State of California CALIFORNIA AIR RESOURCES BOARD

AMENDMENTS TO THE LOW CARBON FUEL STANDARD REGULATION

FINAL STATEMENT OF REASONS

APRIL 2020

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State of California AIR RESOURCES BOARD

Final Statement of Reasons for Rulemaking, Including Summary of Comments and Agency Response

PUBLIC HEARING TO CONSIDER THE PROPOSED AMENDMENTS TO THE LOW
CARBON FUEL STANDARD REGULATION

Public Hearing Dates: November 21, 2019

Agenda Item No.: 19-10-4

I. GENERAL

A. Action Taken in this Rulemaking

The Staff Report: Initial Statement of Reasons for Rulemaking (staff report), entitled "Public Hearing to Consider Proposed Amendments to the Low Carbon Fuel Standard Regulation," released October 1, 2019, is incorporated by reference herein. The staff report contained a description of the rationale for the proposed amendments. On October 1, 2019, all references relied upon and identified in the staff report were made available to the public.

In this rulemaking, the California Air Resources Board (Board or CARB) is adopting amendments the Low Carbon Fuel Standard (LCFS) regulation. Since the Board's original adoption of the LCFS in 2009, the program has increased the availability and use of low carbon fuels throughout California. Prior to the LCFS, the only alternative fuels for transportation with any significant market share were fossil natural gas and ethanol. Since the LCFS began, there has been significant growth in volumes of alternative fuels in California. Renewable diesel use has increased from less than 2 million gallons to 384 million gallons per year, or 19,100 percent. Biodiesel use has similarly grown from 12 million to 184 million gallons, or 1,433 percent. Renewable natural gas use in vehicles has increased from 2 million to 120 million diesel gallons equivalent, accounting for the majority of natural gas used as a transportation fuel in the State.

In response to Senate Bill (SB) 32 (Pavley, 2016), which codified a statewide GHG target of at least 40 percent below 1990 levels by 2030 and the technologically feasible and cost-effective suite of policies to achieve the SB 32 target in the 2017 Scoping Plan Update, the Board adopted a broad set of LCFS amendments in 2018 that strengthened and broadened the ambition of the program. The most significant of these amendments was increasing the LCFS targets, which are now set to achieve a 20 percent reduction in fuel carbon intensity by 2030. To support additional GHG reductions, and result in reductions in criteria emissions and toxics pollutants, the adopted amendments recognize eligibility for new fuel and vehicle applications, such as alternative jet fuel, to generate credits under the program. The adopted amendments also included a rigorous protocol for approving carbon capture and sequestration projects and

established a framework for an independent third-party verification and verifier accreditation program for ensuring the accuracy of LCFS data reported.

While adopting the 2018 amendments with Resolution 18-34, the Board directed the Executive Officer to monitor the cost containment provisions of the LCFS program including the Credit Clearance Market (CCM), and to propose technical adjustments through future rulemaking to strengthen the cost containment provisions, if needed.

The Board also directed the Executive Officer to work with stakeholders to establish an equity-based framework for the possible uses of base credit value from residential charging, consistent with legislative priorities.

The purpose of this rulemaking is to strengthen the current cost containment mechanism by establishing a hard price cap on credit transactions and allowing a limited amount of credit borrowing during the unlikely event there are years in which there are insufficient credits to meet the annual compliance obligation for all entities.

Consistent with Board direction, the proposed rulemaking also ensures a significant portion of LCFS revenue from base residential charging is directed to benefit disadvantaged and low-income communities, thereby confirming that this aspect of the LCFS will drive benefits to these communities from the increasing adoption of zero emission vehicles in California.

The amendments to the Regulations were initiated with the publication of a notice in the California Notice Register on October 4, 2019, and notice of public hearing scheduled for November 21, 2019. The staff report, full text of the proposed regulatory language, and other supporting documentation were made available for public review on October 1, 2019, and for comment, starting on October 4, 2019, with additional oral and written comments submitted at the November 21, 2019, Board hearing. The text of the originally proposed regulation was included in Appendix A of the staff report. The regulatory amendments as proposed would:

- Establish a maximum tradable price for LCFS credits: A proposed amendment would limit the price of LCFS credit transfers between parties to the previously established Credit Clearance Market price of \$200 in 2016 dollars, adjusted for inflation.
- Supply additional credits to the CCM if needed: In the unlikely event, if
 insufficient credits are pledged in the CCM to clear the annual obligation of deficit
 generating entities, CARB could advance credits from future residential base
 residential electric vehicle (EV) charging and distribute these credits to large
 utilities for sale in the CCM.
- Require Compliance Plans for deficit generators participating in two or more consecutive CCMs: Regulated entities that participate in the CCM for two consecutive years would be required to submit a Compliance Plan to CARB

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¹ California Air Resources Board. (2019). *Notice of Public Hearing to Consider Proposed Amendments to the Low Carbon Fuel Standard Regulation.* Available online at: https://ww3.arb.ca.gov/regact/2019/lcfs2019/notice.pdf

detailing their plans on how they intend to meet their LCFS annual compliance obligations in future years.

- Remove buyer liability for entities purchasing credits in the CCM: Buyers of credits in the CCM would not be required to pay back these credits if they are later determined to be invalid.
- Use revenues from holdback credits to support GHG and criteria pollutant reductions in disadvantaged communities: Utilities receiving base credits for residential EV charging will be required to direct a substantial portion of the revenue from those credits to benefit disadvantaged and low-income communities and to provide increased access to electric transportation to lowincome individuals.
- Clarify how base electricity credits will be reallocated from service areas of
 utilities that do not receive such credits: Credits generated in the service
 area of utilities that are ineligible to receive base credits for residential EV
 charging would be issued to large utilities. Large utilities receiving such credits
 would be required to direct all reallocated base credit revenue to the Clean Fuel
 Reward (CFR) program. The CFR Program consolidates the value of existing
 credits provided to individual utilities for residential charging into a singular
 statewide program to support further transportation electrification.

At the November 21, 2019, public hearing, the Board considered the proposed amendments to the LCFS regulations. The Board, through Resolution 19-27, approved the amendments for adoption, and directed the Executive Officer to determine whether additional conforming modifications to the regulation would be appropriate, and if so, propose and finalize such modifications. Upon a determination that additional conforming modifications would be appropriate, the Executive Officer was authorized to make the modified regulatory language available for public comment for at least 15 days, with any additional supporting documents and information, to consider written comments submitted during that public review period, and take final action to adopt the regulation after addressing all appropriate conforming modifications.

After the November 21, 2019, public hearing, CARB staff proposed modifications to the originally proposed regulation, which were released for public comment on February 3, 2020. This Final Statement of Reasons (FSOR) updates the Staff Report and contains a summary of the comments received during the formal rulemaking process by CARB on the proposed amendments or the process by which they were adopted, and CARB's responses to those comments.

B. Mandates and Fiscal Impacts to Local Governments and School Districts

The Board has determined that this regulatory action will not result in a mandate to any local agency or school district the costs of which are reimbursable by the state pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code.

C. Consideration of Alternatives to the Proposed Amendments

Staff is required to consider alternatives to the proposed amendments for the Low Carbon Fuel Standard Regulation. For the reasons set forth in the Staff Report, in staff's comments and responses at the hearing, and in this FSOR, the Board determined that no alternative considered by the agency would be more effective in carrying out the purpose for which the regulatory action was proposed, or would be as effective and less burdensome to affected private persons, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law than the action taken by the Board.

The Executive Officer analyzed several alternatives to the proposed regulation. No alternative proposed was found to be less burdensome and equally effective in achieving the purposes of the regulation in a manner than ensures full compliance with the authorizing law. The Board has not identified any reasonable alternatives that would lessen any adverse impact on small business. For a more detailed description of the alternatives, please see Chapter IX of the ISOR.

II. MODIFICATIONS MADE TO THE ORIGINAL PROPOSAL

A. Modifications Approved at the Board Hearing and Provided for in the 15-Day Comment Periods

Pursuant to Board direction provided at the November 21, 2019 meeting, CARB released a Notice of Public Availability of Modified Text and Availability of Additional Documents and Information (15-Day Notices) on February 3, 2020, which placed documents into the regulatory record and presented additional modifications to the regulatory text after consultation with stakeholders.²

B. Non-Substantial Modifications to the Regulation and Documents

Subsequent to the 15-day public comment period mentioned above, staff identified the following additional non-substantive changes to the regulation:

- The formula to determine the maximum credit price was moved from section 95485(c)(4)(D) to section 95487(a)(2)(D). This change will strengthen internal organizational clarity that the maximum price applies to all credit transactions in the LCFS. Section 95485(c)(4)(D) now refers to the price calculation in section 95487(a)(2)(D).
- Sections 95485(c)(3)(A) and 95485(c)(3)(C)1 were modified to refer to the revised section 95487(a)(2)(D) which contains the formula by which the maximum price of LCFS credits is determined.
- Section 95487(a)(2)(D)3, which was moved from section 95485(c)(4)(D) as explained in the first bullet above, and Table 12 in section 95491 were both modified

² California Air Resources Board. (2020). *Notice of Public Availability of Modified Text and Availability of Additional Documents*. Posted February 3, 2020. Available online at: https://ww2.arb.ca.gov/rulemaking/2019/lcfs2019.

to clarify the date (the first Monday in April) when the call for pledged credits in the CCM and the maximum price of LCFS credits will be published every year pursuant section 95485(c)(3)(A). This modification will provide greater clarity to stakeholders. This change is not-substantive, simply reflecting consistency with section 95485(c)(3)(A).

- In section 95483(c)(1)(A)2., removed underline of the text "%" that was incorrectly included.
- In section 95485(c)(4)(B)2., removed strikeout of the semicolon at the end of the paragraph that was incorrectly included.

The above described modifications constitute non-substantial changes to the regulatory text because they more accurately and clearly reflect the reference relationships between provisions, but do not materially alter the requirements or conditions of the proposed rulemaking action.

III. DOCUMENTS INCORPORATED BY REFERENCE

The regulation adopted by the Executive Officer incorporates by reference the following documents:

California Air Resources Board. (2018). Low-Income Barriers Study, Part B:
 Overcoming Barriers to Clean Transportation Access for Low-Income Residents.
 Retrieved from:
 https://ww3.arb.ca.gov/msprog/transoptions/sb350 final guidance document 0221
 18.pdf. Incorporated by reference in section 95483(c)(1)(A)6.b.

IV. SUMMARY OF COMMENTS MADE DURING THE 45-DAY COMMENT PERIOD AND AGENCY RESPONSES

Chapter IV of this FSOR contains all comments submitted during the 45-day comment period and the November 21, 2019, Board Hearing that were directed at the proposed amendments or to the procedures followed by CARB in proposing the amendments, together with CARB's responses. The 45-day comment period commenced on October 4, 2019, and ended on November 18, 2019, with additional comments on the proposed amendments submitted at the November 21, 2019, Board Hearing.

CARB received 16 comment letters during the 45-day comment period and one comment letter during the Board Hearing. In addition, 12 stakeholders gave oral testimony at the November 21, 2019, Board Hearing. Each comment letter and the transcript of the testimony are responded to in this FSOR. Commenters included representatives from the electricity and renewable natural gas sector, refining sectors, health and environmental sectors, finance sector, local municipalities, and others. To facilitate the use of this document, comments are categorized into sections and are grouped by responses wherever possible.

Table IV-2 below lists the commenters that submitted oral and written comments on the proposed amendments during the 45-day comment period and at the November 21,

2019, Board Hearing, identifies the date and form of their comments, and shows the abbreviation assigned to each.

The individually submitted comment letters for the 45-day and 15-day comment periods are available (in Appendix A to the FSOR) here: https://ww2.arb.ca.gov/rulemaking/2019/lcfs2019

Note that some comments were scanned or otherwise electronically transferred, so they may include minor typographical errors or formatting that is not consistent with the originally submitted comments. However, all content reflects the submitted comments. All originally submitted comments are available here:

https://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=lcfs2019. The transcript of verbal testimony presented during the first Board Hearing is available here: https://ww3.arb.ca.gov/board/mt/2019/mt112119.pdf.

A. List of Commenters

The comment letters were coded by the order and the comment period in which they were received and by the name of the organization or individual commenting. For instance, OP_WSPA1_2 is the second comment received during the 45-day comment period, which is a comment sent by the Western States Petroleum Association. Table IV-1 lists the comment letter codes based on the comment period.

Table IV-1.	Comment	Letter	Codes

Comment Code	Comment Period Received
OP, for original proposal	Comments received during the 45-day comment period of the original proposal, October 4 – November 18, 2019
B, for Board hearing written comments	Comments received as written materials during the Board Hearing, November 21, 2019
T, for testimony at the Board Hearing	Comments received as oral testimony at the Board hearing, November 21, 2019
FF, for fifteen-day changes (see Chapter V)	Comments received during the 15-day comment period, February 3 – February 18, 2019

Written comments were received during the 45-day comment period in response to the November 21, 2019, public hearing notice, and written and oral comments were presented at the Board Hearing. Listed below are the organizations and individuals that provided comments during the 45-day comment period:

Table IV-2. List of Commenters during the 45-Day Comment Period

Comment Letter Code	Commenter
OP MARTIN1 1	Michael Martin Sr., Martin Bros. & Sons Transportation
OF_INIARTINT_T	45-Day: Oct 22, 2019

	-
OP_WSPA1_2	Catherine Reheis-Boyd, Western States Petroleum Association
	45-Day: November 11, 2019
OP_USABIOEN1_3	Paul Oesterreich, USA BioEnergy LLC.
	45-Day: November 12, 2019
	Caelin MacIntosh, AJW, Inc.
OP_AJW1_4	45-Day: November 14, 2019
OP_CALETC1_5	Eileen Tutt, CalETC
	45-Day: November 15, 2019
OP_RNGC1_6	Nina Kapoor, Coalition for Renewable Natural Gas
	45-Day: November 15, 2019
OP_UCSNRDC1_7	Jeremy Martin, Union of Concerned Scientists and National Resources Defense Council
	45-Day: November 16, 2019
OD 0054 0	Jared Lindsey, Southern California Edison
OP_SCE1_8	45-Day: November 18, 2019
OP_NCPA1_9	Emily Lemei, Northern California Power Agency
	45-Day: November 18, 2019
OP_EVGO1_10	Sara Rafalson, EVGo
	45-Day: November 18, 2019
OP_PGE1_11	Fariya Ali, PG&E
	45-Day: November 18, 2019
OP_CHARGEPOINT1_1	Alexandra Leumer, ChargePoint
2	45-Day: November 18, 2019
00 0000000	Janice Tran, Generate Capital
OP_GENCAP1_13	45-Day: November 18, 2019
	Zach Franklin, GRID Alternatives
OP_GRID1_14	45-Day: November 18, 2019
	Mandip Samra, Pasadena Water and Power
OP_PASADENA1_15	45-Day: November 18, 2019
OD OMILAA 40	Frank Harris, California Municipal Utilities Association
OP_CMUA1_16	45-Day: November 18, 2019
-	

B_NESTE1_1	Dayne Delahoussaye, NESTE
D_NEGIEI_I	45-Day: November 21, 2019
T_WSPA1_1	Catherine Reheis-Boyd, Western States Petroleum Association
	45-Day: November 21, 2019
T_NESTE1_2	Dayne Delahoussaye, NESTE
I_NLSIEI_Z	45-Day: November 21, 2019
T_AJW1_3	Chris Hessler, AJW, Inc.
1_A3VV1_3	45-Day: November 21, 2019
T PASADENA1 4	Badia Harrell, Pasadena Water and Power
I_FASADLNAI_4	45-Day: November 21, 2019
T PNCC1 5	Nina Kapoor, Coalition for Renewable Natural Gas
T_RNGC1_5	45-Day: November 21, 2019
T GENCAP1 6	John Dannan, Generate Capital
I_GLNCAFI_0	45-Day: November 21, 2019
Γ GRID1 7	Zach Franklin, GRID Alternatives
I_GRIDI_I	45-Day: November 21, 2019
T CMUA1 9	Frank Harris, California Municipal Utilities Association
T_CMUA1_8	45-Day: November 21, 2019
T_CALETC1_9	Eileen Tutt, CalETC
I_OALETOI_9	45-Day: November 21, 2019
T ALA1 10	Will Barrett, American Lung Association
1_ALA1_10	45-Day: November 21, 2019
T_CCA1_11	Bill Magavern, Coalition for Clean Air
1_00/1_11	45-Day: November 21, 2019
T_SHELL1_12	Michael Carr, Shell Inc.
I_OHLLLI_IZ	45-Day: November 21, 2019

B. Cost Containment

B-1. Multiple Comments: General support for the proposed amendments related to the cost containment mechanism

Comment: AJW is writing to express support for the California Air Resources Board's (CARB) proposed amendments to the Low Carbon Fuel Standard's (LCFS) cost

containment features. The cost containment mechanism (CCM) is an important provision of the LCFS. The proposed modifications not only provide further stability to the program in the event of a credit shortfall, but will also improve market confidence to invest in, and deploy low carbon fuels before a shortfall arises. Complete explanation of the importance of the CCM to the LCFS can be found in AJW's comment letter on April 22, 2019.

