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NRDC CALSTART joint comments on Recovery and Reinvestment Initiative

See attached comments submitted by Dean Taylor Consulting on behalf of NRDC and CALSTART

Additional submitted attachment is included below.

May 5, 2021

California Energy Commission
1516 9th Street
Sacramento CA, 95814

Sent to docket 21-TRANS-02.

Re: 21-TRAN-02 Recovery and Reinvestment Initiative

Dear Commissioners and staff:

The Natural Resources Defense Council (NRDC) and CALSTART submit the following comments regarding the Pre-Solicitation Workshop for the California Energy Commission Recovery and Reinvestment Initiative on April 12, 2021. We are writing to propose a targeted investment by the CEC, using half of the \$10 million budgeted for “Recovery and Reinvestment” to leverage private capital that can support infrastructure investments for zero-emission drayage trucks, buses, shuttles and delivery trucks. The 2020 investment plan created this new funding allocation for “Recovery and Reinvestment” that is “intended to address needs and resiliency measures for the COVID-19 response, including creative financial opportunities that can best leverage Clean Transportation Program (CTP) funding, private investments, and federal cost-sharing.”

To meet these goals, and based on our research and discussions with fleets, charging providers, banks and state agencies,¹ we are proposing the Zero Emission Truck, Bus, and Infrastructure Finance (ZETBIF) program based on conversations as an effective way to create financing opportunities for public and small private fleets that will effectively leverage CTP program funding, while creating economic activity and supporting high-road jobs. As described in more detail below, the ZETBIF pilot proposal seeks to address the challenge of overcoming the high first costs of zero-emission trucks and buses (and the accompanying infrastructure). We have observed that, even though ZE buses and trucks can save fleets money over time, the up-front capital required is the leading barrier to the adoption of these vehicles, especially for public fleets and small fleets who may have different challenges accessing capital.

CEC helping to establish a loan program run by the State Treasurer would enable small and medium-sized fleet owners to secure loans for the upfront capital needed based in part on the Low Carbon Fuel Standard (LCFS) credits that fleets can earn over time by charging or fueling their vehicles with low-carbon fuels. Currently, most fleets generally lack a means to monetize the future stream of LCFS value and bring it up-front because lenders to date have not understood the LCFS market or revenue security. This proposal would be to pilot this concept for 1-2 years to determine if and how fleets would take advantage of these types of loans. Our proposal is very similar to an existing CEC program that funds the State Treasurer to operate an electric vehicle infrastructure loan program. It would not

¹ NRDC and CALSTART have received the support for our proposal from senior executive staff at the California Air Resources Board, the California Pollution Control Financing Authority (CPFCA), and the California Infrastructure and Economic Development Bank (iBank). We have also received favorable input in discussions with the lead CEC Commissioner for transportation and her advisor.

require a solicitation, but rather a modification to the existing agreement that the CEC has with the State Treasurer.

This proposal meets the Commission's Goals for Covid-19 Recovery and Reinvestment for the California Economy

The need for zero-emission heavy duty vehicles and accompanying infrastructure is very great and so large that traditional incentives (e.g., grants and tax credits) are not enough. Loans will be needed too, and the time is now to pilot a new type of innovative loan program, especially for small and medium size fleets. The CEC has recognized the need for loans several times:

- The CEC-funded [EVCS program](#) at the State Treasurer's office is a loan loss reserve program for AC and DC charging stations used in residential and non-residential applications including for light-, medium-, and heavy-duty electric vehicle fleets. However, it does not include the LCFS component in this proposal (and there are other differences detailed below).
- The CEC last Fall proposed innovative financing as a priority in the 2020 Investment Plan Update.
- The CEC last Fall proposed a budget change request for legislation to expand funding for the CEC's Clean Transportation program (including its existing loan and loan guarantee authority) and provide new authority to both the CEC and the iBank for innovative financing.
- In addition, our concept was "adopted" by the Governor's recovery task force's climate committee² as one of their recommended ideas to jump start the state's recovery through leveraging private investment.

