Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) Possible Program Updates - DRAFT for Public Work Group Discussion Only

Overview: The HVIP offers vouchers to help California fleets purchase new hybrid and zero-emission trucks on a first come, first-served basis. Hybrid and zero-emission vehicle technologies have the potential to reduce criteria pollutant, air toxic, and greenhouse gas emissions – particularly in urban delivery vehicles, refuse trucks, work trucks, buses, and other vehicles with high stop and-go or idling duty cycles. This project is intended to spur early production volumes for these vehicles and lower long-term production costs.

Status Update: While Year 1 (FY 2009-10) HVIP voucher demand was high, fleet participation in Year's 2 and 3 (FY's 2010-11 and 2011-12) was slower than expected. The Board approved several program refinements to the project as part of the FY 2012-13 AQIP Funding Plan for Year 4 to stimulate near-term demand for these vehicles, including increased voucher amounts for zero-emission vehicles and advanced technology hybrids. In addition, Hino Motor Company (Hino), a vertically integrated hybrid truck manufacturer owned by Toyota, entered the California market in late 2012 with a more economical hybrid in the 14,000 to 19,000 lbs gross vehicle weight range (GVWR). In contrast to other HVIP participants, Hino trucks are being purchased by smaller fleets that had not previously purchased hybrid vehicles. Voucher demand has increased in response to staff's program changes and the addition of Hino as an economical purchase option, with voucher demand in the fourth quarter of 2012 more than tripled that of fourth quarter 2011.

Possible Revisions to HVIP Implementation Manual (Expected May 15, 2013)
HVIP Implementation Manual revisions reflect administrative or technical program changes needed to ensure that project funds are spent efficiently and effectively. These mid-course corrections may reflect the latest technical or market information not available at the time the Board approved the most recent Air Quality Improvement Program (AQIP) Funding Plan. Implementation Manual changes must be vetted through the public HVIP Work Group process and take effect at the time the new manual is published. The HVIP Implementation Manual, the AQIP Guidelines, the AQIP Funding Plan, and the Grant Agreement between ARB and the project Grantee (i.e. CALSTART) identify the minimum requirements for HVIP administration, implementation, and oversight. Staff recommends the following updates to the HVIP Implementation Manual that would be effective on May 15, 2013.

Maintain Existing Voucher Structure and Funding Amounts
Staff had been considering shifting from basing battery-electric zero-emission vehicle voucher amounts on battery capacity rather than vehicle GVWR. Upon further evaluation and consultation with stakeholders, staff does not plan to recommend this change as the simplicity of the successful existing voucher structure outweighs potential benefits of a more complex and less predictable incentive based upon battery capacity.

Update Assumed Incremental Cost for Hybrid Vehicles to Reflect Latest Information.
Staff is considering lowering the assumed incremental cost of hybrid vehicles between 14,000 and 19,000 lbs gross vehicle weight range (GVWR) to reflect the lower average incremental cost of hybrid trucks in this weight range since last October's California rollout of Hino's more economical hybrid truck. Since this time, all 117 vouchers issued for hybrid trucks in this weight range have been for Hino vehicles. Incremental cost is defined as the cost difference between a conventional new truck or bus and an HVIP-funded vehicle. This potential update would not impact vouchers requested and approved prior to the Implementation Manual update.

Simplify Vehicle Eligibility Application Process.
Currently, vehicle manufacturers must provide a discrete Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project application for each vehicle make, model, model year, vehicle weight, and vehicle vocation to become eligible for program funding. Vehicle vocations include beverage delivery, package delivery, tractor trailer, refuse truck, utility vehicle, and more. Staff proposes replacing the multiple vehicle vocations with three discrete vehicle types – truck, bus, and utility vehicle with electric power take-off. ARB would continue to track vehicles funded by vehicle vocation, but eligibility applications would be based upon these three general vehicle types. The existing vocation-specific eligibility application has little benefit and is overly burdensome for a truck and bus sector with dozens of possible niche vehicle types.

Reaffirm that Battery Leasing is Allowed.
Battery replacement cost and useful life issues may be a deterrent to some fleet's purchase of hybrid- or battery-electric vehicles. Nothing in the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project Implementation Manual prohibits provision of vouchers for hybrid or zero-emission vehicles with a leased battery. However, staff proposes to include language in the next iteration of the project Implementation Manual affirming the eligibility of vehicles with leased batteries, as long as the vehicle and battery meet all project criteria and the battery lease term is at least three years.

Require Motor Carrier Permit (MCP) Number and Tax Identification Number (TIN) for Voucher Redemption
Staff may require a fleet provide a valid MCP number and TIN in order for participating dealers to redeem HVIP vouchers. The HVIP defines vehicles "under common ownership or fiduciary control" as being part of a common fleet, regardless of whether they are part of different subsidiaries, division, or other organizational structures of a company, government agency or other entity (HVIP Implementation manual, Section 2.5). It is important for an accurate metric for determining fleet ownership for purposes of providing an additional voucher amount of up to $10,000 for the first three vouchers per discrete fleet. In the past, the HVIP has allowed for use of documentation such as a California Carrier Identification Number (CA #) or Tax Identification Number (TIN) to help in demonstrating discrete fleet ownership. ARB proposes strengthening this

process by requiring fleets provide an MCP and TIN in order to redeem HVIP vouchers for trucks above 10,000 lbs GVWR.