The CCM structure, proposed by CARB staff on April 5 and refined on July 31 is an appropriate solution, and will withstand the two main concerns AJW has heard from other stakeholders: (1) credit sources beyond nonmetered residential electricity should be utilized and (2) ten million credits may still prove to be short of what the market needs.

In response to these concerns: First, utilizing non-metered residential electric credits is a stable source of long-term credits as opposed to other credit sources, which can fluctuate and undergo market transitions. As CARB staff stated in the April 5 workshop, "although the specific utility may change, we know there will always be a utility providing that power." This is a guaranteed credit source that other credits cannot claim. CARB has the data to predict advance electricity credits, whereas other credit sources are less consistent and predictable. This stability is an important tenet of CCM design.

In addition, the proposal will protect the environmental integrity of the LCFS program. By utilizing EV credits, every credit used for compliance with the LCFS represents a real ton of reduction below the standard and reflects actual decarbonization activities. This approach neither artificially creates credits, nor "borrows" reductions from anticipated future GHG reduction activities. Consequently, the proposed approach is entirely consistent with the established levels and timing of emission reductions sought by the LCFS carbon intensity targets.

To address other stakeholders' second concern: In the event that the ten million credits supplied from EV charging proves to be insufficient to meet sustained CCM demand, CARB will have ample time to adjust accordingly. AJW notes CARB's view that a sustained credit shortfall is unlikely. If future CCM adjustments are needed, the ten million credits provides CARB a sufficient runway during which it can adjust the mechanism based on practical experience.

Providers of low carbon fuels have also supported the proposal by CARB staff, as stated in comment letters from logen, Renewable Fuels Association, World Energy, and others in response to CARB's April 5th LCFS Workshop. This support demonstrates that CARB's proposal will have the intended market impact for low carbon fuel suppliers.

AJW supports CARB's work to improve the LCFS and ensure its long-term viability. We encourage CARB Board Members to adopt and implement the proposed regulatory modification. Doing so will accelerate technological innovations and investments in fuel decarbonization options, increase LCFS credit availability, and secure market stability for years to come. **(OP_AJW1_4-1)**

Comment: CalETC also supports the other reforms in the proposed regulation order that we believe improve the credit clearance market. **(OP CALETC1 5-7)**

Comment: The Coalition for Renewable Natural Gas (RNG Coalition) offers this letter in continued strong support of the California Air Resources Board (CARB) Staff's concept for additional credit price containment within the Low Carbon Fuel Standard (LCFS). The LCFS Regulation Amendments (Proposed Rule), dated October 1, 2019, is a useful addition to an already successful LCFS program.

We Support Appropriate Price Ceilings and Floors in Credit Markets to Increase Investor Certainty

The RNG Coalition supports the creation of credit-price-containment mechanisms in tradeable environmental credit markets—both generally and as outlined specifically by the Proposed Rule for the LCFS. Such features can increase investor certainty in credit markets and provide consumer protection.

Any such cost containment mechanisms should be designed so that operating low carbon fuel projects have ample opportunity to monetize the credits—which they've generated from proven emission reductions—prior to the availability of additional flexible compliance options, such as forward crediting of future greenhouse gas reduction from electric vehicles. We believe the existing Credit Clearance Market and the Proposed Rule will fit well together in this regard.

The Price Ceiling Level and Mechanics are Appropriate

Specific to price ceilings, we believe they should be set at a level that can reasonably expect to draw significant new supply of low carbon fuels into the market. The existing maximum price in the LCFS's credit clearance market satisfies this test for RNG projects—especially assuming some complementary revenue from the Federal Renewable Fuels Standard.

Any firm ceiling price must also remain well above the upper bounds of a credible assessment of the long-run social cost of carbon.² Tying the ceiling price to a strong upper bound estimate of the social cost of carbon ensures that investments that cost-effectively help address the potentially catastrophic environmental damages associated with climate change are properly valued and incented.

The Proposed Rule Encourages Investment in RNG

Firming the ceiling price in the Proposed Rule allows for easy calculation of the maximum revenue for developers of new projects and sets expectations for all counterparties engaged in credit generation and sales. Given that the cap is set at a level that is sufficient for many projects to work financially, having such a cap will actually help financial products develop around LCFS because one leg of uncertainty has been removed. Development of financial products will increase "financeability" of RNG projects, in turn leading to more projects being built.

¹ The Coalition for Renewable Natural Gas is a California-based nonprofit organization representing and providing public policy advocacy and education for the Renewable Natural Gas (RNG) industry. We advocate for the sustainable development, deployment and utilization of RNG, so that present and future generations have access to domestic, renewable, clean fuel and energy in California and across North America.

² The LCFS ceiling price of \$200/credit (in 2016 dollars) meets this test. **(OP_RNGC1_6-1)**

Comment: We support the proposed amendments, which will strengthen the cost containment provisions of the LCFS. **(OP_UCSNRDC1_7-1)**

Comment: NCPA supports enacting new cost containment mechanisms. **(OP NCPA1 9-2)**

Comment: Our firm is writing to express our support for the Cost Containment Mechanism in the Low Carbon Fuel Standard ("LCFS") program that is currently being proposed.

On April 5, 2019, and July 31, 2019, California Air Resource Board (CARB) staff presented concepts relating to a maximum credit price ("Price Cap") which limits all credit transactions between entities in the LCFS program to no more than the CCM maximum price (\$200 in 2016 dollars indexed to inflation). Generate supports this concept for several reasons.

- Provides Stability: The Price Cap will eliminate the possibility of short-term
 price spikes that might lead to higher than necessary costs for regulated parties
 and consumers. The proposed measure therefore will act to stabilize the LCFS
 program and protects the interests of regulated parties and consumers.
- Incentivizes Increased Clean Fuel Production: The Price Cap is set at a level that can reasonably be expected to attract new supply into the market to serve California's increasing targets for greenhouse gas reduction from transportation fuel.
- Removes Uncertainty and Clarifies Market Expectations: Given that the Price
 Cap is set at a level that is sufficient to make many projects financially viable,
 having a price ceiling will help in the creation of financial products and business
 models that can be replicated across multiple projects, thus accelerating the
 development of projects and supply of credits. (OP_GENCAP1_13-1)

Comment: CMUA supports CARB's efforts to firm up the structure of the LCFS and provide the market the regulatory certainty needed to promote investment in low carbon transportation technologies. As such, the Maximum Price and the Borrowed Credit proposals not only strengthen LCFS cost containment features, but also facilitate the investment needed for California to achieve its clean transportation and GHG reduction goals. **(OP_CMUA1_16-2)**

Comment: This really is about certainty. It's about making sure that companies understand the rules of the road, even when the program's under stress. So I applaud the staff for having the foresight to set some additional rules out about how this program will operate in the event that it comes under stress in the event that there's not enough credits. I think it's a really important signal so that investors understand where their risks are and how the program will work in the unlikely event that it does come stress.

It allows the major oil companies to make longer range plans. The further out they go, the less certainty they have about how the market's going to behave. And this gives them confidence so that those investments can be made. **(T_AJW1_3-1)**

Comment: We strongly support staff's concept for additional credit price containment within the LCFS, and believe that the proposed rule is a useful addition to an already successful LCFS program. **(T_RNGC1_5-1)**

Comment: Our members support the goals of the LCFS and we support the cost-containment elements that have been proposed here. We see them as valuable elements to help assure that the LCFS continues to provide a stable mechanism to promote clean transportation in the State of California; and as has been referenced already in public comment, operates as an example for others who would want to implement a similar program elsewhere. **(T_CMUA1_8-1)**

Comment: Chris's Comments at AJW about the imperative for certainty and predictability in the program. Even if the changes are small, they are important towards that aim. **(T_SHELL1_12-1)**

Comment: As a party who both generates credits and incurs deficits, we have a broader view and can confidently assert that the CCM modifications are needed, as the majority of commenters have noted. **(T_SHELL1_12-3)**

Agency Response: Staff appreciates the commenters' support for the proposed amendments to strengthen the cost containment mechanisms of the LCFS.

Comment OP_RNGC1_6-1 suggests the inclusion of a price floor in the LCFS program. Staff addresses this comment and similar ones in B-13, below.

B-2. Multiple comments: Support for removing the requirement to publish number of credits required by Credit Clearance Market participants

Comment: WSPA appreciates CARB's deletion of the language in § 95485(c)(4)(B) that would have required the publication of the LCFS credit positions of those parties participating in the CCM. WSPA sees this requirement as anti-competitive and supports its deletion. **(OP_WSPA1_2-2)**

Agency Response: Staff appreciates the commenters' support for the proposed amendments for removing the requirement to publish number of credits required by Credit Clearance Market participants.

B-3. Support for removing buyer liability for entities purchasing credits sold in the Credit Clearance Market

Comment: We also appreciate the addition of language in § 95495(b)(5)(d) to protect those required to purchase credits in the CCM. Purchasers who are required to purchase pledged credits should not be held liable for replacing CCM credits that are later declared invalid. **(OP_WSPA1_2-3)**

Agency Response: Staff appreciates the commenters' support for the proposed amendments for removing buyer liability for entities purchasing credits in the CCM.

B-4. Multiple Comments: Support for limiting advanced credit issuance only to large utilities

Comment: CalETC supports the proposed regulation order's provisions where the borrowed credits come only from the big five utilities and can be used by them for the Clean Fuel Reward and holdback programs as prescribed.²

² The borrowed credits would come from both the Clean Fuel Reward and holdback portions of base residential credits that are assigned to utilities. **(OP_CALETC1_5-6)**

Comment: NCPA supports the Proposed Regulation Order's provisions to supply additional "borrowed" credits to Large IOUs and POUs if there are insufficient credits pledged in the Credit Clearance Market to clear the annual obligation of deficit generating entities. It is appropriate to direct the borrowed credits to only the large EDUs, who are able to easily absorb and manage the additional credits, and to allocate the proceeds from the borrowed credits to both the CFR program and to other holdback programs. **(OP_NCPA1_9-12)**

Agency Response: Staff appreciates the commenters' support for the proposed amendments for limiting the issuance of advanced credits to only large utilities.

B-5. Multiple Comments: Support for extending maximum credit price to apply to all LCFS credit transfers

Comment: CalETC supports the proposed regulation order's provisions to limit all credit transactions between entities to no more than the credit clearance market's maximum price (\$200 in 2016 \$ indexed for inflation). **(OP_CALETC1_5-11)**

Comment: CMUA Supports a Price Cap

CMUA supports the current Credit Clearance Market ("CCM") component of the LCFS.¹ The Proposed Regulation, as a means to supplement the current CCM, establishes an LCFS credit maximum price ("price cap") as a cost containment concept.² A price cap can provide the regulatory structure to promote stakeholder confidence in the ongoing successful operation of the LCFS program. By implementing a price cap, CARB can demonstrate its commitment to facilitate the continued success of the LCFS. Additionally, this can provide technology developers, low carbon-intensity transportation fuel suppliers, regulated parties and other stakeholders confidence that the LCFS will continue to promote low carbon transportation alternatives. A price cap supports the long-term sustainability of the LCFS by providing consumer protection while maintaining the economic incentive to invest in low carbon transportation technology. Additionally, by supporting the long-term sustainability of the regulation, CARB is able to send a signal to policy-makers in other regions that programs developed in California can be a successful means of moving toward a low carbon transportation future.

Comment: Specifically we believe that a hard price cap stabilizes the program and protects the interests of regulated parties and consumers by eliminating the possibility of short-term price spikes in the program. We believe that the cap is set at a level that can reasonably expect to draw a new supply into the market, and that the price cap grounds expectations for developers of new projects and sets a ceiling price for all counterparties engaged in credit generation and sales.

¹ See 17 Cal. Code Regulation ("CCR") § 95485(c).

² § 95485(c)(3)(D). **(OP_CMUA1_16-4)**

Given the cap is set at a level that is sufficient for many projects to work financially, having such a cap will actually help the financial products develop around the LCFS due to reduced uncertainty. (T_RNGC1_5-2)

Comment: I am here to support the cost-containment measures, really echoing what Nina just said, the same reasons. I'll maybe go into the second derivative of the reasons, price stability. We do believe this will eliminate price spikes.

Why is this really important? So take a step back. I am an investor. I look at projects whose business models and financials and projections are based on the LCFS program every day. Price stability is key to bringing lenders, real project finance lenders into the space - Wall Street. Okay? It's not generally playing in the space right now as a lender, as a bank. Most projects are alternate banking markets, which are not as efficient, or equity. The project we have invested in are mostly equity.

We believe the price incentivizes new production of clean fuels, as Nina said. And we also believe it removes uncertainty and really clarifies market expectations. And this is less of a market thing. This is more about how does a renewables project become a project? It starts with developers. And they have expectations. And they need to know which project makes sense and which one should they go and develop. And then they have to find a finance company to go and pay for it.

And having this cap really helps make that piece of the market more efficient in our view. (T_GENCAP1_6-1)

Comment: And John's comments at Generate Capital about the importance of price and by-proxy program stability for the capital markets. **(T_SHELL1_12-2)**

Agency Response: Staff appreciates the commenters' support for the proposed amendments for extending the LCFS maximum prices to all credit sales and transfers.

B-6. Multiple Comments: Support for advanced credits

Comment: CalETC supports the proposed regulation order's provisions for borrowed credits from electric utilities to ensure there are enough credits to meet all obligations in each year's credit clearance market. These credits would be repaid in a clearly defined schedule by reducing future credit issuance to electric utilities from base residential electricity credits and the number of credits that may be borrowed would be limited to a maximum amount of 10 million credits, cumulatively. **(OP_CALETC1_5-12)**

Comment: The proposal to allow the California Air Resources Board (CARB) to issue advance credits in the event of a shortfall at the credit clearance market is a sensible alternative to allowing obligated parties to bank deficits. Allowing all obligated parties to fully satisfy their obligations each year should resolve any concerns that obligated parties might be unwilling to carry deficits on their books, which could render the cost containment mechanism less than fully effective. It was not clear that the cost containment provision was inadequate in its current form but removing any uncertainty on this point will strengthen the program. Given the guidance in Board Resolution 18-34 we support the implementation of this change. **(OP_UCSNRDC1_7-3)**

Agency Response: Staff appreciates the commenters' support for the proposed amendments for introducing advanced credits to the regulation.

B-7. Multiple Comments: Support for the use of advanced credits for supporting EV deployment

Comment: The Borrowed Credit Proposal Can Provide Greater Cost Containment and Help to Accelerate Investment in Low Carbon Transportation Technology. CMUA supports the Borrowed Credit proposal. By authorizing the use of Borrowed Credits, CARB recognizes that reaching the state's low carbon transportation goals requires longer term actions. By making Borrowed Credits available for compliance, parties regulated under the LCFS can, with greater confidence, make investments in low carbon transportation technologies and not be as limited by immediate compliance constraints.

Borrowed Credits would be issued to large electricity distribution utilities ("EDU") based on their pro-rata share of base credits generated.³ By making this revenue available earlier, the Borrowed Credit proposal provides an opportunity for EDUs to make investments in low carbon transportation earlier than would otherwise be possible. This could further accelerate the state's move toward a low carbon transportation future. As such, the Borrowed Credit proposal not only strengthens the cost containment features of the LCFS but also increases the impact of the LCFS as a means of promoting low carbon transportation technologies.

³ § 95485(c)(3)(C)(1). **(CMUA1_16-5)**

Comment: We appreciate the concept of drawing the value of zero-emission vehicle credits forward to put them to use now, to encourage more deployment; and encourage as we move forward with the low carbon fuel standard to consider looking into the heavy-duty zero-emission vehicle credits as well as a future pullback opportunity. We think the hallmark of this CARB program is really the adjustment and evaluation over time. We think that these changes today really reflect looking at the needed changes and ways that we could really maximize the benefits of the program in our most disadvantaged and highly polluted communities. So we do appreciate that attention. **(T ALA1 10-4)**

Agency Response: Staff appreciates the commenters support for the proposed amendments for using a portion from the proceeds from advanced credits to fund the CFR program.

B-8. Multiple comments: 10 million credits are insufficient

Comment: WSPA still believes that the proposed regulation amendments fall short by presuming that there could never be a scenario that could require more than 10 million (MM) borrowed credits in the event of a credit shortfall.

...Given the inherent imprecision of forecasted credits and deficit quantities in the LCFS, we continue to believe that the 10 MM credit limit is unnecessary and may not provide a means for compliance. WSPA believes that the provisions in the proposed Regulation Amendments should be adapted to a fill any credit gap in any given year once the buffer account and normal CCM mechanisms have provided as many credits

into the market as can be made available. This approach eliminates the need to carry a deficit and ensures the program remains liquid, enhancing its stability. **(OP_WSPA1_2-1)**

Comment: So if it appears there's a lack of compliance options in the future, this can be viewed as a liability by shareholders and it makes it tough to attract investment into the market, which is what you want.

And in fact some investors can stay on the sidelines if they feel there's too much uncertainty surrounding the program, especially on its long-term viability and sustainability.

