

SBIR 06.2 PHASE I - AWARD DETAILS	
ORGANIZATION	PEO C3T
TOPIC NUMBER	A06-190
CONTRACT NUMBER	
YEAR OF AWARD	
AWARD START DATE	
AWARD COMPLETION DATE	
PROPOSAL NUMBER	A062-190-3055
TITLE	HMMWV Towable Load Following 100 kW Power Unit
PROJECT MANAGER	Lance Hays (949) 261-7533 lhays@energent.net
COMPANY	Energent Corporation 2321 S. Pullman St. Santa Ana CA 92705-5512 Minority Owned: No Veteran Owned: No Number of Employees: 440
KEYWORDS	Dual Pressure Euler Turbine, Towable Power System,
ABSTRACT	A high efficiency, towable 100 kW power plant is proposed based on a newly developed turbine. The new turbine, the dual pressure Euler turbine, is highly efficient and can operate in dusty environments with poor quality fuels. The power plant has a power density more than 4 times greater than existing power plants and is 1/4 the weight. A tradeoff and design study is proposed. Performance, weight and volume of the final design will be determined. A development and production program will be formulated.
BENEFITS	The proposed power plant will reduce the size and weight of currently available power plants. The use of magnetic bearings and acoustic treatment will result in a silent power plant. The power plant will have a multi fuel capability. The high efficiency, >35%, will make it suitable for commercial distributed power applications.