Provide Immediate and Significant Emission Reductions.

BAC strongly supports the Draft IEPR’s finding that biofuels will “play a critical role in reducing carbon emissions from the transportation sector and are a key element in the state’s approach to a low-carbon transportation future.”\(^1\) As the Draft IEPR notes, electricity and hydrogen are longer term strategies to reduce greenhouse gas emissions whereas biofuels can provide immediate and significant reductions.\(^2\)

C. Natural Gas Engines and Fuels On Track to Become Electric Vehicle Equivalent for Criteria Pollutants.

BAC agrees with the Draft IEPR that natural gas fuels and engines have the potential to "cost-effectively reduce carbon and criteria emissions from the on-road, heavy-duty trucking sector."\(^3\) [emphasis added] In other words, natural gas engines are on track to operate at emissions levels that are "electric vehicle equivalent."\(^4\) This finding is extremely important as both the Energy Commission and Air Board determine how to maximize both greenhouse gas and criteria pollutant reductions. Continuing to incentivize natural gas engines and fuels is a cost-effective way to reduce both types of emissions and, when the engines use biogas or a biogas blend, achieve the greatest greenhouse gas reductions.

D. Need to Address Pipeline Access and Cost Issues for Biogas.

As the Draft IEPR notes, biogas provides the lowest carbon fuels and yet pipeline access and costs are significant barriers to the increased use of biogas as a

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1 Draft IEPR at page 4.
2 Id. at page 73.
3 Id. at page 117.
4 Id. at pages 95, 110 and 111.
transportation fuel. BAC agrees with the Draft IEPR that the state needs to find ways to reduce the costs of meeting new standards for pipeline biogas and pipeline interconnection in order to expand the use of biogas as a transportation fuel.\(^5\) As the Draft IEPR notes, “Cost-effective compliance methods or alternative funding for AB 1900 compliance must be found so that biogas can be transmitted via California’s vast natural gas pipeline infrastructure.”\(^6\) BAC recommends several strategies to reduce pipeline biogas costs and sources of funding, below, which should be allocated to pipeline biogas.

**E. Need for Better Inter-Agency Coordination**

BAC agrees with the Draft IEPR that increasing coordination between agencies is critical to maximize the benefits of the different greenhouse gas reduction and air quality protection goals. In particular, better coordination between the Commission, Air Resources Board and Public Utilities Commission would help to ensure that funding programs are coordinating to maximize impact and help meet new standards and legislative requirements.

**F. Importance of Leveraging Funding for Clean, Low-Carbon Transportation**

BAC strongly supports the recommendations to leverage various funding programs for transportation. Since several agencies now have funding from Cap and Trade revenues and other sources, it is important that agencies work together to agree on goals and strategies to maximize the impacts of those funds. At a minimum, the Climate Action Team, Interagency Bioenergy Working Group or other inter-agency team should ensure that Greenhouse Gas Reduction Funds (GGRF) are in fact allocated to projects that maximize greenhouse gas reductions and help to promote strategies in the AB 32 Scoping Plan Update. BAC is particularly concerned that the Air Board has prioritized criteria pollutant reductions over greenhouse gas reduction in the use of its GGRF funding, at least in the 2014-2015 budget. The Energy Commission and Air Board should coordinate much more closely on the use of GGRF and ARFVT funding for transportation. In addition, both agencies should coordinate with CalRecycle, CalFire, and the California Department of Food and Agriculture on the use of those agencies’ GGRF funds to maximize greenhouse gas reductions and clean fuels development from those funds.

**G. Importance of Promoting a Technology Neutral Portfolio.**

BAC agrees with the Draft IEPR that California should promote a portfolio of technologies and fuels\(^7\) to increase short-term and long-term benefits and to continue to reduce emissions from all technologies and fuels. A related tenet must be to remain technology neutral as vehicle technologies and fuels continue to evolve and improve. As the Draft IEPR notes, the biggest opportunity for near

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\(^5\) Id. at pages 109 and 119.

\(^6\) Id. at page 109.

\(^7\) Draft IEPR at page 73.
Longer term, electric and fuel cell vehicles will provide the a larger share of greenhouse gas reductions, but California needs both near- and long-term strategies, as well as strategies to reduce emissions in all vehicle classes. Given the wide range of vehicles and the different benefits and challenges for each sector, pursuing a technology neutral, portfolio approach is the most sensible strategy for California to achieve its clean transportation needs.

