Hydraulic Hybrid Vehicle Technology Forum and Roundtable Discussion

Thursday, November 15, 2007 9:00 AM – 4:00 PM South Coast AQMD Headquarters Auditorium 21865 Copley Drive Diamond Bar, CA 91765

Hydraulic hybrid (HH) drive systems have been demonstrated which provide the emission and fuel consumption benefits of hybrid-electric systems in urban driving. These HH systems capture braking energy, store it as high-pressure gas and return it to the wheels during acceleration. Unfortunately, none of these HH systems has yet found commercial success. HH systems are most applicable to heavy-duty vehicles which have sufficient space for the high-pressure accumulator and reservoir, the largest system components. Competing HH designs include "parallel" systems where a hydraulic pump/motor is connected to the driveshaft which then recovers/delivers energy from/to the wheels. "Series" HH systems essentially replace the driveshaft with a hydraulic pump at the engine and a pump/motor at the differential (full hydraulic drive). Each offers unique benefits with a cost premium, but both HH designs can deliver emission, fuel consumption and operational advantages over conventional systems, and may do so at lower cost than hybrid-electric systems. The South Coast Air Quality Management District (SCAQMD) desires to advance HH technology and help it become commercially deployed in the South Coast Air Basin.

The morning will consist of formal presentations by a panel of national technical experts on hydraulic hybrid vehicle technologies and incentives. In the afternoon, there will be a roundtable discussion between the panelists to provide an opportunity for candid exchange of views and suggestions. This roundtable will be moderated by Bill Van Amburg, Executive Vice President of Weststart-CALSTART. Members of the public will also be provided with an opportunity to ask questions of the Technology Forum/Roundtable participants.

The AQMD encourages anyone interested in this topic to attend this forum free of charge. This forum will also be webcast live, and copies of the webcast and of all the presentations will be posted on the AQMD's Technology Forum/Roundtable web page at: http://www.aqmd.gov/tao/ConferencesWorkshops/techforum.htm.

To receive e-mail notifications of future AQMD-hosted technology forums and roundtable discussions, interested persons are encouraged to sign up on the AQMD list server at: http://www.aqmd.gov/listserver/list.aspx.