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December 17, 2012

Hand-Carried

The Honorable Lisa Jackson
Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Re: Petition for Reconsideration of Final Rule published in the Federal Register October 15, 2012, Docket Nos. EPA-HQ-OAR-2010-0799 and NHTSA 2010-0131 (2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards)

Dear Administrator Jackson:

On behalf of VNG.CO ("VNG"), Akin Gump Strauss Hauer & Feld LLP respectfully submits this Petition for Reconsideration ("Petition") to the Environmental Protection Agency ("EPA"), in the above-referenced proceeding.

INTRODUCTION

VNG is a Pennsylvania-based company that plans to build out a national public-access fueling network that will deliver compressed natural gas ("CNG") to light-duty natural gas vehicles in the fleet and mass-market consumer segments. In addition to CNG, this infrastructure can also evolve to deliver gaseous hydrogen, thus serving as a near-term platform for reducing greenhouse gas ("GHG") emissions from internal combustion engine vehicles as well as a long-term platform for achieving EPA and the National Highway Traffic Safety Administration's advanced technology goals by supporting the deployment of fuel cell electric vehicles.

On February 6, 2012, VNG submitted comments in response to the Notice of Proposed Rulemaking for the 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards. VNG expressed support for EPA's proposal to use the Society of Automotive Engineers "utility factor" methodology to measure carbon dioxide emissions and Corporate Average Fuel Economy ("CAFE") for dual fuel CNG vehicles citing

EPA's finding that drivers will fuel on natural gas as often as possible given the higher purchase price of dual fuel CNG vehicles and the much lower cost of natural gas.[1] VNG also noted that manufacturers will have an incentive to design vehicles with the maximum CNG range since emissions calculations and fuel economy will improve with a larger natural gas tank, but that EPA should give manufacturers flexibility to design vehicles based on customer preference.

Consistent with the NPRM, the Final Rule for 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards ("Final Rule") allows manufacturers to measure emissions for dual fuel CNG vehicles based on the utility factors methodology beginning with model year 2012, but adds the requirement that: (1) the vehicle have a minimum natural gas range to gasoline range of 2.0; and (2) the vehicle be designed so that gasoline can only be used when the CNG tank is empty.[2] Beginning with model year 2020, EPA will calculate CAFE for dual fuel CNG vehicles based on the utility factors if the vehicle meets the same two requirements. Dual fuel CNG vehicles that do not meet the two requirements would continue to use a utility factor of .50, the utility factor specified under the current CAFE program.[3]

The Final Rule amends part 600 of title 40, Chapter I of the Code of Federal Regulations ("CFR") to implement the changes discussed in the preamble of the Final Rule. Subpart F addresses Procedures for Determining Manufacturers Average Carbon-Related Exhaust Emissions. Section 600.510-12 titled "Calculation of average fuel economy and average carbon related exhaust emissions" states, with regard to CAFE, that:

> For natural gas dual fuel model types, for model years after 2019, the combined model type fuel economy determined according to the following formula and rounded to the nearest 0.1 mpg...
>
> (B) Natural gas dual fuel model types must meet the following criteria to qualify for use of a Utility Factor greater than 0.5:
>
> (1) The driving range using natural gas must be at least two times the driving range using gasoline.

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[1] 77 F.R. 62624, at 62828 (Oct. 15, 2012).

[2] *Id.*, at 62828-29, 63129-30.

[3] 49 U.S.C. §32905.

(2) The natural gas dual fuel vehicle must be designed such that gasoline is used only when the natural gas tank is effectively empty, except for limited use of gasoline that may be required to initiate combustion.[4]

With regard to measuring carbon dioxide emissions, Section 600.510-12 states that:

For natural gas dual fuel model types, for model years 2016 and later, or optionally for model years 2012 through 2015, the combined model type carbon-related exhaust emissions value determined according to the following formula and rounded to the nearest gram per mile…

(B) Natural gas dual fuel model types must meet the following criteria to qualify for use of a Utility Factor greater than 0.5:

(1) The driving range using natural gas must be at least two times the driving range using gasoline.

(2) The natural gas dual fuel vehicle must be designed such that gasoline is used only when the natural gas tank is effectively empty, except for limited use of gasoline that may be required to initiate combustion.[5]

ARGUMENT

EPA should eliminate the requirement in the Final Rule that vehicles must have a minimum natural gas range to gasoline range of 2.0 to take advantage of the utility factors in measuring carbon dioxide emissions and CAFE. The requirement, which will be added to 40 CFR §600.510-12, is arbitrary and capricious and will be a disincentive to the production and sale of dual fuel CNG vehicles. *See, e.g., Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 844 (1984) ("legislative regulations are given controlling weight unless they are arbitrary, capricious, or manifestly contrary to the statute."); *Motor Vehicle Mfrs. Ass'n of U.S. Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (holding that rescission of NHTSA regulation was arbitrary and capricious because the agency did not "articulate a satisfactory explanation for its action, including a 'rational connection between the facts found and the choice made'").

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[4] *Id.* at 63,185.

[5] *Id.* at 63187.

