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TO: California Energy Commission Commissioners and Staff
FROM: John Boesel, President and CEO
RE: Docket Number 10-ALT-1 – Advisory Committee for AB 118

Clean Transportation Technologies and Solutions

www.calstart.org

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The AB 118 program is a vitally important part of California's efforts to ensure a prosperous and sustainable future. AB 118 investments made by both the California Energy Commission (CEC) and the California Air Resources Board (CARB) are helping to improve the outlook for California's economy and environment by making the state's transportation system cleaner and more efficient. As a direct result of the AB 118 program, Californians will have an increasing array of clean vehicle and fuel choices. This program is helping us move toward a future in which conventional petroleum-powered vehicles are not our only option.

CALSTART appreciates the tremendous efforts made by CEC staff and commissioners to make the AB 118 program a success. Both the commissioners and staff deserve praise for their work to date. If implemented as proposed, the 2011-2012 CEC AB 118 investment plan will have a positive impact on the California economy and environment.

Looking ahead, to next year's plan and beyond, we have some suggestions on how the program can become even better. We begin with high level comments on the investment plan structure and process, and then move on to provide comments on specific elements of the May Committee Draft.

IMPROVING EFFICIENCY AND FLEXIBILITY IN THE INVESTMENT PLAN PROCESS

As noted in our previous oral and written input on the program, CALSTART encourages the CEC to remain flexible and to focus on performance criteria and end results. To that end, we recommend that the CEC incorporate the following recommendations into the investment plan process, both for FY 2011-2012 and for future years:

- **Look for high-impact, limited-duration investments.** As a general strategy, CEC should target opportunities that have a clear exit strategy and will lead to self-sustaining changes. Public financial support should be temporary in nature, with the need for a given incentive declining or disappearing over time as the market takes over. Focusing on these opportunities will ensure that CEC's limited dollars generate meaningful and sustainable changes.
- **Focus on end goals and performance metrics, rather than pre-defined technology categories.** Consistent with CALSTART's comments on previous drafts and investment plans, the program should focus on performance outcomes rather than earmarking funding for specific technology categories.

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The art of picking technology winners is a challenging one. Focusing on end results and funding those projects that score best against a broad set of performance criteria would be more cost effective. The work that is currently underway to quantify program benefits and project emissions reductions for the overall AB 118 program could serve as the basis for designing a broad set of technology-neutral metrics. The most recent Committee Draft does contain some initial steps in this direction, such as the replacement of narrowly defined PEV infrastructure “buckets” with a broad and overarching investment in “charging infrastructure and related activities”. We see this as a positive development, but encourage CEC to go further. For example, a portion of the funds could be designated for projects with low risk and relatively low carbon emission reductions. Another category could encourage proposals for higher risk and higher levels of GHG reductions.

- **Define solicitations to cover fuels, vehicles, and infrastructure in a single application.** We recommend that CEC structure categories and solicitations such that an entity can submit a single application to receive funding that supports all relevant portions of a given project – fuels, vehicles, and infrastructure. If two or more elements are essential for a project and the state gets significant carbon and criteria emission reductions per dollar spent, the project should be supported. This comprehensive and flexible approach would also allow entities to submit a single proposal. For both the CEC and the applicants, this process is more efficient than one which requires multiple proposals for the fuels, vehicles, and infrastructure.
- **Produce flexible, performance-based, two-year investment plans.** We recommend that CEC and the Advisory Group produce a two-year investment plan that is more oriented toward performance outcomes. The current process of producing the annual plans is time consuming and resource intensive. In an era where many state programs are being cut, we should be looking at ways to save money and improve processes. If the plans are more performance-based and less tied to specific technologies, they should be sufficiently flexible to adapt to changing conditions over the two year period. The ability to adapt to changing market and technology conditions is another advantage of a performance-based plan that is not built around pre-defined technology buckets and funding allocations. We do recognize that switching to a two-year investment plan may require change in statute.

COMMENTS ON SPECIFIC ELEMENTS OF THE FY2011-2012 INVESTMENT PLAN

In addition to overarching comments on the plan and process as a whole, CALSTART would like to provide feedback on specific elements of the draft investment plan. As outlined above, our goal in making these recommendations is to ensure that CEC maintains the flexibility to use limited state dollars in the most efficient way possible to achieve California’s economic and environmental goals.

Increase flexibility and efficiency for biofuels investments

The plan calls for investments in clean alternatives to gasoline and diesel. We commend staff for expanding the ethanol funding to focus more broadly on



“gasoline alternatives.” (Note that the table in the body of the report still refers to ethanol exclusively and needs to be updated to match the intent and the executive summary.) While we believe the changes made since the previous draft are an improvement, we think there is an opportunity to further simplify and broaden this portion of the plan. could be further broadened and simplified We recommend that CEC do the following:

- Put the funds allocated for advanced or low carbon biofuels into broad, flexible categories. One might be open to fuels that yield 25-50% well-to-wheel GHG reductions, and another to fuels that yield 50% or greater improvement. CEC should consider giving preference to in-state projects. There a number of companies (both inside California and elsewhere) that are developing next generation biofuels that don't fit neatly in any of the specific categories outlined in the plan.
- As noted above, the solicitations should be structured such that an entity can submit a single application to receive funding that supports not only the fuels production plant, but also the vehicles and refueling station connected to the project. Not all competitors will want to ask for funding for vehicles and a refueling station, but if they're essential and the project will lead to cost-effective emission reductions, the project should not require multiple applications.

