



July 5, 2018  
LEG 2018-0359

California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

**Re: Comments by the Sacramento Municipal Utility District on  
Proposed 15-Day Modifications to the Pending Amendments to the  
Low Carbon Fuel Standard Regulation**

The Sacramento Municipal Utility District (SMUD) submits the following comments on Staff's suggested modifications to the 2018 Proposed Amendments to the Low Carbon Fuel Standard (LCFS) Regulation (15-day Modifications). SMUD is generally supportive of Staff's suggested modifications, which we will explain in detail below.

**EV Charging at Multi-family Residences (§ 95483(c)(2))**

***SMUD supports continuation of the Electricity Distribution Utility (EDU) as the credit generator for electric vehicle (EV) charging at multi-family residences because EDUs are in the best position to economically install chargers.***

In the "Notice of Public Availability of Modified Text and Availability of Additional Documents and Information," issued by staff on April 20, 2018 ("Notice of Modified Text"), staff suggests that granting owners of Fueling Supply Equipment (FSE) first priority to claim residential electricity credits for vehicles charging in multi-unit dwelling situations would incent faster deployment of charging infrastructure because charging equipment at multi-family residences are more similar to non-residential charging than to charging at single-family residences.

SMUD opposes the 15-day Modifications to treat credit generation from residential EV charging in multi-family residences differently than for single-family EV charging. Subdividing residential charging into single and multi-family categories adds considerable complexity to residential electricity credit generation, and forms a barrier to the Board requested "point of purchase" program. Multi-family living situations take many forms in this state, so it cannot be assumed that charging equipment at multi-family residences are more similar to non-residential charging than to charging at single family residences. Much of the housing stock that qualifies as multi-family dwelling are triplexes and other joint housing that are not part of classic garden style or high rise apartment complexes.

Moreover, the economic self-interest of owners of large multi-family dwellings will remain a barrier to purchasing EV charging equipment for tenants until adoption of EVs is sufficiently widespread.

In addition, splintering residential credit generation into multiple categories would reduce credit revenues overall given that some multi-family dwelling property owners would delay getting into the market, which could damage existing EDU programs that have been found to incent EV adoption, such as SMUD's Free Fuel for 2 Years program, and consumer-forward advertising and outreach programs which are aimed at all residential customers (both single family and multi-family dwelling residences).

**Green Tariff programs (§§ 95486.1(c)(2)(A)(1), 95486.1(C)(1)(a), and 95488.8(i)(1))**

***SMUD continues to support the option in the Proposed Amendments of linking non-metered EV residential charging to EDU green tariff programs, but seeks clarification in the 15-day Modifications that incremental credits can be claimed for low-CI energy procured for its existing programs.***

SMUD currently sponsors two green pricing programs that meet the definition of a Green Tariff program under the 15-day Modifications. SMUD's Greenergy program allows customers to purchase up to 100% of their load from Green-e certified renewable energy through a flat monthly fee on their utility bill. SMUD supplies Greenergy from eligible renewable energy resources that meet the renewables portfolio standard (RPS) procurement requirements of section 399.30 of the Public Utilities Code with both RPS-eligible renewable energy resources located within California and RPS-eligible unbundled renewable energy credits (RECs) from Green-e certified resources in the Western Interconnection. In addition, SMUD's SolarShares program allows customers to pay monthly subscriptions to acquire a "share" in a solar power generation resource located in California. Our SolarShares customers also pay a flat fee to acquire kilowatt hours (kWh) of solar generation that vary with the season, with greater bill credits produced in sunny months than in winter months. In the case of Greenergy, SMUD supplies a portion of the program with 100% zero-CI electricity from facilities it owns or contracts with for delivery in California and procures zero-CI attributes for the remainder. In the case of SolarShares, all of the electricity is generated from zero-CI sources that serve California.

Proposed section 95486.1(c)(2)(A)(1) directs the Executive Officer to award incremental credits to EDUs for non-metered, residential EV charging by customers on Green Tariff programs such as Greenergy and Solar Shares. CARB would issue incremental credits for non-metered residences shown to receive zero-CI electricity based on the same method of estimation used to calculate base credits. However, section 95486.1(c)(2)(A)(1) adds a proviso that the credits would be issued so long as the zero-CI electricity "is not claimed by another generator of incremental low-CI electricity credits using metered data." This phrase suggests the possibility that if third party is able to meter the zero-CI electricity, it could claim the incremental credits for zero-CI

electricity purchased by the Greenergy or Solar Shares customer. Ambiguity around who is first in line to generate incremental credits from Green Tariff programs, whether it's parties who pay for the zero carbon fuel versus third parties who meter it, creates uncertainty that would be a disincentive to EDUs and their customers. The incremental value of low or zero carbon fuel should go to the party responsible for generating it and supplying it to EV owners. Instead, it appears that staff could be favoring parties that meter low carbon electricity over those who make it.

