



Kern Oil & Refining Co.

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VIA ELECTRONIC POSTING

Comment List: lcs2015

Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento CA, 95814

Dear Chairman Nichols and Board Members:

Kern Oil & Refining Co. (Kern) is providing comments on the California Air Resources Board's (ARB) Proposed Re-Adoption of the Low Carbon Fuel Standard (LCFS). Specifically, Kern is providing comments in support of the following: (1) Low-Complexity/Low-Energy Use (LC/LU) Refinery Provision; (2) Refinery-specific Incremental Deficit Option; (3) Refinery Investment Credit; and (4) Modification of Compliance Curves for Gasoline and Diesel Standards.

Kern is an independently owned, small refinery located in the Southern San Joaquin Valley, just outside Bakersfield, California. From the inception of LCFS, Kern has been acutely aware of the potential inequalities that result from methodologies adopted to effectuate program goals in a manageable manner for CARB. The loss of granularity and reliance upon averages to effectuate program goals is understandable from a management standpoint; however, it can have detrimental impacts on stakeholders like Kern who do not fit the average mold. In California, the crude oil capacity of transportation fuel producing refineries ranges from approximately 26,000 to 343,800 barrels per day, with a rough average of 142,000.¹ At a crude oil capacity of 26,000 barrels per day, Kern is literally the smallest refinery currently producing transportation fuels. In certain circumstances, specifically the vast discrepancy in facility size and complexity in the refining sector, a more robust/complicated methodology is required to insure the program is being effectuated in a credible and equitable manner. Kern is gratified that the Board has

¹ See California Energy Commission, California Energy Almanac, California Oil Refineries, Information as of November 2014, <http://energyalmanac.ca.gov/petroleum/refineries.html> and considering Tesoro-Carson / Tesoro Refining & Marketing Company, Wilmington Refinery as a single facility.

previously acknowledged and directed Staff to consider these inequalities and that the LCFS Re-Adoption is incorporating provisions that recognize and take steps to mitigate the inequalities inherent in the broader LCFS “average refinery” implementation methodologies.

Low-Complexity/Low-Energy Use (LC/LU) Refinery Provision

Kern strongly supports ARB’s inclusion of a provision issuing a credit for Low-Complexity/Low-Energy Use (LC/LU) refineries in recognition of the inherent lower carbon intensities (CI) of transportation fuels produced at these facilities. The credit helps address the unfair subsidization of higher than average energy-use refiners that results from the current regulation’s reliance upon the “average refinery” in determining CI values for finished transportation fuels. Kern greatly appreciates the extensive work performed by CARB staff in calculating the demonstrable lower CI of the transportation fuels produced by LC/LU refineries, which serves as the strong scientific and technical basis for the credit consideration being given to those refineries.

During the initial program adoption during April of 2009, Kern raised concerns regarding the disproportionate impact of the LCFS on low-complexity, lower-energy use refineries like Kern as a result of the program’s use of the “average refinery” in calculating CI and emissions targets. On December 16, 2011, the Board formally acknowledged and echoed Kern’s concerns – directing the Executive Officer in Resolution 11-39 to consider provisions to the LCFS to address low-energy-use refining processes. As acknowledged in the Staff Report: Initial Statement of Reasons for Proposed Re-Adoption of the Low Carbon Fuel Standard (“ISOR”),² Resolution 11-39 was meant to address the lower energy inherently embedded into the transportation fuels from refineries that use simple processes to refine transportation fuels.

Over the next three years, staff performed extensive analysis of refinery data submitted through the robust Mandatory Reporting Regulation which unequivocally demonstrated that LC/LU refineries, in fact, embed less carbon intensity into the fuels they produce. In line with the Board’s direction, Staff also considered and has adopted clear, justifiable metrics defining LC/LU refineries in relation to a refinery’s modified Nelson Complexity and Total Annual Energy Use. Staff’s analysis across the refining sector demonstrated a clear break between LC/LU refineries versus their larger, more-complex peers at a Modified Nelson Complexity of less than or equal to 5 and a Total Annual Energy Use of 5 million MMBtu per year.³ Staff’s analysis further demonstrated that the identified LC/LU refineries have demonstrably lower CIs for produced gasoline and diesel – 5.53 gCO₂e/MJ below the complex refineries’ CI for gasoline and 4.79 gCO₂e/MJ below the complex refineries’ CI for diesel.⁴ After a robust public process, which included multiple workshops, extensive stakeholder collaboration and consideration of no less than seven alternatives,⁵ Staff is proposing to credit the LC/LU refineries 5 gCO₂e/MJ for

² ISOR, December 2014, p. ES-6, III-48.

