



ADDITIONAL COMMENTS OF THE NATURAL RESOURCES DEFENSE COUNCIL ON PROPOSED AMENDMENTS TO THE LOW CARBON FUEL STANDARD

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1 Summary of Contents

On December 9, 2011, the Natural Resources Defense Council (“NRDC”) submitted comments to the Air Resources Board (“ARB” or “Board”) on the *Proposed Amendments to the Low Carbon Fuel Standard* (“Proposed Amendments”). Provided key changes recommended in those comments are adopted, NRDC urges the Board to enact the Proposed Amendments, which are critical to the success of the LCFS and California’s larger efforts to improve the environmental performance of the transportation sector.

This document provides additional comments on the Proposed Amendments and the *Staff Report: Initial Statement of Reasons* (“Staff Report” or “ISOR”) on the subject of the treatment of regulated parties for electricity. As stated in our previous comments, NRDC enthusiastically supports the requirement that electricity providers return all proceeds from the sale of LCFS credits to electric vehicle customers. This requirement could significantly improve the economics of a decision to drive on electricity.

Findings

1. Not all organizations or individuals installing electric vehicle charging equipment outside of the home will wish to become regulated parties, but electric utilities will always be needed to furnish the electricity required to charge vehicles. Accordingly, the designation of electric utilities as alternate regulated parties in non-residential segments furthers the staff goal of maximizing the number of LCFS credits generated.
2. The Proposed Amendments allow for the use of LCFS credit value to reduce both operating costs and up-front costs of electric vehicles, improving the economics of a decision to drive on electricity.
3. The Proposed Amendments allow an appropriate amount of time for various low-cost metering solutions to emerge, consistent with California Public Utilities Commission (“CPUC”) policy to be agnostic as to the location of the meter.
4. The requirement that electricity providers provide rate options that minimize impacts to the electrical grid and encourage off-peak charging supports CPUC goals for the integration of vehicle charging.
5. The requirement that electricity providers engage in public education and outreach as to the benefits of vehicle electrification furthers the goals of the LCFS.

Recommendations

1. The “Final Statement of Reasons” should reflect the fact that improving the economics of vehicle electrification is sufficient justification for the designation of electric utilities as regulated parties.
2. The “Final Statement of Reasons” should note the fact that improving the economics of vehicle electrification furthers the goal of maintaining the relevancy of the LCFS.



2 NRDC Supports the Proposed Amendments' Treatment of Regulated Parties for Electricity

As noted in NRDC's comments of December 9, 2011, the Proposed Amendments requirement that electricity providers return proceeds from the sale of LCFS credits to electric vehicle ("EV") customers will improve the economics of a decision to drive on electricity.¹ Here, NRDC provides additional comments in support of the Proposed Amendments' electricity provisions.

2.1 The designation of electric utilities as alternate regulated parties the non-residential segments will ensure credits do not go unclaimed

One of the staff goals, expressed in workshops and in the Staff Report, is to ensure that LCFS credits do not go unclaimed.² Accordingly, the Proposed Amendments designate an alternate, or default, regulated party in case the entity that would normally qualify as the primary regulated party fails to meet the requirements or does not wish to become a regulated party. The Proposed Amendments designate electric utilities as the alternate regulated party in the non-residential context in order to ensure LCFS credits do not go unclaimed.

The electric vehicle market is evolving rapidly. The costs of electric vehicle supply equipment are declining rapidly and the availability of off-the-shelf equipment is increasing. Companies dedicated to installing EV infrastructure will likely continue to play an important role in expanding access to charging outside the home. Nevertheless, many businesses, fleet managers, and individuals will install charging equipment without contracting with specialized companies or electricians interested in becoming regulated parties. However, electric utilities will be always required to furnish the electricity needed to operate charging equipment. Recognizing this fact, the Proposed Amendments appropriately designate electric utilities as the back-up regulated party for EV charging outside of the home. This designation furthers the staff goal of ensuring that LCFS credits do not go unclaimed.

2.2 The Proposed Amendments allow for the use of credit proceeds to reduce both the up-front and operating costs of electric vehicles

The Proposed Amendments strike an appropriate balance between restricting the use of credit proceeds and allowing for the most effective use to emerge. The Proposed Amendments require that *all* credit proceeds are returned *directly* to EV customers, but do not specify the exact means by which that should be accomplished.³ This will allow for the use of credit proceeds to reduce both up-front and operating costs, through rebates, as proposed by the Sacramento Municipal

¹ NRDC, *Comments of the Natural Resources Defense Council on Proposed Amendments to the Low Carbon Fuel Standard*, December 9, 2011, p. 6.

² Air Resource Board, *Staff Report: Initial Statement of Reasons for Proposed Rulemaking ("ISOR")*. October, 2011, p. 43, 45.

³ California Air Resource Board, *Appendix A: Proposed Regulation Order*, October 26, 2011, p. 34 ("Proposed Amendments").



Utility District, or through reductions in EV rates.⁴ In either case, the Proposed Amendments will improve the economics of vehicle electrification.

