[SUBMITTED ELECTRONICALLY TO: LCFSworkshop@arb.ca.gov]

January 6, 2017

California Air Resources Board (ARB)
1001 I Street
Sacramento, CA 95812

Re: Comments for Center for Resource Solutions (CRS) in response to the November 23, 2016 Staff Discussion Paper and December 2, 2016 Workshop on Grid and Renewable Electricity in the Low Carbon Fuel Standard (LCFS)

To Whom It May Concern;

CRS appreciates this opportunity to submit comments regarding potential changes to how electricity used as a transportation fuel is treated in the LCFS. These comments pertain to the use of renewable electricity as a transportation fuel and the associated verification measures required to ensure exclusive use of renewable electricity. Specifically, these comments address topics and questions posed on slides 5 and 21 from the Workshop and pages 4 and 13 of the Staff Discussion Paper.

Introduction to CRS & Green-e®

CRS is a 501(c)(3) nonprofit organization that creates policy and market solutions to advance sustainable energy. CRS administers the Green-e programs. Green-e Energy is the leading certification program for voluntary renewable electricity products in North America. For over 20 years, Green-e staff have worked with independent third-party auditors to annually verify renewable energy purchases in the voluntary market and ensure purchasers receive full environmental benefits and sole ownership of each MWh of renewable energy they purchase. Verification procedures ensure there is no double counting between voluntary and compliance (RPS) markets, and that other renewable energy or carbon policies do not claim any of the environmental benefits of certified renewable energy. In 2015, Green-e Energy certified retail sales of over 44 million megawatt-hours (MWh), representing over 1.2% of the total U.S. electricity mix. In 2015, there were over 827,000 retail purchasers of Green-e certified renewable energy, including 36,000 businesses.

Comments on LCFS Workshop and Discussion Paper

CRS's comments focus on the proposed eligibility requirements for renewable electricity that can be used to improve an EV charging station's carbon intensity (CI) score.[1] Staff has proposed two options for assessing eligibility of renewable electricity used for this purpose: (1) the electricity is obtained through a program with requirements that match or are more stringent

[1] Staff Discussion Paper, pp.4-5.

1012 torney avenue
2nd floor
san francisco, ca 94129
tel 415.561.2100
fax 415.561.2105
web www.resource-solutions.org

that the Green Tariff Shared Renewables (GTSR) program ("Option 1"), or (2) the electricity meet a series of requirements, including that no renewable energy certificates (RECs) be produced from the electricity ("Option 2"). CRS strongly supports the requirement that renewable electricity eligible to be used towards an improved CI score not be counted towards any program except RFS2. However, the most suitable way to achieve this result is to revise Option 2 to state that renewable electricity only be eligible if the RECs associated with the electricity are retired and used by the EV charging station. Requiring REC retirement will ensure sole use of the renewable electricity, align the eligibility standards for Option 1 and Option 2, and facilitate verification of renewable electricity usage.

RECs are the standard accepted proof that 1 MWh of renewable electricity was generated and used. They are the most precise means of tracking renewable electricity and therefore the most appropriate tool to verify that renewable electricity is being used by an LCFS credit generator. RECs are recognized by actors in the voluntary market and all thirty-five (35) states that require or have a goal to deliver renewable generation to users, including California, as the common instrument used to demonstrate renewable electricity usage.[2] By aligning the LCFS credit requirements with those of other programs that require RECs to track renewable electricity usage, double counting is less likely to occur across all programs.

Requiring REC ownership and retirement to substantiate renewable electricity use is important to align LCFS credit generators with industry best practices and regulations. The Federal Trade Commission (FTC) requires REC ownership in order for an entity to state that it is using renewable electricity.[3] By allowing the EV charging stations to claim renewable electricity usage while forbidding the creation of a REC, the LCFS program would require the EV charging stations to violate the FTC's guidance. The Solar Energy Industry Association (SEIA), the Interstate Renewable Energy Council (IREC), and other state and national consumer protection agencies and organizations have also published guidance and requirements that reiterate that sole REC ownership is required for renewable electricity ownership.[4]

REC retirement must be required under Option 2 in order for the requirements of Option 1 and Option 2 to be equally rigorous. The GTSR program is Green-e Energy certified, which means that the utility providing the program must retire RECs on behalf of the customer. This retirement is verified annually through our third-party verification process. Any other program that is eligible under Option 1 will therefore also need to retire RECs on behalf of the customer

[2] Jones, et al. (2015). The Legal Basis of Renewable Energy Certificates. Available at: http://resourcesolutions.org/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf

[3] Federal Trade Commission (FTC). (2012). Guides for the Use of Environmental Marketing Claims; final rule. Available at: https://www.ftc.gov/sites/default/files/documents/federal_register_notices/guides-useenvironmental-marketing-claims-green-guides/greenguidesfrn.pdf.

