



Western States Petroleum Association
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Catherine H. Reheis-Boyd
President

August 8, 2011

Mr. Floyd Vergara, Chief Alternative Fuels Branch
California Air Resources Board
1001 I Street
Sacramento, CA
Via e-mail to fvergara@arb.ca.gov

Re. **Western States Petroleum Association Comments on July 22 CARB Workshop on LCFS Regulatory Amendments**

Dear Mr. Vergara:

Attached are the Western States Petroleum Association's (WSPA) comments on staff's initial proposed LCFS regulatory amendments. WSPA is a non-profit trade association representing twenty-six companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California, and five other western states.

WSPA has several comments relating to the issues raised in the July 22nd workshop and we'd be happy to discuss our comments to assist you in understanding our position. In addition, there may be a number of other significant proposed revisions by WSPA to the regulation that we will share in later correspondence.

We look forward to working with you in coming months on appropriate revisions to the program.

Sincerely,

A handwritten signature in blue ink that reads "Catherine H. Reheis-Boyd". The signature is written in a cursive style.

c.c. R. Corey - ARB
A. Sideco - ARB
M. Waugh - ARB

WSPA Comments on July 22 LCFS Proposed Regulatory Amendment Workshop

[Note: Comments that are underlined, bolded and italicized are *additions* to the regulatory language]

Opt In/Opt Out Provisions

The suggested revisions in Section 95480.1 (b)(3)(C) allow an opt-in fuel to select a default CI of 86.27 g/MJ for gasoline substitutes, and 85.24 g/MJ for diesel substitutes. It is important that the term EER^{XD} ratio from the credit calculations in 95485(a)(3)(B) and (C) be set to 1.0 when these values are used, or else the default CI would be advantaged over the CI in the Look-Up Table.

Opt-Out Requirements for Specific Alternative Fuel Providers first “Opting In”

ARB staff should change the 30 day opt-out notice of intent requirement to 90 days minimum or at the end of a compliance period, whichever is later, because an alternative fuel provider’s decision to opt-in (and then later opt-out) can cause uncertainty for regulated parties dealing with the alternative fuel provider.

Method 2A/2B Certification Program

ARB has proposed the Method 2A/2B approval process be changed from the current rulemaking process to a “certification program” that would not require a rulemaking. WSPA strongly opposes this proposal.

The carbon intensity (CI) values used in the LCFS are contained in a Lookup Table that is contained in the regulations. This is because these CI values are the fundamental currency of the LCFS, and as such they are integral to the program. It is therefore essential that additions to the Lookup Table be subject to the full public process.

ARB cited concerns about the length of time required to go through the public process as a justification for their proposal. However, staff has already instituted a far superior mechanism to address this problem. Regulated parties have the ability to use the new CI values as soon as they are posted by staff, which occurs before any of the formal public process begins. In other words, the public rulemaking process does not add ANY delay in the use of the new CI values. As a result, WSPA does not understand why staff is making this proposal.

Staff also indicated this “certification program” would be modeled after existing certification programs for other regulations. However, none of these other certification programs have been established for the approval of new components of their respective regulations; rather, they are used to show equivalence to regulatory components. The parallels drawn between staff’s proposal and these other programs are clearly not applicable.

WSPA recognizes the need for and supports streamlining of the Method 2A/2B process. Clarity and guidance to speed the process would be a great benefit to the LCFS. However, such streamlining should be confined to the process that results in the publication of new CI values so

they are available for use by regulated parties. The public process that is required for the regulatory changes to insert the new CI values into the Lookup Table does not delay the ability to use new CI values and must be preserved.

As an additional note, WSPA believes the current rulemaking should be used to formally update the Lookup Tables contained in the regulation with all pathways that have been created using the Method 2A/2B process and approved by the Executive Officer.

Staff needs to complete its rulemaking proposal for the minimum contents of a technical report describing the pathway, life cycle analysis, as well as final pathway carbon intensities for a method 2A/2B application. Specifically 95486(f)(3)(B)2a, b, c, d, and e are currently blank in the proposed rule change.

