



Edwin Harte  
NGV Program Manager



September 28, 2011

Mr. Floyd Vergara  
California Air Resources Board  
P.O. Box 2815  
Sacramento, CA 95812

**Southern California  
Gas Company**

555 W. Fifth Street  
Los Angeles, CA  
90013-1011

Dear Mr. Vergara:

San Diego Gas & Electric Company (SDG&E) and the Southern California Gas Company (SoCalGas) would like to thank the California Air Resources Board (CARB) for the opportunity to offer comments on the most recent draft (September 14, 2011) of the proposed amendments to the CARB Low Carbon Fuel Standard (LCFS) regulations.

Mailing Address:  
Box 513249, GT 15E4  
Los Angeles, CA  
90051-1249

In its August 5, 2011 letter commenting on the draft proposed LCFS amendments presented at the July 22, 2011 public workshop, SoCalGas and SDG&E discussed in detail why the definition of CNG in that draft needed to be revised so that it no longer referenced the CARB CNG specification set forth in Title 13, CCR Section 2292.5. In response, CARB added language to the definition of CNG in the most recent draft that, unfortunately, creates further confusion and uncertainty:

tel 213-244-2847  
fax 213-244-5039

“(12) ‘Compressed Natural Gas (CNG)’ means natural gas that has been compressed to a pressure greater than ambient pressure and meets the requirements of title 13, CCR, section 2292.5, or is otherwise shown to have no significant adverse impacts on the emissions of vehicles fueled by the natural gas.” (Marked to show CARB’s changes)

It is not clear what it means to show CNG has “*no significant adverse impacts on the emissions of vehicles fueled by the natural gas.*” The definition of “natural gas” in the LCFS regulation is set forth in Section 95481(a)(34):

“(34) ‘Natural Gas’ means a mixture of gaseous hydrocarbons and other compounds, with at least 80 percent methane (by volume), and typically sold or distributed by utilities, such as any utility company regulated by the California Public Utilities Commission.” (Emphasis added.)

Given the above, the definition of CNG then means CNG that either meets the Section 2292.5 specification, or has no significant adverse impacts on emissions of vehicles fueled by natural gas sold or distributed by a utility company regulated by the CPUC. But this definition is not only confusing, but also circular, given that CPUC-regulated utility companies (which would include SoCalGas, SDG&E and PG&E, among others)

supply the very natural gas that eventually gets processed and compressed into CNG for use in vehicles. Therefore, CNG (from natural gas supplied by SoCalGas) that has no significant adverse impacts on emissions of vehicles fueled by natural gas supplied by SoCalGas, qualifies as CNG under the LCFS regulation.

What adds to the confusion is the fact that CARB, without input from SoCalGas, SDG&E or other commenters, also revised the definitions of “biogas” and “LNG” by including the same, circular language.

“(5) ‘Biogas (also called biomethane)’ means natural gas that meets the requirements of 13 CCR § 2292.5 or is otherwise shown to have no significant adverse impacts on the emissions of vehicles fueled by the natural gas, and is produced from the breakdown of organic material in the absence of oxygen. . . .” (Marked to show CARB’s changes)

. . . . .

“(29) ‘Liquefied Natural Gas (LNG)’ means natural gas that has been liquefied and meets the requirements of title 13, CCR, Section 2292.5, or is otherwise shown to have no significant adverse impacts on the emissions of vehicles fueled by the natural gas.” (Marked to show CARB’s changes)

As you may recall, in 1992, CARB adopted specifications for alternative motor vehicle fuels which were set forth in Title 13 CCR Sections 2290 – 2293.5 (the “Alternative Fuels Specifications”). Section 2290 defined “alternative fuel”:

“(1) ‘Alternative fuel’ means any fuel which is commonly or commercially known or sold as one of the following: M-100 fuel methanol, M-85 fuel methanol, E-100 fuel ethanol, E-85 fuel ethanol, compressed natural gas, liquefied petroleum gas, or hydrogen.”