We note that CEC is planning to have a summer 2011 forum focused on “alternative fuels, agriculture markets, and food commodities.” The plan suggests that ethanol producers will be involved, but we suggest broadening this to also include other biofuel companies whose processes are tied to agriculture markets. Algae biofuel companies and others should also be included.

Ensure ongoing and flexible investments in medium and heavy duty vehicles

Investing in advanced medium- and heavy-duty vehicles is a good decision, and one that is very consistent with the need to reduce criteria emissions under the new proposed National Ambient Air Quality Standards (NAAQS). In addition, unlike with light-duty vehicles, this is not a sector that will see significant GHG reductions through standards or policies developed by ARB. The CEC should retain the ability to invest in advanced technology that can be used in buses, trucks, and non-road vehicles. Of these three markets, the truck sector is the largest but not an area where new technology is easily adopted. The transit market often serves as a proving ground for advanced heavy-duty vehicle technologies. Advanced technologies then make their way to the on-road truck sector, and finally to off-road vehicles. Despite its small size relative to the light duty sector, the medium and heavy duty vehicle sector is a major source of fuel usage, greenhouse gas emissions, and criteria emissions in California. Continued investment is a wise choice. It's not clear that this year's plan allows for funding of advanced bus technology. It should be clearly stated in future plans that both advanced bus and truck projects can be funded under this category.

The recent decision to invest \$4 million in electric trucks through the Air Resources Board's Hybrid Truck and Bus Voucher Incentive Project (HVIP) is a wise one. The streamlined HVIP program has been very successful and the



addition of funding targeting electric trucks will greatly help to accelerate the deployment of vehicles that have even greater environmental benefit. We note that page 22 of the Committee Draft contains a typo, as it indicates an investment level of \$2 million when it appears that the actual recommended investment is \$4 million.

Move ahead with flexible investments in California manufacturing

The Staff Draft called for \$10 million to fund projects that establish commercial-scale alternative fuel vehicle and component manufacturing facilities in California. These manufacturing investments have the potential to help build a strong, sustainable clean energy economy well-suited to the needs of the 21st century. Furthermore, our understanding is that this funding category will be broad, flexible, and not tied to any specific technology. This is a positive development and a good model to follow. However, we note that the investment in the more recent Committee Draft has been reduced by \$2 million, leaving a total of \$8 million in funding for clean technology manufacturing. We suggest that CEC do the following:

- Restore funding for this category to \$10 million or more, as outlined in the previous draft of the investment plan. These investments can help the state meet economic as well as environmental goals.
- Maintain flexibility to fund the best manufacturing projects, rather than targeting specific technologies. This approach, outlined in the current draft, is directly in line with our overarching recommendations on maintaining flexibility and steering state resources toward those projects that have the greatest promise to help California meet its goals.

Ensure that funding for innovative technologies, advanced fuels, and federal cost sharing is flexible and sufficient to meet demand

CALSTART is pleased to see that the Committee Draft includes \$3 million for federal cost share, innovative technologies, and projects that don't fit neatly into pre-defined funding categories. In order to maximize the impact of this category of funding, we suggest that CEC consider the following recommendations:

- Increase funding for this category to at least \$5 million. Particularly in light of the fact that these funds can be used for federal cost share, it makes sense to ensure sufficient funding.
- Prioritize job creation for at least a portion of this funding. Consider providing funding for a competitive "1,000 Jobs" program. Under this program, the CEC could create an independent evaluation board to review proposals from any organization that puts forward a plan to create 1,000 clean transportation technology industry jobs in California within the next three years. This sort of creative and competitive program could generate many good ideas and help generate new job growth in California.
- Design a process for these funds that is truly open and flexible, relying on performance criteria and metrics. The bulleted list on page 125 provides a good starting point for potential projects, but even this list may not be broad



enough to capture all of the potential project ideas that companies may generate.

Use block grant authority provided in enabling statute to leverage in-state talent and lessen the demands on CEC staff

Given the state's limited resources and the hiring freeze, it would be beneficial for the Commission to leverage outside expertise in implementing the AB 118 program. There are organizations within the state that CEC can tap to assist in the implementation of this program. For example, our organization has considerable expertise in facilitating the development of a wide array of advanced technologies, and we are currently managing several leading medium- and heavy-duty vehicle technology programs. There are several other public, private, and nonprofit organizations that CEC could take advantage of. In particular, we recommend that CEC:

- Make full use of the block grant authority provided in the statute creating the program. This authority allows the state to leverage in-state talent and provide a small number of large awards that would advance a certain area. We recognize that there are administrative costs associated with outsourcing, but believe they are modest when compared with internal staffing costs. It would also allow CEC to effectively increase the size of the AB 118 staff in a time when internal hiring is not possible due to a hiring freeze.

Investing in a Clean and Secure Transportation Energy Future

CEC's implementation of AB 118 has put California on a path to a cleaner, more secure, and more prosperous future. The progress to date is impressive in the face of limited state resources and a severe economic downturn. The need for public investments in clean transportation is particularly important today as we strive to maintain momentum. We believe that the recommendations above, particularly those related to leveraging outside resources and focusing on performance metrics, would make this program even more valuable. We look forward to engaging with staff and would be happy to answer any questions or provide more information on the recommendations included here. Thank you for the opportunity to provide comments, and for your work in implementing the program to date.