At the same time, the Proposed Amendments will not allow for the use of credit proceeds to fund activities which only *indirectly* benefit EV customers. NRDC supports the both the strictness and the flexibility inherent the Proposed Amendments, as it is not yet clear whether reductions in up-front or operating costs will best accelerate the electric vehicle market.

2.3 The Proposed Amendments allow an appropriate amount of time for various lower cost metering arrangements to emerge

The Proposed Amendments will not require “direct metering” of electricity for LCFS purposes until 2015.⁵ Given that the current means of implementing direct metering is prohibitively expensive, it is appropriate to allow for a less costly form of metering to emerge. NRDC also supports the technological agnosticism implicit in the use of the term “direct metering” which encompasses various metering solutions. NRDC advocated before the California Public Utilities Commission for a “sub-metering” protocol to explore low-cost metering in various locations. Commission Decision 11-07-029 stated:

*We agree that a process is needed to develop an Electric Vehicle submetering protocol. We also agree with NRDC that the Electric Vehicle submeter protocol should create a framework that can incorporate emerging metering technologies and encourage innovation. The submetering category as defined here remains broad, and any Electric Vehicle submeter protocol should support the use of submeters in various physical locations, such as standalone customer-owned submeters, or in electric vehicle service equipment or a vehicle.*⁶

The Proposed Amendments, by not specifying the location of the sub-meter, are consistent with CPUC policy to allow for various sub-metering solutions. Likewise, the Proposed Amendments allow for the possibility that other metering arrangements, such as separate metering, including separate metering facilitated through dual meter adapters, may be the most practical low-cost solution. In sum, the Proposed Amendments are consistent with Commission policy, allow an appropriate amount of time for lower cost metering solutions to emerge, and are appropriately agnostic as to the form of those solutions.

2.4 NRDC supports the requirement that regulated parties for electricity provide appropriate rate options as a precondition for the receipt of LCFS credits

NRDC supports the requirement that regulated parties provide rate options that encourage off-peak charging and minimize adverse impacts to the electrical grid. NRDC commends staff for revising the previous language to ensure that all appropriate rate options comply with this pre-condition on

⁴ See Sacramento Municipal Utility District, *Re: Proposed Regulatory Changes for Low Carbon Fuel Standard Regulations*, August 5, 2011.

⁵ *Proposed Amendments*, p. 43.

⁶ California Public Utilities Commission, *Decision 11-07-029*, p. 42.



the receipt of LCFS credits. Like the Proposed Amendment's treatment of metering, this requirement is appropriately constructed to allow for the most efficient solutions to emerge.

2.5 NRDC supports the requirement that regulated parties for electricity engage in active education and outreach as a precondition for the receipt of LCFS credits

NRDC advocated vigorously before the CPUC for strong utility education and outreach programs.⁷ All five of California's utilities are already pursuing activities in line with the example education and outreach activities included in the Proposed Amendment. It is entirely appropriate for ARB to underscore the importance of such efforts by requiring active education and outreach as a precondition for the receipt of LCFS credits.

While requiring education and outreach as a precondition, the Proposed Amendments do not allow for the use of LCFS proceeds to fund such efforts because they require the use of "all credit proceeds as *direct* benefits for *current* EV customers" (emphasis added).⁸ While vital, education and outreach, by its nature, is not an exclusive direct benefit to current EV customers. NRDC supports the simplicity inherent in ARB's Proposed Amendments as it ensures that all credit proceeds will be used to improve the economics of vehicle electrification at this critical stage in the market's development. In the future, when the total value of LCFS proceeds in the electricity sector is more substantial, ARB may wish to re-direct some portion of proceeds towards additional activities that accelerate the electric vehicle market, informed by the knowledge and experience gained in the intervening years. For now, however, NRDC recommends that ARB keep it simple and ensure that all credit value is used to provide an additional incentive to drive on electricity.

3 NRDC Respectfully Disagrees with the Staff Report's Rationale for the Designation of Electric Utilities as Regulated Parties

3.1 Improving the economics of vehicle electrification is sufficient justification for the designation of electric utilities as regulated parties

The ISOR provides, as justification for designation of electric utilities as regulated parties, the assertion that electric utilities will incur substantial costs associated with integrating vehicle charging.⁹ As a preliminary matter, it is premature to state that vehicle charging will result in net-costs to utility customers. As noted in CPUC Decision 11-07-029, the greater asset utilization that will result from off-peak vehicle charging could reduce the marginal cost of electricity for all utility customers, a net-benefit to the system.¹⁰ At this nascent stage in the development of the electric vehicle market, it is impossible to predict whether vehicle integration will result in net-costs or net-benefits. In fact, it is the goal of the CPUC to implement the policies which will ensure that vehicle electrification results in net-benefits. Accordingly, ARB's determination to

⁷ *Comments of the Natural Resources Defense Council on Proposed Decision on Phase Two Issues*, R. 09-08-009, April 5, 2011.

⁸ *Proposed Amendments*, p. 43.

