

# **CUMMINS/U.S. DEPARTMENT OF ENERGY LIGHT TRUCK DIESEL ENGINE PROGRESS REPORT**

**John Stang, David Koeberlein, and Michael Ruth**  
Cummins

Cummins has studied requirements of the light-truck automotive market in the United States and believes that its proposed V-family of engines meets those needs. Design and development of the V-family engine system continues. The engine system is a difficult one, since the combined requirements of a very fuel-efficient commercial diesel with the performance and sociability requirements of a gasoline engine are needed.

Results of testing have shown that the engine can meet requirements for fuel economy and emissions in the Tier 2 interim period from 2004 to 2008. Advanced results show that the full Tier 2 results for 2008 and beyond can be achieved on a laboratory basis.

Various results of ongoing system development are shown, including air-handling system, noise, overhead system dynamics, and overall vehicle performance. General aftertreatment system design direction is discussed.