

Genscape Comments
CARB LCFS Integrity Program
July 29, 2016 workshop

LCFS Monitoring and Verification Program Proposed Regulatory Amendments
Comments on CARB July 29, 2016 Workgroup

August 25, 2016

VIA ELECTRONIC FILING

California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, CA 95812-2815
ATTN: Ms. Ursula Lai

Re: Comments on Workshop to discuss proposed amendments to clarify and enhance regulatory requirements, as well as preliminary draft regulatory language for a proposed mandatory verification program as presented by CARB on July 29, 2016.

To Whom It May Concern:

Genscape appreciates the opportunity to submit comments on the proposed framework for the Low Carbon Fuel Standard (LCFS) Monitoring and Verification Program. Genscape has focused its comments on creating an effective and efficient LCFS Credit Integrity Program as part of the Recordkeeping, Registration, and Enforcement Provision amendments being considered. After participating in the July 29th workshop, Genscape provides the comments herein.

Verifier Qualifications and Auditor Rotation

Genscape strongly supports including EPA approved RFS2 QAP service providers using remote monitoring as qualified ARB accredited verifiers. By allowing this additional qualification category, providers with significant experience in fuel program compliance will be able to conduct quality auditing services to increase transparency and promote integrity in the LCFS marketplace. Additionally, this will enable a faster adoption of the integrity program with experienced verifiers in the fuels arena.

Genscape comments that the six year term limit for a verifier could create a challenging commercial situation without an equal benefit to audit quality or independence. Echoing some sentiments expressed in the workshop, switching verifiers creates challenges for the program participant. Effectively, the participant must complete the onboarding process again if its service provider changes. Because every auditor operates somewhat differently, the participant would have to change its workflow and retrain its staff to provide information to a new auditor. This may incur additional cost for the participant.

There are examples where auditor rotation has been considered and ultimately not accepted as a means to better independence and improved audit quality. In 2013, the U.S. House of Representatives passed a bill (H.R. 1564) with a vote of 321-62 to prevent the Public Company Accounting Oversight Board from requiring mandatory audit

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rotation. The Wall Street Journal reported in February 2014¹ that the PCAOB had stopped pursuing the idea to impose auditor term limits on public companies after the vote. Opponents to audit rotation cited the lack of evidence that rotation improved audit quality or bolstered independence.²

Genscape comments that increased familiarity with a facility improves the ability of the auditor to understand a client's operations and detect normal and abnormal situations. For instance, collecting data about renewable fuel production over a longer period of time provides a better empirical and statistical basis for detecting mass balancing anomalies. The independence and auditing standards presented in the LCFS integrity program proposals are very strong and establish an effective set of criteria without audit rotation.

Monitoring & Verification Phase-In

To streamline the process of participant engagement, ARB could enable verification bodies and lead verifiers to begin submitting verification plans and qualifications as early as 2016, even as an interim/iterative planning tool. Early feedback on verification plans would likely help verifiers and participants to prepare for the official program start. This could lead-in to participant engagement in an interim program in 2017. An interim program could allow for increased fungibility, market transparency, and credit cash flow to alleviate the stakeholder concerns that market timing for verified credit generation will be delayed into mid-2018.

With more than 400 unique pathways in the program, a rolling start to verification ahead of the deadline would help enable every regulated body to meet fully verified credits in 2018. The figure below presents a sample timeline and considerations for implementing an interim adoption period for the monitoring & verification program.



¹ <http://blogs.wsj.com/cfo/2014/02/05/pcaobs-auditor-rotation-project-is-essentially-dead/>

² <http://www.accountingweb.com/practice/practice-excellence/house-backs-bill-that-prohibits-mandatory-firm-rotation>

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Because of the overall complexity in the startup of a new verification program both from a regulatory and commercial perspective, Genscape believes that an interim period or ramp-up would be helpful to both the verifying bodies and the participants. To give some additional insight about the process from a verifier standpoint, the following considerations are presented that roughly outline the commercial planning and execution process.

1. A successful verification program requires careful planning and execution. Business planning typically begins two to four quarters before operations begin. Many activities occur in parallel. Some of the major steps include:
 - a. Overall market sizing and expense estimation
 - b. Allocating, acquiring or building the team to meet the verification standards of audit
 - c. Training and certification with ARB
 - d. Operational and workflow organization and establishment
 - e. Legal assessment, contract development and client engagement
 - f. IT development for any applications or tools needed to execute the business

2. Verification plans will likely be developed for each fuel type and pathway. Each plan will depend on the complexity of the fuel processing operations and supply chain associated with the pathway. It is anticipated that there would be some iterative process with ARB in the approval of these verification plans.

3. Once a client is engaged for verification, there are several steps to onboarding. Depending on client availability, these activities can take several weeks. Some of these steps are envisioned to include:
 - a. Client training on documentation and data exchange
 - b. Obtaining permissions for any required LRT data access
 - c. Client establishment of workflow for data/documentation exchange
 - d. Scheduling of site visits and/or remote monitoring installations (as required)
 - e. Execution of on-site activities (as required)
 - f. Initial audit review and analysis

Being able to stagger these audit activities with a small pool of clients and then ramping up to the full client base is the preferred method of execution. Any early feedback on tangible plans and team formation will help create a successful program for 2018.