ZEV adoption faces the same challenge as energy efficiency: even with a decent payback on investment vs. a diesel vehicle, many public and private fleets cannot make the switch because their capital budgets may not allow them to cover the incremental cost difference between a conventional vehicle and a ZEV. In 2020 HVIP provided over 1200 M-HD-ZEV vouchers—but this likely represents only half of the demand for commercial ZEVs. In addition, there are transactional barriers for private banks to provide loans to fleets for relatively new technology, and we understand commercial ZEVs may be viewed as risky due to unknown residual value.

Our proposal meets staff's proposed equity principle. Especially for medium and heavy zero-emission vehicles, the capital and installation costs associated with charging infrastructure or hydrogen stations results in fleet owners often facing a large barrier to adopting ZETBs, and this barrier can seem insurmountable to small fleets. Providing CEC stimulus funds to address this barrier is worthy of stimulus because ZETBs will not otherwise be bought by small and medium size fleets. Purchase incentives are enough for these buyers because they need "wrap around" support for their vehicle purchase and the expense for DC chargers used by most medium and heavy vehicles (compared to light duty chargers). The ZETBIF program allows fleets to leverage future funding streams to solve the "first costs" problem.

In addition, a loan loss reserve program by design incents banks to make loans to borrowers at reasonable interest rates who might otherwise not be deemed credit worthy. And this makes these

² [Governor Releases Task Force on Business and Jobs Recovery Report | California Governor](#)

loans more appealing to borrowers (they don't need to worry about how to repay) and to lenders (reduces loan risk). Finally, the existing State Treasurer programs serve very small fleets (e.g., one truck) with owners who are often based in disadvantaged communities (e.g., serving the port).

This proposal would also support the Commission's goal of bringing forth the infrastructure needed to support the rapid deployment of zero-emission, heavy duty vehicles, as required by CARB's Advanced Clean Trucks rule, and Governor Newsom's ZEV Executive Order.³ (Note that we support the four principles proposed at the workshop too.⁴) CARB has many programs and regulations to accelerate the ZETB market. The most recent CARB proposal is called [Project 800](#)—which calls for a goal of 800 orders for zero-emission drayage trucks by end of 2021. This is an ambitious, but very worthy goal. CARB also has regulations to accelerate adoption of zero-emission trucks starting in [2024](#), buses starting in [2023](#), and airport shuttles starting in [2026](#).

Our proposal meets the staff's proposed priority to attract funding. Specifically, our proposal is not only for LCFS-backed loans for infrastructure but also for purchase of the ZEV, and several non-CEC sources of funds for the State Treasurer to operate a loan-loss reserve ZETBIF program are interested in our proposed pilot program including utilities' LCFS holdback funds, CARB funds, future federal green bank funds, and future iBank funds. A ZETBIF program would also complement existing state grant programs by leveraging private dollars together with LCFS proceeds by using comparatively lower amounts of public funds. We estimate that this program will leverage private funds at a 5:1 ratio.

Our proposal meets the staff's proposed principle for speed of implementation (staff priority to be shovel ready). The State Treasurer's Capital Access Program (CalCAP) is willing to operate our proposal if seed funding can be secured as they already operate the above EVCS using CEC funds and a CARB-funded loan-loss reserve [program](#) for new cleaner heavy duty diesel trucks. And as mentioned earlier, our proposal has been well vetted especially with agencies but also with fleets, banks, manufacturers, and non-profits, so CalCAP can quickly implement it.

Our proposal meets the staff proposed principles of job creation and economic development by speeding up pace of change in the ZETB sector—getting people loans allows more fleets to consider purchases earlier.

Key Elements of the Proposed Pilot Program, Similarities with Existing Program Designs

Compared to the existing CEC-funded EVCS loan program at CalCAP, our proposal has some new elements:

- CalCAP would receive multiple funding sources, so the CEC could fund the infrastructure part of the loan-loss reserve program, while other funding sources (described above) would fund the vehicle portion of the loan loss reserve program.
- The program could function as a traditional CalCAP loan loss reserve program but with an innovative financing mechanism added that would allow owners to also finance their purchase based on the value of their LCFS credits earned over the lifetime of the vehicle, and for their

³ <https://ww2.arb.ca.gov/resources/fact-sheets/governor-newsoms-zero-emission-2035-executive-order-n-79-20>

⁴ Speed of implementation. Equity (most impacted individuals and communities). Job Creation. Economic Development

loan to be repaid based on the sales of those credits in the market as well as the value of fuel and maintenance savings.