In contrast, staff has recognized that ambiguity around claims to incremental credits for metered charging at single-family residences should be resolved. The 15-day Modifications in section 95483(c)(1)(B) state that Load Serving Entities (LSEs) that meter residential charging have first priority to claim credits, manufacturers are second in line, and all other entities have third priority. According to staff, there are several reasons for this hierarchy. First, LSEs "are assigned first priority because they have the clearest ability to quantify the supply of low carbon electricity to the customer under existing California energy policy, including through green tariff programs." (Notice of Modified Text, p. 5.) Second, staff asserts that the ability of LSEs to facilitate smart charging to support the electric grid merits priority, but also recognizes the value of on-board telematics to meter EV charging and potentially enable V2G.

Ambiguity around claims to incremental credits for non-metered charging at single-family residences is even more problematic than for metered charging because most residential charging is unmetered. As SMUD and other utilities have commented in the past, insisting on metering at single-family homes is an unnecessary expense because quantifying the supply of electricity to EVs can be done quite accurately by current formula in section 95486.1(c)(1)(A). If the estimation method in that subsection is good enough to calculate base credits, it should be good enough to calculate incremental credits. In addition, the first rationale for granting the LSE priority in the metered residential EV charging context is equally true for non-metered EV charging: EDUs or LSEs have the "clearest ability to quantify the supply of low carbon electricity to the customer ..." because they purchase zero-CI electricity on their behalves. Not only should paying a premium for zero-CI fuel entitle the customers to priority, but the outlay of the extra funds means that the utility will quantify how much zero-CI fuel is acquired and delivered to its customers. A third party may know how many kWh go into the vehicle but it does not know how much zero-CI is in the kWhs.

SMUD also requests clarification of a key requirement in section 95488.8(i)(1)(B)(1). Subsection (i) enables EDUs to use book-and-claim accounting to claim low-CI or zero-CI electricity supplied through green tariff programs such as Greenergy and SolarShares. Paragraph (B)(1) of that subsection states that "Electricity [must be] generated using equipment owned by, or under contract to the pathway applicant for all environmental attributes of the claimed electricity." SMUD interprets this text to mean that the EDU (or LSE) must own the low-CI resource, such as a solar PV facility, or its low-CI attributes in order for those attributes to generate incremental credits through a Green Tariff program. SMUD seeks clarification that in the context of EV charging by

customers of EDU Green Tariff programs, if the utility satisfies this and the other requirements of (B)(1), it is the only party that may generate incremental credits from the claimed electricity. This would be appropriate because, as stated above, the party that generates or buys the low-CI electricity should be the one to benefit from making it.

As SMUD commented previously, the Proposed Amendments create a complicated system of requirements to ensure that Greenergy or SolarShares customers who purchase low-CI electricity are the same customers who are charging EVs at home or at a participating workplace. Instead, the customer who pays for low-CI electricity through a green tariff should only need to register the EV with the EDU with a proof of registration within some period of time after purchase or lease. Once that link is established to ensure that the EV owner is a green pricing customer, and the EV is not registered to another EDU, the LCFS program can generate more incremental credits to monetize the value of low-CI charging. SMUD urges staff to accept the hierarchy that the EDU should have priority to generate credits from zero carbon intensity (0g/MU) electricity provided to EDU customers of green pricing programs such as Greenergy and SolarShares.

***SMUD supports the concept of allowing a DC Fast Charging Infrastructure pathway now described in proposed section 95486.2.***

SMUD supports CARB's recommended eligibility requirements as follows.

*Subsection (b)(1)(B):* SMUD supports the proposal to require sites to support at least two of the three currently used DC Fast Charging (DCFC) connector types, along with a requirement for one third of units at a site to be able to support multiple connector types. We believe that this is a good compromise in meeting equity goals and promoting the deployment of infrastructure that can be used by all EV drivers in California.

*Subsection (b)(4)(C):* SMUD supports the requirement for using public point of sale methods that accept credit cards or debit cards. SMUD has deployed six DC Fast Charging stations in the Sacramento area dating back to 2014 equipped with credit/debit card readers and believes that they are an important feature to help drive EV adoption by informing the public of similarities between EV charging and regular fossil fuel dispensary operations.

*Subsection (b)(4)(F):* SMUD has concerns with the requirement to have County Departments of Weights and Measures verify charging unit performance to enable the FSE to sell electricity by the kWh. SMUD does not question the need to have the charging unit performance verified. However, the California Department of Agriculture Division of Measurement standards has not completed the standards development on this topic for implementation by counties for the purpose of certifying public charger energy delivery standards for consumer protection. Thus, it is not possible to comply with the requirement at the present time, and it may take years before county sealers of weights and measures are empowered to enforce the requirement. Accordingly, SMUD

requests that ARB wait to implement this requirement until the state adopts the certification standards and the counties are trained and ready to implement them.

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