Mandatory Use of the Reporting Tool

WSPA generally supports staff's proposal to make use of the LRT mandatory; however, care must be taken to ensure that sufficient flexibility is preserved. The requirement to use the LRT cannot result in regulated parties either being forced to provide information not required by the regulations, or prevented from submitting required data. Either scenario would constitute an underground rulemaking.

In addition, there have already been many instances in which we have worked with staff to identify and resolve situations in which the LRT was not yet configured to handle data necessary for compliance. Despite the best efforts of all involved, we anticipate such situations will continue to occasionally arise in the future. An example would be ensuring that the crude reporting in the LRT be consistent with the regulation and associated regulatory advisories. Given the long lead times required for LRT changes, it is important that there be enough flexibility to allow for "work arounds" to supplement the data that is provided via the LRT.

Energy Economy Ratios (EERs)

ARB staff has proposed two changes to the EERs: (1) assign separate EERs for heavy-duty natural gas vehicles depending on whether the engine is compression ignition or spark ignition; and (2) revise the light-duty PHEV/BEV EER to 2.6. These are discussed separately below.

Natural Gas EERs - ARB staff is proposing to assign an EER of 1.0 to heavy-duty, natural gas, compression-ignition engines, while maintaining the current EER of 0.9 for heavy-duty, natural gas, spark-ignition engines. According to information presented at the workshop, the value of 1.0 for compression-ignition engines is based on certification data for a model year 2010 Cummins Westport engine. According to the March 2009 staff report for the LCFS, the current EER of 0.9 was also based on a Cummins Westport engine. This is a stoichiometric spark-ignited engine that met ARB's 2010 NO_x and PM standards because it was anticipated this technology would be reflective of 2010 and newer engines.

WSPA supports the bifurcation of the EERs for heavy-duty natural gas engines, as the two technologies (compression-ignition and stoichiometric spark-ignition) have fundamentally different efficiencies. However, assigning fuel volumes used by the two technologies could be a significant challenge, particularly for fuel dispensed at a public refueling station. Has ARB developed a methodology to allocate fuel volumes between compression-ignition and spark-ignition technologies?

More importantly, WSPA continues to believe that a more appropriate EER for heavy-duty spark-ignited natural gas engines (which are assumed to displace diesel fuel) is in the range of 0.7. This was suggested in WSPA's comments submitted during the 45-day comment period for the April 2009 LCFS hearing, and it was supported by an analysis of available test data performed by Energy and Environmental Analysis (EEA), which was also submitted in WSPA's comments (see Appendix 4 of WSPA's April 21, 2009, comments).

As noted on page C-11 of the LCFS staff report:

“There is widespread use of CNG in heavy duty vehicles. Most of this use is in transit buses. Therefore, there is a substantial amount of data on the fuel economy of CNG relative to diesel in transit buses. Most of this data shows a significant fuel economy penalty for CNG relative to diesel, ranging from about 10 percent to about 25 percent, depending on driving cycle. However, many of the CNG engines used in transit buses are older model years. Improvements to CNG engine efficiency have been achieved in more recent model year engines.” (Emphasis added)

According to the LCFS staff report, most of the CNG use is in transit buses that have a significant fuel economy penalty relative to diesel buses. It makes no sense to assign these vehicles an EER of 0.9 when the reality is closer to 0.7. Restating the concern we raised in our April 21, 2009, comments with respect to natural gas EERs: Establishing an overly optimistic EER that is not representative of the existing heavy-duty CNG fleet sets up a mechanism in which LCFS credits can be generated that are not justified or real.

