

August 30th, 2018

Sam Wade
Chief, Transportation Fuels Branch
Industrial Strategies Division
California Air Resources Board
1001 I Street
Sacramento CA, 95814

RE: 2nd 15 Day Package of Proposed Amendments to the Low Carbon Fuel Standard

Dear Mr. Wade,

Thank you for the opportunity to comment on the Second 15-Day Modified Text of the proposed Low Carbon Fuel Standard (LCFS) which was released as part of the ongoing rulemaking¹. The LCFS plays a crucial role as the state works to attain the SB 32 target and set a course for even deeper cuts after 2030. California cannot achieve its climate or air quality goals without significant progress in the transportation sector. It is therefore crucial that the LCFS achieve the fullest extent of its potential to drive down emissions and support advanced clean energy technologies.

The LCFS has a strong track record of success to build upon; it has reduced carbon pollution emissions by more than 38 million tonnes since 2011,² supported over 300 California companies employing more than 20,000 workers, and contributed to over \$2 billion of investment in clean fuel production and distribution infrastructure.³ By displacing highly-polluting petroleum fuels with cleaner alternatives, the LCFS has contributed to California's progress towards healthier air, saving over \$1.8 billion in health care expenditure by reducing the incidence asthma, heart disease, lung cancer and other respiratory diseases.⁴ The LCFS is supported by a broad and diverse coalition of California business, scientific, health and community stakeholders who recognize the unique value it provides.

¹ <https://www.arb.ca.gov/regact/2018/lcfs18/15dayatta2.pdf>. Hereafter referred to as the "current proposal"

² <https://www.arb.ca.gov/fuels/lcfs/lrtqsummaries.htm>

³ http://www.calstart.org/Libraries/Policy_Documents/California_s_Clean_Transportation_Technology_Industry_-_2016.sflb.ashx

⁴ Internal analysis, based on methods presented in:

https://www.edf.org/sites/default/files/content/edf_driving_california_forward.pdf

NextGen **strongly supports the re-adoption of the Low Carbon Fuel Standard through 2030.** With one notable exception, we support the current proposal, which reflects months of analysis, consultation and collaborative work among stakeholders. We are deeply concerned, however, that the proposed infrastructure capacity credits represent an open-ended, inefficient and unnecessary commitment of revenue from the LCFS program, which will ultimately prove counterproductive to the State's climate and clean energy goals. While we recognize that there is insufficient time in the rulemaking calendar to correct these problems without severe disruption to the re-adoption process, we urge the Board to instruct staff to return to this issue at their earliest convenience, to review the early performance of this program and conduct a thorough evaluation of the appropriateness of the levels of support offered by the infrastructure credit provision.

Comments on Proposed Point-of-Purchase Rebates

Board Resolution 18-17 instructed staff to work with stakeholders to develop a method for using LCFS credits from unmetered residential charging to support a state-wide EV rebate program. **NextGen strongly supports the creation of a state-wide point-of-purchase EV rebate program.** We appreciate the efforts of staff, Vice-Chair Berg and stakeholders from utilities and automakers towards developing a workable statewide rebate which will more efficiently leverage LCFS credit value into support for broader EV deployment.

Comments on Possible Statewide Point of Sale Rebates Funded by LCFS Residential Charging Credits

We support the ongoing efforts by EV manufacturers, utilities and other stakeholders to develop a comprehensive, statewide point-of-purchase EV rebate. We feel that selecting an independent third party, subject to oversight by CARB, is the most appropriate structural choice for such a program. We can draw from lessons learned in the oversight of the Clean Vehicle Rebate Program as we design this new LCFS-funded rebate.

We support the proposal to have stakeholders seek approval with CPUC to modify existing rules governing the use of LCFS revenue to allow the creation of a single, statewide program to issue rebates for EVs, funded by value from un-metered residential EV charging credits. We are concerned that the necessary administrative and stakeholder engagement processes to develop and adopt the necessary rules or to amend existing rules will be time-consuming and result in a significant delay before the program becomes operational. We urge CARB to

work with all stakeholder to expedite this process to the greatest possible degree, to ensure that the rebates envisioned by this are made available to prospective vehicle purchasers as quickly as possible.

