

April 23, 2013

VIA EMAIL

Robert B. Weisenmiller, Ph.D. Chair, California Energy Commission 1516 Ninth Street Sacramento, CA 95814 California Energy Commission

DOCKETED 12-ALT-02

TN # 70434

April 23 2013

Re: 12-ALT-02 - 2013 - 2014 Investment Plan Update

Dear Commissioner Weisenmiller,

Vopak Terminal Los Angeles ("Vopak") hereby respectfully submits its second request that the California Energy Commission (the "CEC") modify the 2013-2014 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVT Program) to include funding for upstream infrastructure to handle gasoline substitutes, specifically marine storage terminals¹. In this connection, Vopak requests that the CEC modify the current draft of the above-described Investment Plan Update (hereinafter referred to as the "Plan Update") to introduce a subcategory called "Upstream Gasoline Substitutes' Infrastructure" to replace a previously utilized, but now unfunded, subcategory entitled "Upstream Biodiesel Infrastructure"². The replacement subcategory would also be listed in the "Alternative Fuel Infrastructure" category. Modifications of the Plan Update may be made until the final Plan Update is approved by the CEC, which is currently due to occur in May.

Vopak requests that the CEC allocate \$1 million to the new subcategory out of the \$100 million available for the ARFVT Program for 2013 – 2014. If Vopak is awarded a grant under the subcategory, it will use it for engineering and other development activities for a marine storage terminal dedicated to ethanol to be co-located with a bulk liquid terminal it already owns at the Port of Long Beach. The cost to develop and build the facility is estimated at \$61 million, which Vopak expects to fund in large part. Vopak is the world's largest independent tank storage provider, specialized in the storage and handling of liquid chemicals, gasses and oil products, with facilities at both the Ports of Los Angeles and Long Beach.

Because of the two year-plus lead time required to develop and build a marine storage terminal and the high cost of development, Vopak believes that it is too important to the State's goals under AB 118 and the LCFS to delay a year until next year's Investment Plan Update to request a gasoline substitutes infrastructure subcategory in the CEC's portfolio of projects.

Initially, Vopak anticipates that the ethanol stored at the terminal will primarily be Brazilian sugarcane ethanol arriving by ship from Brazil via the Panama Canal. However, as low carbon intensity (CI) biofuel

¹ On December 4, 2012, I sent a letter to Commissioner Carla Peterman requesting that the 2013 – 2014 Investment Plan include funding for gasoline substitutes infrastructure. That letter is in the docket for this proceeding at Log # 68773, dated December 4, 2012. Shortly after I sent the letter, Commissioner Peterman left the Energy Commission to join the California PUC. The current draft of the Plan Update does not mention gasoline substitutes' infrastructure.

² The Plan Update has eliminated the Upstream Biodiesel Infrastructure subcategory because there is no longer any need to fund projects with AB 118 grant money. See p. 34 of the Plan Update.

production facilities in California come online, whether funded in part by AB 118 grants or otherwise, Vopak expects that storage capacity at the terminal will be utilized by California alternative fuel producers. Some will need a dedicated ethanol terminal at the Port as part of the logistics chain for the blending of their biofuels by refineries located near the two Southern California Ports.

The CEC has already committed to set aside funding for marine infrastructure to accommodate the low CI gasoline substitutes for purposes of the LCFS. However, no such funding has been allocated in the first four Investment Plans. That is no doubt a function of the state of the market for foreign ethanol arriving by ship to Southern California ports. Only recently has the market started to accelerate to the point that Vopak projects that marine terminal storage will be required.

As recently as 2008, when the percentage of ethanol blended in California was still 5.6% and the LCFS had not yet gone into effect, only 4% of California's ethanol was imported from outside of the US³, and it didn't come from Brazil⁴. That's because California's ethanol market was essentially closed to Brazilian ethanol due to a US import duty of \$0.54/gallon imposed on foreign ethanol. Brazil, close behind the US as the world's second largest ethanol producer, was, for all intents and purposes, the only foreign ethanol producer affected by the import duty – the other foreign ethanol sold to California blenders came in duty-free under the Caribbean Basin Initiative (CBI), a limited source of the biofuel. On January 1, 2012, the import duty was eliminated.

Brazilian sugarcane ethanol is key to the ability of California obligated parties to meet their requirements under the LCFS in the early years of its implementation⁵. The type of such ethanol most likely to come to California has a CI of 58.40, by far the lowest CI of any alternative transportation fuel currently available at wide commercial scale⁶. In comparison, CARBOB has a CI of 99.12 and the CI scores of corn ethanol are almost entirely in the range of 80's to 90's⁷.