- The program would be limited to medium and heavy-duty vehicles unlike the CEC funded EVCS which includes light duty.
- The pilot version of the program would be limited to small- and medium-size fleets only.
- The program would also include fuel trucks and hydrogen infrastructure owned by a fleet.

Further Pilot Program Details and Benefits

CalCAP would help identify interested and eligible participating private lending institutions and establish guidelines for the program.⁵ The private bank's loan would be based on the estimated value⁶ of LCFS credits earned over the vehicle "lifetime" and reasonable interest rates set by the lender. A CalCAP ZETBIF program could be piloted for two years with modest initial seed funds to establish a reserve. Participating lenders would provide loans to a mix of small fleets and medium size fleets based in part or in full on the LCFS credit value stream.

We estimate that under a pilot program, demand for the program would likely be around 1200 battery electric trucks/buses and charger loans (assuming both CEC and non-CEC sourced seed money) over two years (e.g., 800 drayage trucks for Project 800 and 400 buses) or similar fuel cell trucks. (The CEC would only fund the charging infrastructure portion.) Based on a 20% loan/loss reserve ratio, the initial budget for this program would be \$26M. The amount of private financing attracted would be \$128 million. Small and medium sized fleet owners would consign their future LCFS credits to either the lending institution or a third party, and their loan would be gradually repaid as LCFS credits are generated and sold, minus a reasonable interest rate. Lenders would base the size of the loan on an independent evaluation of the value of the LCFS credit stream.⁷

Under our proposal, private lending institutions would make loans based on their estimation of the value of LCFS credits earned over the "lifetime" of the vehicle and may include a higher interest rate (e.g., 5-10%). CalCAP would not provide some level of loan "guarantee" to these private lenders based on a minimum LCFS clearing price. Rather, the private lending institutions would take on this role of estimating the value of LCFS, fuel savings and maintenance savings. CalCAP would however, put some of the pilot funds (e.g., 10 to 20%) into a loan loss reserve account (we assume 20% above).

CalCAP and its private lenders already have experience with a variety of fleets including ones with only one truck. However, it seems more likely that medium and large fleets, both private and public would be able to find lenders willing to make these kinds of loans because they are likely to have established credit histories with financial institutions.

We observe that most private lenders are presently unwilling to make loans to commercial fleets based on LCFS value, citing that this is due to the LCFS not having an established floor price, as well as

⁵ CalCAP's lenders typically have loans in the 5-10% range and no more than 20%. Many loans are to one truck fleets.

⁶ The value of LCFS would be estimated by the financial institution and not state government. Lenders may choose to sell the credits in the LCFS market themselves or to work with a third party with greater expertise in the market.

⁷ We recommend a calculation that relies upon an 8-year useful life of the vehicle (rather than 10 or 12 years) and that relies upon 75% of expected LCFS revenues over this time.

potential uncertainty of the program over a loan's horizon, thus making such loans too risky. Further research has shown that lenders generally may perceive making loans for ZEV purchases to be overly risky today, because there is not enough evidence of the vehicles re-sale or "residual" value after the term of the loan. Thus, CalCAP would also have an opportunity, through this program design, to demonstrate how to solve a larger financing problem for the ZEV industry, at least in part.

This pilot would not require either a regulatory or legislative change to the existing LCFS program that is implemented by CARB. This would be a separate, but complementary program implemented by CalCAP.

CalCAP would establish general guidelines and protections for all participating parties in operationalizing the program (e.g., interest rate caps, etc.). Specific conditions would likely need to be developed depending on the type of fleet as well (e.g., government fleet, small business fleet, large corporate fleet). Lending institutions and not state government would need to estimate the value of LCFS as well as electricity and maintenance savings. As a pilot, some of the process may be naturally iterative as the CalCAP also helps private lenders conduct their due diligence and assess risks. Today's existing CalCAP program caps interest rates at 20% and sees interest rates as low as 5%. CalCAP typically directs 10-14% of the funds to the loan loss reserve for its existing diesel truck program.

We appreciate this opportunity to comment on CEC's Recovery and Reinvestment Initiative. Please contact us if you have additional questions.

Sincerely,

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