As utilities transition the operation of EV rebates from their own programs to the state-wide alternative envisioned by these amendments, it is important that CARB and other state agencies exercise their full oversight authority over the the funds which support point-of-purchase rebates and also the funds which utilities retain for their own projects. With multiple funding streams supporting the deployment of EV charging infrastructure, including recent PUC proceedings, Volkswagen settlement funds, GGRF revenue, CEC grants, etc., it is critical that CARB work with other state agencies to ensure that infrastructure funding is spent in an efficient and non-duplicative manner. Helping support EV deployment in disadvantaged communities is especially important, revenue from LCFS credits can help fill critical gaps in other programs. **We urge CARB to focus the LCFS credit value retained by utilities towards projects which support EV deployment in disadvantaged communities, and require transparent accounting of the disposition of those funds.**

Point of Purchase Rebates Should Incentivize Battery Capacity Increase Over Time

§ 95483 (c) (1) (A) (2) establishes a formula for scaling the proposed incentive in relation to battery size. This is intended to provide an incentive for automakers to deploy vehicles with larger, and more capable batteries. We support the intent behind this provision, however we note that threshold level for receiving a full incentive is set at 16 kWh, which is significantly smaller than the batteries deployed in almost every current-generation electric vehicle and even smaller than the battery in some plug-in hybrids. **We suggest that CARB increase the ratio of battery size to incentive amount over time.** We recognize that this schedule was set to harmonize with Federal battery rebate programs and agree that there is value in such harmonization, but feel that maintaining an incentive to increase battery size is a higher priority. Insofar as the Federal incentive may not effectively support larger battery sizes needed to deploy a more robust and capable fleet of electric vehicles, California should choose to adopt a more effective standard.

The Definition of “Battery Capacity” Should Be Clarified to Focus on the Capacity Available to the Vehicle

The definition of “battery capacity” as specified in § 95483 (c) (1) (A) (2) is unclear as to whether it refers to the sum of all battery cell capacity installed within the vehicle, the maximum possible capacity of the installed battery system, or the capacity available for use by the vehicle under its default operational condition. This distinction is important because one tool battery makers employ to maximize the lifespan of batteries is to limit or prevent charging or discharging behavior which would put the battery into its highest and lowest charge states. This puts some fraction of the battery’s nominal capacity off-limits to the vehicle’s charge controller and yields a battery with a smaller functional capacity, but enhanced durability.

We suggest clarifying the definition of “battery capacity” as applied in § 95483 (c) (1) (A) (2) to refer to the effective capacity available to the vehicle, under its default mode of operation. Doing so will ensure that battery manufacturers cannot increase the state subsidy available to them without increasing the effective range of the vehicle in question.

Comments on Proposed Renewable or Smart Charging Incremental Credits

We appreciate the engagement by staff during the development of Smart Charging provisions over this rulemaking process and support the amendments reflected in the current proposal. The current proposal effectively prevents double-counting of renewable energy by prohibiting the same transaction from benefitting from both renewable energy and smart charging incremental credits. As electricity markets evolve and become better able to track the source of electricity on a real-time basis, it may be possible to amend the incremental charging credit provisions to allow simultaneous participation in both renewable and smart charging programs. We look forward to working with CARB and other stakeholders on this issue moving forward.

The smart charging provisions reflected in the current proposal have shifted substantially from the original concept released in March. We recognize the value in aligning the proposed smart charging provision with ongoing work by CAISO and the CPUC to create a standard framework for implementing Time-of-Use (TOU) rates, which offer clear advantages over flat or tiered rates in terms of better aligning utility rates with the real costs, and environmental impacts of electrical generation. We are concerned however, that the proposed system will be extremely complex for consumers who are not aware of how TOU rates function and are not equipped

with the information or technological tools to manage their household and vehicular energy demand. We urge CARB to ensure that utilities or charging providers who enroll customers in the smart charging provision educate their customers and provide tools to ensure that EV owners understand the time-based incentives this provision institutes.