³ ISOR, III-39 – III-51; Low Carbon Fuel Standard Re-Adoption Workshop, Staff Presentation, slides 47-49; LCFS Low Complexity / Low-Energy-Use Refinery Provisions Workshop, June 20, 2013, Workshop Presentation, slides 2-4;; see also LCFS Regulatory Amendments Workshop, March 5, 2013, LCFS Amendment Presentation, slide 38.

⁴ ISOR, III-53

⁵ See LCFS Regulatory Amendments Workshop, March 5, 2013, LCFS Amendment Presentation, slide 39.

CARBOB and diesel. Kern strongly supports the credit proposal and is grateful to staff for the years of work, analysis and stakeholder collaboration that have ultimately culminated in the current proposal.

Refinery-specific Incremental Deficit Option

Kern continues to be encouraged by ARB's acknowledgement that low volume refineries are disadvantaged by the current California Average Approach, in that they can be affected by the incremental deficit but cannot affect the sector-wide annual crude average CI. ARB is proposing a one-time opportunity for Low-Complexity/Low-Energy Use (LC/LU) refineries to opt out of the California Average Approach, and instead have their incremental deficits determined through a comparison of the facility's annual average crude CI and its 2010 baseline crude CI. Kern has some concerns about the potential for LC/LU refineries to be locked into too low of a CI baseline, but is generally supportive of the option proposed.

Kern, however, does believe that ARB should revise the option as relates to the use of a default CI for crude oils that do not have a specific CI assigned in the regulation. As proposed, any crude without a specific assigned CI would get assigned the California average CI of 12.71 gCO₂e/MJ. ARB should assign LC/LU refineries opting into the incremental deficit option their own average default crude CI based on their 2010 baseline CI. Given that LC/LU refiners will likely have 2010 Baseline CIs much lower than the California Average, and that ARB only intends to update the CI lookup table with new crudes on a three year cycle, assigning a California Average default crude CI to all new crudes will unnecessarily limit or even prevent LC/LU refineries from running new crudes without incurring incremental deficits. A LC/LU's default CI for new crudes should also be its individual 2010 Baseline CI as opposed to the California Average because a LC/LU's individual 2010 Baseline CI is more representative of that facility's historic performance as opposed to the State's historic performance. Kern also believes that ARB should consider an implementation schedule for the Refinery-specific Incremental Deficit Option similar to the three-year rolling phase-in approach as proposed in the California Average method for transitioning from the 2010 Crude CI Lookup Table to the 2012 Crude CI Lookup Table.

Modification of Compliance Curves for Gasoline and Diesel Standards

Given, the two year delay resulting from the *Poet* decision and the required re-adoption of the LCFS, Kern agrees with ARB that some adjustment must be made to the compliance curves to prevent imposition of a sudden dramatic reduction that would negatively affect the market and regulated parties' ability to comply. Kern understands that ARB has conducted in-depth analyses of projected fuels availabilities and evaluated the impact on compliance goals from separate proposed changes to the LCFS in order to develop the proposed compliance curves. To that end, Kern supports ARB smoothing out the curve to 2020 to ensure that reductions are required in a ratable and smooth manner.

GHG Emissions Reductions at Refineries

Kern is cautiously optimistic with regard to ARB's proposal to reward refiners for projects resulting in demonstrable emission reductions at a stationary source facility. As Kern

understands it, refiners would earn program credits in consideration of those reductions, consistent with full life cycle analyses demonstrating lower resultant CI of fuels produced. ARB's proposal describes an application process where the refinery's baseline transportation fuel CI would be calculated and compared to the new, post-project calculated transportation fuel CI. Specifically, credits would be generated based on the difference between these two CIs, but only for qualifying projects where a reduction of greater than 0.1 gCO₂e/MJ is achieved. Kern understands that Staff's intention is to allow for a project to be implemented in multiple phases over an approved period of time in order to achieve the threshold 0.1 gCO₂e/MJ and recommends additional language be added to the proposed regulatory text to clarify Staff's intent. As a small refinery, Kern has limited resources and must utilize its efforts, resources and investments with a high degree of efficiency. Allowing flexibility on the timing of a project is critical because it is not always financially feasible to carry out a substantial project all at once.

In conclusion, Kern appreciates ARB's consideration of Kern's comments. As always, Kern is committed to working with Staff throughout this regulatory process.

Sincerely,



Melinda L. Hicks
Manager, Environmental Health and Safety
Kern Oil & Refining Co.

cc. Floyd Vergara, ARB
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