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ON THE FUTURE OF THE ZEV PROGRAM

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The California Air Resources Board Zero Emission Vehicle program when adopted in 1990 required that ten percent of the light duty vehicles sold in California have zero tailpipe emissions for the lifetime of the vehicles. The primary goal and benefit was to be vehicles that did not suffer the problems of real-world, life-time tail-pipe emissions that were greater than new vehicle certification values. Zero was to mean zero. As technology-forcing, the ZEV program resulted in the introduction in California during the late 1990s of eight battery-electric vehicles by major OEMs. About a thousand of these vehicles remain in operation in California today, a small fraction of the anticipated ten percent.

The Board's redirection of the ZEV program in 2003 from battery-electric vehicles to fuel cell vehicles was based on an assessment of unacceptably high battery vehicle owner costs, limited range, related issues of battery performance and costs, and the promise of full-performance fuel cell vehicles. In retrospect, five years later, all of these assessments were in error. Fuel prices have more than doubled, the Li-Ion battery with performance and potential manufacturing costs appropriate to BEVs is entering production, and fuel-cell vehicles remain decades away.

Most importantly, the ZEV program can be a major contributor to meeting California's 2020 and 2050 greenhouse gas reduction commitments. Electricity is the alternative motor fuel that is truly low-carbon. It will become even lower carbon with time. And, the distribution infrastructure is already in existence. Battery and plug-in hybrid electric vehicles are existing technologies that enable decreasing our dependence on petroleum, reducing greenhouse gases, and meeting air quality standards.

As you will recall, as Chair, I was reluctant to include the ZEV program in the state's greenhouse gas reduction efforts. I was concerned that it would become a part of the auto industry's legal challenges to AB1493, Pavley. However, with ARB's three major court victories and the promise of a new global-warming-conscious and waiver-friendly administration in Washington, that concern is now minimal.

California needs every tool at its disposal to meet global warming and air quality goals. I have two recommendations:

1) Direct the staff to plan the coordination of the AB32 (Global Warming Solutions Act), AB1493 (Pavley), Low Emissions Vehicle (LEV-III), AB118 (Alternative Fuels and Vehicles), the Low Carbon Fuel Standard, and the ZEV programs to accelerate the reduction of greenhouse gases, attainment of air quality standards, and reduction of dependency upon petroleum in California and to ensure that the ARB's regulatory programs in the light-duty vehicle sector are complementary and cost-effective.

2) At this time, restore the ZEV program to its original goal of 10% annual sales of zero emission vehicles, to be attained by 2020, as a major contribution to meeting greenhouse gas reductions. The successful PZEV and ATPZEV programs should become part of the LEV program, where they belong. Other than a possible interim credit for plug-in hybrid electric vehicles, based on the actual displacement of hydrocarbon fuels, the ZEV program should be returned to a "zero means zero," simple, easy-to-understand, easy to enforce, program. Continue to promote fuel cell vehicles as a promising technology, if combined with a low carbon hydrogen technology, for meeting 2050 greenhouse gas reduction goals.

California is the place where electric vehicles can and should happen. Our climate, our multi-vehicle families, our commitment to the environment, and our tradition for innovation all argue for the Air Resources Board to reassume leadership.