Comments on the Proposed Capacity-Based Infrastructure Credit Pathways

LCFS staff have proposed a pathway to allow ZEV fueling infrastructure to generate LCFS credits based on its operational capacity rather than the quantity of fuel dispensed. This is a significant departure from the model the LCFS has successfully employed to date. Only DC Fast chargers and hydrogen fueling stations would be eligible for these pathways and total permit issuance through these pathways would be limited to 2.5% of the previous quarter's total LCFS deficits. We appreciate staff's willingness to engage in thoughtful, constructive discourse over the last few months. **We remain, however, opposed to the addition of capacity based infrastructure credits to the LCFS.** We feel that this breaks a well established model and that there are more appropriate policy options for supporting infrastructure investments. EV charging and hydrogen fueling station deployment is currently supported by recent CPUC proceedings, the VW settlement, CEC Grant Programs and ongoing investment of cap-and-trade revenue. While we do not believe that those sources are sufficient to meet all state ZEV infrastructure needs, they will satisfy a significant fraction of that need and adding additional revenue through a blunt, un-targeted mechanism like the proposed infrastructure capacity credits is likely to lead to inefficient, duplicative investments.

In addition to our opposition to these credits on a conceptual level, our July comment letter identified two specific concerns with the proposed language: that the proposed cap mechanism would not limit capacity credits to the intended level and that the mechanism for allocating capacity credits will lead to an excessive and inefficient level of funds to each station, which sends counterproductive market signals and establishes a troubling precedent for future infrastructure support programs.

We would like to thank staff for their constant engagement throughout this process. Their commitment to regular discussion and collaborative work on modeling has certainly improved the state of understanding regarding likely effects of these provisions. Of the two key problems we identified above, one has been effectively resolved in the current proposal, while the other remains deeply troubling.

The Revised Cap on Aggregate HRI and FCI Credits Will Effectively Support the Intent of the Program

The First 15-Day Package of amendments introduced the Hydrogen Refueling Infrastructure (HRI) and Fast Charging Infrastructure (FCI) provisions, per the Board's instruction in Resolution 18-17. That proposal included a provision which restricted the acceptance of applications to the program when HRI or FCI credits exceeded 2.5% of total LCFS deficits. As we discussed in our July 5th comment letter, the initial proposal would not achieve the stated goal of limiting credits to the specified level. Staff's revised version in the current proposal, creates an effective and binding cap on total infrastructure credits and provides much greater certainty that infrastructure credit issuance will not exceed the intended cap. We **support adoption of the cap on capacity credits, as described in § 95486.2 (a) (3) (A) and § 95486.2 (b) (3) (A) in the current proposal**, which provides for a firm limit on total credits through this program and is a better reflection of the Board's intent than the previous version.

The Proposed Capacity Credit Pathways Award an Excessive Amount of Credits to Participating Stations, Especially in the Case of HRI

The proposed HRI and FCI pathways, as described in § 95486.2 are intended to support the deployment of fueling infrastructure in advance of anticipated ZEV demand, in support of Executive Order B-48-18. We appreciate staff's effort to design a system which rewards aggressive deployment of refueling and fast charging infrastructure, which will help improve the market's adoption of ZEVs. Unfortunately, the current proposal still goes too far, especially in the case of HRI.

Every dollar which supports possible future reductions through investment in infrastructure would otherwise have supported real, and more timely reductions through purchases of credits resulting from sales of low-carbon fuel under normal LCFS pathways. While we agree with the State's desire to support ZEV infrastructure, there has been an insufficient discussion of what level of support is appropriate to achieve the desired goal. The current program exceeds what current research and modeling indicates is necessary to support the deployment of a robust ZEV fueling infrastructure network. In the case of HRI, it could exceed that level by millions of dollars per station.⁵ That exceedence directly trades off against real emissions reductions from other LCFS credit pathways.

⁵ See out attached credit model.

The FCI provisions in § 95486.2 (b) include a cap on per-station capacity credits, a limited interpretation of maximum station capacity, as well as a more reasonable period under which credits could be issued. While we feel like the FCI provision is very likely to err on the side of over-compensating station developers, these sensible protections limit the potential risk and ensure that by 2030, these stations will have transitioned to normal LCFS credit generation pathways.

The HRI provisions in § 95486.2 (a), however, create a multi-decade commitment that could give project operators revenue from state-backed carbon instruments substantially in excess of total capital and operational costs. This excessive level of support will create a troubling precedent for future infrastructure deployment programs, it mutes incentives for private companies to reduce capital costs and the carbon intensity of their fuels, and it commits California fuel consumers to paying tens of millions of dollars per year for hydrogen stations through the next 20 years.

