

CallGV News April 6, 2015

Policy File

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The Coalition is tracking the following bills and others related to alternative fuels and vehicles throughout the legislative session.

AB 692 | Author: Quirk In brief: Requires a currently unspecified percentage of state agency fuel purchases to be very low carbon, effective Jan. 1, 2017.

The percentage would increase every year.

Details: A very-low-carbon transportation fuel is defined as having no more than 50 percent of the carbon intensity of the closest comparable petroleum fuel, as measured by the LCFS.

Status: Referred to Assembly Accountability and Administrative Review and Natural

AB 808 | Author: Ridley-Thomas

Resources committees.

In brief: Requires a conspicuous label on CNG and LNG dispensers saying that the dispensers measure fuel in gge or dge units.

Status: Referred to Assembly Transportation and Banking and Professions committees.

AB 857 | Author: Perea

In brief: Modifies the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program to provide incentives for deployment of low-emission heavy-duty trucks from 2018 to 2023.

Details: Requires that 80 percent or \$100 million of funding (whichever is greater) for zeroand near-zero-emission mediumand heavy-duty truck technology

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Refueling

Home Refueling Appliances Update

Work continues on next-generation HRAs, with several reportedly on the verge of coming to market

hen we last checked in with the world of home refueling appliances (HRAs) in December 2013, it seemed that NGVs were on the verge of achieving a major convenience advantage over conventionally fueled vehicles: the ability to fill your tank at home.

So what's up with that? We checked the status of existing and planning HRAs, and surveyed the market for potential new options. Here's what we found.

On sale or close to market Phill, from Italy's BRC FuelMaker, remains the only HRA on the U.S. market. At a cost of roughly \$4,800, plus installation, it fills at a rate of 0.42 gge per hour and is available from several U.S. dealers, including Clean Energy Fuels.

The Eaton approach could simplify HRA mechanics and reduce costs.

A Go Natural CNG/Parker Hannifin partnership has narrowed what had been a list of five prototype HRAs down to a single model in beta testing, which Go Natural CNG expects to bring to market in late 2015. The unit's compressor is designed to operate at 10–20 cycles per minute and allows built-in performance monitoring and diagnostics via WiFi, Ethernet, or cellular modem. Go Natural CNG says its HRA uses a patented hydraulic technology to compress gas,

instead of the typical reciprocating technology.

New Gas Industries began testing and validating an HRA in 2014, with features including 0.48 gge per hour throughput on a 1 hp compressor, 110V AC power upgradable to 220V AC for fleet service, and the promise that its compressor will run as quietly as a refrigerator. This unit should be available for purchase sometime in 2015.

In addition, UK-based Gasfill has been seeking a U.S. partner willing to help manufacture and distribute its Gasfill HOME compressor, which the company says fills at 2.0 cubic meters per hour (about 0.56 gge per hour) and has a 12,000-hour design life, an important consideration in the parts-intensive world of compressors.

Under development Eaton Corporation and the University of Minnesota continue to work under a \$3.4 million ARPA-E grant to develop an innovative at-home compressor that works with a liquid piston, as opposed to the mechanical-piston systems used in most current compressors. A commercial product resulting from Eaton's approach could simplify the mechanics

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- CEC Actions: Investment Plan vote, infrastructure solicitation
- Truck Options: Peterbilt introduces new medium-duty NGVs

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be allocated to support commercial deployment of technology that meets or exceeds a specified emission standard.

Status: Set for hearing April 13 in Assembly Transportation Committee.

AB 945 | Author: Ting

In brief: Exempts low-emission vehicles from sales and use taxes through the start of 2020. **Status:** Referred to Assembly Revenue and Taxation Committee.

SB 350 | Authors: De León, Leno In brief: Aims to reduce the state's petroleum use 50 percent by 2030.

Status: Referred to Senate Energy, Utilities and Communication and Environmental Quality committees.

SB 687 | Author: Allen

In brief: Requires gas sellers to make "reasonable progress" toward ensuring that RNG is at least 1 percent of natural gas supplied to retail customers by Dec. 31, 2019.

Details: The goal increases in steps and then becomes a requirement of 10 percent in 2030. **Status:** Referred to Senate Energy, Utilities and Communica-

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and reduce the cost of HRAs while making them dramatically more efficient.

NatGasCar is developing the Ecowise Refueling System, which will fill tanks at 1 gge per hour and plug into 240V AC outlets, just like a clothes washer or dryer. NatGasCar says the unit will be designed to work with any CNG vehicle and will have an oil-free design for neatness' sake.

Finally, General Electric, Chart Industries, and the University of Missouri had an ARPA-E grant to develop an HRA that would cool gas to -50° C to clean and pressurize it, fill a tank in 60 minutes, and cost just \$500, factors that would dramatically change the HRA market. However, GE has ended its participation in the project and has no plans to bring the technology to market, although it continues to explore home refueling technologies on its own.

It's an open question whether the federal Alternative Fuel Infrastructure Tax Credit, which allows people who install an HRA to write off 30 percent of its cost, will apply retroactively to 2015 taxes, as it did to 2014 taxes. Congress has gotten into the habit of passing this credit at the last possible moment, so stay tuned.

News Briefs

Workshop Addresses SB 1204 Funding CARB staff discussed incentive funding requirements mandated by SB 1204 at a March 26 workshop on the 2015–16 Air Quality Improvement Program and Low Carbon Transportation Investments. The Coalition has been advocating for implementation of the requirement that 20 percent of incentive funding for trucks go to deployment of commercially available heavy-duty trucks. The Coalition has been urging CARB to focus deployment funding on Class 7 and 8 trucks and continues to work with CARB staff on the scope of and eligibility for this portion of the incentive funding.

AB 118 Investment Plan Update The CEC Lead Commissioner Report on the 2015–16 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program is available here. The CEC will vote on the update at its April 8 business meeting.

CEC Seeks Infrastructure Projects The CEC's PON-14-608 solicits NGV fueling infrastructure projects for school districts and other public entities. Projects should "establish or expand infrastructure necessary to store, distribute, and dispense" CNG for use in NGVs. Maximum award amounts are \$500,000 for public K-12 school districts and \$250,000 for other public entities; non-school entities must match 25 percent of total project costs. A total of \$1.5 million in funding is available. Applications are due June 11.

Peterbilt Intros Two Medium-Duty NGVs Peterbilt Motors Company introduced two new medium-duty CNG trucks at the Mid-America Trucking Show last month. The natural gas 337 and 348 models feature 320-hp Cummins Westport ISL-G engines and dimensions and steering geometry optimized for working in urban settings or congested job sites.

99 Cents Opens CNG Station at Hub 99 Cents Only Stores has opened an on-site CNG station at its main distribution center in City of Commerce. The opening marks the final step in the company's conversion of its fleet to CNG operation, giving it California's largest private retail Class 8 fleet, at 53 trucks.

2014 NGV Sales Show Light-Duty, Heavy-Duty Divergence An NGVAmerica report says that overall NGV production and sales fell 6.5 percent in 2014 compared with 2013, largely due to a 34 percent decrease in light-duty NGV sales. However, a sharp increase in medium- and heavy-duty NGV sales, which surged 24 and 30 percent, respectively, nearly made up for the light-duty drop. Total NGV production and sales for the year totaled 18,000 vehicles, giving the U.S. an all-class NGV inventory of 152,300. Download the full report here.

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