

POWER EXTENDER - GRID SOURCE (PEGS)

AGILE POWER EXTENDER FOR REMOTE OPERATIONS

PROJECT OVERVIEW

This effort will develop a product that provides the capability to run power from its current maximum of 300' to a longer distance of 1500'(T)-3000'(O). This will enable remote sensors, weapon systems, and power loads to be run from the more efficient central power generation source and eliminate the need to run an extra generator set for one load in a remote area. This product will take the normal 120VAC 20amp circuit that is common on military power distribution equipment into the transmitter box and convert the 120VAC to 600VDC to transmit over a ruggedized power line to the receiver box which will convert it back to 120VAC for the local load to plug into. Converting to the higher voltage will eliminate the issues with line loss at the higher distances and enable the removal of spot generators from the battlefield, saving fuel and reducing the logistic burden on the warfighters.

BENEFITS

- Reduce the number of needed and running generator sets while providing an increased power reliability and availability by running from the main grid
- Increase the readiness of the warfighter and operational flexibility of the battle commander across all the services
- Reduce the logistic burden on the warfighter and reduce the fuel needed on the battlefield

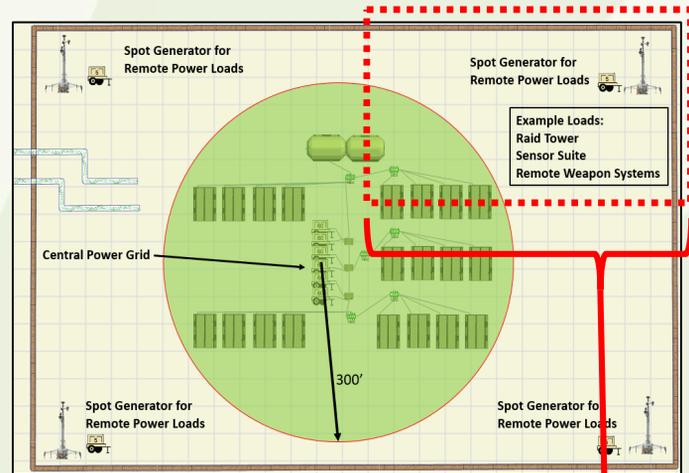
PATH FORWARD

Completion of this project will result in a transition of Hardware, a Tech Data Package, and/or Purchase Description to Project Manager – Expeditionary Energy & Sustainment Systems. PM-E2S2 holds the DoD charter for power generation and distribution. Upcoming major activities include demonstrations, field evaluations, soldier touch points, and mil-spec testing.

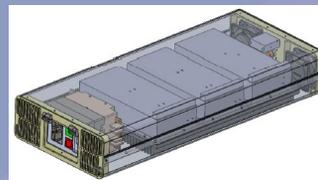
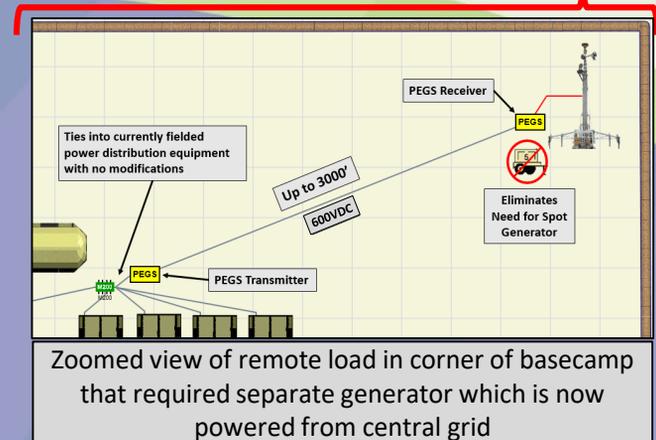
DoD Executive Agent

Office of the Assistant Secretary of the Army for Installations, Energy, and Environment

Approved for Public Release



Basecamp with central power grid and remote loads requiring separate generators



PEGS Transmitter
(Proof of Concept)

FOR FURTHER INFORMATION

National Defense Center for Energy and Environment
<http://www.denix.osd.mil/ndcee/home>

U.S. Army - C5ISR (Command, Control, Computers, Communications, Cyber, Intelligence, Surveillance and Reconnaissance) Center
<https://c5isr.ccdc.army.mil/>