We strongly feel that the proposed per-station cap on total HRI credits, which was discussed at the August 8 workshop, would provide a sufficient addition to existing state infrastructure incentives to support the deployment of hydrogen capacity which meets the targets set out by Executive Order B-48-18. **We oppose the adoption of the HRI pathways in the current proposal, which lack such a limit**, especially given that the available evidence indicates that such a cap would still result in stations recovering their capital costs in a reasonable time period. We understand, however, that further amendments to address this issue would risk delaying the re-adoption of the LCFS as a whole. If an immediate solution to this problem is impracticable, then we call on CARB to instruct staff to address this problem at the earliest opportunity.

We strongly urge the Board to instruct staff to review the performance of the infrastructure capacity credit provisions as part of the next LCFS rulemaking. This review should consider the evidence from early HRI and FCI applications, consultation with stakeholders and independent experts, and all relevant published research to determine whether the HRI pathways offer an appropriate and efficient level of support to achieve the goals of Executive Order B-48-18, SB 32, and other applicable State energy and emissions targets. If this review concludes that these pathways do not provide an appropriate and efficient level of support, staff should suggest amendments to address any issues identified by the review.

Rationale for the suggested action:

As written, the HRI and FCI pathways would likely yield far more revenue from the sale of HRI and FCI credits than is necessary to shield project developers from financial risk arising from building fueling infrastructure in advance of vehicle deployment. We submitted a HRI and FCI cost and revenue model as part of our June comment letter. We have had several conversations with staff and stakeholders in the hydrogen fueling station business since that time and requested review and comment. We have noted reviewed comments on this rulemaking as well as other publicly available sources and have found no publicly-available evidence that our model makes any significant methodological errors. We had numerous constructive conversations with staff regarding the model development and appreciate their engagement on this subject. We are submitting an updated version of our cost model with this comment, which includes cost of capital and operational costs based on the most recent NREL hydrogen infrastructure modeling, which CEC uses as their main source of evidence when developing their hydrogen infrastructure planning documents. We reviewed the public comment record and could not find any alternative values for capital or operational cost submitted by stakeholders.

The submitted HRI model evaluates capital and operational costs for stations within the proposed program on both a per-station and aggregate bases and considers a high and low growth scenario for hydrogen transportation fuel.⁶ The “Hydrogen Capacity Effect” tab evaluates aggregate HRI credit generation for hydrogen stations through 2025 on a growth trajectory consistent with attaining the 200 station target established by Executive Order B-48-18. The “Hydrogen Station Revenue” tab provides an estimate of cash flow on a per station basis under the same conditions. The aggregate HRI modeling considers the existing fleet of hydrogen fueling stations which are operational, permitted or under construction,⁷ then simulates the deployment of a sufficient number of stations on an approximately linear trajectory to yield approximately 200 stations by the end of 2025. It is worth noting that the proposed HRI provisions will direct around \$50 million in LCFS credit⁸ to these existing stations, even assuming they reach their maximum average utilization, as

⁶ See attached Excel File Capacity_Credit_Estimates_v1.0

⁷ 64 stations are identified by CEC data, however the construction of one has been indefinitely delayed and two others were in early conceptualization stages. These three were excluded, yielding 61 stations with an average capacity of 263 kg/day of hydrogen. Source: CEC Joint Agency Staff Report: Assessment of Time and Cost Needed to Attain 100 Hydrogen Refueling Stations in California, CEC Report number 600-2017-002 and California Fuel Cell Partnership SOSS system.

⁸ All revenue estimates in this comment assume constant \$150 LCFS credit prices, unless otherwise noted. Both CARB’s Illustrative Compliance Scenario calculator and recent research by Cerulogy indicate a flat or slightly tightening LCFS credit market through 2025, which implies this is a conservative estimate.

recommended by NREL and CEC, by 2030.⁹ We feel that providing revenue to stations which are already operational and dispensing their intended level of fuel at commercial rates is an inefficient approach to incentivizing new stations.

When new and existing stations are considered together, the high-growth hydrogen scenario¹⁰ estimates that approximately \$260 million in HRI credits will be disbursed from 2020-2025, after which most stations will have at least 10 more years of eligibility for continued support through this program. Under the lower-growth scenario,¹¹ HRI funding exceeds \$400 million through 2025.

CEC estimates that \$125 million in funding beyond existing state commitments is required to deploy 100 hydrogen stations by 2024.¹² Even assuming no economies of scale apply to stations beyond the initial hundred, the HRI provision projects to at least meet this need and possibly exceed it by as much as 50% through the first six years of the program. The program will continue to provide support through the late 2030's, far exceeding the level of support required as indicated CEC research.