With the elimination of the import duty and the phasing in of the LCFS, Vopak projects that there will be a new and substantial demand for Brazilian ethanol arriving by ship from Brazil. Demand can be expected to accelerate once CARB's online trading platform for LCFS credits goes online, providing an organized and transparent market for trading LCFS credits. CARB has announced that the LCFS Report Tool Credit Bank and Transfer System will be online any day now.

LCFS credits are necessary for Brazilian exporters to incur the extra cost of selling ethanol to California as opposed to the East Coast or for arrival on the Gulf Coast. And from a cost, California jobs, and CI perspective, it's better if Brazilian ethanol arrives by ship at a California port as opposed to traveling to California by unit train after delivery to the Gulf Coast.

 $^{^3}$ l.e., about 40 million gallons out of the almost 1 billion gallons of ethanol blended in California gasoline in 2008. 4 2010 – 2011 Investment Plan, pp. 61-62

⁵ Despite some erroneous reports to the contrary, Brazilian sugarcane is grown sustainably - its growers have not in the past and do not now burn down the Amazon rain forest to plant sugarcane. For climactic, soil-type and logistic reasons, sugarcane cannot be grown in the rain forest and, in fact, the two regions in which it can be suitably grown are located about 1500 and 1200 miles away from the Amazon, respectively. To ensure that its sugarcane continues to be grown sustainably, the Brazilian government passed the Sugarcane Agro-Ecological Zoning law in 2009 which, among other things, prohibits the expansion of sugarcane growing in the Amazon.
⁶ CARB describes the fuel pathway, ETHS002, as "Brazilian sugarcane with average production process, mechanized harvesting and electricity co-product credit". California Air Resources Board LCFS Look-Up Tables as of December 2012, http://www.arb.ca.gov/fuels/lcfs/lu_tables_11282012.pdf, Fuel Pathway Identifier ETHS002

⁷ Thirty-two out of 35 corn ethanol fuel pathways in the current Look-up Table. There are only a couple of corn ethanol pathways that have CI scores in the mid-70's.

We know from discussions with the Air Resources Board staff that there are many Brazilian ethanol producers interested in selling ethanol in California. There are already three Brazilian ethanol fuel pathways in the CARB LCFS look-up table, and we are aware of at least one Brazilian cellulosic ethanol producer that intends to apply for a new fuel pathway certification during 2013 for the first of its planned plants, currently under construction.

From CARB's point of view, it's highly desirable that high volumes of Brazilian sugarcane ethanol are shipped and sold in California over the next several years until other sources of low carbon biofuels are commercially available in California. It's similarly desirable for the EPA, with its RFS2 requirements, since sugarcane ethanol is defined as an "advanced biofuel" under the Energy Independence and Security Act of 2007.

Since Brazilian ethanol arrives in California by ship, marine terminal bulk storage at a Southern California port will be required as the volume increases. However, that bulk storage has to be in a separate, dedicated facility. Like biodiesel, ethanol requires dedicated storage, in this case because of its miscibility with water. That means it cannot be stored in the same facilities where gasoline has been stored or travel in pipelines transporting gasoline, which is not miscible with water.

The Commission has already recognized the need to provide funds for upstream biodiesel infrastructure in earlier Plan years because of its unique upstream infrastructure requirements. Five projects totaling \$4.5 million in grants have been funded under the subcategory. However, the CEC has determined that grants for this type of project are no longer required at this time - private investment has begun to fund projects to such an extent that there was an under subscription of proposals in the CEC's most recent PON for that subcategory.

Similarly, the CEC has already recognized the need for infrastructure grants relating to gasoline substitutes through E85 fueling infrastructure funding, and has to date provided \$16.5 million for such projects. However, that is infrastructure required at the point of sale to the consumer. We now need upstream gasoline substitutes' infrastructure upstream, i.e., at the point of entry at the ports.

In conclusion, we believe that a new subcategory called "Upstream Gasoline Substitutes Infrastructure" under the subcategory of "Alternative Fuel Infrastructure" is both necessary and appropriate in the 2013 -2014 Investment Plan Update for the reasons discussed in this letter.

Very Truly Yours,

Anthony Santich

Sales and Marketing Manager

Vopak Terminals Los Angeles

Cc: Robert P. Ogelsby, Executive Director
Drew Bohan, Chief Deputy Director