EPA states in the Final Rule that the ratio is required "to ensure that there is a vehicle range incentive to encourage vehicle owners to seek to use CNG fuel as much as possible."[6] EPA's sole explanation for selecting a 2.0 ratio is that "the agency believes that a ratio of 2.0, in concert with a (currently) much less expensive fuel, is very strong incentive to use natural gas fuel."[7] EPA does not explain why a 2.0 ratio, as opposed to, for example, a 1.5 or 1.0 ratio, is needed to incentivize the purchase and use of vehicles capable of running on natural gas. The imposition of the 2.0 ratio contradicts EPA's finding that drivers will fuel on natural gas as often as possible in light of the higher cost of the dual fuel vehicle and the lower cost of natural gas compared with gasoline. This finding suggests that there is no need for the natural gas tank to have twice the range of the gasoline tank. Current law already requires that dual fuel CNG vehicles have at least a 200 mile range on CNG.[8] That requirement alone should suffice for applying the utility factor.

EPA notes in the Final Rule that there was widespread support for the use of the utility factor in measuring emissions and CAFE.[9] The only commenter that proposed a minimum natural gas to gasoline ratio was the Natural Resources Defense Council ("NRDC"). While NRDC stated in its comments that EPA should consider prioritizing "a minimum requirement for natural gas-to-gasoline range of at least 80 percent of natural gas", it did not specify any basis for its recommendation. EPA's imposition of the 2.0 ratio may be a well-intentioned effort to strike a compromise between the many commenters that did not believe a ratio was necessary and NRDC, which asked for a 4.0 ratio. Regardless, the fact that the ratio has no basis in science or otherwise means that it is arbitrary and capricious and should be eliminated. "Regulations that are a product of pure political compromise in the absence of scientific justification will generally be viewed as arbitrary and capricious." Fisherman's Finest, Inc. v. Locke, 593 F.3d 886, 898 (9th Cir. 2010) (internal citations omitted).

EPA also failed to take into account the effect of the ratio on manufacturing and hence the availability of dual fuel vehicles. If anything, specific tank design requirements will hinder the development of dual fuel vehicles by increasing the production costs of the vehicles. CNG is ideally suited for larger vehicles such as pickup trucks, SUVs and minivans due to the larger envelope of these vehicles. Indeed, the larger vehicle envelopes allow automakers to enhance an existing vehicle with CNG capability without requiring any significant modifications to the

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[6] *Id.* at 62,828.

[7] *Id.* at 62,829.

[8] 49 U.S.C. §32901. The minimum range requirement is similarly problematic, but since it is proscribed by statute, it is beyond EPA's authority to modify.

[9] *Id.*

gasoline aspects of the vehicle. For instance, the 2013 Chevrolet Silverado and GMC Sierra 2500 HDs offer a standard 36-gallon gasoline tank with an additional 17 gallon CNG tank.[10] By engineering it this way, General Motors was able to offer a dual fuel pickup truck without incurring the additional cost of re-engineering the gasoline aspects of the vehicles. Conversely, if GM had to meet the 2.0 ratio requirement, GM would have to re-engineer the gasoline aspect of the vehicle in order to meet the ratio requirement. This would add additional cost to the vehicle which would of course be passed on to the consumer and reduce demand for the vehicle.

It is important to recognize that gasoline tanks and associated fueling apparatus are probably one of the most regulated and litigated aspects of automotive design. Requiring automakers to re-engineer gasoline fueling systems in order to introduce CNG fueling presents enormous technical challenges, is very costly, and will delay the introduction of dual fuel automobiles for at least one production cycle (approximately 4-5 years). It is far preferable to permit automakers to retain a proven gasoline fueling design rather than require them to completely re-engineer it simply to satisfy an arbitrary range ratio requirement.

As both GM and Chrysler[11] have demonstrated, they can introduce CNG capabilities to existing vehicles without diminishing the gasoline capabilities of the vehicles in order to get consumers comfortable with dual fuel vehicles. As consumer acceptance grows, automakers can increase the CNG tank capacity and reduce the gasoline capacity accordingly. And of course as CNG tank technology improves and allows for greater storage in a smaller vessel, automakers can experiment with "ultra-long distance" dual fuel vehicles capable of going extreme distances without refueling or otherwise adjust the ratio of gasoline to CNG to meet consumer demands.

The 2.0 ratio is also unnecessary because the utility factor approach will incentivize automakers to build vehicles with greater CNG range since the utility factor increases as driving range on natural gas increases. During this period where automakers are only beginning to produce dual fuel CNG vehicles, EPA should provide maximum flexibility for automakers to respond to customer choice while providing maximum incentives for producing these vehicles. Any specific tank size requirements will make it more difficult for manufacturers to convert models that previously only ran on gasoline and build new vehicles in response to consumer preferences.

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[10] http://news.pickuptrucks.com/2012/03/gm-announces-bi-fuel-chevrolet-silverado-and-gmc-sierra-2500-hds.html

[11] Both GM and Chrysler have dual fuel pickup trucks on the market with gasoline ranges nearly twice that of the CNG range. The introduction of these models was in response to the automakers' understanding of the market and consumer demands. See, http://www.autoguide.com/auto-news/2012/03/2012-dodge-ram-2500-heavy-duty-cng-starts-at-47500.html

CONCLUSION

EPA should grant VNG's Petition and eliminate the requirement that dual fuel CNG vehicles have a specific range on natural gas compared with the range on gasoline as a condition for using the utility factor to measure carbon dioxide emissions and CAFE since the requirement has no scientific or other basis and is, therefore arbitrary and capricious.

Please contact me if we can provide any additional information or clarification relating to this petition for reconsideration.

Sincerely,

Susan H Lent

Susan H. Lent

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