On a per-station basis, the proposed HRI provisions will yield \$3.1 to \$4.4 million in revenue per station through the first six years of eligibility. Based on feedback from staff and stakeholders, the model submitted in July was updated to include capital costs, station operational and maintenance expenses, hydrogen procurement costs and interest on station capital. Even when these costs are considered, stations fully repay their capital cost under the high-growth scenario by year 7 and the low-growth scenario by year 9. In both scenarios, the stations are more than meeting ongoing costs¹³ by the time their capital is paid off. Revenue from state climate policy instruments should be used to support attainment of state climate goals. Providing additional revenue to

⁹ It is recommended that stations be built such that typical utilization does not exceed 75% of nameplate capacity, in order to ensure that stations maintain surge capacity. Since HRI credits are based on nameplate capacity, this means stations will continue to receive HRI credits even if future sales volumes meet their design expectations.

¹⁰ Based on CEC state-wide hydrogen consumption forecasts.

¹¹ Based on hydrogen growth in the 20% target, high-demand, high-ZEV scenario in the CARB Illustrative LCFS Compliance Scenario calculator.

¹² <http://www.energy.ca.gov/2017publications/CEC-600-2017-002/CEC-600-2017-002.pdf>

¹³ Defined as revenue from HRI credits, fuel sales and standard LCFS hydrogen pathway credits being greater than hydrogen procurement costs, O&M costs and interest on debt equal to 100% of capital costs at a 10% interest rate. Hydrogen was assumed to be centrally-produced SMR of natural gas, procurement cost and retail price was taken from CEC's central estimate in <http://www.energy.ca.gov/2015publications/CEC-600-2015-016/CEC-600-2015-016.pdf>, Figure 20. Retail costs were adjusted downward to reflect a more rapid transition to cost parity with gasoline. Using CEC's retail costs without adjustment would lead to a quicker payback on the station and higher long-term profits.

profitable, privately-owned stations after they have fully recovered their capital is an imprudent use of resources, which could otherwise be directed towards attainment of critical state environmental goals.

Excessive HRI credits pose additional risks beyond the LCFS program. Not only is the use of LCFS revenue for fuel-specific infrastructure an abrupt departure from historical LCFS operation, but the level of support is unprecedented, relative to other technology-promoting state subsidy programs for deployment of commercial clean energy products or infrastructure. We are not aware of any other grant or subsidy program which virtually guarantees that State incentives will cover the full cost of capital, much less one that continues to provide support beyond that. The overwhelming majority of similar clean energy programs administered by CARB, CEC and CPUC require developers to retain some exposure to project capital, impose strict limits on rates of return, or often both. The provision of such generous state support under the LCFS case will create a precedent that prospective project developers should expect similar levels of support from other commercial deployment incentives. This could increase costs for deployment of future clean energy technology and make it more challenging for the state to achieve its climate and air quality goals.

We are also concerned that the proposed HRI provisions complicate or reduce the incentive for hydrogen station owners to reduce the carbon intensity of the fuel they dispense. The current provisions impose a fixed cap on the total number of credits available through HRI pathways. Each station is assigned credits based on a formula which includes the average carbon intensity of hydrogen dispensed by that firm. Higher carbon intensity hydrogen reduces the amount of credit each station receives, but accepting this per-station reduction could allow a firm to have more stations accepted while still staying below the 2.5% aggregate cap. While there are a number of market or competitive factors which impact investment decisions, under some feasible scenarios a firm could obtain more profit by delaying investments in cleaner hydrogen until after 2025 than by making them earlier. This disrupts one of the LCFS's most critical elements: a clear and unambiguous incentive for fuel producers to reduce the carbon intensity of their fuel.

