

Karl-Heinz Ziwicka

BMW COMMENTS

March 27, 2008

**Public Hearing to Consider the Adoption of the 2008 Proposed
Amendments to the California Zero Emission Vehicle
Regulations**

**By Karl-Heinz Ziwicka
BMW of North America, LLC**

Good morning Madam Chairman and members of the Board:

My name is Karl-Heinz Ziwica. I appreciate the opportunity to testify here today on behalf of BMW. We have submitted written comments for your review which focus on the transition from intermediate volume manufacturer to large volume manufacturer.

At the present time, BMW is an intermediate volume manufacturer (IVM). Without a change in the current ZEV requirements, BMW will become a large volume manufacturer by 2012. This will have dire consequences to our hydrogen internal combustion engine program, which BMW has so heavily invested in for more than twenty-five years. BMW's achievements in this area are well documented. Currently we operate one hundred hydrogen-powered 7 series vehicles that were built under a full scale production development program. Twenty-five of these vehicles are being operated here in the state of California. BMW has invested nearly half a billion dollars in this program without any regulatory mandate.

Without a change in the ZEV mandate, we will have to refocus our development efforts away from the current hydrogen internal combustion engine technology to fuel cell or battery technology. BMW's added value to the advancement of battery and/or fuel cell technologies for fully electrically powered vehicles would be minimal, at best.

In contrast, BMW has been a leading company focusing on the advancement of hydrogen internal combustion engines and is now able to demonstrate near zero emission performance. We believe that this technology is in line with CARB's ZEV goal to achieve a sustainable clean environment while at the same time maintaining consumers' choice in propulsion systems.

Furthermore, BMW's contribution in the IVM category with respect to California's air quality outweighs by far the contribution it would be required to make as a large volume manufacturer. The change in BMW's manufacturer status would have the effect of increasing its average fleet emissions significantly.

BMW has kept CARB apprised of its hydrogen internal combustion engine activities and the progress we have made with respect to the emissions performance and hydrogen storage technology. Despite the achievements made, we still need to pursue additional research and development efforts to advance the efficiency of the engine and storage capability. In order to demonstrate comparable efficiencies to battery electric or fuel cell vehicles, we need to further invest in research and development over the next few years.

To make these investments our Board in Munich needs a clear signal from you. Adopting the additional transition period of six years for IVM's as proposed by staff under 3.7 of the Initial Statement of Reason will do that. We urge you to adopt this proposal.