II. RECOMMENDATIONS ON THE 2014 DRAFT IEPR

BAC supports many of the findings in the Draft IEPR, but urges the Commission to expand the recommendations in several areas to address those findings. In particular, we urge the Commission to add the following recommendations:

A. Chapter One

BAC urges the Commission to add specific recommendations to:

- Coordinate with ARB and the CPUC to develop a transparent matrix of the different regulations and incentives to reduce both greenhouse gas emissions and criteria pollutants and how each regulation and incentive promotes each goal;
- Develop a long-term, inter-agency strategy to maximize both greenhouse gas emissions and criteria pollutants and ensure that current incentives are focused on greatest reductions;
- Define what the terms “zero emission” and “near zero emission” mean and whether they always refer to the same (criteria pollutant) emissions;
- Ensure that current incentive programs are technology neutral and that GGRF funding maximizes greenhouse gas reductions (or, at a minimum, does not ignore the lowest carbon transportation fuels)

B. Chapter Two

BAC urges the Commission to add specific recommendations to:

- Include coordination with, and leveraging of, the gas sector’s cap and trade revenues, which are separate from the revenues included in the State Budget and which are approximately $150 million in 2015;
- Allocate a portion of the gas sector cap and trade revenues to production and pipeline distribution of biogas;
- Leverage funding for organic waste diversion (CalRecycle), dairy digesters (CDFA) and other cap and trade revenues to produce biogas for transportation

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8 Id.
fuels;
- Ensure that a portion of the Air Board’s GGRF funds goes to biogas for transportation fuel use and as the renewable source of hydrogen;
- Coordinate ARB and CEC funding to promote biogas development that is co-located with hydrogen fueling stations to meet the requirements of SB 1505 as cost-effectively as possible;
- Coordinate with CalRecycle on the implementation of AB 1826 (Chesbro, 2014) and AB 1594 (Williams, 2014), which require the diversion of organic waste and will provide additional feedstock for biogas production;
- Leverage local funding and opportunities with ports and public agencies such as wastewater, solid waste and transit agencies to produce biogas and co-locate that production with natural gas and hydrogen fueling stations.

C. Chapter Five

BAC urges the Commission to include recommendations to:

- Develop a statewide strategy to optimize biogas production that is co-located with hydrogen fueling stations by identifying potential biogas production sites that are near fleets and fueling stations and incentivizing their joint development;
- Fund research to identify strategies to reduce the costs of compliance with new pipeline biogas standards, pipeline interconnection and other barriers to pipeline biogas injection, which is required by AB 1900 (Gatto, 2012).

III. SPECIFIC EDITS AND CORRECTIONS TO THE 2014 DRAFT IEPR

In addition to the recommendations above, BAC requests that the Commission make the following specific corrections to the Draft IEPR:

A. Biogas Potential (page 116)

Since testifying before the Commission in June, BAC has revised its estimate of the fuels potential from organic waste. The revision is based on corrections from UC Davis, which provided the underlying data, and because UC Davis only included 67 percent of the municipal organic waste in its estimates. With the passage of AB 1826 and AB 1594, BAC believes it is more accurate and more consistent to use 100 percent of the technically available organic waste across all sectors to calculate the fuels potential (the UC Davis estimate includes 100 percent of the technically available waste in other feedstock categories). The underlying data and analysis are included in the report that BAC recently released, Decarbonizing the Gas Supply: Why California Needs a Renewable Gas Standard, which is attached to these comments.

BAC would, therefore, like to correct the fuels potentials cited in the Draft IEPR on page 116 as follows:
• The total fuels potential from organic waste is 2.5 billion gge (not 2.1 billion dge) per year.
• Currently landfilled organic wastes could produce 684 (not 492) million gge of carbon negative transportation fuels.

B. Correct name of BAC (page 117)

Please correct BAC’s name in footnote 177 on page 117. The correct name is Bioenergy Association of California, not Biogas Association of California.

C. Update Draft IEPR to include statutes of 2014 (page 122)

The Draft IEPR includes a helpful discussion of the relationship between organic waste diversion and production of the lowest carbon fuels, but should be updated to include two new statutes related to organic waste diversion that were enacted in 2014:

• AB 1826 (Chesbro) requires recycling of commercial organic waste; and
• AB 1594 (Williams) phases out the recycling credit for greenwaste that is used as landfill cover.

These new statutes will increase feedstock for biogas production and increase the need for coordination between the Commission and CalRecycle.

We thank the Commission for the opportunity to comment on the Draft IEPR. With the recommendations and corrections above, it will provide an outstanding framework for California’s transportation sector.

Sincerely,

Julia A. Levin
Executive Director