



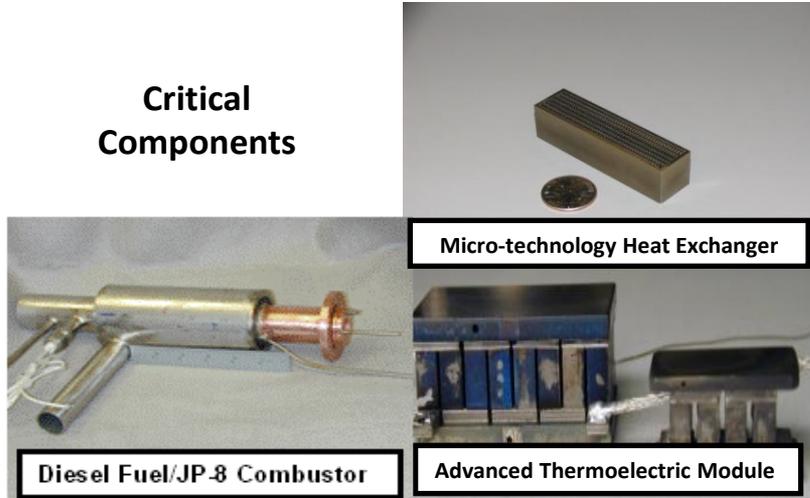
Advanced Thermoelectric Generator (TEG) Power Source

DESCRIPTION

A two-year, three-phase effort to deliver a lightweight modular power source for use in austere environments at the dismounted squad and platoon level. Provides a squad/man-portable, JP8-powered prototype system capable of recharging squad batteries nearly silently. A modular design allows TEG components to be transported separately and assembled in the field, minimizing the load to the individual Soldier. Project integrates DOE and NASA expertise to deliver a government-owned TEG system, data and design specifications to Army transition partners who will perform prototype evaluation and productization.

Payoff: minimize or eliminate use of primary batteries; lighten the Soldier's load; reduce the Army's total cost of battery procurement, storage, transport, and disposal.

Critical Components



Army Transition Partners: PM Soldier Warrior (SWAR), CERDEC, PM MEP
Stakeholders: CERDEC, PM MEP, U.S. Army Infantry Center

MILESTONES

- ✓ Brief Director Jul 10
- ✓ Brief G-4 Aug 10
- ✓ Ph 1 Funding Decision Sep 10
- ✓ Begin Phase I: Design/Develop Components Sep 10
- ☐ Phase II Funding Decision Jun 11
- ☐ Begin Phase II: Subscale Prototype (80-100W) Oct 11
- ☐ Phase III Funding Decision Mar 12
- ☐ Begin Phase III: Full-scale Prototype Apr 12
- ☐ Prototype Demonstration Sep 12

STATUS

- ☐ Efforts to Date:
 - TEG Proposal Brief/White Paper - Aug 10
 - Briefed Joint partners (USAF, SOCOM, USMC) - Oct 10
 - Completed TEG User Conference - Oct 10
- ☐ Current Efforts:
 - TEG Phase I: Investigate, apply, and evaluate critical components - Oct 10-Sep 11
- ☐ Next Actions:
 - Phase II Funding Decision - Jun 11