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Via electronic submittal: https://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=lcfs18&comm_period=1

Re: GlassPoint Solar Comments on LCFS 1st 15-day Amendment Package

GlassPoint Solar, Inc. (GlassPoint) is pleased to submit these comments on the June 20, 2018 15-day Regulatory Amendment Package for proposed amendment to the Low Carbon Fuel Standard (LCFS). We support CARB's continuing efforts to improve the LCFS program in general, and the Innovative Crude and lower CI pathway provisions specifically.

GlassPoint is a California company that develops, manufactures and finances solar steam generators for industrial processes including thermal enhanced oil recovery and biofuel refining. Our renewable energy technology has proven reliable, safe and economical in field operations in California and the Middle East.

We appreciate CARB's recognition of the potential for solar steam to deliver meaningful emissions reductions in the production of liquid fuels, through both the Innovative Crude provisions and the recognition of low-carbon energy sources for biofuel refining. We believe these provisions are appropriate given the program's fundamental focus on fuel life cycle emissions and will help provide a price signal which will create projects that deliver economic growth while reducing both criteria pollutants and GHG emissions.

The amendment package has a series of focused amendments proposals to the LCFS program. GlassPoint's technology deployment in California and elsewhere is intertwined with the stability of the LCFS, therefore changes to the program present unique challenges for solar-steam technology. GlassPoint appreciates CARB's desire for long-term stability of the program and look forward over the next decade and beyond to a steady-state implementation of the program.

GlassPoint previously submitted detailed comments on the original 45-day proposal¹. We would like to specifically support the following proposed revisions in this package:

- The additional bin for 45% steam quality, and the correction to the 95% quality bin;
- The additional eligibility for innovative methods associated with crude oil transportation;
- Simplified reporting for crude delivered to in-state refineries.

¹ <https://www.arb.ca.gov/lists/com-attach/77-lcfs18-Wj1cNgFhU3MEcVQk.pdf>



One area that has come up since the release of the 45-day package relates to Provisional Pathways (95488.9(c)). As currently written, Provisional Pathways are limited to “facilities that have been in operation for less than 24 months”. This definition limits the ability of an existing facility with an established CI and pathway from securing a Provisional Pathway when adding additional technology, like solar steam. Such large capital-intensive projects require the ability to generate credits once placed in service. Waiting for 24 months of operational data to apply for a conventional Tier 1 or Tier 2 pathway would be prohibitive. GlassPoint fully understands that provisional credits would be issued over the first two years of operation. We have discussed this issue on several occasions with staff who recommended we provide suggested language. GlassPoint suggest Section 94588.9(c) be amended as follows:

- c) *Provisional Pathways. As set forth in sections 95488.6(a) and 95488.7(a), LCFS fuel pathways are generally developed based on 24 months of operational data. The Executive Officer may consider Provisional pathway applications from new or modified facilities that have been in operation as configured for less than 24 months, provided they have been in operation for at least three months. Based on timely reports, the fuel reporting entity may generate credits or deficits using a provisionally-certified CI.*

GlassPoint has concerns that the proposed inclusion of credits associated with ZEV fueling infrastructure. Because such credits would not correspond directly to avoided CO2 emissions, they do not match the performance-based, fuel-neutral nature of all other LCFS credits. GlassPoint requests that these provisions be removed from the regulation.

GlassPoint would like to note a concern that there is not a temporal limitation on the new sub-section 95487(d)(7) under Prohibited Transactions. This new authority spelled out to prevent transactions needs to be limited to a timeframe concurrent to the actual transaction. Commercial transaction cannot be subject to indefinite invalidation. GlassPoint recommends 180 days. Additionally, the language in sub-section (7) should not be part of the list of prohibited transactions, (as it is not a prohibited transaction itself) but rather a concluding paragraph to that section.

Additionally, GlassPoint has the following suggested edits:

Section 95489 (c)(1)(A)(1). To be internally consistent, each location that states crude oil production facilities should read “crude oil production or transport facilities” as it does for electricity in (3).

Section 95487(b)(1)(D) needs to be modified to reflect the expected complexities associated with credit transaction contracts related to multi-year offtake agreements associated with LCFS Credit based financing of large capital project. As we have discussed, the request for information about the terms remains vague and could present implementation issues. GlassPoint suggests that



language be added that allows for these more complicated transactions to easily be reported to CARB. We suggest the language below. (Note the punctuation changes as well on #4 and #7.)

(D) *For Type 2 Transfer.* Within 10 days from the date the parties enter into the credit transaction agreement, the Seller and the Buyer must report the following using the Credit Transfer Form (CTF) provided in the LRT-CBTS:

1. *Date of Transaction Agreement.* The date on which the Buyer and Seller enter into the credit transaction agreement;
2. Names and the Federal Employer Identification Numbers (FEIN) of the Seller and the Buyer as registered in the LRT-CBTS;
3. First name, last name, and contact information of the Seller and Buyer representative;
4. If the agreement requires a single delivery of credits or multiple delivery of credits;
5. The expected date of last credit delivery or the expected length of the agreement including the date by which all deliveries are to be completed;
6. ~~The~~ An estimate of total number of credits anticipated to be transferred under the agreement;
7. The price per credit (in U.S. dollars) or a summary of the terms to determine the price for future credit transfer as per the agreement;
8. If the agreement is terminated or amended prior to its full execution as provided in subsection 5. above, the parties must notify the CARB within ~~40~~ 30 business days.

GlassPoint strongly supports CARB's work to improve the program. Thank you for the opportunity to provide these comments, and we look forward to continued discussions.

Sincerely,

/s/

John O'Donnell
Vice President, Business Development

cc: Sam Wade
Jim Duffy