Interestingly enough, the LCFS regulation (section 95480.1) identifies a few of these alternative fuels listed above to which the LCFS is applicable: compressed natural gas, hydrogen, and E-100 ethanol.” The LCFS definition of “E-100” ethanol set forth in Section 95481, however, does not reference Title 13 CCR Section 2292.3 which sets forth the Alternative Fuel Specifications for E-100 ethanol as an alternative motor vehicle fuel. The same is true for “hydrogen” which the LCFS regulation fails to define, much less define in reference to Title 13 CFR Section 2292.7 which sets forth the Alternative Fuel Specifications for hydrogen as an alternative motor vehicle fuel.

In addition, CARB, without explanation, includes in the LCFS definitions of biogas and LNG, the reference to the CARB CNG specification in Title 13 CCR Section 2292.5, which on its face applies only to CNG as an alternative motor vehicle fuel. In other

words, the Alternative Fuel Specifications do not define or identify biogas or LNG as alternative motor vehicle fuels.

Why is CARB singling out CNG and unfairly tying down CNG to its 1992 Alternative Fuel Specifications and requirements for vehicle emissions, but not doing so for E-100 ethanol nor for hydrogen? And why is CARB inexplicably linking biogas and LNG to the same CNG specifications set forth in Section 2292.5, when the Alternative Fuel Specifications do not even define biogas or LNG as alternative fuels?

It should be noted that the CARB CNG specification was and is inconsistent with the gas quality of many sources of natural gas transported and distributed by SoCalGas and SDG&E, and is no longer relevant to ensure the safe operation of engines and vehicles given the advances in technology over the past 19 years. As a result, on October 12, 2010, CARB granted an exemption for all CNG station operators within both the SoCalGas service territory and the SDG&E service territory. The exemption allows CNG station operators to dispense CNG that has been produced with natural gas that meets California Public Utilities Commission gas quality requirements.

For this reason, SoCalGas and SDG&E have advocated a change in the definition of CNG within the LCFS regulations that is consistent with the exemption language and allows all CNG station operators within Southern California to generate LCFS credits. Presumably, CARB would never have granted a system-wide exemption for CNG station operators if there was a possibility of adverse vehicle emission impacts and extensive engine testing and analysis performed by SoCalGas and SDG&E in partnership with CARB and other air agencies have demonstrated that fact.

If CARB retains the current draft definition of CNG within the LCFS regulations, any CNG station operator that opts to become a regulated party will be forced to monitor gas quality at individual CNG stations and then evaluate the potential emissions of individual CNG vehicles refueling at the station. Since there are no CNG stations we are aware of that have gas quality measurement devices, such as gas chromatographs, installed on-site, this represents an extraordinarily costly and burdensome regulatory hurdle that serves no useful purpose to establish LCFS credits. Unfortunately, it is likely that fewer credits will be generated by CNG station operators that will view the LCFS regulations as a hurdle to business and not an opportunity.

Therefore, SoCalGas and SDG&E respectfully request that the reference to Title 13 CCR Section 2292.5, as well as the confusing and circular phrase "*or is otherwise shown to have no significant adverse impacts on the emissions of vehicles fueled by the natural gas*" be removed from the definitions of "biogas", "Compressed Natural Gas" and "Liquefied Natural Gas". Furthermore, the definition of "Compressed Natural Gas" must be replaced in its entirety with the following:

“(12) ‘Compressed Natural Gas (CNG)’ means natural gas that meets the gas quality requirements of the California Public Utilities Commission and that is then compressed to a pressure greater than ambient pressure.”

SoCalGas and SDG&E hope that these comments will help to further improve the revisions to the CARB LCFS regulations currently under consideration. If you have any questions or concerns, please feel free to give me a call at (213) 244-2847.

Sincerely,

A handwritten signature in black ink, appearing to read "Edwin T. Harte, Jr.", written in a cursive style.

Edwin T. Harte, Jr.