⁹ *ISOR*, p. 45.

¹⁰ California Public Utilities Commission Decision 11-07-029, p. 55: "...incremental Electric Vehicle load on a larger scale has the potential to yield improved electricity system asset utilization in the long-term."



allocate LCFS credits to utilities should not be based on supposition that vehicle integration will result in net-costs, when the opposite is equally possible.

Secondly, the ISOR mischaracterizes CPUC policy with respect to cost recovery, stating that all costs associated with vehicle integration will be subject to Decision 11-07-029's determination that, until 2013, costs in excess of utility allowances shall be treated as common facility costs.¹¹ That aspect of Decision 11-07-029 speaks only to a very rare set of factual circumstances irrelevant to the majority of costs associated with vehicle integration. This is the only instance in which the Commission determined to treat cost recovery with respect to electric vehicles differently that cost recovery associated with any other load. The Commission justified this exception on the legislative directive included in California Public Utilities Code §740.2, AB 32 goals, and ARB's Scoping Plan which are intended to encourage the use of electricity as a transportation fuel.¹² For the vast majority costs associated with vehicle integration, the standard cost allocation framework will apply. ARB should not cite to the exception to the rule to justify its allocation of LCFS credits to utilities.

Thirdly, and most importantly, the justification for the allocation of LCFS credits to utilities on the grounds that they will incur expenses associated with vehicle integration is at odds with the Proposed Amendments' requirement that *all* credit proceeds be returned to *EV* customers. Section 95484(a)(6)(A)(1) does not allow for the use of credit proceeds to offset costs associated with vehicle integration. This is consistent with the existing cost allocation framework established by the CPUC. The costs of shared distribution equipment necessary to serve load are shared within any given customer class. Transformers do not discriminate between dishwashers and electric vehicles. The Proposed Amendments are consistent with CPUC policy, but the ISOR implies a different arrangement would be appropriate.

NRDC respectfully request that the "Final Statement of Reasons" not justify the allocation of LCFS credits to utilities on the grounds that costs will be incurred to accommodate vehicle charging. Rather, ARB should justify its allocation to utilities on the grounds that they are providing a low carbon transportation fuel and are obliged to return all credit proceeds to EV customers. In sum, ARB should justify its regulations on the grounds that they could improve the economics of vehicle electrification and further the overarching goal of the LCFS — to increase the use of low carbon transportation fuels. No further justification is necessary.

¹¹ ISOR, p. 45.

¹² California Public Utilities Commission Decision 11-07-029, p. 58-59: "Therefore, in light of the policy set forth in AB 32 and ARB's 2008 Scoping Plan to encourage the electrification of the transportation sector as a means of reducing overall greenhouse gas emissions, we adopt special interim cost treatment for service upgrade costs resulting from Electric Vehicle charging that exceed the Rules 15 and 16 residential allowances. Our decision today is also supported by the directive in § 740.2 to reduce barriers to Electric Vehicle adoption and our goal to encouraging early adopters."



3.2 The designation of utilities as regulated parties furthers the goal of maintaining relevancy by improving the economics of vehicle electrification

The executive summary of the Staff Report states that the designation of electric utilities as regulated parties:

*...goes against the goal of maintaining relevancy as the EV charging market evolves in future years. Such designation cannot benefit potential charging equipment installers such as non-utility electric vehicle service providers, business owners, and EV fleet owners...*¹³

Allocating credits to utilities and then requiring them to pass along all credit proceeds to EV customers will improve the economics of vehicle electrification. This could have a profound and lasting effect upon the future of the EV market. Given the fact that electricity prices are likely to rise for reasons exogenous to vehicle electrification, requiring the use of credit proceeds to improve the economics of a decision to switch to electricity could prove critical to the prospects for the electric vehicle market.

To suggest that “potential charging equipment installers” will not benefit from the Proposed Amendments’ electricity provisions is also mistaken. If a utility decides to use credit proceeds to provide rebates to reduce first costs, such as those associated with charging equipment, installers of charging equipment stand to benefit enormously. Likewise, if a utility decides to use credit proceeds to reduce EV rates, the price of electricity as a transportation fuel will be reduced. For companies that offer public charging services, the result will be a reduction in the cost of a key input. Companies that install charging equipment also stand to benefit from a reduction in the price of electricity as transportation fuel, which will increase investment in charging station installations. Under ARB’s Proposed Amendments, all parties — utilities, third-party charging service providers, charging equipment installers, and electric vehicle drivers — stand to benefit. NRDC respectfully requests that the “Final Statement of Reasons” note that improving the economics of a decision to drive on electricity ensures relevancy, and supports the overarching goal of the LCFS — to lower the carbon intensity of California’s transportation fuel mix.

4 Conclusion

We commend ARB for its efforts to increase the use of alternative transportation fuels, reduce dependence on oil, and further California’s broader environmental goals, and urge the Board to adopt the Proposed Amendments electricity provisions.

Sincerely,

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¹³ ISOR, p. ES-8.