

**Testimony of Jim Ehlmann, Manager, Vehicle Emissions, General Motors  
on Item 09-10-04: Public Meeting to Provide an Informational  
Update on the Zero Emission Vehicle Regulation Revisions  
Air Resources Board Public Meeting  
December 10, 2009**

Chairman Nichols and Members of the Board, my name is Jim Ehlmann, Manager of Vehicle Emissions at General Motors. I appreciate the opportunity to offer some brief comments as the ARB begins to develop its future ZEV program.

These are exciting times at GM as we work to develop the electric drive technologies of the future. These include the Chevy Volt Extended Range Electric Vehicle. The Volt will travel up to 40 miles as a zero tailpipe emissions electric vehicle on a single charge. After that, an engine/generator turns on to extend the total range to more than 300 miles. We continue to be on schedule to introduce the Volt in late 2010, and, as announced just last week, California will be one of the initial Volt launch markets. In addition to extended range EV technology, we are also developing plug-in hybrid technology, and plan to introduce a PHEV crossover vehicle in late 2011. We are also investing significant resources into making battery technology a core competency, including the recent opening of our advanced battery lab and the opening of our own facility to manufacture the lithium-ion battery packs for the Volt. And we continue to make progress on fuel cell technology, having gained valuable experience from Project DriveWay, the largest fuel cell vehicle demonstration program to date, which has accumulated a total of more than 1,000,000 miles.

With all of this activity going on at GM, we really appreciate the time and effort that the ARB Staff has put into understanding where we are at on these various technologies, including both the successes we have had and the challenges that remain. And we are committed to continuing this open dialog with the Staff as it develops regulations next year. It is only through this type of partnership approach that can result in a successful ZEV program.

But this partnership needs to extend beyond automakers and the ARB. It must include energy providers and others needed to make sure the infrastructure is there for the vehicles. We are very encouraged that Staff is focusing increased attention on infrastructure, including ways to assure that hydrogen refueling stations will be in place as fuel cell vehicles are introduced. The Staff also realizes the importance of working with other government agencies, including the CPUC and CEC, to develop EV charging infrastructure. And we are encouraged by Staff's recognition that incentives -- both monetary and non-monetary -- will be needed in the early years of these technologies to help bring costs more in line with conventional vehicles and make them more attractive to potential customers. Finally, when looking at the overall goal of achieving greenhouse gas reductions from the passenger vehicle segment, we also appreciate Staff's recognition that the desired reductions can only be accomplished through all parties working together: automakers providing vehicles that can operate on low carbon fuels; energy companies substantially reducing the carbon intensity of those fuels; and government reducing VMT growth. Thank you.