So the staff's borrowed credits proposal is certainly a step in the right direction. We still fear it falls short of ensuring market certainty and stability and a regulated entity's ability to comply to address this possible situation that Richard Corey referenced that could require more than the 10 million borrowed credits. (T WSPA1 1-1)

Agency Response: Staff disagrees with the commenter's suggestion that 10 million advanced credits will be insufficient to meet potential future demand. As stated in the ISOR (Chapter III, page III-13), staff has proposed a cumulative limit to the number of credits that can be advanced. This cumulative limit is based on ensuring a sufficient future base credit generation to offset any advances without disrupting the credit market. Staff proposed 10 million credits as a limit as it represents about half the number of base residential EV charging credits that will be generated in 2026 – 2030, the earliest period in which the borrowed credits will be recouped, under the fairly conservative scenario of low-ZEV adoption used in the SRIA of the 2018 LCFS Amendments.

Staff does not anticipate that the market will face a substantial shortage in the medium-run that would necessitate an increase of the cumulative advanced credit limit because: 1) the LCFS credit bank, as of the end of 2019 Q3, held about 8 million credits which will provide additional flexibility for regulated entities to meet their annual obligations, and 2) the LCFS amendments adopted in 2018 add new opportunities for regulated entities to generate LCFS credits. Many market participants are in the process of expanding existing projects, or have announced new projects that are expected to take advantage of these new provisions, as well as older provisions to take advantage of the value created by the LCFS program.

Additionally, the primary responsibility for long-term compliance rests with the deficit-generating entities that must comply with the LCFS. The regulation has always been based on the principle that providers of gasoline and diesel must make the necessary investments to ensure their own compliance. Each of the major refiners has access to substantial sources of capital that can be used to ensure compliance through investment in credit generating opportunities. With the introduction of these additional measures, major refiners have a sufficient time period to plan and implement measures to comply with the LCFS.

Comment OP_WSPA1_2-1 also implies that the buffer account should be used to provide credits in the event that the market is short. Staff notes that credits in

the buffer account may only be used for very limited purposes. The buffer account was established as part of the 2018 amendments to mitigate credit invalidation risk.

B-9. Advanced credit window should be extended

Comment: In addition, CARB should not limit the provision to a six-year window as proposed in § 95485(c)(3)(C)2. **(OP_WSPA1_2-4)**

Agency Response: Staff rejects the commenter's recommendation to allow advanced crediting window for more than six years. As stated in the ISOR (Chapter III, page III-12), "staff does not intend for borrowed credits to be a long-term compliance option, but instead a temporary measure to contain costs in cases where there is a short-term shortage of credits. Regulated entities should plan to acquire enough credits to meet their compliance targets... Staff estimates that six years will give regulated entities sufficient time to make plans and to invest in credit generating projects, alternative fuel production facilities, and alternative fuel vehicle fleets to meet their annual compliance targets."

B-10. Advanced credits issuance should not be limited to EDUs

Comment: WSPA believes that the proposed design fails to incentivize other technology developments. While it may help to relieve temporary shortfalls, the proposal should be expanded to additional technologies in order to maintain fuel neutrality and provide a signal to market participants that all technologies delivering emission reductions play an important role in the LCFS. Maintaining the market-based aspect of the LCFS and including additional market participants is essential. Establishing a process for a formal credit approval criteria would allow other credit generators to qualify for credit borrowing. **(OP_WSPA1_2-5)**

Agency Response: Staff rejects the commenter's recommendation to allow the issuance of advanced credits to entities other than EDUs. In the ISOR (Chapter IX pages: IX-1 to IX-2), staff evaluated an alternative which would allow advanced credits to be issued to additional entities other than EDUs.

As stated in the ISOR, "staff chose to reject this alternative as difficult to implement due to risks associated with recouping borrowed credits. To be similar to the staff proposal, the "borrowed" credits would need to be recouped in a timely manner from the entities that the borrowed credits were issued to. If fuel producers are able to participate in the borrowed credit framework, it could be difficult to ensure that these entities will exist or be producing sufficient low-carbon fuel such that borrowed credits could be recovered in the future. Utilities, however, are uniquely regulated in the State, and there are fewer complexities and risks affiliated with implementation of the borrowed credit framework.

To implement this alternative, CARB would have to establish fairly extensive and objective criteria to evaluate the eligibility of projects that may receive borrowed credits. This will require extensive resources, including staff and management time, to review and consider different projects that could apply for the provision. Staff would also be required to hold workshops, meet with stakeholders, perform

research, extensive analysis, and other activities to ensure that projects meet the eligibility criteria of borrowed credits.

Additionally, recouping credits under this alternative may be difficult and uncertain. Under the proposed amendments, CARB issues base credits to utilities, therefore the process of recouping credit is simple and low-risk: CARB reduces the future issuance of base electricity to EDUs. Even if an EDU ceases to exist or opts-out of the program, the credits will be generated by other entities as described in section 95486.1(1)(A)2.

Under the proposed alternative, recouping credits is neither simple nor risk-free. There are no guarantees that credits can be recouped if the company ceases to exist, the project fails to generate sufficient volumes, or the project produces fuels of higher CI than expected and does not generate sufficient credits to be recouped, or the company ceases to send fuels to California and generate credits under the LCFS and instead sends its products to other jurisdictions.

Due to the reasons listed above, adopting this alternative might compromise the environmental integrity of the program. Additionally, this alternative will require a substantial increase in the administrative difficulty of the program, which may be unnecessary, since staff does not consider it likely that the LCFS will experience significant credit shortages."

B-11. Small and Medium POUs should be able to voluntarily participate in advanced credits provisions

Comment: Opt-In Utilities Should Be Able to Volunteer to Issue Borrowed Credits
The Proposed Regulation establishes a process by which CARB would issue Borrowed
Credits when the cumulative outstanding deficit exceeds the Pledged Credits in the
credit clearance market. EDUs would have neither the choice to opt out of the
Borrowed Credit draw nor the choice to offer Borrowed Credits in a scenario in which
CARB did not advance any credits. However, as discussed above, Borrowed Credits
can provide a means to accelerate investments in low carbon transportation
technologies and as a result, expedite the state's clean transportation and GHG
reduction goals. CMUA encourages CARB to investigate the potential for EDUs to
voluntarily provide Borrowed Credits.

⁴§ 95485(c)(3)(C). **(CMUA1_16-6)**

Agency Response: Staff rejects the commenter's suggestion that smaller utilities should be able to voluntarily participate in the advanced credits provision of the proposed amendments. As stated in the ISOR (Chapter III page III-8), "participating in the CCM potentially involves high transaction costs for small entities, and requires executing potentially large contracts in a relatively short period of time. Restricting the issuance of borrowed credits to a small number of eligible large EDUs that have sufficient staff and resources to execute such deals on tight deadlines will ensure the success of the CCM and not unduly burden smaller entities," such as smaller utilities.

B-12. Extending CCM maximum price to all transactions will not be effective

Comment: CARB proposes to establish a price cap on LCFS credits in § 95487(a)(2)(D). WSPA appreciates the desire indicated by CARB to protect fuel consumers in California by limiting the price of a transaction that can be reported in the LCFS tool. While this provision may provide a signal to the market of a price that CARB desires, such a signal is likely to be lost in the event of a structural LCFS credit shortage.

During the April 5, 2019, CARB LCFS Workshop, this issue was discussed as noted in the WSPA Comment Letter of May 2, 2019. In response to workshop questions, CARB staff appeared to acknowledge that the wide-ranging nature of potential transactions does not lend to the ability to confidently identify the actual LCFS credit price in transactions. Subsequently in the July 31, 2019, CARB LCFS Workshop, CARB staff understandably indicated that they would not be prepared to assess the actual price of an LCFS credit in a fuel transaction. Thus in reality, an LCFS credit cap is illusory.

Further, effective cost containment and achievable targets must go hand-in-hand. A price cap is only helpful if credits are available. The actual market price will be responsive to firm signals, and the certainty of available credits will effectively provide this signal and achieve the result that CARB clearly indicates it wants with this element of the proposed rulemaking. **(OP_WSPA1_2-6)**

Agency Response: Staff disagrees with the commenter's suggestion that the LCFS maximum price provision will not be effective. As stated in the ISOR (Chapter III, page III-16), "[p]lacing a limit on the transaction price for credits will prevent price spikes and deter market manipulation, to avoid adverse impacts on California consumers potentially resulting in an erosion of support for the program, thereby leading to credit market instability. By capping the sale price of LCFS credits, the proposed amendment is establishing a strong market signal of expectation for the maximum cost of compliance with the program and its potential impact on consumers."

Staff does not believe it is likely that an entity would pay more than the maximum price in a bundled transaction when credits are guaranteed to be available in the credit clearance market through the advanced credit mechanism. Moreover, as part of market monitoring, CARB may conduct audits, review contracts, and enforce the regulation to ensure that no entity sells or transfers credits at a price that exceeds the maximum LCFS credit price.

Staff also continue to believe that the LCFS target updates set by CARB in 2018 are achievable, and recent activity and investments in the low carbon fuel sector points to potentially strong growth in the low carbon fuels sector and the achievability of LCFS targets.

B-13. Multiple comments: Adopt minimum price floor

Comment: This threat against the project economics can be at least somewhat mitigated if concurrently an LCFS credit price floor of say \$150/metric tonne were to be instituted, thereby ensuring that loss of upside revenue is at least somewhat mitigated

by reducing the downside risk associated with lower LCFS credit values, overall providing greater revenue certainty and increasing the odds of funding the project.

CARB must acknowledge and appreciate that the only way that additional low-carbon fuel will be produced and be brought to the California market is that a reasonable degree of certainty must exist regarding LCFS credit pricing to enable these multimillion dollar projects to be financed. Without that revenue certainty, CARB's drive to lower the GHG production within the state will likely fail for lack of available low-carbon fuel due to inadequate funding to build the necessary production facilities. (OP_USABIOEN1_3-2)

Comment: We Support Appropriate Price Ceilings and Floors in Credit Markets to Increase Investor Certainty³

...3 Floor prices, and other mechanisms to hedge downside price risk, would also be helpful in increasing investment certainty and motivating project development using credit revenue. We support continued work in this area as discussed in CARB Staff's whitepaper on pilot financial mechanisms.

https://arb.ca.gov/cc/shortlived/final_sb1383_financial_pilot_mechanism_whitepaper.pdf (OP RNGC1 6-2)

Agency Response: Staff believes that the aggressive LCFS targets set through 2030 will provide for a strong market price for credits well into the future. If low prices resulting from excessive supply of cheap low-carbon fuels do unexpectedly occur, then the Board may consider amendments to increase the stringency to reflect the technological developments, consistent with the State's goal of carbon neutrality by 2045. Staff recognizes the need to do more, especially in the transportation sector, to achieve that goal. In the near term, staff believes the 2030 target is appropriately set to send the strong price signal to incent the production of low carbon fuels and does not foresee any changes to that target for 2030, and in the longer term staff will be evaluating more stringent targets for post-2030.

B-14. Compliance plan and CBI information

Comment: WSPA believes that requiring a party to submit a compliance plan so intimately tied to a sensitive commodity market crosses a confidential business information (CBI) threshold. The proposed compliance plan requirements represent an excessive level of detail that has the potential to affect commercial operations. In particular, the requirement to include "Data records, including written contracts and associated verbal or electronic records, and invoices used to demonstrate actions underway consistent with the submitted plan" [§ 95483(c)(2)(C)(1)(h)] which appears to require the sharing of sensitive commercial communications. This is an inappropriate requirement and should be removed from the proposal.

... However, if CARB continues with its desire for entities to provide such a market sensitive compliance plan with the associated risk of inadvertently disclosing CBI, it would indeed be imperative that these are maintained with the strictest of confidentiality and only available to select CARB staff with very tight controls. (OP_WSPA1_2-7)

Agency Response: Staff appreciates the commenter's input and are highly sensitive to information protection considerations and CARB's associated legal obligations. As stated in the ISOR (Chapter I, page I-7), "consistent with legal requirements, CARB will work with entities that have deviated from their compliance plan to ensure that any confidential trade secret information is appropriately redacted from the publicly posted versions of such implementation reports."

B-15. Compliance plan feasibility

Comment: Further, the requirement that a CCM participant submit a five-year plan for achieving compliance presumes that such a plan is feasible. If participation in the CCM is the result of issues such as a lack of technology breakthroughs, slow vehicle fleet turnover, or feedstock constraints, an individual program participant will not have sufficient influence to change those factors. This will be particularly true if several reporting parties find themselves subject to the CCM, representing a systemic failure of the program to meet its targets.

If CARB is going to require these compliance plans, the requirement should allow for a reporting party to illustrate the barriers to achieving compliance within five years. **(OP_WSPA1_2-8)**

Agency Response: The primary responsibility for compliance and for meeting the LCFS targets rests with the regulated entities that generate deficits under the program. The vast majority of deficits are generated by refiners and oil companies who have extensive resources to invest in alternative fuels and petroleum projects, including emission reduction projects at refineries and in oil fields, in order to generate sufficient credits to meet their obligations.

Consistent with the comment's suggestion regarding illustration of barriers, as proposed the compliance plans must quantify anticipated annual shortages and uncertainties over the five compliance years as part of the compliance plans. Parties that deviate from their original compliance plan annual credit shortages must identify the deviations from the approved compliance plan.

B-16. Target Revision

Comment: Additionally, CARB could establish formal procedures for re-evaluating the CI reduction schedule in the event of a significant number of parties being subject to the CCM in a given year. **(OP_WSPA1_2-9)**

Agency Response: Agency Response: Staff rejects the commenter's suggestion to establish procedures for revising targets downwards. In the ISOR (Chapter IX pages: IX-3 to IX-4), staff evaluated an alternative which would adjust CI targets downwards. Staff ultimately rejected the alternative "because it compromises the environmental integrity of the program, may further destabilize the LCFS credit market by creating additional uncertainty, and fails to support future investments in low-carbon fuels.

The staff proposal allows for credit borrowing, which gives deficit generating entities access to additional credits to meet compliance obligations that are later

repaid. If after the 6-year borrowed credit window, deficit-generating entities are still unable to obtain sufficient credits to offset deficits under the program, entities are allowed to further bank deficits with interest for up to 5-years (current provisions under the 2018 adoption of the LCFS). Staff believes that the 6-year credit borrowing window alongside the 5-year deficit banking period provides a sufficient time-period for deficit-generating entities to make the necessary investments in low-carbon fuel projects to fully offset any outstanding deficits they otherwise may have accrued. These provisions help to maintain the environmental integrity of the program, while providing compliance flexibility for addressing short-term credit shortages. The staff proposal will help maintain a predictable framework for supporting low-carbon fuel investment, and is therefore better aligned with long-term cost containment."

B-17. Oppose compliance plan

Comment: WSPA strongly recommends that CARB eliminate the compliance plan requirement entirely from the proposed rulemaking. **(OP_WSPA1_2-10)**

Agency Response: Staff rejects the commenter's suggestion to remove the compliance plan requirements from the proposed amendments. As stated in ISOR (chapter III, pages III-10 to III-11), "Compliance Plans are introduced in these proposed amendments to provide CARB and the public with greater assurance that regulated entities that continuously fail to meet their annual compliance have a detailed and feasible plan to achieve their annual compliance obligations.

If a regulated entity fails to follow through on their Compliance Plan, the public and other stakeholders should be provided with a detailed explanation on why the plans were not followed, and how the regulated entity plans to address this. This requirement is designed to allow the public and other stakeholders to hold the regulated companies accountable for following their plans in the case that they fail to meet them. If regulated parties must to deviate from their approved plans, required potential public disclosure and explanation of such a deviation should strengthen the incentive to formulate quality compliance plans and thus ensure compliance with the standard in future years."

B-18. Multiple comments: Do not penalize utilities who make good faith effort to sell advanced credits

Comment: CalETC requests 15-day amendments to § 95485 (c)(3)(C) and (F) clarifying that utilities who make good faith efforts to sell borrowed credits in the credit clearance market are not penalized if the contract cannot be completed with the buyer. This is to address the problematic "borrowed credits must be pledged for sale" language in the proposed regulation order. Electric distribution utilities, particularly the investor-owned utilities, have restrictions on contracting based on prudent risk management standards and CPUC requirements that could become an obstacle to timely completion of contracts. CalETC's proposed amendments provide flexibility to both CARB and the utilities, but do not limit the proposed regulation's restrictions on parties who voluntarily pledge credits to the credit clearance market. (OP_CALETC1_5-8)

Comment: PG&E requests that CARB amend the current draft language to clarify that utilities that make good faith efforts to sell borrowed credits in the CCM will not be penalized if the contract cannot be completed with the buyers in the required time frame. This protection is critical for the Investor-Owned Utilities (IOUs), which are subject to California Public Utilities Commission (CPUC) requirements for prudent contract management standards, as well as internal and external obligations to minimize potential risks from transaction executions.

PG&E believes that the amendment language provided by CalETC to § 95485 (c)(3)(C) and (F) would help to address this concern and should be incorporated through a 15-day public notice process. **(OP_PGE1_11-2)**

Agency Response: Staff recognizes that in the case of the issuance of advanced credits, large utilities will be obligated to participate in the CCM under the proposed amendments. Staff also recognizes that IOUs are subject to the CPUC regulatory process that imposes additional requirements on how utilities must engage in contracts.