PHEV/BEV EERs - ARB staff is proposing to modify the EER for electricity used for plug-in hybrid electric vehicles (PHEVs) and battery electric vehicles (BEVs). The revised EER is based on fuel economy label estimates reported by the U.S. EPA for the Chevrolet Volt (93 miles per gasoline gallon equivalent [mpgge] on electricity) and the Nissan Leaf (99 mpgge). One of WSPA's primary concerns with ARB's initial assessment of the EER for electricity was related to properly accounting for in-use operation, specifically noting in our April 21, 2009, comments:

“Comparisons must be made based on ***on-road fuel economy*** rather than fuel economy derived from FTP-based laboratory testing. This is particularly important for battery electric vehicles which can be significantly impacted by ambient temperatures, use of air conditioning and heating, road grade, and other factors not typically accounted for in laboratory testing. EEA's analysis accounted for some of these effects by using fuel economy adjustment factors recently

developed by EPA to better reflect on-road operation when fuel economy is reported on fuel economy labels.” (*Emphasis in original.*)

The latest ARB analysis uses current fuel economy label data, which are based on “5-Cycle” testing that better reflects on-road performance. This is definitely a step in the right direction. However, ARB should monitor on-road fuel economy of electric vehicle technology and make adjustments to EERs where necessary.

ARB has continued to adjust the conventional gasoline vehicle baseline to account for fuel economy improvements anticipated as a result of AB1493 and federal CAFE standards. As WSPA previously commented, such an adjustment is appropriate and should be included in EER estimates developed for future model year vehicles. However, if that adjustment is applied to conventional gasoline vehicles, every effort should be made to ensure that the alternative fuel vehicles being analyzed also reflect the technology anticipated for the same timeframe as the conventional vehicle estimates. In this way, an “apples-to-apples” comparison is made.

A more direct way to estimate the EER for a PHEV is to simply take the ratio of fuel economy under gasoline mode versus electric-only mode. For the Chevrolet Volt, the electricity-only fuel economy is reported on the label to be 93 mpg, while the label value for gasoline mode is 37 mpg. Using these values results in an effective EER of 2.5 for PHEVs (i.e., 93 mpg/37 mpg), which is close to the revised value being proposed by ARB.

Electricity Pathway

The revisions concerning the regulated party for the electricity fuel pathway do not recognize all potential fuel contributors. There are supplemental electricity producers that provide electricity into the grid that would not receive credit under the current regulatory construct. We believe it is important to encourage an open market for competition for all potential fuels providers, including those providing supplemental grid electricity. The participation of at-risk capital will be vital to deliver the necessary scale of investment and to reduce the timeline for innovation in and deployment of alternative fuels efficient technologies. The regulation should provide a pathway for LCFS electricity credit generation for supplemental power producers in the case of a direct contract path to the transportation fuel distributor or consumer.

We suggest the following changes to Section 95484 (6) (B):

(B) For transportation fuel supplied through public ***or private business*** access EV charging equipment, the non-utility Electric Vehicle Service Provider (EVSP) or Utility Distribution Company that has installed the equipment, or had an agent install the equipment, and who has a contract with

1. The property owner where the equipment is located to maintain or otherwise service the charging equipment, or

2. EV owners

is the regulated party.

This would allow businesses to provide EV charging equipment in employee parking areas, etc. and generate credits.

Credit Trading

WSPA supports a LCFS credit trading process where clearing of trades is simple, all participants in each transaction are required to report, where required information is processed in the LRT and where periodic aggregated reports are generated to assess program health and provide participants general market information.

WSPA supports most of the proposed changes to the regulation including:

- the clarification of the distinction between credits and deficits, and the separation of their respective calculations.
- the new work in 95488 to define the credit transfer process, inclusive of the new, temporary credit transfer form and the longer term (should be done as soon as possible) plan to incorporate all credit trade information in the LRT system. In 95488(b)(1)(C)(3) CARB should provide notification of receipt of the credit transfer form to both the buyer and seller. Also in section 95488(b)(3) – CARB should clarify what constitutes “authorization” for a facilitator. Is this an email? A contract? A registration in the LRT?
- the new work in 95488 to define and implement the carry back credit concepts both on a temporary and longer term basis. However, we do not believe there should be any distinction on credit generation date, 2012 credits should be able to be used for 2011 reconciliation. A company who needs carry back credits should be able to purchase credits from a company who generated those credits in following year 1Q provided the company filed their report with CARB prior to the annual compliance report deadline. Staff should also delete the proposed section 95488(a)(3)(C) restrictions on “Carry Back Credits”, because there is no need to restrict use, identify number and source of credits, or be forced to meet 100% of compliance obligation just because credits were purchased in this window.
- the mandatory credit retirement provisions to cover compliance obligations and the credit/deficit ratio requirement the public disclosure proposal to periodically release aggregated trade data only, inclusive of the number of credits traded, and number of trades on a quarterly basis. Public disclosure of Credit and Deficit Balances and Credit Transfer Information in Section 95488(d) needs to clarify that summary data will only be on an aggregated basis and not disclose information regarding any particular regulated party or parties.