[4] For example, see: Solar Energy Industry Association (SEIA). (2015). SEIA Solar Business Code. Available at: http://www.seia.org/policy/consumer-protection/seia-solar-business-code.
Interstate Renewable Energy Council (IREC). (2015). IREC's Clean Energy Consumer Bill of Rights. Available at: http://www.irecusa.org/consumer/bill-of-rights.pdf.

in order to meet the criteria of having requirements that match or are more stringent than GTSR. It follows that Option 2 must also require that RECs be retired in order to be as stringent. Staff should also consider requiring the use of the California's Voluntary Renewable Electricity Program (VREP) to ensure that the LCFS program contributes to reducing emissions beyond the cap set under AB32. Due to Green-e's requirements that all certified renewable electricity contain its full CO_2 emissions reduction benefit, renewable electricity purchased through GTSR must be matched with allowances through VREP. To be as stringent, Option 2 and other programs eligible under Option 1 should also require that the LCFS credit generator apply for allowances through VREP.

Requiring RECs be retired is integral to preventing double counting of renewable electricity and will aid in the verification of LCFS credit requirements. RECs are a mechanism to identify ownership, trade, and claim the environment attributes of renewable energy production. These attributes are created automatically with each MWh of renewable electricity that is produced. Preventing a REC from being issued in a regional REC tracking system, such as the Western Regional Generation Information System (WREGIS), does not preclude its existence and the ability of the generation owner to trade or sell those attributes. RECs are often also traded and retired contractually. Since RECs automatically exist, it is necessary for the user of the electricity to have ownership of the REC to claim renewable electricity usage. It is also common practice for on-site solar facilities to be owned by a third-party (usually a solar developer who offers a lease or power purchase agreement to the user of the electricity) who keeps the RECs produced by the system and does not transfer them to the user of the electricity. By not requiring that the EV charging station own RECs, the renewable electricity could be counted twice—once by the EV charging station towards an LCFS credit and once by the owner of the REC. By requiring that EV charging stations own RECs in association with the electricity used, there is no question as to who is using the renewable electricity.

Requiring REC retirement would streamline the verification processes required to "assure that the amount of renewable electricity purchased/generated meets or exceeds the amount of renewable electricity claimed as a transportation fuel…[and] assure that the renewable electricity is not credited in any other program[.]"[5] Verification would require that either (a) the renewable electricity was purchased through a program with third-party certification that required REC retirement (such as the GTSR program), or (b) RECs were retired (used) in association with the electricity used at the charging station.

To have the biggest impact, the LCFS program should be incremental to other renewable electricity or carbon reduction programs. The LCFS, like the RPS, is a tool that the state is using to meet its overall GHG emission reduction goals. As such, it is important that the GHG benefits of the renewable electricity counted for the RPS are not also "double" counted by contributing to the issuance of LCFS credits. This could occur if LCFS credits were issued based on using RPS renewables as eligible methods to reduce the CI of the electricity used for EV charging. Only

[5] Staff Discussion paper, p.15.

renewable electricity in excess of RPS obligations can reduce emissions beyond what the RPS is achieving on its own.

As the administrator of the Green-e programs, CRS staff would be happy to set up a call to discuss REC best practices and the appropriate verification measures to ensure renewable electricity usage. CRS has extensive experience developing reporting and verification processes, and has advised state, national, and international agencies on verification approaches and procedures.

We thank you for this opportunity to provide comments on the proposed LCFS requirements for renewable electricity usage. Please feel free to reach out with any questions or comments.

Sincerely,

Maya Kelty
Senior Analyst, Policy & Programs