To address these comments, staff has proposed modifications to the regulation text in the 15-day period. First, staff proposed that entities required to acquire credits in the Credit Clearance Market must complete payment to the seller before the credit transfer is initiated, unless the buyer and seller agree on other payment terms. Second, staff clarified that section 95485(c)(3)(F)5 does not apply to utilities that are obligated to offer advanced credits in the CCM.

Staff believes these changes address the commenters' concerns, as evidenced by the commenters' support letters in Chapter V, section B-1 and B-2.

B-19. Guidance document for CCM functionality

Comment: Guidance Document

In addition to CalETC's comments and proposed draft language, PG&E requests that CARB publish a guidance document regarding the functionality of the CCM. There are currently no available details as to how the market functions, how buyers and sellers will be matched in the market, and how the resulting credit transfers will be facilitated. If credit borrowing occurs, it will be mandatory for PG&E to participate in the CCM. Prior to participating, IOUs will need to receive approval from the CPUC for selling LCFS credits through a new method of sale and a guidance document with details about the functionality would provide some of the necessary details for an appropriate approval request. **(OP_PGE1_11-3)**

Agency Response: Staff understands the requirement for IOUs to receive approval from the CPUC for selling LCFS credits in the CCM. Staff will continue to work with stakeholders to ensure smooth implementation of the CCM, and will provide any additional guidance as appropriate.

B-20. Multiple comments: Oppose the cost containment provisions

Comment: Neste writes to express our disappointment in the proposed amendment's cost containment features. The amendments attempting to control the cost of the LCFS program disrupt the otherwise proper-functioning, market-based program that has

effectively helped California meet its greenhouse gas reduction goals in the transportation sector.

... These proposed amendments would not just diminish incentives for innovative, large-volume, low-carbon fuel suppliers, but reward incumbent, petroleum-based fuel producers and their efforts to delay complying with the LCFS. (**B_NESTE1_1-1)**

Comment: However, significant changes in the program design could disrupt those plans and continue to put continued production product availability and new investment decisions in jeopardy.

... Particularly with the caveat that the CCM, the credit clearance market, is existing; has a cost containment provision for those obligated parties that choose to participate in that; and has the option as outlined by staff to have that compliance in place. However, if for individual reasons people want to go and do individual transactions to have a different compliance plan, we don't think that it's appropriate to overregulate that market and extend those to all credit prices rather than having that -- rather leaving the market alone and then credit clearance market of it all. **(T_NESTE1_2-1)**

Comment: Obviously it's -- a program like this is not static. As market prices go up and down in a free market, that will be taken advantage of. And it's important to understand that short-term blips will be taken care of by a free market. And I would caution against overregulation and creating uncertainty that can cause from keeping too heavy hand on that. **(T_NESTE1_2-5)**

Agency Response: Staff disagrees that adoption of these amendments will disrupt the proper functioning of the LCFS market. Staff believes the maximum price protects the interests of consumers while also stabilizing the market and providing sufficient incentive to invest in low-carbon fuels and technology. As indicated in the comment letter, the maximum price eliminates the possibility of short-term price spikes resulting from market speculation or manipulation. These price spikes would lead to higher than necessary costs for California consumers and might lead to erosion of support and potential uncertainty for the program. Please see responses below to Chapter IV section B-22, as well as supporting comments from other stakeholders in Chapter IV, sections B-1 and B-5.

B-21. Multiple comments: Cost containment provisions are not necessary

Comment: CARB's desire to institute a long-term cost containment mechanism is laudable - provided there is adequate alignment among all market participants and regulators. But, Neste agrees with CARB's assessment that there will be sufficient credits available for future compliance. Therefore, the need to amend the LCFS to include new cost containment provisions is unnecessary and unduly burdensome.

...The existing cost-containment provisions in place are adequate for California. The price cap in the CCM provides adequate flexibility for obligated parties to remain in compliance by limiting their costs and buying in the credit clearance market, or for them to complete compliance obligations by obtaining adequate credits at a free market price. CARB should abandon attempts to extend a price cap to all transactions outside of the clearance market. (B_NESTE1_1-2)

Comment: Neste again supports this program and agrees with the staff that it's a well designed market and that it's not going to have significant cost containment implications. And therefore we would suggest that these are undue and unnecessary at this time in a well functioning market. **(T_NESTE1_2-2)**

Agency Response: Staff does agree with the commenter's assertion that it is likely that there will be sufficient credits available for future compliance. However, in the unlikely scenario where the credit market experiences prolonged periods of credit shortages, the amendments, including the extension of the maximum credit price to all LCFS credit transactions, will ensure the long-term stability of the market and protect California consumers from program-related fuel price spikes, thereby ensuring the success of the program in reducing the carbon intensity of transportation fuel in California.

B-22. Multiple comments: Oppose extending the price cap to all LCFS credit transactions

Comment: From strictly a trader's perspective the imposition of a price cap on any commodity or tradeable credit removes the freedom of the marketplace to set the price based on supply and demand, which is a key to a market that works for everyone. If the demand is higher than the supply, the market has an incentive to find ways to generate more supply. Likewise if the market is oversupplied, it sends a signal to producers and potential producers that there is greater risk in bringing more product or credits to market and these producers make adjustments in their business or plans.

From a management team perspective of a company that is working to build and operate renewable fuel production facilities, it is counterproductive to potentially limit the financial return to a project by placing an artificial cap on one of the primary revenue streams of the business, that being LCFS credits and it threatens the viability of building the facility and bringing more low-carbon fuel to the California market.

(OP USABIOEN1 3-1)

Comment: A credit price cap does not accomplish the goal of increasing incentives to invest in low-Cl fuels. The opposite is true. Under a price cap, an investor knows that they will have only a fixed return that is not tied to performance or other market conditions. This would serve as a destabilizing effect on the investment return calculations and will make new investments limited or non-existent.

California is a leading market and pioneer in setting targets for decarbonizing transportation fuels. But, the current proposed price cap of \$200 was established several years ago, before the current program's carbon reduction targets were extended and increased. Since that time, more jurisdictions have added carbon reduction targets for fuel and others have extended program aspirations. But, the supply of low-carbon fuel has not yet increased at the same rate as the demand. As a result, the value of carbon reductions have increased along with competition for those fuels. In order to continue to attract sufficient supply of low-carbon fuels and to incentivise new production, the LCFS program must set a clear price signal that is adequate to support California's ambitious CI reduction targets. A price cap that is too low will disincentive good behavior and will actually serve to harm the LCFS market and prevent the overall reduction of high-carbon fuel consumption. It is important to align any price cap to fuel

performance, market conditions, and the true cost of carbon emission reductions. (B_NESTE1_1-3)

Comment: ARB should abandon any efforts to extend the cap to open market transactions between willing participants. If an obligated party wants to take advantage of the CCM then they can adequately be protected from excessive compliance costs. However, if an obligated party chooses to continue to participate in a credit market that exceeds the price cap for its own individual considerations, it should not be prohibited from doing so.

The price cap should be a safety valve as an available option and not as an overly regulated and prescribed way of working. The only changes to regulations should be those that are necessary and otherwise ARB should let the market function efficiently without undue or overly burdensome restrictions. (**B_NESTE1_1-5**)

Comment: Changes to Increase Cap Stringency Undermine the Investments and Progress of Low Carbon Supporters and Provide Undue Deference to Program Laggards. These proposed changes are, simply, an affront to low-carbon fuel producers looking to supply long term to California. Low-carbon fuel producers have responded to the regulatory signals from the LCFS program. In making business decisions, they have conducted in-depth analyses into feedstock availability, technology assessments, consumer behavior, other investments, production capacity, traditional fuel demand, and consumer preferences and trends. Based on these and many other factors, low-carbon fuel producers have made decisions to produce and supply low carbon fuels to California and are making investment decisions to grow that supply capacity. Changing the rules of the game at this stage damages the validity of the analysis and jeopardizes current and future investments and business plans.

Most of the investments and market reactions supporting the LCFS have been done by low-carbon fuel suppliers. The success to date of the LCFS has been driven by an increase in the supply and a lowering of the average carbon intensity of liquid low carbon fuels. There has not been a similar reduction in the carbon intensity or demand of traditional fuels. There has not been investment in new low-carbon fueling infrastructure or new low-carbon fuel production technologies or supply by the obligated parties.

It is contrary to a strong and stable implementation of a regulation to penalize the supporters – those who are making positive steps to lower the carbon intensity and investing in growth of low carbon fuels - in favor of other market participants who are not adapting their business and operating models and then complaining that the program is not working fast enough for them. The fear exhibited by such unstable policy belies California's oft-stated goal to be a global leader and example for other markets to decarbonize transportation. (B_NESTE1_1-6)

Agency Response: Staff believes that the LCFS maximum credit price is sufficient to incentivize investment in low carbon fuel projects. As indicated by current investments, there are plenty of viable projects that do not need a price higher than the maximum over the long horizon. These investments include recent announcements of over a billion additional gallons of renewable diesel and jet fuel, investments in hundreds of dairy and green waste digester projects,

carbon capture and sequestration at ethanol facilities, electrification of combustion equipment at ports and refineries, and construction of solar steam and electricity facilities in oil fields and at biorefineries. Moreover, allowing prices to increase substantially for a short period of time may not necessarily increase the long-term supply of credits needed to ensure long term compliance with the program, but rather may in fact jeopardize support for the program, inadvertently increasing the uncertainty of future credit prices. This viewpoint is also supported by other stakeholder's comments in section B-5 above. See also the response to comments in section B-20 above.

B-23. Multiple comments: Oppose the price cap level

Comment: We suggest that \$200 is not a leading price point when compared to other, more aggressive low-carbon markets. In addition to several European markets, British Columbia is engaging in program updates that might increase compliance penalties above California's proposed price cap level. California's increased commitment to this proposed price cap will place it at a disadvantage in the coming years as the incremental cost of carbon emission reductions exceeds the price cap and California regulations are not flexible enough to continue to incentivise low-carbon fuels into this market.

... In a free market – one that reacts to regular and changing supply and demand dynamics – credit prices will not remain static. Sometimes the prices will go up and sometimes they will go down. But, the simple application of supply and demand principles will correct temporary imbalances. If a credit price rises, market participants will take actions to capture additional credits into business operations- either by reducing the amount of high carbon fuels, or by increasing the supply of more low-carbon fuels. A market that is allowed to function properly will correct short-term price swings. Attempts to mitigate such blips by over-regulation are contrary to the program's stated purpose – to send clear and stable market signals to promote the decarbonization of transportation fuels. (B NESTE1 1-4)

Comment: Most importantly, we think that that \$200 price level was set several years ago before California has increased its targets and before other markets have come on line and then further extended their targets. So putting a hard cap in place does not allow flexibility in the program to continue to send a positive market signal to make California the most attractive market that might attract fuels or other low carbon solutions in from some of the competing ones as they continue to grow, as more continue to come on line, and as more continue to extend their greater carbon reductions. **(T NESTE1 2-3)**

Comment: I think if the – if the credit clearance market price were revisited, addressed, and set at a real level to attain the true cost of carbon, I think that would be a sufficient fix with the existing regulations (Mr. Delahoussaye in an exchange with board member Sperling on whether Neste would like to see a higher maximum LCFS credit price). **(T_NESTE1_2-7)**

Agency Response: As mentioned in the agency response for Chapter IV, section B-22, staff believes that the LCFS maximum credit price is sufficient to incentivize sufficient investment in low carbon fuel projects. This maximum credit

price is the maximum price that was used as part of the scenarios evaluated during the 2018 LCFS rulemaking process. Based on currently available information and market projections, staff is confident that the maximum price is set at a level that is sufficient to draw new supply into the market.

B-24. Multiple comments: Advanced credits and GHG emission reduction

Comment: While "borrowing" credits from future years might fix a short term credit shortfall, it has two fundamental flaws: 1) it fails to account for the harm arising from delayed carbon reductions on the environment, and 2) it merely hopes for - not guarantees against - future carbon reductions and future program solvency.

Because emissions are cumulative and because we have a limited amount of time to reduce them, carbon reductions today have more value than carbon reductions in future years. "Borrowed" emission reductions do not reduce current greenhouse gas inventory increases and further exacerbates the negative cumulative effects. This can be further seen in the beneficial concept of the credit banking system. Emissions reduced in early years are recognized as they limit the negative cumulative effects in years that follow. Notably, These current amendments do not adequately address the impact of cumulative emissions and tacitly encourages delays.

Secondly, while the expectation that electric vehicles will continue to become a growing part of the California light duty fleet, several policies - including numerous local and federal policies - are detached from the LCFS program and leave open the potential for misalignment. Shifting compliance obligations by borrowing credits might aid fleet electrification efforts, but does not provide adequate assurances that other policies will not unplug those efforts.

... Additionally, staff should refrain from attempts to install artificial regulatory solutions to increase credit supply by borrowing credits from future electricity generations. This does not consider the negative climate impacts from delayed carbon reductions, does not accurately account for the true cost of credits when considering other State investments into electrification, and inappropriately picks winners and losers – again contrary to one of the foundational tenants of a low-carbon program. (B_NESTE1_1-7)

Comment: Also, we would look at the borrowing of the electricity credits. While it's important to have a process in place - and that's a good outline out there - we don't think the program fully encompasses the negative impacts from deferred carbon reductions. Carbon reduction is more valuable today than it will be five years from now. This program has no provision other than just the reinvestment of new future carbon reductions to take account for that. **(T_NESTE1_2-4)**

Agency Response: Staff disagrees with the commenter's suggestion to use time adjusted GWP accounting in the LCFS program. None of the LCFS lifecycle accounting methods apply a time adjusted GWP. Adopting such an accounting method would overly complicate the program and make implementation more difficult.

B-25. Multiple comments: LCFS should contain a method to adjust the maximum price

Comment: In the unlikely event that CARB continues to assert a maximum price cap outside of the Credit Clearance Market, it should not be immovably fixed. Such a cap must be able to react to current market conditions to properly function. Otherwise, reasonable, but unforeseen, future market conditions might cause the credit price to increase but for the price cap and would serve as a significant negative factor in the credit market economics.

It appears that one of the main aims of a price cap is to control credit price exposure to fossil oil refiners as the primary obligated parties under the LCFS. Staff projections supporting the amendments assume growing amounts of credits as a result of refinery expenditures in low-complexity/low-energy infrastructure. Incorporating these and other assumptions, Neste projections agree with ARB staff and anticipates that in future years credits will be sufficient to keep the LCFS program solvent.

However, when keeping all other assumptions the same but excluding projected refinery upgrades, the outlook has a significantly different trajectory.¹

In the second scenario, there would be a building of deficits and as insufficient bank suitable for compliance. Correcting this will require a stronger market signal in the form of higher credit prices to actually encourage refinery investments or attract adequate amounts of other credit-generating low-carbon fuels to make up the shortfall. In exchange for giving some upper bound to compliance costs, a reasonable expectation is that all sectors – including primary fuel suppliers – implement all carbon solutions available.

In order to hedge against laggard refinery improvements and other shortfalls – whether they be less than anticipated volumes of renewable diesel or fewer electric cars – ARB should explore and implement a formula that adjusts and increases the credit price cap as a function of the overall credit balance. This can be done by using prior year's data and would give obligated parties and market participants a fixed and predictable measure to project a credit price while still allowing for control of the maximum value.

...Finally in the unlikely event that ARB proceeds with the cost containment, the regulation should include a predictable price cap adjustment formula to provide flexibility to adjust the price cap as needed to continue to attract adequate amounts of carbon credits while still controlling the upper bounds of the credit compliance costs with predictability.

¹ But for minimal low complexity/low energy use refinery credits generated for 2016 and 2017, no such credits have made significant impact in the credit bank. This scenario projects credit balance based on the refining industry implementing low carbon refining projects without making significant changes from the historic trendline. (B_NESTE1_1-8)

Comment: I think it should have more flexibility in it than having been set that long ago and not revisited. But potentially higher I think is an open question; but more specifically having staff directed to look at that and determine if that's still an appropriate level. **(T_NESTE1_2-6)**

Agency Response: Staff rejects the commenter's suggestion to adopt a method to adjust the maximum LCFS credit prices to react to current market conditions. Adoption of a method to adjust the maximum LCFS credit prices defeats the goal of these amendments. By abandoning the certainty of a maximum price, the commenter's suggested approach could potentially increase the volatility of credit prices. Moreover, by providing a predictable way for maximum credit prices to increase as credit supply becomes tighter, the suggested approach could create a perverse incentive for market participants to withhold credits from the market in order to drive up the maximum price.