WSPA disagrees with the following provisions:

- The need for RPs to be able to specify which credits are to be retired to meet mandatory retirement obligations under 95488c. All credits are in units of MTCO₂eq. It does not make any difference which tons are used. Therefore section 95488(c)(2) regarding "retirement hierarchy" which so far is unspecified should be eliminated.
- ARB staff also mentioned during the discussion the possibility of specifically identifying credits with unique ID numbers or by some other method (see Section 94588(a)(2)). WSPA sees no need for this added work. It is unnecessary, will require detailed tracking systems and associated manpower, and it supplies no helpful

information to a market that trades credits for metric tons of CO₂eq. The suggested use of unique identification numbers for credit tracking is similar to the original RIN program under RFS1 which proved to be unworkable and was abandoned by the U.S. EPA. There is no reason to expect that such a program under the LCFS would be any less problematic. CARB should not consider adding this unnecessary complexity to the LCFS. A credit trade transaction confirmation number linking the buyer and seller for the particular transaction is acceptable, but a unique ID number for the credits themselves is unnecessary.

- ARB staff has also suggested that the LCFS credit tracking mechanism will be used to ensure that the buyer of a credit is ultimately responsible for the validity of the credit. We strongly believe that this is misplaced. We believe that the responsibility of validating a credit is best with the original regulated party (the importer or the in-state producer) that first generated the credit. The initial regulated party has the direct responsibility (for in-state producers) or the contractual relationship (importer) needed to validate a credit. Placing the responsibility for credit validation on the first regulated party results in a responsibility party for every credit, and ensures the integrity of the system. If a credit was later determined to be invalid, the change should be placed on the balance of the original producer or importer.

Placing the responsibility on subsequent credit buyers creates additional problems. First, it would now be a requirement to disclose to all LCFS credit buyers the identity and plant location for the credit. This is generally information that would be kept confidential. Additionally, the credit buyer would then need to verify the validity of the original generation of the credit, although they have no contractual relationship with the original producer. It is unclear what documentation the credit buyer would need to obtain from the credit seller to adequately defend the validity of the credit. The original transaction BOL's, copies of contracts, and invoices are all documents that the original regulated parties possess, but are not something that would be shared to the credit buying party.

- WSPA also suggests a change to 95488 (a)(2) that the EO review/verification of a credit transfer occur within 6 months of the transfer. In the absence of an explicit review/verification by CARB, the credit should be deemed valid after 90 days. This will add certainty for the credit transactions and will limit the impacts of corrections and additional credit demand during future market cycles.
- Much of the language contained in 94584(b) appears to be inconsistent. For example, the terms in the *Compliance Obligation* equation are specified to be for specific compliance periods, while the terms in the *Credit Balance* equations have had all references to specific compliance periods stricken. This inconsistency is magnified in paragraph (3), where the compliance demonstration is specified to be determined by comparing the *Credits*^{Retired} (which are not tied to a specific compliance period) to the *Compliance Obligation* (which is tied to a specific compliance period).

Did staff really intend for the terms in the *Credit Balance* equation to not be tied to a specific compliance year? This would seem to result in those terms being cumulative,

correct? Does staff really expect regulated parties to report cumulative quantities (which in future years could potentially be billions of metric tons of credits that have been accounted since the beginning of the program) for the terms in the *Credit Balance* equation?

