



July 5, 2018

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

RE: 15-day Proposed Amendments to the Low Carbon Fuel Standard Regulation

Dear Mr. Wade:

Thank you for this opportunity to provide input on the proposed 15-day amendments to the Low Carbon Fuels Standard (LCFS). NRDC appreciates ARB staff's commitment to cleaner, healthier air for all Californians and for your international leadership in protecting current and future generations from the impacts of climate pollution. We respectfully submit these comments for your consideration.

NRDC recognizes ARB staff received direction from the Board during the April 27th Hearing to provide additional credits based on installed infrastructure capacity for hydrogen fuel cell stations, and – out of an interest in promoting Zero Emission Vehicles - has asked staff to also extend these credits to electric-vehicle fast charging stations.¹ While in principle we do not support these types of “incentive, bonus credits” being added to the performance-based LCFS system, we also recognize that ARB has, as a policy matter, sometimes added these types of bonuses into programs. We flag our concerns more generally with the use of incentive multipliers, the trade-offs they generally create, and ask that ARB strengthen the proposed constraints and rules governing the Hydrogen Refueling Infrastructure (HRI) and DC Fast Charging Infrastructure (FCI) credits.

1. Staff should modify the provisions to place a hard-cap on infrastructure capacity credits

NRDC appreciates staff's attempts to put percentage-limits and a sunset to the HRI and FCI provisions, and to also restrict the eligibility to only projects not receiving settlement funds (e.g. Volkswagen Settlement among others). However, staff's proposal to provide a 2.5% limit to the HRI and another 2.5% limit to the FCI credits (for a supposed limit of 5%) is actually a soft cap. The current proposal only

¹ ARB Board Resolution 18-17, April 27th, 2018 Hearing; Governor Jerry Brown's Executive Order B-48-18.

restricts ARB from approving additional applications once the credits make up 2.5% of the quarterly deficit (or requirement). It is very likely that between the time ARB has approved the initial group of HRI and FCI projects, to the time that the initial HRI and FCI projects are built and generating the 2.5% of the credits, an entire pipeline of projects exceeding the 2.5% may have already been approved.

We ask that the current soft-limit structure proposed by staff be converted into a hard cap, based on the *cumulative approved* HRI and FCI projects and capacity relative to the actual deficits for that specific year. A first-come, first serve approach could be used, whereby a project application could be approved until the cumulative total of approved projects reaches the 2.5% threshold relative to the current quarter. To account for some projects not moving forward, a time-limit for project developers to build and commission stations could be instituted, such that they would need to go back into the end of the queue for their application so that other projects could move forward.

Absent a hard cap, the impact of these provisions could greatly exceed the 5% overall impact, meaning less actual, overall GHG emission reductions will be achieved.

2. The HCI and FCI crediting provisions should be sunset after 5-8 years for a project and include a phase-down of credits for unutilized capacity.

We recognize the HCI and FCI provisions is intended to provide enough value over a period to overcome potential low, initial utilization. However, a full 15-year crediting arrangement for the HCI would provide significant credits, potentially well beyond the 2030 time-period, suggesting an overly generous amount of multiplier credits over the lifetime of a project as opposed to just the initial period.

Second, the credits remain largely fixed over time, even if the HCI and FCI project developers or operators do not increase utilization rates, setting up a perverse incentive where if the project developer increases utilization there would be a reduced HCI and FCI incentive. A station operator may have less incentive to attractively price the refueling service or fuel since “unused” capacity is still being rewarded. ARB should solve this by adding a factor in the HCI and FCI crediting equations to simply reduce the HCI and FCI credits for unutilized capacity over time.

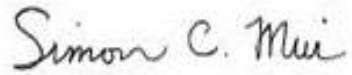
3. ARB should make these provisions a “pilot” and add an earlier review to evaluate the efficacy and impact of the HCI and FCI provisions.

Because of the fast turn-around since the April 27th Board hearing to further develop these provisions, NRDC recommends that staff make the HCI and FCI provisions part of a 2-year pilot, after which ARB will workshop the provisions to evaluate questions around the effectiveness of the provisions, the impacts on projects, and the impacts on the overall program. As demonstrated in Attachment F “Public Workshop Materials” for the June 11th, 2018 workshop there is large potential uncertainty in the effects of these provisions on specific projects.

In summary, while we support ARB’s overall efforts to adopt changes to the LCFS to extend the program to 2030, we have concerns about ensuring these new provisions – which begins to move the program away from the performance-based approach through the introduction of “incentive bonus” credits – are

designed in a manner that ensures the environmental integrity of the program and that the unintended tradeoffs and risks are mitigated to the extent possible.

Sincerely,

A handwritten signature in black ink that reads "Simon C. Mui". The signature is written in a cursive style with a clear, legible font.

Senior Scientist, Ph.D.

Climate & Clean Energy Program

Natural Resources Defense Council