

July 18, 2016

Submitted electronically through the website

RE: Proposed 2016 State Strategy for the State Implementation Plan (State SIP Strategy)

Dear Chair Nichols:

The California Natural Gas Vehicle Coalition (CNGVC) would like to submit the following comments concerning the 2016 State Strategy for the State Implementation Plan (State SIP Strategy). We support many of the proposed staff actions in recognizing the role that the Cummins-Westport low-NOx natural gas engine will play in reducing GHG and NOx emissions, especially in some of California's most polluted geographic areas.

About CNGVC

CNGVC is an association of natural gas vehicle and engine manufacturers, utilities, fuel providers and fleet operators serving the state. We are united in the belief that wider adoption of clean-running NGVs—a proven technology in use worldwide—is key to helping California reduce greenhouse gas emissions, air pollution and petroleum dependence.

The Coalition is the industry's premier advocacy organization in California. We support new initiatives, provide up-to-date information on NGV technology and market developments, and work with legislators and regulators to develop policies that will increase alternative fuel and vehicle use. We also advise stakeholders on testing and demonstration programs and help NGV-related businesses break into the California market.

Federal Low-NOx Standard

CNGVC supports the proposed action to submit a petition to the United States Environmental Protection Agency (EPA), asking for a national low NOx standard. We believe that a low NOx standard would help the reduction of Greenhouse gases in the atmosphere and help protect the ozone layer. It would also help benefit the health of low-income communities that are affected by harmful emissions at a disproportionate rate.

Medium & Heavy-duty GHG Phase 2

We look forward to working with staff on the Phase 2 proposal that will soon go to the board. We also support the use of the renewable natural gas (RNG) to reduce the GHG emissions, especially when it is paired with a low NOx engine. This combination is the key to reducing GHGs and NOx from a sector that

produces a large percentage of these harmful emissions. However, RNG will be difficult to have in large quantities for transportation due to the barriers that are placed on it. We look forward to a robust conversation about how we can work together to overcome these barriers.

Hundreds of thousands of cleaner heavy-duty trucks needed by 2050

In September 2015, CWI's 8.9 liter ISL G NZ engine became the world's first heavy-duty engine certified to meet CARB's lowest-tier optional low-NOx emission standard of 0.02 g/bhp-hr NOx. This next-generation" heavy-duty natural gas engine is now commercially available in a broad range of HDV sectors that power our freight and public transportation systems (transit buses, refuse haulers, and short-haul delivery trucks)¹.

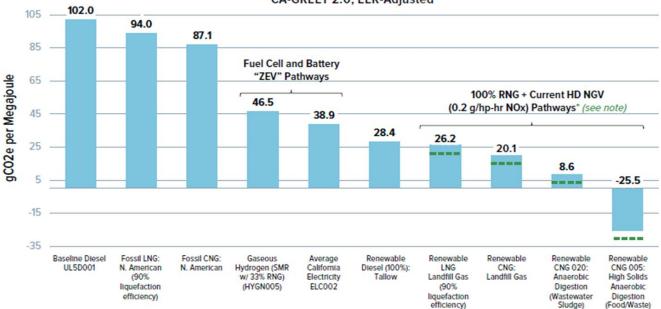
We support the projection of approximately 900,000 class 2B and last mile delivery trucks, along with the 425,000 California class 7 and 8 heavy-duty trucks. However, we believe that incentives are necessary to get these trucks on the road. Some of these incentives should also include a bonus for deploying the low NOx engine into a disadvantaged area, this will ensure that areas that are the dirtiest in terms of air pollution receive top priority.

CNGVC is ready to lend ARB all of its resources to make sure that these projections become a reality.

Transit sector leading in the adoption of Natural Gas as a cleaner transportation fuel

In addition, we support the proposed measure to help fleets purchase the most advanced buses and a focus on disadvantaged communities. RNG has become a proven, cleaner fuel in the transit fleet space. The benefits of using RNG can already be seen in Santa Monica's transit fleet, Big Blue Bus. This fleet transports 61,000 people a day and has a fleet of 200 vehicles. They recently transitioned their fuel to Redeem which is a proprietary Renewable Natural Gas by Clean Energy. When the company used Liquefied Natural Gas they reduced their GHG by only 2,300 metric tons per year but after switching over to Redeem, they have reduced their GHG to over 9,100 metric tons per year! Big Blue Bus is an exemplary company to show the benefits of using Renewable Natural Gas as a fuel source. The graph below illustrates why the Big Blue Bus made the right choice.

Carbon Intensity Scores for Heavy-Duty Truck Pathways Final California Low-Carbon Fuel Standard, 2015 CA-GREET 2.0, EER-Adjusted



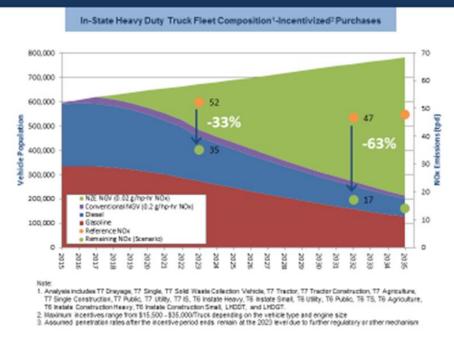
---- * Note: using the new "NZ" NG engine (0.02 g/hp-hr) will further reduce the CI scores of these RNG pathways by about 4 gCO₂e/MJ (closed crankcase ventilation reduces methane by 70%).

Source: California Air Resources Board, "LCFS Illustrative Fuel Pathway Carbon Intensity Determined using CA-GREET2.0,"discussion presented by staff on 9/17/15 and/or CARB LCFS Final Regulation Order, Table 6; note that "HSAD pathway is EER-adjusted by the CARB formula (-22.93 base CI divided by EER of .9), even though this improves its CI score.

Incentives-Key to getting cleaner trucks on the streets

There have been unbalanced amount of awards allocated towards fuels and or projects that may not be available or feasible until the far off future and by contrast natural gas that are ready now and already making a great impact. Certification for Natural Gas 11.9L is key to significantly improving the state of our emissions among heavy-heavy duty trucks. The cost effectiveness of going with Low NOx engines is prominently better compared to any other fuel source or pathway.

Incentives for Near-Zero Emissions Heavy-Duty Trucks Can Deliver Substantial Emissions Reductions



As you can also see, the best way to get these engines on the "streets" and to reduce emissions significantly is to provide adequate incentive funding. We need to address the deficiencies in equal incentive funding that has been lacking in other plans released this year.

We appreciate the opportunity to comment on this plan and we look forward to working with staff, board members, and the Governor's office on its implentation. We are happy to answer any questions or provide any additional clarification if needed. Thank you.

Sincerely,

Thomas Lawson

President, California Natural Gas Vehicle Coalition