WSPA believes that all of the terms in the *Credit Balance* equation at 95484(b)(2) should be specified to be applicable to the current compliance period. A *Credits^{CarriedOver}* term should also be added to the *Credit Balance* equation, with the specification that it is equal to the final credit balance from the previous compliance year.

- Staff’s proposal to require regulated parties to provide price information associated with the trading of credits in 95488(b)(1)(B) and the draft “credit transfer form”. The price of credits traded between two companies is not relevant to a regulated party’s compliance with LCFS carbon intensity reductions requirements. All references/requirements for price information regarding credit trades needs to be removed from the proposed regulation and associated draft reporting forms.

Comments on the draft “Credit Transfer Form”

- Section 1 Reporting Period – Staff should change the word “proposed” to “to be recorded”. So the instruction would then read as “Enter the period in which the credit transfer is to be recorded”.
- Section 2 – CARB should insert the same note “Brokers/facilitators must include submittal of a copy of authorization to act on behalf of the Buyer/Seller or both.” in this section like they did in section 3. Alternatively make it clear that this note applies to both Section 2 and Section 3.
- Section 4 – CARB should remove the average price, fuel used to generate, ID numbers, qtr of generation, and name of previous seller from the form. This information is not needed to accomplish the LCFS program goals and in many cases is not defined in a way that could be reported. Credits in a regulated party’s bank are fungible.
- Section 5 – CARB should indicate who can sign the transfer form. Does it have to be the same as “sellers rep” and “buyers rep”? Must they be registered in the LRT? Must they be a corporate officer?
- This form should also indicate a date by which a trade should be reported. If a 2Q trade occurs, does a regulated party need to report within 10 days of the end of the quarter? 30 days? Other?

Comments on the draft “Credit Allocation Form”

Consistent with our earlier comments on the proposed rule changes, the credit allocation form is unnecessary and should be deleted.

Definitions involving “Transloading Facility”

We appreciate ARB has included a definition involving transloading facilities in the proposed regulatory changes, however we believe the definition is unintentionally overly restrictive in stating that a transload facility must have no permanent storage tanks (of any kind) for fuels or

blendstocks subject to the LCFS. As an example, the definition as proposed would exclude a facility which has permanent storage tanks for CARBOB but no storage tanks for ethanol from being a transload facility for ethanol. We believe the proposed definition language should be modified as follows so a facility may be defined as a transload facility for a particular type of fuel or blendstock subject to the LCFS provided it does not have a permanent storage tank(s) for that particular type of fuel or blendstock subject to the LCFS.

(25) “Import facility” means, with respect to any imported liquid product, a facility or equipment in California that meets one of the following criteria:

(A) ***The transloading facility in which the product was first delivered by rail, provided there are no storage tanks in the transloading facility for the product;***

(B) *The storage tank in which the product was first received in California delivered from outside California into California, including; or*

(C) In the case of liquid product imported by cargo tank and delivered directly to a facility for dispensing the product into motor vehicles, the cargo tank in which the product was imported.

(42) “Transloading facility” means the permanent, stationary facility in California that meets all the following criteria:

(A) ***It is the first facility in California in which a transportation fuel or blendstock is delivered from outside California;***

(B) ***It has no permanent storage tanks for the transportation fuels or blendstocks subject to the LCFS; and***

(C) ***All ~~The~~ transportation fuels or blendstocks that ~~arrive~~ arrives at the facility ~~are~~ 7] is transferred directly from rail to cargo tank truck for transport out of the facility.***

A “transloading facility” includes the associated railyard and other related non-storage points located within California (e.g. other non-storage facility in California where the fuel or blendstock is temporarily placed before delivery to the railyard where it is transferred directly from rail to cargo tank truck).

Enhanced Regulatory Party Provisions

WSPA has concerns about the concept of permitting procedures and requirements which govern the manner in which out of state biofuel producers are given the ability to opt in as regulated parties under the LCFS. At the very least, the specific proposal presented by staff is inadequate. As proposed, this provision has the potential to add great complexity to the compliance process and lead to confusion and compliance errors. The root of the problem with staff’s proposal is that it would allow opt-ins as a producer under the LCFS without any specific ties to delivered product; this creates a potential disconnect between the opt-in parties and the regulated parties receiving the biofuel in California.

