Laboratory technologies ENDURE™ SCR Catalyst and Hyperion Power Module garner Federal Laboratory Consortium awards

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Honors recognize LANL’s efforts to reduce emissions and create clean, safe, affordable power

Los Alamos, New Mexico, April 27, 2010—Two Los Alamos National Laboratory technologies, ENDURE™ SCR Catalyst and Hyperion Power Module, received Awards of Excellence in Technology Transfer from the Federal Laboratory Consortium.
The annual awards recognize successful efforts by federal laboratory employees to transfer government-developed technology to commercial industry. A panel of experts from industry, state and local government, academia, and the federal laboratory system judge the nominations.

Los Alamos, a U.S. Department of Energy laboratory, was a recipient of 2 of the 28 awards given this year, bringing the Lab’s total number since 2005 to 14. The awards will be presented this week in Albuquerque during the FLC’s national meeting.

This year’s honors recognize LANL’s efforts to reduce emissions and create clean, safe, affordable power.

Developed by Kevin C. Ott, the ENDURE SCR Catalyst is a novel technology that virtually eliminates nitrogen oxides (NOX) from engine exhaust streams. Unlike competing solutions, the ENDURE system does not consume additional fuel, retaining diesel’s inherent efficiency.

LANL has been collaborating with Santa Fe, New Mexico-based CleanAIR Systems, Inc. for several years to commercialize the technology, and the company is developing it for applications in stationary diesel and natural gas engines, pipeline compressors, on- and off-road equipment, and gas turbines.

CleanAIR recently introduced a new product that incorporates a LANL technology called the E-POD™—a hybrid technology designed for large diesel and natural gas stationary engines that dramatically reduces emissions. Installation of the new system recently was completed on seven Caterpillar 3512 diesel generator sets operating on drilling rigs in Wyoming’s Pinedale Anticline Project Area.

Also conceived at LANL, the Hyperion Power Module (HPM) was licensed exclusively to Hyperion Power Generation Inc. in 2008. The HPM, developed by Otis Peterson, Turner Trapp, and Patrick McClure, uses the energy of low-enriched uranium fuel and meets all the non-proliferation criteria of the Global Nuclear Energy Partnership.

Each unit will produce 70 megawatts or 27 megawatts electric—enough to provide electricity for 20,000 average American-sized homes or the industrial equivalent. Approximately 1.5 meters (slightly less than 6 feet) wide by 2 meters tall (slightly over 6 feet), the units can be transported by ship, rail, or truck to produce power for five to seven years depending on usage.

According to John “Grizz” Deal, CEO of Hyperion, more than a hundred letters of interest to purchase the HPM have come in from communities and industries on every continent.

“It is truly an honor to have the FLC recognize these commercialization efforts coming out of the Laboratory,” said Susan Sprake of LANL’s Technology Transfer Division and mid-continent regional coordinator for the Federal Laboratory Consortium. “Through the successes of companies like Hyperion and CleanAIR, federal laboratories such as LANL are able to realize the commercial impact of public investments that contribute to our ‘green’ future.”

The FLC, organized in 1974 and formally chartered by the Federal Technology Transfer Act of 1986, promotes and coordinates technology transfer efforts by creating an environment that facilitates the rapid movement of government-developed technologies into the U.S. economy. More than 700 federal labs and centers and their parent agencies are FLC members.
Businesses that would like to learn about ways to connect with federal laboratories and their innovations are invited by the FLC to attend special events from 1:30 to 5:30 p.m. on Thursday, April 29, at The Hyatt Regency Albuquerque at no cost. For more information about the meeting and to register, visit www.federallabs.org/meeting.

Operated by Los Alamos National Security, LLC for the Department of Energy's NNSA