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California Energy Commission

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Dear CEC Commissioners:

We appreciate the opportunity to review and provide comments on the current draft of the *2014-201 Investment Plan Update for the ARFVT Program*. Our primary recommendation is that the Energy Commission continues to support a robust program of independent and objective technical analysis and program evaluation to guide strategy and decision-making for the ARFVT program and to help achieve the state's AB118 goals.

The Sustainable Transportation Energy Pathways program (NextSTEPS) at the Institute of Transportation Studies UC Davis (ITS-Davis) is currently engaged in providing technical assistance to the ARFVT program. NextSTEPS worked closely with the CEC to design a two-year technical analysis project that helps the CEC evaluate the technical, economic, policy and business opportunities and challenges for low-carbon fuels and advanced vehicles to further the CEC's goals, including maximizing the energy, environmental and economic benefits of a transition to low-carbon transportation in California. In addition to submitting the required deliverables to CEC, NextSTEPS will disseminate and integrate research findings more substantively within the CEC by providing two-hour presentations at the CEC each week on the project's 10 research tasks this spring and again in the fall of 2014. NextSTEPS also regularly engages a wide range of key public and private stakeholders to ensure that our work is getting into the hands of those who can use it to guide strategy and investments.

We recommend that, in current and future Investment Plans, the CEC continue to use a percentage of Investment Plan funds for independent entities to help evaluate and provide technical analysis for the ARFVT program. The following provide the reasoning, tremendous value, and impact of independent evaluation and technical analyses:

- **The AB118 statute requires that the CEC evaluate its use of Investment Plan funds and provide an analytical rationale for proposed expenditures. The use of independent entities to conduct this work provides the ability to tap into outside expertise and increases the objectivity of the analysis.** CEC has contracted with well-respected groups (e.g. UC Davis, UC Irvine, NREL, RAND, etc.) that are providing technical assistance and program evaluation across the wide range of alternative fuel, vehicle technology, and policy issues. This model is working for the CEC and should receive continued funding so that the CEC can continue to understand and evolve with the changing landscape of alternative fuels, vehicle technologies, and related policies in California.
- **There is significant value in evaluating the use of funds and providing technical assistance to the CEC.** By understanding the current and potential markets for alternative fuels and vehicles through sound analysis, the CEC can better target their investments in those areas that are likely to have the greatest positive impact. This saves money and increases the likelihood of CEC meeting its policy goals. For example, NextSTEPS provides technical and economic assessments of the most promising alternative fuel pathways, including assessments of emerging technologies, best policies

and incentives, infrastructure requirements, and consumer demand. Independent entities that research alternative fuels and vehicles beyond the state of California also add significant comparative analyses. For example, the NextSTEPS program compares California to other states and regions of the US, as well as other regions of the world that are adopting alternative fuels, vehicles and related policies, particularly in Europe and China.

- **Independent technical analysis and program evaluation provides broader information dissemination on ARFVT Program issues to policy and business decision makers in California, thereby building the consensus and ecosystem of stakeholders needed to achieve the State's AB118 goals.** For example, the NextSTEPS program hosts workshops and symposia to release research insights on alternative fuels, vehicles, and policies to decision makers at major automakers, energy companies, utilities, academic institutions and leading environmental NGOs. The UC Davis Policy Institute for Energy, Environment, and Economy hosts forums in Sacramento and webinars which help disseminate key research findings from NextSTEPS and other related work on alternative fuels and vehicles to decision makers and the general public. ITS-Davis and the Policy Institute also host seminars and numerous meetings with staff from the CEC, the Governor's office, the Air Resources Board, Caltrans, and other agencies to disseminate and discuss research results to inform better government decision-making. The work of independent entities has helped inform the policy process across all alternative energy pathways – including electric, hydrogen fuel cell, natural gas, and biofuels-powered vehicles.

In summary, good technical analysis provides the ability to test and understand the implications of different investment strategies so that program funds can be spent more efficiently. Objective and independent evaluation allows the CEC to assess past and current investments to determine their effectiveness, make course corrections, and end or avoid unproductive programs. We encourage the CEC to continue to provide adequate funds within the Investment Plan to support sound program evaluation and technical assistance, and we look forward to continuing to work with the CEC to achieve the state's AB118 goals.

On behalf of the NextSTEPS research team at ITS-Davis, thank you for reviewing these comments.

Sincerely,

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