Tailored Hybrid Power System

Expeditionary Power Solution for Austere Environments in an Era of Fiscal Austerity

Ronaldo Lachica
CW4, USA Retired
Tailored Hybrid Power System (THPS)

- Development and procurement of Mobile Electric Hybrid Power Sources (MEHPS)
- Innovative approach; concept and not a product
- Five principles of THPS
  - Scalability
  - Modularity
  - Mobility
  - Autonomy
  - Reliability
- Tiered Procurement
Scalability

- Expanded or contracted based on application & requirements
- Plug-and-play
- Battery-based power-on-demand
Modularity

- Open architecture
- Integration of existing and future technologies
Mobility

- Flexibility to tailor an expeditionary power solution based on transportation requirements
- Initial entry and beyond
Autonomy

- Harvest energy from any source available
- Operationally effective source is used first
- Uninterrupted power supply
Reliability

- Mil-810G compliant
- Enhanced generator reliability due to less down time
- Enhanced reliability of supported electronic equipment
- No planned obsolescence
Tiered Procurement

- Hybrid/Renewable power technologies have a short lifecycle and move at a pace faster than traditional acquisition process
- Renewable power systems are expensive
- Different types of operational environment
- Provides the Warfighter with the latest hybrid power capability

“I'm trying to make a very big point that there's not just one size or one way to set up a program. There are some basic things that you have to do in almost any program, but beyond that you have to look at the nature of the product and factors like operational urgency….then lay out a program that makes sense for the product.”

Frank Kendall,
US Undersecretary for Defense Acquisition, Technology and Logistics
Tiered Procurement

- Agile Acquisition strategy with less defined parameters
- Procure increasing and continuously evolving components
- Pre-deployment Training Equipment (PDTE) vs Modification Table of Organization and Equipment (MTOE)
- Power for unmanned ISR and Force Protection equipment

“The Warfighter needs power solutions that can be tailored for requirements generated from energy-informed decisions during mission analysis and operations planning. Agile Acquisition with integrated logistics support will provide the Warfighter with the latest hybrid power capability.”

Ronaldo Lachica,
Nobody; not a VIP at all
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