C. Changes to the Clean Fuel Reward Program

C-1. Allowing for higher administrative costs for the CFR program

Comment: CalETC supports the proposed regulation order's other provisions on the Clean Fuel Reward program but requests a 15-day change allowing CARB's Executive Officer to approve increases to the 10% cap on administrative costs. The administrative costs associated with the Clean Fuel Reward program are unknown at this time, and neither the utilities nor any other entity have yet been able to successfully implement a rebate for EVs at the point of sale. For example, procuring insurance for the Clean Fuel Reward program is one of the major risk reduction measures in the Clean Fuel Reward implementation and it is unclear how much that insurance will cost at this time. The Executive Officer would approve and increase in the 10% cap only if the risk mitigation requirements in the CPUC approved advice letter or in the Clean Fuel Reward Governance document result in administrative costs exceeding 10%.

¹ The detailed advice letters by the three investor owned utilities were filed in April 2019 and approved in October 2019 by the CPUC. The much more detailed governance agreement negotiated by over 20 electric utilities was completed in October 2019. The CPUC is currently reviewing this governance agreement. CARB staff actively participated in the development of all the above. **(OP_CALETC1_5-3)**

Agency Response: Staff agrees with the commenter's suggestion, and accordingly proposed modifications to the regulation language as part of the 15day Notice to allow the administrator to apply for higher administrative costs to account for potentially unforeseen needs to administer the CFR program. As stated in the 15-day Notice on page 3, "because the Clean Fuel Reward program is the first of its kind, predicting some administrative costs is difficult. In order to provide adequate necessary flexibility for implementing the program efficiently and effectively notwithstanding reasonable but difficult to forecast costs, staff proposes adding a process for the Clean Fuel Reward program administrator to request Executive Officer approval to exceed the ten percent spending limit for administrative costs...As an example of a currently unknown but likely to be reasonable expense that could potentially result in administrative costs exceeding the ten percent limit, California Public Utilities Commission (CPUC) Resolution E-5015 requires the initial program administrator Southern California Edison to procure sufficient insurance to mitigate any potential risk associated with its role in the implementation of the program. The cost of such insurance is currently unknown. This proposed modification will allow the administrator to

ensure continuous implementation of the program while adding flexibility to allow the Executive Officer to determine, based on the included regulatory criteria whether the higher administrative costs are necessary to administer the Clean Fuel Reward program."

C-2. Multiple comments: Support for dedicating base credits of ineligible or nonopt in utilities to the CFR program

Comment: CalETC supports the proposed regulation order's provision that clarifies that credits generated from "base" residential electricity within the service area of EDUs that do not opt-in to the LCFS must be used exclusively to fund the Clean Fuel Reward (CFR) program. **(OP_CALETC1_5-9)**

Comment: Similarly, NCPA supports the clarification in section 95486.1(c)(1)(A)(2) that base credits from EDUs not opted in or not participating in the CFR should be allocated to Large IOUs and Large POUs, rather than all opt-in EDUs. Directing these base credits to the Large EDUs will ensure the timely and streamlined processing and transfer of the credits to the CFR program. **(OP_NCPA1_9-11)**

Agency Response: Staff appreciates the commenters' support for the proposed amendments for dedicating base credits of ineligible or non-opt in utilities to the CFR program.

C-3. Multiple comments: Support for requiring utilities to sign the governance agreement to be eligible for base credit generation

Comment: CalETC supports the proposed regulation order's provision that prevents the electric utilities from having to renegotiate a governance agreement as new utilities come into the CFR program. **(OP_CALETC1_5-10)**

Comment: NCPA supports ...clarifications pertaining to the Clean Fuel Reward ("CFR") governance agreement and the allocation of residential base credits, and the goal of ensuring that transportation electrification is available to all communities.

...NCPA appreciates clarifications to the Proposed Regulation Order for establishing exact timelines and expectations in regards to entrance into the CFR program governance agreement. (OP NCPA1 9-3)

Agency Response: Staff appreciates the commenters' support for the proposed amendments for requiring utilities to sign the governance agreement to be eligible for base credit generation.

C-4. Allow EDUs to keep base credits for use in their own service territory if they don't agree to sign the governance agreement

Comment: PWP recommends that if an EDU does not sign up for the CFR Program, the credits generated from the EDU's territory be spent on programs within that EDU's territory. The CFR requires acceptance of a Governance Agreement that, as currently drafted, contains many provisions that represent unacceptable financial risks, uncertainties, and requirements that conflict with government practice or applicable law. As such, many small and medium POUs may be unable or unwilling to sign the Governance Agreement. **(OP_PASADENA1_15-8)**

Agency Response: Staff rejects commenter's suggestion to allow EDUs to optout of required participation in the CFR program. As stated in the ISOR (Chapter III, page III-5), "[e]lectrification of the transportation sector is essential for the success of the LCFS and for California to achieve its climate and air pollution goals, and a successful CFR program will aid in this effort." The CFR program is designed to deliver statewide benefits, within a framework that allows voluntary EDU participants to cooperatively contribute to that program while also administering programs within their own service territories. If EDUs are unable to or do not wish to participate in the CFR program, they may opt-out of base credit generation, and credits associated with base credit charging within their service area will be reallocated to increase statewide CFR funding.

D. Holdback Credit Equity Projects

D-1. Multiple comments: General support for holdback credit equity projects provisions

Comment: We support the proposed amendments, which will ... increase funds available to reduce GHG and criteria pollutants in disadvantaged communities.

...In feedback to materials presented at an earlier workshop, we argued against using credit value from advance credits to focus on disadvantaged communities, since this would not be a reliable source of support for disadvantaged communities and would lead to different rules for different classes of otherwise equivalent credits. The proposed amendment remedies these concerns by providing a more significant and reliable source of support for disadvantaged communities, and treating all credits the same, whether issued through the normal process or the cost containment provision. We also support the proposal to require at least 50 percent of utility holdback credits be used to support GHG and criteria pollutant reductions in disadvantaged communities. This approach complements the Clean Fuel Reward program's point of sale rebates. Rebates are important to ensure new car buyers have affordable EV options, but not all Californians purchase new cars. This requirement will ensure that the benefits of electrification accrue to communities most burdened by vehicle pollution.

(OP_UCSNRDC1_7-2)

Comment: NCPA supports additional efforts to encourage transportation electrification in hard-to-reach communities, including disadvantaged and low-income communities, so that all of California is able to benefit from the adoption of zero emission vehicles. **(OP_NCPA1_9-5)**

Comment: We are strongly supportive of prioritizing investments in disadvantaged and/or low income communities as these communities are often disproportionately affected by the impacts of climate change and we are pleased to see the revenue from this program being used to continue to promote transportation electrification in disadvantaged communities. **(OP_CHARGEPOINT1_12-1)**

Comment: We want to state that we do agree that a portion of the revenues from the holdback credits should be used in the disadvantaged and low-income communities. It does create access to cleaner air and cleaner vehicles for all residents within our surface territory. **(T_PASADENA1_4-2)**

Comment: We want to express our strong support for the environmental justice provisions of the new amendments. The commitment to environmental justice from the Board, from the staff, not just with your words and your values but with your financial resources is commendable. **(T_GRIDALT1_7-1)**

Comment: And also very, very much support the other equity provisions in this document and the staff's modifications. **(T CALETC1 9-3)**

Comment: We think that accelerating the zero-emission technologies that we're discussing in the equity programs is critical to achieving our health protective air quality and climate goals and standards. And we support the direction of the holdback credit being used for these purposes for community-driven equity zero-emission vehicle projects. (T_ALA1_10-3)

Comment: What we're particularly excited about in today's proposal is the equity provision. For too long because of historic injustices our disadvantaged communities have been the last in line to get access to clean mobility. And that has meant both more pollution for those communities to suffer, and also less access to necessary transportation services.

What we're seeing here today is that disadvantaged communities will be in line for a large chunk of investments that can go towards electric vehicles, whether new or used; but could also go towards electric transit buses, school buses, or the benefits of -- if you're in a community that has a lot of drayage trucks, benefit of having those drayage trucks be zero emission instead of heavily-polluting-diesel drayage trucks.

So because of the importance of providing clean mobility to our disadvantaged communities, we have been for the last six years among the leaders of the Charge Ahead California campaign. And we think that this proposal today is very much supportive of what we've done in the past and will add to that investment in clean mobility for the communities that have for too long been last in line for those investments. (T_CCA1_11-2)

Agency Response: Staff appreciates the commenters' support for the proposed amendments for introducing holdback credit equity projects.

D-2. Multiple comments: Support for the inclusion of POU's governing bodies definitions of low-income communities

Comment: In addition, NCPA supports the provision that allows a POU governing body to define "low-income individuals", as it recognizes the importance of using a public process to adopt definitions that reflect the cost of living and unique circumstances of specific areas. **(OP_NCPA1_9-6)**

Comment: PWP agrees that the definition for what constitutes LI needs to align with either the State LI programs or the public owned utility ("POU") definition of these communities (as noted previously, Pasadena programs are extended to the 76% range). **(OP_PASADENA1_15-3)**

Agency Response: Staff appreciates the commenters' support for the proposed amendments for inclusion of the definition of low-income communities adopted by the POU governing body.

D-3. Support allowing holdback credit proceeds to be used to increase EV deployment

Comment: EVgo supports directing holdback credit proceeds toward vehicle deployments. The LCFS amendments as drafted could be critical for increasing vehicle deployments in low income communities, whether for personal use, public transportation, or other electric mobility solutions such as rideshare, where drivers, often low and moderate income members of the gig economy, drive three to seven times that of personal use drivers. Moreover, a study from the Rocky Mountain Institute showed that rideshare drivers could save \$5,200 per year by driving an electric car instead of a gas-powered vehicle.¹ EVgo strongly supports CARB's amendments to include these vehicle deployments as eligible candidates for holdback credit proceeds, and EVgo recommends that utilities prioritize funding projects in these categories.

Today, California is 4.3 million vehicles short of reaching its goal of 5 million EVs on the road by 2030. Given budget constraints under the Clean Vehicle Rebate Project (CVRP), limited rebate funding available for light duty fleet drivers from other California programs, and declining federal tax credits, holdback credit proceeds could be an important funding source for increasing vehicle deployments and helping California to meet its ZEV goals.

¹ https://rmi.org/ride-hailing-drivers-ideal-candidates-electric-vehicles/ **(OP_EVGO1_10-2)**

Agency Response: Staff appreciates the commenter's support for the proposed amendments for using holdback credit equity projects to promote EV deployment.

D-4. Multiple comments: Administrative costs for holdback credit equity projects

Comment: CalETC opposes the proposed regulation order's provisions regarding administrative costs <u>associated with the "holdback" portion of the utilities' base residential credits</u> and is concerned that CARB staff did not adequately reach out to equity groups or the utilities in the design of the equity provisions. <u>We specifically</u> request 15-day change language so that:

- a. <u>Administrative costs for equity programs are included in the equity portion of the holdback funds</u>. Administrative costs for equity programs can be high as equity programs are often undersubscribed and extra effort is needed to make sure the funding is as easily accessible to those eligible as possible. This means the program administrator may take on many of the functions that the applicant for funding would cover in non-equity programs to ensure ease for applicants.
- b. If there is a cap on administrative costs in the equity holdback percentages, CARB's Executive Officer has the authority to approve exceeding this cap, only in cases where the administration of an equity program is performed by a Community-Based Organization (CBO) or where the program is implemented in a community that has been overlooked and/or mistrusts government efforts. While most equity programs do not exceed 10% for administrative costs, these administrative costs can exceed 10% if the

program is reaching communities that have long been overlooked and/or where the administration is done by a CBO.

c. If there is a cap on administrative costs internal to the utility, e.g. an EDU staff person working on implementation of an equity program, those administrative costs are external to the cap. Many utilities do not track the hours staff spends on equity program implementation versus other programs. Requiring the tracking of these hours to count against a limit would create undue burden on the equity programs, a burden that does not exist for non-equity program implementation. (OP_CALETC1 5-4)

Comment: The LCFS program should allow for administrative costs that directly support the development and implementation of projects funded to benefit low-income and/or disadvantaged communities to count toward meeting the percentage holdback requirements for residential base credits. The costs associated with the development and implementation of equity programs are of vital importance to the success of such programs, and should be recognized and included as part of the overall funding goals. **(OP_NCPA1_9-7)**

Comment: The programs allowed under the LI and DAC requirements, should be more inclusive and should include marketing and administrative costs to highlight programs for these communities. However, the percentage of administrative costs should be capped, at 10 percent. **(OP_PASADENA1_15-6)**

Comment: Additionally, in order to provide EDUs with the flexibility to develop and manage equity programs, the Proposed Regulation should be modified to recognize the important role that administration plays in the success of equity programs. In order to do so, the administrative costs must be recognized as part of the cost of implementing such programs. **(OP_CMUA1_16-8)**

Agency Response: Staff agrees with the suggestion to make modifications to the requirements governing administrative costs of the holdback credit equity programs.

Staff proposed modifications to the amendments to address these points as part of the 15-day Notice. Staff agrees that administrative costs should be included as part of percentage that is dedicated to equity projects, but that it must be capped at ten percent of total proceeds dedicated to holdback credit equity projects, with exceptions to projects receiving prior approval from the Executive Officer. As stated in the 15-day Notice (page 7), this change is in response to stakeholder feedback and is necessary to align the holdback equity project provision with similar State programs that include administrative cost spending within the total spending requirements. Allowing for higher administrative costs in certain cases and with Executive Officer approval will provide EDUs additional flexibility for designing equity projects, while allowing the Executive Officer to ensure that the proceeds from the holdback credits are used in an efficient and effective manner for implementing equity projects.

D-5. Percentage of holdback credits proceeds dedicated to equity projects should be proportional to percent of disadvantaged and low-income communities in utilities' service area.

Comment: PWP recommends that the percentage for the use of LCFS in this manner be commensurate with the percent of LI and DAC in the utility service territory. **(OP_PASADENA1_15-2)**

Agency Response: Staff rejects the commenter's suggestion that the percentage of holdback credits proceeds dedicated to equity projects should be proportional to percent of disadvantaged and low-income communities in utilities' service area. Board Resolution 18-34 directed CARB staff to "establish an equity-based framework for the possible uses of base credit value for residential charging, consistent with legislative priorities." As stated in the ISOR (Chapter III, page III-7): "To be consistent with the State's legislative goals of assisting California's most vulnerable communities, staff proposed that by 2024 at least 50 percent of the proceeds from base credits must be used to the primary benefit of disadvantaged and low-income communities and low-income individuals in California. The 50 percent minimum is similar to the percentage of the California Climate Investment Projects that provided benefits to disadvantaged and lowincome communities. It is also consistent with SB 535 (De Leon) goal of providing a minimum of 25 percent of the total investments to benefit disadvantaged communities." Please also see the response to comments in section D-13.

D-6. Allow POU's governing bodies to define disadvantaged communities

Comment: For DAC communities the definition should also be inclusive of how a POU defines a DAC. This allows for more flexibility for the use of funds, for these communities. **(OP_PASADENA1_15-4)**

Agency Response: Staff rejects the commenter's suggestion to allow POUs the flexibility to define disadvantaged community. The amendments already provide significant flexibility in spending this money in disadvantaged communities, low-income communities, and for the benefit of low-income individuals as defined by the POU governing body. Moreover, as part of 15-day changes these revenues will also be allowed to be spent in rural areas as defined in the regulation. Providing additional flexibility in spending the revenue could risk dilution of the benefits of the required spending for disadvantaged people throughout the State. Moreover, disadvantaged communities are adequately defined and delineated by the State pursuant to California Health and Safety Code section 39711(a). Allowing for utility-specific definitions of what constitutes a disadvantaged community would add unnecessary inconsistency, administrative burden, and potential for confusion. Please also see the response to comments in section D-13.

D-7. Allow the inclusions of areas adjacent to disadvantaged and low-income communities to qualify for holdback credit equity projects

Comment: Lastly, it is recommended that LCFS revenues spent adjacent to LI or DAC, fall within this threshold. **(OP_PASADENA1_15-5)**

Agency Response: Staff rejects the commenter's suggestion to allow revenue for equity projects to be spent in areas adjacent to disadvantaged and low-income communities. The amendments already provide significant flexibility in spending this money in disadvantaged communities, low-income communities, and for the benefit of low-income individuals as defined by the POU governing body. Moreover, as part of 15-day changes these revenues will also be allowed to be spent in rural areas as defined in the regulation. Providing additional flexibility in spending the revenue could risk diluting the intended beneficial impact of the required spending, which is to ensure that the most disadvantaged populations in the State further benefit from the transition to electric transportation. Please also see the response to comments in section D-13.

D-8. Multiple comments: Addition of rural areas to qualified areas for holdback credit equity projects

Comment: The equity holdback should include programs in rural communities, in addition to disadvantaged communities and low-income communities and/or households. It is important to include rural communities to the list of eligible projects in the equity holdback program as this is an important underserved population in CA. **(OP_CALETC1_5-5)**

Comment: "Rural communities" should be added to section 95483(c)(1)(A)(6)(a), alongside disadvantaged and low-income communities. Rural communities face unique challenges that require additional assistance and support to ensure adoption of zero emission vehicle technologies, and the definitions of "disadvantaged communities" and "low-income communities" do not include all rural communities. **(OP NCPA1 9-8)**

Agency Response: Staff agrees with the comments and proposed modifications to the amendments in the 15-day package to add rural areas as qualified areas to receive proceeds from holdback credit equity projects. As discussed in the 15-day Notice (pages 4-5), this modification is proposed because transportation electrification in rural areas is lagging compared to other areas. Including rural area eligibility for holdback credit equity projects will help accelerate that progress consistent with the intent of the initial proposal.

