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Clerk of the Board
Air Resources Board
1001 I Street
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RE: Proposed Regulation to Implement the Low Carbon Fuel Standard

On behalf of Chevron, I am pleased to provide comments on the proposed regulation to implement the Low Carbon Fuel Standard (LCFS). These comments pertain to the proposed regulation as described in the Staff Report: Initial Statement of Reasons, released on March 5, 2009.

Chevron supports the goal of the LCFS: to reduce the carbon intensity of California transportation fuels. Our support began with Governor Schwarzenegger's Executive Order and continues today.

In line with our support of the ARB's objectives in the proposed regulation, we offer several comments intended to strengthen the program and make it more workable:

- **Program Reviews are Critical:** The LCFS is a very ambitious program. Achievement of the 2020 goal will require commercial-scale implementation of fuel and vehicle technologies that do not currently exist; in fact, a key element of the program will be to incentivize the development of such technologies. At the same time, the reliance of the LCFS on new technologies creates considerable uncertainty about its feasibility. Regular, mandatory program reviews will have a critical role in keeping the pace of implementation matched to the pace of technology development while ensuring that the expectations of the motoring public are met. We strongly encourage ARB to incorporate specific requirements for regular program reviews to be conducted by the Board at least every three years in addition to the 2012 review currently included in the proposed regulation.

  The availability of new technologies can be predicted for a limited number of years into the future with a minimum of speculation. The program reviews should recognize this and focus on aligning the standards of the program with the availability of the technologies required to comply over a subsequent 3-4 year period. Over such a short timeframe, projections can be based on then-currently available technologies and concrete construction plans.

Unfortunately, such an analysis was not performed for the initial years of the LCFS as part of this rulemaking. Instead, the analysis in the Staff Report appears to be just as speculative in the early years of the LCFS as it is in the later years. As a result, the feasibility of the program in the first few years of compliance has not been established.

- **Indirect Land Use Change Should be Included in Carbon Intensity Values:** Good science says that indirect land use change (ILUC) is a real, significant effect; only its magnitude is uncertain. Therefore, ILUC must be included in a full lifecycle analysis of GHG emissions, and the Board should move forward with the best estimates available.

  Failure to include ILUC initially only to add it later will lead to bad investment decisions, stranded capital and possible harm to the environment. Delay in the recognition of ILUC effects would also falsely ease the compliance burden in the early years of the LCFS, reducing the incentive to develop new technologies (e.g. cellulosic biofuels).

  Chevron considers harmonization of the LCFS and the Federal EISA requirements to be vital, since we will have to comply with both programs simultaneously. Since EPA is statutorily required to include ILUC under EISA, ARB must also include it.

- **Carbon Intensity Values Should Be Part of the Regulation:** The carbon intensity values of fuels and fuel components are the currency of the LCFS: all compliance determinations are based on these values. Investment decisions will be made based on these values, and changes to them will create the risk of stranded capital. Therefore, these values should be explicitly included in the regulation, the same way that the Predictive Model equations are included in the CaRFG regulations. Any permanent changes to these values should only be possible through a public rulemaking process.

  In furtherance of the technology innovation goals of the LCFS, it is also important to recognize the need for flexibility, especially in the determination of carbon intensity values for novel fuel pathways that are critical to the success of the program. Such cases could perhaps be accommodated by either an expedited rulemaking process or a provision to grant temporary approval until the rulemaking process can be completed.

- **Compliance and Reporting Requirements Should Be Improved:** The ability to enter into protocols with the ARB in order to enable streamlined processes for data that ARB needs to ensure compliance has been a valuable component of past fuels regulations. It is unfortunate that the proposed LCFS regulation contains no provisions for protocols. At a minimum, protocol provisions should be added to the following sections:
  - 95484(c) (2), *How to Report*: Flexibility is required if the web portal is not available, especially at the beginning of the program.
  - 95484(c) (3) (A), *General and Specific Reporting Requirements for Quarterly Progress Reports:* Streamline transmitting quarterly information for product transfer documents (PTDs), carbon intensity (CI) values, volumes, and renewable identification numbers (RINs).
  - 95484(d) (2), *Evidence of Physical Pathway*: Streamline the initial demonstration of physical pathway.

Provisions to establish a registration of producers of alternative fuels would greatly streamline the LCFS. Such registration could establish definite CI values and demonstrated physical pathways for fuels produced at specific facilities. A registry of facilities and their CI values would aid the identification of producers of low CI fuels.

Annual reporting is sufficient to maintain the integrity of the LCFS; the proposed quarterly reporting is not necessary. Whatever the reporting frequency, the timing of the reports should not result in LCFS reports being due at the same time as significant Federal reports in order to ease the resource burden on regulated parties.

Given the difference between the treatment of RINs in the Federal RFS and their attempted use to verify LCFS compliance, it is not clear to us that reporting of RINs is appropriate for the LCFS.

- **EER for Heavy-Duty CNG Does Not Match the Vehicle Fleet:** The proposed Energy Economy Ratio (EER) value for compressed natural gas (CNG) in heavy-duty applications is based on a single advanced technology engine meeting ARB's 2010 emissions standards. As noted in the staff report, this engine has less of a fuel penalty relative to diesel than most of the current CNG fleet. While this engine technology is expected to be implemented to some extent in the future, the proposed EER value will be applied to the current vehicle fleet that does not include this technology. The EER for heavy-duty CNG in this rulemaking should be based on the current vehicle fleet; to the extent that more efficient advanced technologies are implemented the EER value can be updated, perhaps as part of the Program Reviews. Establishing an overly optimistic EER for the existing heavy-duty CNG fleet sets up a mechanism in which credits can be generated that are not real.

Conclusion

Chevron is working to provide reliable, affordable energy, produced in a safe and environmentally responsible manner. We regard the establishment of a workable California LCFS to be an important part of advancing transportation fuel technology and supporting the state's environmental goals.

We recognize the competing considerations that staff has had to deal with in formulating the proposed regulation, and we appreciate their efforts.

Thank you for your consideration of our comments. Please contact me at (916) 441-338 if you have any questions or would like more information.

Sincerely,

via email

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cc: James Goldstene
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