WSPA supports revisions that allow parties that opt-in to become the initial regulated party for the fuel under the following requirements:

- Opt-in parties must generate LCFS credits only through the act of bringing the fuel into the state, not simply from producing it. This is vital to maintain the integrity of LCFS credit generation.
- Sales from the opt-in parties to other regulated parties would be treated like any other in-state fuel transaction.
- Opt-in parties should be the initial regulated party for all of the fuels they deliver to California, subject to all reporting and recordkeeping requirements
- Such opt-ins should carry a requirement for mandatory registration of all production facilities used to supply product to California
- ARB should publish a list of all parties that have elected to opt-in so that regulated parties in California are aware of their status

WSPA can support provisions that reflect the principle that opt-ins carry all of the responsibilities of being a regulated party and not just the rights, and we believe that certainty is provided by: 1) clearly knowing who bears the initial responsibility for a specific quantity of fuel; and 2) knowing whether obligation for such product is being passed on as part of the transaction.

WSPA believes these changes can be incorporated into this regulation by adding an opt-in provision to the language concerning either producers or importers.

RIN Retirement

WSPA supports the removal of the regulatory language at 95484(c)(3)(A)4. which required regulated parties to report “all Renewable Identification Numbers (RINs) that are retired for facilities in California.” However, section 95484 Table 3. should also be amended to remove the reference to quarterly reporting of RINs.

HCICO

The HCICO topics discussed in the 7/22 Workshop were identical to those outlined in the 7/1 Advisory Panel.

Topic 14 – HCICO Outline

WSPA continues to advocate for a crude oil treatment that does not differentiate. We hired Wood Mackenzie to study the issues and consequences inherent in a differentiation approach and their Panel presentation can be found on the Advisory Panel’s website. During the workshop there were questions relating to what WSPA’s position is relative to crude oil treatment. We’ve provided below our position, called Option 6, and ask this be included in

the overall options. Option 5 – Worldwide Average approach, which has been characterized as the WSPA approach, is actually a second tier preferred approach after Option 6 (note that WSPA does not support the inclusion of an update to refining emissions in the calculation of the average in Option 5).

Option 6. CA Baseline Approach: In this approach, all gasoline and diesel fuels use the existing CI values in the Look-Up Table. When reporting, refiners will only calculate and be subject to the Base Deficit for all refined products regardless of crude. The Look-Up Table values for gasoline and diesel would not be updated.

This option:

- 1) Focuses the LCFS on what should be its primary objective - driving innovation in alternative fuels.
- 2) Greatly simplifies the regulation.
- 3) Avoids crude shuffling and the additional GHG emissions that go along with it.
- 4) Avoids restricting choices in crude supply and any possible, resulting, unintended adverse consequences to California refiners and the market for petroleum products.
- 5) Allows for equitable enforcement that avoids discrimination against in-state refiners of products, blendstocks or components.

Other Suggested Changes to the LCFS Regulation

We would suggest that the definition of the term “Product Transfer Document”, or “PTD” be defined in the regulation consistent with the definition in the Guidance Document 1.0.

“Product Transfer Document”, or “PTD” means a document or combination of documents that authenticates the transfer of ownership of fuel from the transferor to the transferee. The PTD may include, but is not limited to, one or more of the following: contract, invoice, bill of lading, RFS2 product transfer document, meter ticket, and rail inventory sheet. The PTD should be a document or combination of documents that is commonly used and accepted in the industry for the subject fuel. If multiple documents are used for an authentication, each document must contain information that identifies their association to each other.

We would recommend the following change to the term “Regulated Party” in the definitions to further clarify the reference to the term “person”.

“Regulated Party” means a person as defined in H&S Section 39047 who, pursuant to section 95484(a), must meet the average carbon intensity requirements in section 95482 or 95483.