

Environmental Security Technology Certification Program (ESTCP)

NATIONAL GUARD READINESS CENTER ENERGY ASSURANCE

OBJECTIVE

The U.S. Department of Defense (DoD) Installation Energy Test Bed seeks innovative approaches to provide affordable and resilient energy assurance at small National Guard Readiness Centers. There are thousands of single or two building Readiness Centers across all 50 states and U.S. territories. In times of disasters, when the electric grid is down, these locations often serve as the forward outposts for National Guard and other Federal forces to respond to emergencies. ESTCP intends to fund multiple state or regional projects to demonstrate and validate innovative technical and business approaches that can provide affordable energy assurance for a portfolio of sites.

Small National Guard Readiness Centers have modest energy loads during non-emergency times, but in the event of a natural disaster, they play a critical role in the State and Federal government responses. Robust backup power is needed that can be operational within hours and last for weeks. Approaches are needed that can provide the large portfolio of sites in a state with energy assurance where and when it's needed. Given the expected infrequent need for any one Readiness Center to require extended backup power, capital and sustainment costs are a large barrier to effective solutions. Approaches are needed that ensure that when backup power is needed it is available for as long as required.

Areas of interest are pilots and demonstrations that explore the following issues:

- Exploitation of on-site renewable energy and storage.
- Exploitation of mobile energy storage and generation assets.
- Innovative business models that provide the required energy assurance as a service.
- Consideration of State-wide or regional resilience strategy based on hazard and risk analysis to inform solutions.

Other innovative technologies and practices that would enhance energy security are also of interest. Proposals that address only a single site-specific case will not be considered responsive to the intent of this solicitation.

Projects will be executed in two phases with a Go/No-Go decision point. Phase I will study, analyze, and conduct conceptual designs for providing energy assurance to a portfolio of small Readiness Centers. An assessment of the approach's reduction in risks to various threats is required. A report documenting the results with justifications for testing during Phase II is the final Phase I deliverable. Phase II will consist of demonstrations at one or more Readiness Centers.

BACKGROUND

Nation Guard Readiness Centers play a critical role during emergencies when the commercial grid is down for an extended period. As a homeland defense force, the National Guard provides support at the local and State level in response to natural and man-made disasters. With proximity that enables prompt response, knowledge of local conditions, tactical flexibility, and close association

with State and local officials, the National Guard is generally the first military uniformed responder on the ground in the event of a disaster. Resilient energy assurance for small National Guard Readiness Centers allows them to operate in times of disaster.

The majority of the National Guard's footprint is in single building Readiness Centers (previously called Armories). The Army National Guard (ARNG) has over 2000 single building Readiness Centers which represents approximately 80% of their sites and 60% of their building footprint. An additional 183 ARNG sites have only 2 buildings.

POINT OF CONTACT

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For pre-proposal submission due dates, instructions, and additional solicitation information, visit the [ESTCP website](#).