Instructing staff to revisit the appropriateness of an un-capped HRI provision will allow for a re-evaluation informed by capital cost data submitted in the first wave of applications for this program. Existing hydrogen stations will also have provided additional data on operational costs and utilization. With the benefit of additional data, staff can confirm that the existing provisions set an appropriate level of support or make adjustments. **It is important that CARB signal its intent to revisit this matter so prospective developers can account for this review in their planning processes.**

Comments on Credit Generation at Refineries

Staff have proposed a number of provisions which allow refineries to reduce on-site emissions resulting from the production of transportation fuels, subject to certain limits and conditions. We agree that such projects deserve recognition and LCFS credits for the real, quantifiable, additional and verifiable emissions reductions they produce. We support the use of facility-level analysis rather than process-level, in order to ensure that improvements which receive credits do not increase emissions at other parts of the refinery, outside the analyzed system boundaries in the LCFS credit pathway. We are concerned that the current proposal may allow refineries to claim credit for upgrades which were required by law or regulation other than the LCFS. We urge CARB to interpret the term “baseline” in § 95489 (e) (1) (D) (5) to include projects, retrofits or upgrades required for compliance with appropriate law or regulation in the refinery’s jurisdiction.

Comments on the Proposed Carbon Capture and Sequestration Protocol

Carbon Capture and Sequestration (CCS) is a rapidly-developing technology that has demonstrated significant potential, in a limited number of pilot projects, for reducing GHG emissions. Almost every global emissions scenario which prevents catastrophic levels of climate change includes significant deployment of CCS. CARB once again finds itself as the global leader in climate policy by crafting provisions under which the emissions reductions from CCS are recognized and assigned financial value by a carbon market. It is absolutely critical that CARB strike the right balance between encouraging the deployment of CCS projects and ensuring that they provide real, permanent sequestration. With only a few exceptions, we support the current proposals on CCS and commend staff for producing a framework which should support the deployment and regulation of CCS projects within the California fuels market.

For the most part, we echo the comments the Clean Air Task Force and the Natural Resources Defense Council and others are submitting in this comment period, regarding several technical issues which were largely addressed in the current proposal.

Specifically, **we agree that the blanket application of a 100 year monitoring, with the current prescribed monitoring methods is unscientific, cost-inefficient, and inadequately protective against leakage risk.** The types of geological sequestration of pressurized CO₂ covered by this provision typically entail active injection

periods well in excess of a decade. Given that no projects have even been conceptualized, much less constructed, at this point, post-injection monitoring will likely not begin for at least 20 years. During that time, we strongly expect technological advances in fields relevant to CCS monitoring. Future measurement techniques are likely to be more accurate and less costly than those specified in the current proposal. CARB should not tie project developers to requirements that they utilize analytical methods which will almost certainly be obsolete by the time they become relevant in the case of projects being credited under the LCFS.

Given the lack of real-world experience with CCS, we recognize that the first generation of commercial scale projects will entail real, though probably modest risk that the stored carbon could escape. We commend staff for the thought and effort they have made to design a program which can manage this risk. Given the critical need to deploy CCS at commercial scales, it may be prudent for CARB to temporarily adopt a view of risk that slightly diverges from precedent, for the first few projects which utilize this pathway. Because of the immense uncertainty regarding first-generation commercial-scale CCS projects, when risk is accurately priced into development costs, projects may become too expensive for any developer to accept, even after considering the value of LCFS credits. CARB may wish to partially limit reversion risk or liability in case of technical failure, for developers of the first small handful of projects. The critical importance CCS could play in global GHG reduction efforts requires rapid deployment of commercial-scale pilot projects, to begin to develop the corpus of real-world experience necessary to inform decision-making about the role of CCS in climate policy going forward. In essence, CARB may wish to consider a slightly more permissive approach to risk-management the first handful of pilot projects which can help inform the development of more robust and empirically-supported future CCS policy. While this means California will accept the risk that a leak at a CCS project may not be fully compensated for by the developer, the potential payback from developing CCS technology to commercial viability is so great that a strictly limited exception may be warranted in this case.

A Strong LCFS Positions California for Success

CARB has an opportunity to build upon many years of success by extending a strong LCFS program through 2030 and building upon the foundation it has laid. California has an opportunity to continue its leadership in climate, clean energy and transportation policy for years to come.

We again thank CARB and the LCFS Program staff for the opportunity to comment on this critical rulemaking and for their effort, thoughtfulness, transparency and receptiveness to feedback through this process. Their work has produced a strong and set of proposals for the LCFS program and with a few amendments, as discussed in this letter, we are confident that the LCFS can achieve its full potential to deliver cleaner air, innovative technology and sustainable transportation. We look forward to continued engagement on this matter as it continues through the rulemaking process.

Thank you,

Colin Murphy Ph.D.
Transportation Policy Manager
NextGen California