D-9. Definition of low-income rural areas

Comment: I have one question. I don't know what a low income rural community is. There are a lot of definitions for rural communities, and there are a lot of definitions possibly for a low income. I do know, personally experienced living in a rural community – I'm not sure it was considered low income or not. And I do know that rural communities are often left behind in this effort to electrify. So I just want to make sure that whatever definition we end up with for investing in these rural communities, that it is

inclusive and that we don't end up excluding many rural communities that are currently being left behind. (T CALETC1 9-2)

Agency Response: Staff responded to this suggestion by proposed changes with the 15-day Notice modifications to establish a definition of rural areas for the LCFS. The proposed definition for rural area is a "census tract with at least 75 percent of its population identified as rural by the latest US Census data." As discussed in the 15-day Notice (page 2), staff's proposed definition of rural areas reasonably balances the need for effective implementation and tracking in the program while ensuring that any region with a clear majority of rural population is covered.

D-10. Multiple comments: Increase flexibility for POU's base credit proceeds

Comment: However, NCPA opposes the provisions that limit the flexibility of publicly-owned electric utilities ("POUs") to develop and manage their transportation electrification programs in a manner that best support the needs of its communities.

POUs are uniquely positioned to complement the state's transportation electrification efforts by tailoring programs to the specific needs of the communities they serve. As POUs have no shareholders or profit motivations and are directly accountable to their customers through locally elected public officials, they serve as their customers' caretakers of LCFS credits. LCFS credit revenue is a critical source for many of the POU transportation electrification incentive programs, and LCFS funds are directed back in to the community.

... the Proposed Regulation Order includes provisions within the requirements for holdback credits that should be broadened to allow POUs the flexibility to define the projects that best serve their communities' needs, and to recognize the administrative challenges faced by programs that are intended to provide additional support to hard-to-reach communities. (OP NCPA1 9-4)

Comment: In order to strengthen the incentive for transportation electrification that the LCFS provides, CMUA encourages CARB to allow greater flexibility to develop and manage equity programs. **(OP_CMUA1_16-3)**

Comment: What we would like to urge the Board and staff to consider is some more flexibility on the portion that is required to serve solely the DAC community. **(T PASADENA1 4-4)**

Agency Response: Staff recognizes that EDUs will have to design and implement new projects to meet the new requirements of the holdback credit equity projects, and that EDUs may need some time and resources to implement successful equity focused transportation electrification projects.

To this end, several provisions were added with the 15-day Notice modifications to provide increased flexibility to meet the new holdback credit equity projects requirements. First, EDUs have a delayed start to give them sufficient time to design, implement and acquire approvals for these new projects. Second, the minimum contribution share ramps up over a period of 3 years to 50 percent, which will allow them greater flexibility to ramp down old projects and learn from

experience on the relative success of their equity projects. Third, modifications to the amendments include a list of several specific eligible project categories that meet the new requirements. Fourth, staff included a provision where EDUs can apply for Executive Officer approval of alternative projects to meet the new requirements.

However, staff disagrees with the commenters' suggestions that even more flexibility in allowable spending of this revenue is needed. As discussed in the responses to Chapter IV, sections D-6 and D-7, providing additional flexibility in spending the revenue would dilute the intended impact of the required spending which is to ensure that the most disadvantaged populations in the State further benefit from the transition to electric transportation. Please also see the response to comments in section D-13.

D-11. Multiple Comments: Alternative holdback credit equity projects should not require Executive Officer approval

Comment: Alternative projects subject to section 95483(c)(1)(A)(6)(a) should not require approval by the Executive Officer. The Proposed Regulation Order includes a list of eligible projects that qualify as primarily benefitting disadvantaged and/or low-income communities and/or low-income individuals, and the provided list is broad enough to cover most types of projects currently planned. However, for POUs that are interested in developing unique projects through a public process to respond to feedback from environmental justice advocates and community needs, it is unnecessary for additional evaluation and approval from CARB, which would delay timelines and introduce uncertainty to the process. Instead, a public process for approval and reporting of the approved projects to the Executive Officer should be sufficient to ensure that projects fall within the requirements of the Proposed Regulation Order, and would encourage POUs to consider innovative projects with the goal of better reaching underserved communities. (OP_NCPA1_9-9)

Comment: The Proposed Regulation Should Provide POUs Greater Flexibility to Implement Equity Programs

The Proposed Regulation provides a limited set of potential equity programs. The Proposed Regulation further requires that any other potential equity programs be approved by the Executive Officer. An application for such approval would need to include "evidence that the project was developed with local environmental justice advocates and local municipalities". However, POUs already have an open and public process for community engagement and as such the additional layer of approval would needlessly delay such programs. Additionally, in order to provide EDUs with the flexibility to develop and manage equity programs, the Proposed Regulation should be modified to recognize the important role that administration plays in the success of equity programs. In order to do so, the administrative costs must be recognized as part of the cost of implementing such programs.

Agency Response: Staff rejects the commenters' suggestion that alternative projects not require CARB approval. As indicated by the commenter, the

⁵ § 95483(c)(1)(A)(6).

⁶ Ibid. (OP CMUA1 16-7)

proposed amendments list a number of equity projects that CARB has approved as satisfying the provision. Staff believes requiring alternative holdback credit equity projects to receive Executive Officer approval based on specific regulatory criteria will ensure that the alternative projects are aligned with the LCFS program goals, and the State's climate and environmental justice goals. Additionally, the approval requirement will potentially encourage innovative approaches to developing compliance with regulatory requirements, while ensuring that EDUs confirm, before initiation, that particular unspecified and potentially novel programs meet regulatory requirements.

With regard to commenter's suggestion that administrative costs be recognized as part of the cost of implementing such programs, see response to comments in section D-3.

D-12. Multi-year averaging of percentage spending on holdback credits equity projects

Comment: CARB should allow for multi-year averaging or a true-up period for the requirements in section 95483(c)(1)(A)(6)(a). Designing and implementing successful transportation electrification programs for low-income and/or disadvantaged communities has been challenging, and the uptake and timing of projects is difficult to project. Based on the provisions within the Proposed Regulation Order, the undersubscription of a program could potentially have the unintended consequence of delaying the distribution of funding for other projects. EDUs should be able to correct for an underperforming project by launching additional or different projects in the following years, in order to assure multi-year compliance while continuing to support the equitable distribution of funding and infrastructure. **(OP_NCPA1_9-10)**

Agency Response: Staff recognizes that EDUs will have to design and implement new projects to meet the requirements of the new provision, and that designing and implementing successful transportation electrification programs for low-income and/or disadvantaged communities could be challenging. To accommodate this, the proposed amendments allow for a delayed start date of 2022 for this provision. The proposed amendments also allow for a three year ramp up to the 50 percent spending requirement for equity projects in 2024. This delayed start and three year ramp allows sufficient time for utilities to design robust equity projects, obtain appropriate approvals from multiple stakeholders, including the CPUC and the utilities' boards, and successfully integrate these projects with current spending programs (ISOR Chapter III, page III-7).

D-13. Multiple Comments: Oppose restrictions for use of holdback credits on disadvantaged and low-income communities

Comment: PWP is concerned about the lack of flexibility in the LCFS proposed regulation. Pasadena's DAC/LI, based on EnviroScreen 3.0 91 %+ percentile range represents only about 4% of Pasadena's total population of approximately 141,000 residents. The proposed regulation requires that LCFS revenues derived from utilities receiving base credits from residential EV charging be spent on DAC and LI, starting with 30% of LCFS revenues in 2022, 40% of LCFS revenues in 2023 and 50% of LCFS

revenues post 2024. However, the regulatory language does not provide a level of flexibility once all new programs have been implemented in the DAC/LI. In other words, once a utility has proven that they have created and developed all possible opportunities through the development of various programs in each utility's respective DAC/LI, CARB should allow utilities to then spread the remaining revenues, earmarked for DAC, around the City for public use. As proposed, the regulation will mandate a highly disproportionate percentage of holdback credit revenues in the smallest area within our City boundaries. (OP_PASADENA1_15-1)

Comment: What we would like to urge the Board and staff to consider is some more flexibility on the portion that is required to serve solely the DAC community. **(T PASADENA1 4-3)**

Agency Response: Staff rejects the commenter's suggestion to allow more flexibility in the spending of revenue from holdback credits. As stated in the ISOR (Chapter III, page III-7), staff proposed the amendments to align the LCFS with existing State legislative goals of assisting California's most vulnerable communities. Staff believes there are sufficient opportunities to further electrify the transportation sector to directly benefit advantage of disadvantaged and low-income communities/individuals in all EDU service territories. Moreover, required equity project spending is not limited by the LCFS regulation to projects within each participating EDU's service territory. If a utility determines that they have exhausted all opportunities to spend these revenues in their own service territory, they may consider collaborating with other neighboring or regional EDUs in order to ensure that all revenue that is earmarked for equity projects gets spent in disadvantaged and/or low-income communities, or to benefit low-income individuals.

D-14. Charging infrastructure investment should be better coordinated with existing State programs.

Comment: CARB should require for charging infrastructure investments to be combined, or at least coordinated, with existing state programs. While EVgo prefers for funding to be directed to vehicle deployments, we would respectfully request that if holdback credit proceeds are directed to infrastructure programs that the proceeds be used to supplement existing infrastructure programs. Developing new programs could significantly delay deployments, and from an operator's perspective, differing state and utility programs often come with inconsistencies as it relates to technical requirements and program design.

For example, rather than creating a new infrastructure program, proceeds could be directed to existing state programs such as CARB's Clean Mobility Voucher Project, which focuses on mobility projects in disadvantaged communities, or CALeVIP, which is administered by the California Energy Commission and aims to guide California toward its goals of 10,000 DCFC by 2025 and 250,000 Level 2 chargers. Additionally, CALevIP has an explicit goal for investments in disadvantaged communities, and all infrastructure funding from holdback credits could be directed to charging stations in these communities. Leveraging investments into these existing programs will help the market

move faster, further accelerating transportation electrification in the state. **(OP EVGO1 10-3)**

Agency Response: Staff proposed changes to the amendments in response to this comment included among in the 15-day Notice modifications to ensure that investments made on holdback credit equity projects are better coordinated with existing State programs. EDUs will be required to include in their annual reports a discussion on how their portfolio of holdback credit equity projects is consistent with the findings and recommendations of the SB 350 Low-Income Barriers Study, Part B. Among other requirements, this discussion must include a description of how the projects consider, and to the extent feasible, either complement or build upon existing CARB, other State, or local incentive projects to diversify and maximize benefits from statewide investments.

D-15. Allow additional projects to the list of allowable holdback credits equity projects

Comment: PWP recommends adding the following for additional uses of how LCFS revenues dedicated to LI or DAC funds can be spent (page 14 of the Appendix A):

- Investment in electrification infrastructure in an expanded DAC area, adjacent to LI and DAC and easily accessible to the LI or DAC
- Investment in electrification infrastructure, with lower rates for charging for LI or DAC
- Electrification of fleet vehicles, if regularly based and charged in a DAC
- Investment in last mile mobility options (including, but not limited to, electric scooters, electric bikes, bike sharing, etc.) (OP PASADENA1 15-7)

Agency Response: Staff rejects the commenter's suggestion to allow projects in an expanded DAC area, but the other suggested uses of equity funding appear consistent with the amendment language. The proposed amendments explicitly list the types of projects approved for equity funding. These approved projects include: electrification and battery swap programs for school and transit buses; electrification of drayage trucks; investment in public EV charging infrastructure and EV charging infrastructure in multifamily residences; and investment in electric mobility solutions, such as EV sharing and ride hailing programs; as long as each of these projects are for the primary benefit of or primarily serving disadvantaged communities and/or low-income communities and/or rural areas. Also allowed for funding are projects that focus on additional rebates or incentives for low-income individuals for: purchasing or leasing new or previously owned EVs, installing charging infrastructure in residences, promoting use of public transit or other clean mobility solutions, and offsetting costs for residential or non-residential EV charging. Alternatively, the EDU may develop and implement other projects that primarily serve disadvantaged and/or low-income communities and or rural area or low-income individuals. The alternative projects are subject to Executive Officer approval. With the exception of the first bullet item in the comment, each of the commenters suggested uses of equity funding would be allowed by the proposed regulation language. The first suggested item "Investment in electrification infrastructure in an expanded DAC area, adjacent to

LI and DAC and easily accessible to the LI or DAC" would not be allowed because of the location of the infrastructure in an expanded disadvantaged or low-income community area. See also the response to comments in section D-7.

D-16. Multiple comments: Charging infrastructure investment should be consistent with the recommendations of SB 350

Comment: ChargePoint urges that the requirements for these investments contain checks and balances that align with the requirements of investments already being made under SB 350 and that will be continued to be made under the DRIVE OIR¹. To this end, language should be added to ensure that utility investments using LCFS proceeds support customer choice and competition. As stated in SB 350, "Widespread transportation electrification should stimulate innovation and competition, enable consumer options in charging equipment and services, attract private capital investments, and create high-quality jobs for Californians, where technologically feasible." Therefore, we urge the board to adopt the regulations with the following modifications:

Restrictions on Use of Holdback Credits. Documentation of adherence to the following restrictions must be included in § 95483. Fuel Reporting Entities. 14 the annual report submitted pursuant to section 95491(d)(3)(A)5.

- a. Effective January 1, 2022, at least 30 percent in year one, 40 percent in year two, and 50 percent in subsequent years of holdback credit proceeds must be used to support transportation electrification ... These projects may include:
- i. Electrification and battery swap programs for school or transit buses.
- ii. Additional rebates for low-income individuals, beyond the Clean Fuel Reward and other existing federal and State rebates, for the purchase of new or previously owned EVs, or for the electricity to charge EVs.
- iii. Electrification of drayage trucks.
- iv. Investment in EV charging infrastructure, including charging infrastructure in multi-family residences, that stimulate innovation and competition, enable consumer options in charging equipment and services.
- v. Investment in electric mobility solutions, such as EV sharing, ride hailing, and transit pass programs.
- vi. Multilingual marketing, education, and outreach on the benefits of EV transportation; basic maintenance and charging of EVs; electric rates designed to encourage EVs; and local, state, and federal incentives available for purchase of EVs.
- vii. Rebates, credits, or other incentives for nonresidential charging for low-income individuals.

Alternatively, EDUs, in coordination with local environmental justice advocates and local municipalities, may develop and implement other projects that promote transportation electrification in disadvantaged and/or low-income communities or for low-income individuals. These alternative projects are subject to approval by the Executive Officer. Applications submitted to the Executive Officer must include, and will be evaluated for approval based on, a complete description of

the project, demonstration that the project promotes transportation electrification in disadvantaged and/or low-income communities or provides increased access to electric transportation for low-income individuals, stimulate innovation and competition, enable consumer choice, and evidence that the project was developed in coordination with local environmental justice advocates and local municipalities.

The California Public Utilities Commissions should review all utility investments to ensure they are made in compliance with the requirements set out these proposed modifications, as well as other electric vehicle infrastructure investment programs.

- ¹ California Public Utilities Commission Rulemaking 18-12-006
- ² Public Utilities Code §740.12(a)(1)(C) (OP_CHARGEPOINT1_12-2)

Comment: GRID... provides the following comments and recommendations to ensure that these new equity investments proposed for LCFS are coordinated with CARB's existing equity investments in clean transportation:

I. The new LCFS environmental justice amendments should reflect CARB's guidance from its SB 350 Barriers Study.

GRID strongly supports the proposed new environmental justice amendments to the LCFS regulation, and applauds CARB's deep commitment to equity. Our only concern is the need to ensure that these new investments for low-income consumers and disadvantaged communities are well coordinated with CARB's existing equity programming. This need for this coordination comes directly from CARB's own SB 350 Low-Income Barriers Study Guidance Document on the barriers low-income residents, including those in disadvantaged communities, face in accessing clean transportation and mobility options.¹

While low-income Californians have access to a wide range of incentives for clean transportation and related climate equity programs, they often struggle to navigate many different agencies and different application processes to determine which programs they are eligible for, which technologies best meet their needs, and which incentives can be combined or stacked. In addition, low-income families face additional barriers to program participation involving technology, language, trust, and the time constraints faced by people working multiple jobs to make ends meet. These barriers must be addressed to ensure that California meets its ZEV deployment and environmental justice goals, while maximizing efficient use of public dollars by ensuring that equity programs are leveraging each others' investments.

The SB 350 Barriers Study calls for a coordinated application process and coordinated community outreach to ensure that low-income communities have easy access to all of the funding they are eligible for. CARB is now implementing these recommendations from this guidance document through the One-Stop-Shop Pilot Project, as well as through CARB's SB 350 Outreach Strategic Roadmap .2 These initiatives serve as a natural foundation to ensure that new transportation electrification programs serving low-income and disadvantaged communities can be coordinated with existing ones.