Pathway Risk Assessment

Genscape comments that ARB, as the governing agency, should ultimately determine the level of risk associated with a pathway. In a competitive services market place, allowing a verification body to independently determine the risk level of a pathway could create motivation to bias risk assessment lower than it actually should be. For instance, a verifier might be influenced to assess less risk for a particular pathway if they could offer a price point for the service below that of a competing verifier that is adequately assessing risk. This could further lead to a “race to the bottom” where verifiers are influenced more by lowering the commercial price point than appropriately assessing risk. For consideration, some potential areas of risk are presented below.

1. Feedstocks
 - a. Facilities with multiple pathways, where different CIs are associated with different feedstocks
 - b. Combined feedstocks used for liquid fuel(s) production (UCO, tallow, soy oil, etc.)
 - c. Potential for use of ineligible feedstocks; for instance, due to geography
 - d. Where upstream verification standards are required, appropriate sourcing

2. Fuel Production
 - a. Facilities producing multiple fuel types at the same facility

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- b. Appropriate CI for the energy usage scheme at a facility (e.g. renewable energy sources versus conventional energy sources)
 - c. Proper accounting of feedstock to finished fuel for CI verification reporting
 - d. Storage infrastructure/eligible demand for participating fuels
3. Transportation
- a. Facilities approved for different CIs for pathways with different physical transportation means (i.e. truck versus rail)
 - b. Sufficient verification of eligible transportation use
 - c. For facilities outside of California, appropriate allocation of fuel volumes for LCFS credit generation only to fuel that is transported to California

In terms of risk mitigation, ongoing remote monitoring can be used as a means for addressing higher levels of risk. Genscape employs thousands of energy monitors all over the world, and currently uses real-time energy monitoring in the majority of its QAP client facilities. These same monitors are also capable of assessing gas and liquid fluid flow rates at many points in fuel processing and loading operations. Remote monitoring using visual or infrared imagery can also be applied in special circumstances to observe transport and other phenomena.

Credit Unique Identifiers (UIDs)

A continued “buyer beware” market environment lends itself to UIDs for visibility into the credit source. Tracking lowers risk in scenarios where credits are aggregated by marketers/traders/brokers if the credits can be traced back to the first point of transaction for obligatory purposes. Combined with a credit verification program, a UID could carry both a verification stamp and the point of origin. As an auditor, Genscape does not view the visibility of UIDs as a substitute for credit verification but together they create a powerful risk mitigation strategy. Some considerations for attributes of a unique identifier might include: generation year/quarter, fuel type, company ID, facility ID, physical pathway code, first point of transaction and verified status.

The Renewable Identification Numbers (RINs) used in the Renewable Fuels Standard (RFS2) present one model for unique credit tracking. The RFS program has both a credit tracking system and a verification program. Under the RFS2, the fuel producer and/or marketer acts as the credit generator and is assigned a unique RIN transaction and submission identifier that is traceable throughout the transaction cycle and carried through to retirement. Verified RINs are marked as “Q-RINs” in the EMTS system.

Material Misstatement

Genscape strongly supports efforts to fully define the standards of audit for the LCFS credit integrity program and its verifying bodies. Establishing definitions for reasonable assurance, positive verification and material misstatement are all important elements of audit standards. With regards to the 5% level of error, from the standpoint of a verifier, the value seems well within the range of discrepancies identified in methods of reasonable assurance.

An additional consideration for standard of audit protocols could be the dispute process if a regulated party disagrees with the findings of a verifying body. Another possible regulatory structure could be what (if any) steps must be taken for a regulated party to continue generating credits if a material misstatement has been escalated to ARB.

Alternative Proposals

The first alternate proposal balances invalidation risk and the industry’s concerns about integrity costs and credit cash flow. It limits the direct verification cost to the parties that benefit most from the credits. At the same time, it creates a much lower invalidation risk than the second alternative proposal which would leave potential material misstatements and imbalances in the market for up to twelve months. End of year discoveries of invalid credits could potentially upset the credit and deficit balance and make price discovery more difficult during the period

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where credits are not validated. It seems that much less regulatory complexity would be involved if positive verification comes in a timeframe closer to credit issuance.

With the first alternate proposal as presented, there could still be potential delays in the credit generation and the cash flow for generators. One solution would be an ongoing verification system that would render a pathway verified so long as it continues to meet the verification standards. The owner of a verified pathway would generate verified credits much in the same way credits are generated today. A pathway with an established verification program could continue to generate validated credits for the next quarter. If subsequent analysis of the credits from the previous quarter resulted in negative findings, the generator would be responsible for remediating the action within a certain time frame. There also could be a regulatory basis for verified status to pause or cease in the case of material misstatements, for instance. Enabling verifying bodies, under agency direction, to address volume or CI misstatements on an ongoing basis helps avoid potentially costly delays.

Additional Comments and Closing

Among the individual elements that have been outlined in the three verification proposals, Genscape recommends that the following be incorporated into the final version of the proposal:

- Genscape supports the push-and-pull system of credit transaction reporting represented in the first-alternate scenario. We feel that ongoing reporting leads to increased market certainty and fewer possibilities for errors.
- Genscape supports the earliest potential issuance of credits that ARB deems practicable. Both the first and second alternate scenarios are a major improvement on the timeline of the June 2nd proposal. With ongoing verification activities, especially if that includes ongoing monitoring, verifying bodies will have no trouble keeping up with the quarterly generation timelines.
- While not mentioned in the descriptions of any of the three proposals, Genscape feels that on-site, independent monitoring should be required of certain facility types or risk levels, if not required for all facilities.

Genscape appreciates the opportunity to provide comments on the CARB program for LCFS verification services and qualified provider requirements. We look forward to working with CARB in a cooperative and constructive manner.

Sincerely,



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