The CA# - issued by the California Highway Patrol - is just the first step in the process of obtaining an MCP. The role of the MCP is to verify that the "motor carrier has met all of the statutory requirements to commercially operate motor vehicles on California's highways." (www.dmv.ca.gov/vehindustry/mcp/mcpfaq.htm) California's Department of Motor Vehicles requires existing fleets with trucks above 10,000 lbs GVWR to have an MCP, and issues an MCP only after the CA# has been authenticated. While the process for new truck fleets to receive an MCP can take between 6-8 weeks, the MCP would provide a better indicator of common fiduciary control than the CA#. Public fleets would have the option to provide different documentation needed to demonstrate common fiduciary control.

Possible HVIP Updates as part of FY 2013-14 AQIP Funding Plan (Board consideration June 27, 2013)

ARB staff brings an AQIP Funding Plan to the Board for its consideration annually. This annual Funding Plan includes staff's recommended project priorities, funding allocations, and requirements for Board consideration. Staff's Proposed FY 2013-14 AQIP Funding Plan will be made publicly available in late-May and be considered by the Board on June 27, 2013. These project changes would take effect at launch of the FY 2013-14 HVIP (expected Fall 2013).

Proposition 1B: Goods Movement Emission Reduction Program Set-Aside.

Updates to Proposition 1B: Goods Movement Emission Reduction Program (Goods Movement Program) project criteria will provide an opportunity for fleets to combine Goods Movement Program and Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project funds for eligible zero-emission trucks over 19,500 lbs gross vehicle weight operating in California's freight corridors. Staff is considering setting aside a portion of the FY 2013-14 Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project funding allocation for vehicles that also receive Goods Movement Program funding to ensure vouchers will be available for participating vehicles at the end of the goods movement program solicitation and grant agreement process.

First Three Vehicles' Voucher Enhancement to Include Previous Year Purchases.

The up to $10,000 voucher enhancement for the first three vouchers per fleet is intended to further encourage additional fleets and smaller fleets to purchase a hybrid or zero-emission truck or bus. In previous funding years, a fleet would be eligible for the additional voucher amount for the first three vehicles in that funding year, even if it had received this incentive in previous funding years. The definition of a fleet's first three vouchers has not previously been inclusive of previous funding years and was reset each funding year. To help Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project funds to go further and better target truly new and smaller fleets, staff may propose that beginning in FY 2013-14 only the first three vouchers inclusive of all funding years would be eligible for the additional voucher enhancement. So for example, if a fleet had received three or more vouchers in a previous funding year, it would be ineligible to receive the up to $10,000 voucher enhancement for the first three vouchers in the FY 2013-14 program.

Since the purpose of this incentive is to encourage fleets to consider new, advanced technologies when buying a new truck or bus, ARB may also consider providing an additional up to $10,000 per fleet per technology type (hybrid, zero-emission plug-in electric, or zero-emission fuel cell). So a fleet that had previously received HVIP-vouchers for hybrid vehicles would still be eligible for the additional HVIP-incentive for its first three zero-emission plug-in electric or fuel cell vehicles.

Additional Funding For Fast Charge Compatible Vehicles.
Staff is considering providing zero-emission vehicles that are compatible with fast charging infrastructure with an additional voucher amount due to their “unlimited” daily range relative to traditional slow charge vehicles. Eligibility criteria for the fast-charge vehicle voucher enhancement would be based upon factors such as potential vehicle miles per day, technology reliability, and technology incremental cost, and would be developed in consultation with the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project Work Group. Staff invites public feedback regarding the most appropriate metric for determining voucher amounts for trucks and buses utilizing hydrogen fuel cell or other advanced zero-emission technologies.

Require Stronger Three-Year Warranty.
The Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project warranty requirement may need to be strengthened to specify the manufacturer warranty covers not just the vehicle battery but the entire vehicle, engine (if applicable), motor, drive train, battery, parts and labor for a full three year period. Staff may recommend working with the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project to develop minimum warranty requirements that comprehensively cover the full vehicle and components for a minimum three year period. Staff will also consider whether the minimum warranty mileage coverage of 50,000 miles should be increased.

Enhanced Voucher for Extended Warranties.
Staff is also considering an additional incentive amount for extended vehicle warranties that would provide purchasing fleets with certainty regarding vehicle reliability, maintenance costs, and battery life. Staff may recommend an additional $2,000 voucher amount for each additional year of warranty coverage between six to ten years and/or mileage coverage above a certain threshold. So for example, a hybrid or zero-emission vehicle with a six-year manufacturer warranty would receive an additional $2,000 voucher amount, a seven-year warranty would translate into an additional $4,000 voucher, and so on. Staff would evaluate and discuss potential minimum warranty requirements – such as minimum mileage per additional warranty year, warranty terms, and responsible entity or entities – during a Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project Work meeting or meetings prior to launch of FY 2013-14 project funding.