



California Natural
Gas Vehicle Coalition

November 20, 2017

Anil Prabhu
Manager, Fuels Evaluation Section
California Air Resources Board

Dear Anil,

RE: Tier 2 Method 2B Pathway: Solar-based (Photovoltaic) Electricity for a Single Dual Port Electric Vehicle Charging Station. (T2N-1208)

On behalf of the California Natural Gas Vehicle Coalition, I would like to submit the following comments on a specific pathway application.

We believe that ARB's proposal to allow solar photovoltaic (PV) panels to earn LCFS credits based on net metering should be modified to account for the impact that charging stations, even with sited solar PV, have on electricity capacity markets.

Electricity is different than liquid or gaseous fuels in that it cannot be (cost-effectively) stored. That is why ISOs around the nation, like CAISO, have developed capacity markets. Capacity markets create market-based incentives for additional generating units to be made available to the grid to handle potential peak-loads. This helps protect the grid from brownouts.

As electric vehicles become more commonplace, the power that they draw from the grid while charging will increase electricity demand within the State of California and create a need for more system-wide capacity. The incremental capacity of station-sited solar PV generating units will help CAISO meet this need, but their contribution will be limited to the nameplate capacity of the generating units times their capacity factor. As a result, even electric vehicle charging stations with sited solar PV will be a net consumer (rather than contributor) of electricity. CAISO will have to offset this shortfall with other sources of electricity that likely have the emissions profile of the average CA power plant (i.e., CA-MIX CI). Crediting electric charging stations for emissions reductions for all of their load served based on net metering overstates the amount of generation actually displaced.

Instead of awarding credits based on net metering, CNGVC would propose that the 0 CI score of station sited solar PV generating units be capped at capacity factor times nameplate capacity for any

given month, receiving a CA-MIX CI score for the remaining electricity supplied. This would ensure that ARB's LCFS credit generation methodology would mirror electricity capacity markets and remain true to ARB's ideology of rewarding alternative vehicle fuels for their lifecycle emissions displacement.

Who We Are

The California Natural Gas Vehicle Coalition represents the state's natural gas vehicle industry and includes major automobile manufacturers, utilities, heavy-duty engine manufacturers, fueling station providers, equipment manufacturers, and fleet users of natural gas vehicles. We are working together to advance natural gas as an alternative transportation fuel.

Please don't hesitate to reach out to me, if you have any questions or concerns at thomas@cngvc.org or at 888-538-7036.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Lawson', with a horizontal line extending to the right.

Thomas Lawson
President, California Natural Gas Vehicle Coalition