II. To reflect this guidance, CARB should require that new LCFS-funded investments serving low-income and disadvantaged communities be coordinated

with CARB's existing equity incentives, and with equity programs from other agencies.

GRID Alternatives recommends that CARB require that transportation electrification projects that are used to meet the environmental justice requirements for LCFS holdback credits be coordinated with CARB's existing equity investments. CARB's One-Stop-Shop Pilot Project provides a natural mechanism for this coordination, but coordination could also take place through other means. Preferably, electric distribution utilities (EDUs) should also be required to coordinate their projects with existing equity investments in transportation electrification from other agencies as well, such as the California Energy Commission. Coordination will increase transportation electrification in low-income communities by providing more comprehensive solutions; ensure cost effectiveness by maximizing funding leverage; and address the risk of duplicative or confusing programming that could accidentally increase barriers to access for low-income households.

This requirement can be structured in a flexible way, consistent with the flexibility that the proposed amendments provide EDUs to propose different low-income programs that meet the needs of local communities. One option would be to require that EDUs include documentation in their annual report submitted to CARB of how their equity projects are being coordinated with existing low-income transportation equity programs from CARB and other agencies, but provide flexibility to EDUs to determine what that coordination looks like on a project-by-project basis. (**OP_GRID1_14-2**)

Comment: We also want per our written comments to recommend one minor but we think important change to the regulations to make sure that these amendments reflect CARB's SB 350 barriers report and guidance on how to decrease barriers to access to these programs in low income and disadvantaged communities.

As you know, that study includes extensive input from an environmental justice stakeholders from throughout the State, and identifies the need for a coordinated process for folks to apply for and access all of the different resources that are available to them. The good news is that there's a lot of funding available to support transportation electrification in low income and disadvantaged communities. The bad news is there's a lot of funding available in these communities; and without coordination, it can be very difficult, in some cases impossible, for folks to get access to all the financial resources that they're eligible for.

And so the recommendation that we're making in our written comments is if there's a way to include some requirement that utilities implementing equity programs under the holdback credit provision have some coordination with the existing programs including primarily CARB's programs, with flexibility for utilities to determine what that coordination looks like; really just to make sure we're not reinventing the wheel, right? And this happens over and over again. And it's not out of malice. It's not out of malintent. It's just because people are busy and operating in silos.

So if there's a way to add a small amendment to just require that in their reporting back to CARB, there's some documentation about how the new programs are coordinated with the existing ones, that would be I think a big win. I've had good conversations with

staff about this, and so I think there's ways to implement that are not burdensome to any of the parties and really allow everybody's dollars to go further. (T_GRIDALT1_7-2)

Agency Response: Staff proposed changes to the amendments included in the 15-day Notice modifications to address these comments. The proposed regulation languages requires that EDUs "include a discussion on how their portfolio of holdback credit equity projects is consistent with the findings and recommendations of the SB 350 Low-Income Barriers Study, Part B report prepared by CARB, incorporated herein. This discussion must include, as applicable, a description of how the projects: support increased access to clean transportation and mobility options; consider, and to the extent feasible, either complement or build upon existing CARB, other State, or local incentive projects to diversify and maximize benefits from statewide investments; demonstrate partnership and support from local community-based organizations; and meet community-identified clean transportation needs." As stated in the 15-day Notice (Section B, page 6), the changes proposed are necessary to ensure that holdback credit equity projects implemented by each EDU are aligned with the other ongoing efforts to address the barriers identified for adoption of transportation electrification, especially for low-income California residents. This modification is designed to facilitate the development of meaningful and costeffective projects, and to avoid duplicative efforts.

E. General Support

E-1. Multiple comments: General support of the amendments

Comment: This letter largely supports the proposed draft regulation order and provides some suggested modifications for consideration.

... CalETC largely supports the proposed amendments to the LCFS (also referred to as proposed regulation order). **(OP_CALETC1_5-2)**

Comment: SCE worked closely with the California Electric Transportation Coalition (CalETC) to review and assess the proposed amendments to the LCFS regulation. SCE supports the proposed amendments with the 15-day changes requested by CalETC. **(OP_SCE1_8-2)**

Comment: GRID supports the proposed amendments. (OP_GRID1_14-1)

Comment: We have very long supported, as many of you on the Board know, the Low Carbon Fuel Standard is an exceptionally well done regulation. And we also support staff's proposal today here. **(T_CALETC1_9-1)**

Comment: And we do support the staff's proposal today. We think it reflects the need to continue to drive the benefits of California's leading clean-air programs into our most disadvantaged communities where the cleanup is most urgently needed. **(T_ALA1_10-2)**

Agency Response: Staff appreciates the commenters' support for the proposed amendments.

E-2. Multiple comments: General support for the existing program

Comment: CalETC appreciates this opportunity to SUPPORT the Low Carbon Fuel Standard regulation and provide feedback for CARB Board member consideration.

...CalETC supports the LCFS, a program that has been successful in reducing the carbon intensity of California's transportation fuel. Given the near-total dependence on oil in the transportation fuels sector, the LCFS is essential to both diversify the transportation fuels sector and reduce emissions from carbon-based fuel. (OP CALETC1 5-1)

Comment: Southern California Edison (SCE) supports the California Air Resource Board's (CARB's) Low Carbon Fuel Standard (LCFS) regulation. **(OP_SCE1_8-1)**

Comment: NCPA supports the LCFS program as an essential and effective strategy for diversifying California's transportation fuels and significantly reducing greenhouse gas ("GHG") emissions from the transportation sector in furtherance of the state's climate change goals. **(OP_NCPA1_9-1)**

Comment: EVgo thanks CARB for its work on the LCFS, which has been a transformative policy tool for accelerating transportation electrification. Notably, LCFS has been critical for maintaining lower electricity costs to California EV drivers by helping to cover a portion of operating expenses including, in the case of EVgo, a 24-hour call center, operations and maintenance which has led to a 98% uptime across the EVgo network, energy costs, and other related expenses. **(OP_EVGO1_10-1)**

Comment: PG&E continues to support a well-designed LCFS program that advances low-carbon fuels while protecting consumers and reducing regulatory risk with appropriate cost containment mechanisms. We look forward to continuing to support the program through our investments in related sustainable infrastructure. **(OP_PGE1_11-1)**

Comment: We applaud California and the Air Resource Board for their leadership in creating a forward-thinking market mechanism that accelerates the decarbonization of transportation. **(OP_GENCAP1_13-2)**

Comment: CMUA supports the LCFS program as an essential and effective strategy for diversifying California's transportation fuels and advancing the state's climate change goals by significantly reducing greenhouse gas ("GHG") emissions from the transportation sector. **(OP_CMUA1_16-1)**

Comment: And I wanted to show support for the LCFS programs. We believe that is one of the major vehicles for deployment of EVs in the State of California. **(T_PASADENA1_4-1)**

Comment: The Lung Association and our supporters and our colleagues in the American -- in the public health and medical community have been long-standing supporters of the low carbon fuel standard. We see it as a critical rule to protect public health and improve public health against the risks posed by the transportation sector. So we do appreciate that. **(T ALA1 10-1)**

Comment: We strongly support the low carbon fuel standard because it reduces emissions from transportation, which as you know is the greatest source of air pollution

as well as climate changing emissions in California. And it's beginning to diversify our sources of transportation fuels and to drive cleaner fuels into the market. And I think although we've already seen some success from the low carbon fuel standard, the greatest successes are still ahead of us as the carbon intensity is required to go down in the intervening years until 2030. So we look forward to that continued success. **(T_CCA1_11-1)**

Agency Response: Staff appreciates the commenters' support for the proposed amendments.

E-3. General support for CARB programs

Comment: In regards to this clean air act I support all you do I was borne and raised Oakland CA 1964 thank for the environmentalist and all to help keep California Clean, I just opened up my own trucking company and will continue to meet the guideline of this new act, if company's cant comply then stay out of California, thank you for keeping my state clean. **(OP_MARTIN1_1-1)**

Agency Response: Staff appreciates the commenter's support.

V. SUMMARY OF COMMENTS MADE DURING THE 15-DAY COMMENT PERIOD AND AGENCY RESPONSES

Chapter V of this FSOR contains all comments submitted during the 15-day comment period with CARB's responses. The 15-day comment period for additional proposed amendments commenced on February 3, 2020, and ended on February 18, 2020.

CARB received six comment letters on the proposed 15-day amendments during the 15-day comment period. Table V-1 below lists the commenters that submitted written comments on the proposed amendments during the 15-day comment period, identifies the date and form of their comments, and shows the abbreviation assigned to each.

The individually submitted comment letters for the 45-day and 15-day comment periods are available here: https://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=lcfs2019.

Note that some comments were scanned or otherwise electronically transferred, so they may include minor typographical errors or formatting that is not consistent with the originally submitted comments. However, all content reflects the submitted comments. All originally submitted comments are available here:

https://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=lcfs2019.

A. List of Commenters

Listed below are the organizations and individuals that provided comments during the first 15-day comment period:

Table V-1. List of Commenters during the 15-Day Comment Period

Comment Letter Code	Commenter
FF_PORTSD1 _1	Laura Wagner, Port of San Diego
	15-Day: February 18, 2020
FF_CALETC1_2	Dean Taylor, CalETC
	15-Day: February 18, 2020
FF_NCPA1_3	Emily Lemei, Northern California Power Agency
	15-Day: February 18, 2020
FF_PGE1_4	Fariya Ali, PG&E
	15-Day: February 18, 2020
FF_PASADENA1_5	Badiya Harrell, Pasadena Water and Power
	15-Day: February 18, 2020
FF_WSPA1_6	Thomas Umenhofer, Western States Petroleum Association
	15-Day: February 18, 2020

B. Cost Containment

B-1. Support for the 15-day proposed amendments relating to the cost containment provisions

Comment: In particular, PG&E appreciates the changes to the Credit Clearance Market (CCM) provisions. **(FF_PGE1_4-2)**

Agency Response: Staff appreciates the commenter's support for the proposed amendments to the cost containment provisions.

B-2. Support proposed amendments to the advanced credits provisions

Comment: Advanced credits: The amendments specific to advanced credits in the Credit Clearance Market are appropriate and consistent with the intended goal of cost-containment of LCFS credit value. **(FF_CALETC1_2-4)**

Agency Response: Staff appreciates the commenter's support for the proposed amendments to the advanced credits provisions.

B-3. Multiple Comments: Provide greater clarification on the effective date of the annual LCFS maximum credit price

Comment: Proposed Regulation Order Section 95487(a)(2)(D), states "A regulated entity may not sell or transfer credits at a price that exceeds the Maximum Price set pursuant to section 95485(c)(3)(D)." The referenced section explains that the Maximum Price is \$200/credit in 2016 and that the Maximum Price will be effective on June 1. Inflation is a metric that changes daily and CARB has not yet announced to the market

the date that will be used for this metric, only the date that it will be effective. The market needs certainty on what CARB considers the Maximum Price allowed for transactions in order to ensure compliance with the identified section of the regulation. PG&E requests that CARB publicly post the exact dollar value of the Maximum Price that will be effective June 1, before June 1 of each year.

Based on CARB's 15-Day Notice (section C.5), PG&E believes that CARB intends for the Maximum Price to be effective on June 1 of the current year and that Maximum Price will continue to be effective until June 1 of the following year when a new Maximum Price will be effective (and ideally publicly posted prior to the effective date). PG&E requests CARB clarify in the Final Statement of Reasons that a new Maximum Price will take effect June 1 of each year.

In CARB's FAQ on the Effective Date for 2019 LCFS Amendments (posted February 7, 2020), the answer to question 3 states, "the Maximum Credit Price will apply to all credit transfers posted in the LRT-CBTS on or after the Effective Date even if the agreement date for that credit transfer was prior to the Effective Date." However, counterparties may sign an agreement up to 10 calendar days (or more for Type 2 transfers) before the credit transfer is reported or initiated in the LRT-CBTS. Similarly, if market participants do not know the new Maximum Price until June 1 of each year, they may enter into agreements based on an outdated Maximum Price and there is no mention that CARB intends to allow LRT-CBTS Agreements to be modified for a change in price. Unless CARB accepts PG&E's request to post the Maximum price before June 1, any agreements that occurred prior to June 1 could now potentially be out of compliance with no means to change them. PG&E again requests CARB reconsider the timing for the application of the Maximum Price in its guidance. PG&E believes that the Agreement Date should govern which Maximum Price may be used for contract purposes at that time. (FF_PGE1_4-5)

Comment: §95487(a)(2)(D): This section states:

"Sell or transfer credits at a price that exceeds the Maximum Price for credits in the Clearance Market which is set in the pursuant to section 95485(c)(3)(D)"

This regulatory language does not make it clear that the "Maximum Price" applies to all LCFS credits, not just those credits in the CCM. CARB's "Low Carbon Standard Frequently Asked Questions – Effective Date for LCFS 2019 Amendments" (FAQ), dated February 2020, appears to address the matter in the first question response:

1. Under the current LCFS regulation, the Maximum Credit Price applies only to credit transactions taking place in the credit clearance market (CCM). When the amendments approved by the Board in November 2019 take effect, this Maximum Credit Price will apply to all credit transactions. When do the LCFS amendments go into effect?

The LCFS amendments will not be effective until they are approved by the Office of Administrative Law (OAL) through the regulatory approval process required by law. The pending amendments are currently on schedule to become effective July 1, 2020.

At the time of approval, OAL will also confirm the effective date of the regulatory amendments (hereafter referred to as the Effective Date). The Effective Date of the amendments will be the first day that the Maximum Credit Price will apply to credit transactions outside of the CCM (hereafter referred to as non-CCM transactions).

While the FAQ response is helpful, WSPA believes that the regulatory language is ambiguous and requests that CARB clearly state in the regulation that the "Maximum Price" applies to all LCFS credits, not just those credits in the CCM. (FF_WSPA1_6-5)

Comment: §95491: Table 12 of this section has been amended to indicated when the new maximum credit price goes into effect. However, there is no date certain when the new maximum credit price will be published. WSPA recommends that Table 12 be further amended to include a line item with the date when the new price will be published. (FF_WSPA1_6-6)

Agency Response: Both comment letters ask for a greater clarification on the timeline of announcing the new effective maximum price for LCFS credits. Staff notes that the current regulation's section 95485(c)(3)(A) already specifies that the Executive Officer will announce the new maximum price for credits on the first Monday of April. To improve regulatory clarity in response to this comment, staff has made non-substantial modifications to the proposed regulation language to add the publishing date of the new maximum effective price in Table 12 of section 95491 in the regulation, which is discussed in Chapter II, section B of this document. This addresses PG&E's concern that CARB announce maximum price for credits before June 1 to ensure that type 2 transactions are not entered and then later found to be out of compliance.

In FF_WSPA1_6-6, WSPA requests that CARB provide greater clarity that the maximum price of credits applies to all credit transfers in the LCFS credit market, and not only to the transactions and transfers occurring in the CCM. Staff clarified in the ISOR, the 15-day Notice package, and the staff's presentation to the Board that staff's proposal includes extending the maximum price to all credit transfers and transactions in the LCFS market. Staff also made non-substantial modifications to the proposed regulation text to further clarify this, which are summarized in Chapter II, section B of this document.

In FF_PGE1_4-5, PG&E requests that CARB confirm that the new maximum price for LCFS credit transactions will go into effect on June 1, 2020. In 2020, the effective date for the maximum price would be the effective date of the amendments, which will be after June 1, 2020. In subsequent years, the effective date for the maximum price would be June 1 of that calendar year.

B-4. Effective date should be changed

Comment: §95485(c)(3)(D)(3): WSPA suggests that CARB reset the annual LCFS credit price cap to take effect starting every July 1st instead of every June 1st as LCFS reports are due on a quarterly basis. This date change would avoid having to report LCFS credit transactions under two different price caps in the second quarter of each year. (FF WSPA1 6-4)

Agency Response: Staff rejects commenter's suggestion to change the annual price cap effective date as July 1. A July 1 price cap date would work less well with the broader CCM framework. For a portion of the CCM operation period, from June 1 to June 30, the market would operate at one effective maximum price, and for the remaining portion it would operate at another effective maximum price. Staff considers this to be an unnecessary confusion for CCM participants. CCM participants might delay transactions in the CCM to take advantage of the higher maximum prices, which could lead to shorter times for CCM participants to arrange for payments and transfers of credits before the designated deadlines.

B-5. Guidance document for CCM functionality

Comment: In order to pursue authority from the California Public Utilities Commission (CPUC) to participate in the CCM moving forward, PG&E reasserts the need for a guidance document on the functionality of the CCM. Market participants cannot fully evaluate the risk of participating in the CCM without knowing how buyers and sellers will be matched. For example: Do sellers choose who they are selling to? Do buyers choose who they buy from? Is there some kind of automated matching? Do credits get prorated from all sellers to all buyers? How will this differ in the case of Advance Credits versus the regular CCM? This information will be critical for all market participants as well as the CPUC to consider. **(FF_PGE1_4-6)**

Agency Response: Please see the agency response in Chapter IV, B-19.

