



Press Release



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U.S. Army Engineers Discuss Power and Energy Capabilities

DETROIT ARSENAL, MI — U.S. Army engineers and industry partners converged on Sterling Heights, MI, July 7 and 8, to discuss solutions for powering the Army's future force.

The two-day *Power and Energy (P&E) Innovation Workshop* was sponsored by the National Defense Industrial Association Michigan Chapter and U.S. Army Tank Automotive Research, Development and Engineering Center (TARDEC). Guests from government, industry and academia attended the workshop to address the Army's evolving P&E needs and provide potential suggestions.

"Our objective is to explore P&E across all spectrums, from Soldier to ground vehicle to aerial vehicle to installation," explained TARDEC Senior Research Engineer Dr. Peter Schihl. "There have been many symposiums and workshops on this, and we're trying to not reinvent the wheel. We're trying to take all that information from the outside, bring different people in and be creative."

Breakout technical sessions were geared toward improving P&E capabilities. Discussions focused on energy storage, alternative fuels, advanced propulsion, grid-based technologies and the possible use of nuclear and solar technologies as power sources. Guests were urged to be innovative and explore solutions that could meet the Army's near and future-term requirements. Collaboration, creativity and ingenuity were encouraged.

"There is no 'silver bullet,'" COL (Ret.) Paul Roege of the U.S. Army Nuclear and Chemical Agency informed guests. "There's no one answer to this. We're going to have to do everything we can. Everything we can do is going to be necessary to achieve this."

Dr. Paul Rogers, TARDEC's Executive Director of Research, opened the event stating P&E capabilities are of paramount concern to the Army. Increases in fuel use, the volatility of petroleum costs and the logistical challenge of refueling the Army's ground vehicle fleet have made the development of alternative energy essential. The addition of electronics, enhanced materials and other capabilities have also increased vehicle energy requirements exponentially over the years. In order to ensure vehicles can perform effectively, Rogers stated it is essential to develop and integrate new methods for powering systems.

"This is the most challenging Science and Technology problem for our warfighter," he stressed. "P&E is at the crux of our challenge today. This is absolutely crucial to the future of our war fighting capabilities."

TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.



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Roeye urged attendees to develop solutions to create an “autonomous brigade,” a future force not heavily-dependant on resupplying or prone to vulnerabilities and disruptions that can be caused while Soldiers await supplies in the field. Water and fuel account for 70 percent of resupplying needs and long-distance refueling in Afghanistan can take as long as 45 days to complete. Roeye encouraged guests to find innovative solutions that combine, conserve, simplify and compact power resources and optimize P&E solutions.

The round tables’ results will be compiled into a 25-page white paper identifying current P&E needs and recommending near, mid- and long-term solutions. A results briefing will be presented at the Ground Vehicle Systems and Technology Symposium (GVSETS), scheduled for Aug. 18-20, in Troy, MI. For more information about GVSETS, or to register, please go to: <http://www.ndia-mich.org/gvsets.php>. According to GVSETS organizers, registration is filling up fast, so don’t delay, register today.

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There are two photos available for use with this release. Caption information follows. To download the photos, go to <http://www.tardec.info/pressreleases/>.

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COL (Ret.) Paul Roeye of the U.S. Army Nuclear and Chemical Agency addresses guests at the P&E Innovation Workshop, held July 7 and 8, 2009, in Sterling Heights, MI. The workshop brought together engineers from the Army and industry to discuss solutions for the Army’s power and energy needs. (U.S. Army TARDEC photo by Chris Williams.)

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Dr. Paul Rogers, TARDEC’s Executive Director of Research, explains the importance of the workshop – enhanced capabilities on ground vehicles and increased fuel consumption have made the need for alternative means of energy and power essential. (U.S. Army TARDEC photo by Chris Williams.)

TARDEC is the Nation’s laboratory for Ground Systems Integration to ensure U.S. Soldiers continue to be the best-equipped and most lethal, survivable and sustainable fighting force on Earth. For additional information or to schedule an interview with a TARDEC subject-matter expert, please contact Bill Dowell at (586) 574-6683, william.dowell2@us.army.mil.

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