B-6. Later effective date for CCM provisions

Comment: PG&E also appreciates CARB's acknowledgement of the confusion that may be caused with the effective date of these amendments being within the CCM window if one were to occur. PG&E requests that the regulation language applicable to Advanced Credits not be effective until 2021. This would allow time for CARB to publish the requested guidance document and for the IOUs to receive authority from the CPUC to participate in the CCM. **(FF_PGE1_4-7)**

Agency Response: The proposed regulatory clarification is unnecessary because the amendments specify that any advanced credits to be used in a CCM will be issued before June 1. Because these amendments will not take effect before July 1, 2020, no advanced credits could be issued pursuant to the amendments in a potential 2020 CCM.

B-7. Compliance plan and CBI information

Comment: Compliance Plan Confidentiality: As noted in the WSPA Comment Letter, dated November 11, 2019, we remain concerned that requiring a party to submit a compliance plan so intimately tied to a sensitive commodity market crosses a confidential business information (CBI) threshold. Pursuant to the revised §95485(c)(2)(C)(1), WSPA requests that CARB confirm that Compliance Plans will be kept confidential or, at a minimum, allow for redaction of CBI as indicated by the Plan submitter. (FF_WSPA1_6-1)

Agency Response: Please see the agency response in Chapter IV, B-14.

B-8. Timeline of submitting the annual compliance reports and the compliance plans are incompatible

Comment: §95485(c)(2)(B): In this section, August 31st is cited as the day entities are required to submit Compliance Plans and Annual Compliance Reports. Thus, an entity that goes into the CCM in 2020 for 2019 reporting and in 2021 for 2020 reporting would have to submit a Compliance Plan the same day as an Annual Compliance Report for 2020 (on August 31, 2021). WSPA believes that this situation needs to be addressed in the regulations from a timing standpoint. (FF WSPA 6-2)

Agency Response: Entities that must submit Compliance Plans will know that they will need to submit the Compliance Plan by April of that year, and will thus have enough time to prepare for both documents. Because the contents of those two reports are unrelated, staff does not anticipate that any suggested time conflict should necessitate a change in the timeline of submission for either document.

B-9. Clarify provision related to prepayments in the CCM.

Comment: §95485(c)(2)(D): For clarity and consistency, WSPA requests that the following <u>underlined</u> language be added to §95485(c)(2)(D) to clarify the conditions related to the following:

Entities required to acquire <u>advanced</u> credits in the Credit Clearance Market must complete payment to the seller before the credit transfer is initiated, unless the buyer and seller agree on other payment terms. <u>Entities required to sell voluntary credits in the Credit Clearance Market must complete credit transfer before payment is made, <u>unless the buyer and seller agree on other payment terms</u>. All credit transfers must be completed on or before the final date of the Clearance Market Period. (FF_WSPA1_6-3)</u>

Agency Response: Staff rejects the commenter's suggested change to the regulation language. Requiring entities that voluntarily pledge credits to complete credit transfer before payment is made places an unnecessary risk on selling in the CCM, which may lead to fewer credits being volunteered. Staff believes that requiring the buyer to complete payment before the credit transfer is initiated appropriately places the risk on the buying entity.

C. Changes to the Clean Fuel Reward Program

C-1. Support for greater flexibility for the administration costs of the CFR program.

Comment: PG&E appreciates ... the additional flexibility on how to address administrative costs for the Clean Fuel Reward. **(FF_PGE1_4-3)**

Agency Response: Staff appreciates the commenter's support for the modifications of the proposed amendments relating to the administration costs of the CFR program.

D. Holdback Credit Equity Projects

D-1. Multiple Comments: Support the inclusion of rural areas to qualified areas for holdback credit equity projects

Comment: Rural projects: Adding rural projects to the list of eligible equity holdback projects addresses an important barrier to making sure all Californians benefit from EVs. (FF_CALETC1_2-2)

Comment: With regards to the modified Proposed Regulation Order, NCPA supports the inclusion of "rural areas" as eligible for equity project funding; rural communities face unique challenges that require additional assistance and support to ensure adoption of zero emission vehicle technologies. **(FF_NCPA1_3-1)**

Agency Response: Staff appreciates the commenter's support for the modifications of the proposed amendments relating to the inclusion of rural areas.

D-2. Multiple Comments: Support for changes made to the administrative costs of holdback equity credit projects

Comment: Administrative costs: Providing improved flexibility on how to address administrative costs and allowing the Executive Officer to approve exceeding the administrative cost cap will make the utilities' LCFS programs more successful and reduce risks. **(FF_CALETC1_2-3)**

Comment: PG&E appreciates ... the additional flexibility on how to address administrative costs for... other LCFS-funded utility programs. **(FF_PGE1_4-4)**

Agency Response: Staff appreciates the commenter's support for the modifications of the proposed amendments relating to the administrative costs of holdback equity credit projects.

D-3. Multiple Comments: Support counting administration costs for holdback credit equity projects as part of the holdback credit equity spending

Comment: NCPA appreciates CARB's recognition that the administrative costs necessary to successfully implement equity projects should be recognized and counted towards spending requirements, consistent with other state programs. **(FF_NCPA1_3-2)**

Comment: PWP also supports CARB decision to allow utilities to use HBC funds for administrative costs associated with the development of Holdback Credit Equity Projects. **(FF PASADENA1 5-2)**

Agency Response: Staff appreciates the commenter's support for the modifications of the proposed amendments related to the inclusion of the administrative costs as part of the holdback credit equity spending portion.

D-4. Multi-year averaging of percentage spending on holdback credits equity projects

Comment: Prior to the effective date of the new equity provisions in 2022, NCPA recommends that CARB consider updates to the LCFS regulations or reporting guidelines to allow multi-year averaging or a true-up period, instead of a strict annual requirement, and to allow for the encumbrance of funds for equity projects as an eligible use of funds. Designing and implementing successful transportation electrification programs for low-income, disadvantaged, and rural communities has been challenging, and the uptake and timing of projects is difficult to predict.

Based on the provisions within the Proposed Regulation Order, the undersubscription of an equity project could potentially have the unintended consequence of delaying the distribution of funding for other projects. Electric distribution utilities (EDUs) should be able to correct for an underperforming or delayed project by launching additional or different projects in adjacent years, in order to assure multi-year compliance while continuing to support the equitable distribution of funding and infrastructure. **(FF NCPA1 3-3)**

Agency Response: Please see the agency response in Chapter IV, D-12.

D-5. Allow POU's governing bodies to define disadvantaged communities

Comment: PWP appreciates the additional flexibility in the proposed regulations with regard to the Restriction on Use of Holdback Credits, section 95483(c)(1)(A)(6)(a). PWP understands that the City of Pasadena's governing board has the authority to establish the definition of both its own DAC and LI communities. PWP recommends adding language that states, "DAC as defined by the local governing board," as an acceptable definition for DAC, so that utilities can be more inclusive with the DAC definition to help a larger population in section 95483(c)(1)(A)(6)(a).

...PWP requests that CARB consider adding language in the regulation to allow a POU's governing body to define a DAC. **(FF PASADENA1 5-1)**

Agency Response: Please see the agency response in Chapter IV, D-6.

D-6. Additional SB 350 requirements may be administratively cumbersome

Comment: Lastly, the newly added holdback credit reporting provision for EDUs, requiring an analysis of the SB 350 Low Income Barriers Report and existing state and local programs, may be an administratively burdensome undertaking for smaller utilities. The reporting requirements for LCFS should be reviewed regularly to verify that only necessary information is requested, and that the combined requirements do not have the unintended consequence of discouraging smaller utilities, especially those with lowincome, disadvantaged, and rural communities, from participating in the LCFS. **(FF_NCPA1_3-4)**

Agency Response: Staff does not anticipate that the additional reporting will be excessively burdensome on small POUs. Any additional reporting effort is designed to ensure that entities across the State are working together to comprehensively and consistently advance important policy goals. Staff

appreciates the commenter's concern, and is committed to work with EDUs to minimize the administrative burden of these reports.

E. General Support

E-1. Multiple Comments: General support for the 15-day changes

Comment: We believe the amendments adequately address all comments submitted and reflect CARB Board direction; we urge you to take final action to adopt the regulation. ... The staff's proposed amendments to the LCFS appropriately address the CARB Board direction to staff and are responsive to public comments submitted by CalETC and others during the November 2019 CARB Board hearing process **(FF_CALETC1_2-1)**

Comment: PG&E believes that these amendments adequately address the concerns raised through the public process and the Board Hearing on December 21, 2019. **(FF_PGE1_4-1)**

Agency Response: Staff appreciates the commenters' support for the modifications of the proposed amendments.

E-2. General support for the LCFS program

Comment: PG&E continues to support the Low Carbon Fuel Standard as a program that will help the state meet its aggressive climate goals while maintaining a healthy economy. **(FF_PGE1_4-8)**

Agency Response: Staff appreciates the commenter's support for the LCFS.

F. Comments outside the Scope of the Rulemaking

F-1. Recommendations related to credits generated by electricity used in port equipment

Comment: The Port of San Diego is pleased to have participated in the LCFS program since Q2 of 2019. During this time, the Port has gained familiarity with the LCFS rule as it applies to port operations and equipment. Given that ARB is in the process of reviewing and revising the 2019 LCFS Amendment with consideration of possible modifications to the Rule now, prior to a full rule-making process for the next LCFS amendment, the Port thought it would be helpful to offer the recommendations below. These recommendations are meant to help ports more easily participate while maintaining the high level of oversight and integrity of the credits.

Recommendation 1: LCFS Opt-in credit generators should not have to create a WREGIS account to procure RECs.

The Port is a retail electric customer. We have limited space to produce solar energy and the utility here (SDG&E) does not have an open green power program. The Port's best option is to "green up" the power supply through the retail purchase of RECs from any of the numerous qualified retail brokers. The source of the RECs should be Green-e certified, generated in California, limited to solar and wind, and fall within a prescribed vintage period.

Requiring the Port and other entities that want to purchase RECs to open and maintain their own WREGIS account is overly cumbersome for us opt-in entities. Instead, we and similar entities should be able to simply purchase RECs from an account holder who will retire the RECs in accordance to the LCFS guidelines that require the tracking of these instruments and retirement on behalf of the LCFS program and a particular opt-in entity.

Recommendation 2: Amend the AFP Attestation Form required for pairing RECs with electrical consumption.

Currently, to pair Renewable Energy Certificates (RECs) with electrical consumption and earn a zero-carbon intensity (Cl) score for the electricity used, LCFS opt-in credit generators must sign the Alternative Fuels Portal (AFP) Attestation Letter version 20190101. This Letter states the following:

"I certify under penalty of perjury under the laws of the State of California that I have personally examined, and am familiar with, the statements and information submitted in this document., certify that the statements and information submitted to CARB are true, accurate, and complete."

However, LCFS credit generators are relying on the accuracy of the RECs tracked in the Western Renewable Energy Generation Information System (WREGIS), which is required for REC retirement under the LCFS Program. Therefore, it is difficult for LCFS credit generators to certify to the accuracy of these RECs, which are generated remotely and tracked by the WREGIS system. Therefore, the Port recommends that the following language replace this Attestation Form for LCFS credit generators that are pairing RECs with consumption so that it is more accurate.

"This certification is based on having reviewed a dashboard provided by WREGIS/WECC that shows that the agent for the Port has procured A) a quantity of Renewable Energy Certificates (RE Cs) that are greater or equal to the quantity of energy reported, B) the RECs are sourced from solar and/or wind energy with a Cl equal to zero, C) the location of the energy source is in California, and D) the vintage month and year fall within the acceptable production and banking period."

Recommendation 3: Change definition of FSE for eTRU to be consistent with definition of FSE for eCHE, shore power, and forklifts.

As a bit of background, a trailer refrigeration unit (TRU) is a self-contained unit that is the size of one container. They can provide refrigeration by one of the following three options: using electricity supplied by land-based shore power; using electricity from a portable diesel generator; or using its self-contained diesel generator. (This is analogous to vessels that can either use shore power or their diesel auxiliary engine when at berth.) When the TRUs are discharged from the vessel, they are placed on the chassis of a truck. At this point, if they are transported to an off-site warehouse, the contents are kept cool by the self-contained diesel generator. If the units are to remain on the terminal, then they are driven to a holding yard where they are plugged in to electricity from the local grid. Therefore, these units are only electric when they are plugged in.

The plug they require is a specific one, and the terminal operator's facility required significant upgrades in the electrical infrastructure to support over 740 30-amp, 460

VAC, 3-phase plugs to each charging site. This upgrade was developed for the purpose of reducing local and global air pollutants1 prior to any regulation requiring it. The Port made significant capital investment to ensure that these units could be charged and used at the Port to improve the air quality for local inhabitants.

The current regulation, which gives ownership of the credit to the Fueling Supply Equipment (FSE) (defined as the eTRU), does not properly compensate the party responsible for the expensive upgrades necessary to electrify these units. Just like shore power, the expensive upgrades necessary to serve this equipment was made by the Port. And, like other LCFS crediting opportunities where the intention of the program is to reward the entity responsible for the capital infrastructure upgrades, the eTRU credits awarded should go to those to those who invested in and own the infrastructure.

Furthermore, if the terminal operator was going to try to capture the LCFS credit value for the eTRUs, the rules are set up in a way that makes this impossible. First is the issue of registering and recording the eTRUs, since eTRUs only exist when they are plugged in. The eTRU fleet used by the terminal operator at the Port is over 30,000 strong. Every week a ship arrives and unloads 700-750 TRUs. These reefers are shipped worldwide and are periodically retired. Keeping track of this fleet by serial number is untenable as the cost of this longshore labor would exceed the value of the LCFS credits and could result in jurisdictional labor disputes.

The upshot of the LCFS Regulation as it is written is that few or no eTRUs will apply for credits due to the cumbersome recording requirements. The system could be greatly simplified by requiring the electricity records of each plug that serves an eTRU, instead of eTRU tracking. These plugs can only serve eTRUs so the records would be accurate and simple to pull. If the eTRU is plugged in at a different facility, then that facility can credit the eTRU usage there through the electrical records and no double counting occurs. This is analogous to how ocean-going vessels (OGV) can go from port to port pulling shore power at each port. The OGV is not the FSE and nor should it be as it is not supplying any electricity to the vessel. Similarly, the eTRU is not supplying electricity to the unit and should not be considered the FSE.

The Port does ask that, given what ARB now knows about how eTRUs function, the definition of FSE be revisited to create consistency amongst all cargo-handling equipment: forklifts, yard tractors, reefers and the ships themselves. The definition in the rule [Section 95483.2.(b){8)(B)6-7] currently exists as follows:

- 6. Far electric forklifts, eCHE, or eOGV, FSE refers to the facility or location where electricity is dispensed for fueling. If there are multiple FSEs capable of measuring the electricity dispensed at the facility or location, then it is optional to provide serial number assigned to each equipment by the OEM and the name of OEM.
- 7. For eTRU, FSE refers to each eTRU. Fuel reporting entities for eTRU fueling must provide the serial number assigned to the unit by the OEM and the name of the OEM.

The Port suggests that ARB amend Section 6 above to include eTRU with the electric forklifts, eOGV and eCHE. Section 7 can then be deleted.

Recommendation 4: Revise definition of OGV to be a maritime craft.

As ports strive to improve the air quality for the local inhabitants of port communities, there is discussion of retrofitting ferries and tugboats to plug into shore power instead of idling on diesel at berth. The current OGV definition in the LCFS regulation (400 feet in length overall, 10,000 gross tons, and/or propelled by a marine compression ignition engine with per cylinder displacement of greater than or equal to 30 liters) would preclude these smaller crafts from qualifying as they are below the size and weight requirements set by the OGV definition in the LCFS regulation.

Therefore, the Port recommends that this definition be modified to include all maritime crafts that plug into shore power since the carbon dioxide savings will be measured by the total kilowatt hours used, and regardless of the size of the craft, these savings should be rewarded as investments to retrofit all maritime crafts and install shore power outlets are costly and require incentives such as LCFS credits.

Having greater clarity on what qualifies as an acceptable expense and having this guidance in writing will satisfy the Port's internal reporting and finance team's requirements and concerns.

Thank you for your attention to these recommendations, and feel free to follow up with the Port for additional clarity or questions. The Port would be glad to arrange a phone call or meeting and tour of the Port's facilities to help staff better understand the workings of a Port and how the rule applies to eCHE, eTRUs, eOGVs, and forklifts at the site.

Agency Response: Staff appreciates the commenter's recommendation. However, these comments are outside the scope of this rulemaking, as the comments do not pertain to the cost containment provisions of the LCFS, the CFR program, or designing an equity-based framework for the use of proceeds of holdback credits.

VI. PEER REVIEW

Health and Safety Code Section 57004 sets forth requirements for peer review of identified portions of rulemakings proposed by entities within the California Environmental Protection Agency, including CARB. Specifically, the scientific basis or scientific portion of a proposed rule may be subject to this peer review process. CARB determined that the rulemaking does not contain scientific basis or a scientific portion subject to peer review, being based instead upon future market projections rather than existing empirical data (or other scientific findings, conclusions, or assumptions establishing a regulatory level, standard, or other requirement for the protection of public health or the environment), and thus no peer review is needed to be performed.