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## **SPECIAL NOTICE 13-SN-0007**

### **ONR Industry Day Notice Hybrid Energy Storage Module**

#### **General Information:**

Classification Code: A – Research & Development

NAICS Code: 541712

**Description:** The Office of Naval Research (ONR) plans to conduct an Industry Day to present an upcoming Broad Agency Announcement (BAA) for the ASD(R&E) Hybrid Energy Storage Module (HESM) Program. Hybrid Energy Storage Modules (HESM) with high power and energy densities, high rate capability, scalable to all power levels, will maximize performance, enhance fuel efficiency and enable future high power weapons and sensor systems on legacy and next generation vehicles and platforms. This capability is intended to store electrical energy while having variable charge & discharge rates in high power density modular-reconfigurable configurations. These systems include combinations of power and energy devices such as battery-capacitor, battery-flywheel, or battery-battery (different types), etc, are intended to enhance integration of existing power systems with energy storage, providing maximum safety, reliability, efficiency, and security of operation with minimal installed storage, overhead, and cost.

This BAA will address three areas for development and demonstration of the concept of hybridized energy storage for the purpose of supporting highly transient loads via a coordinated, multiple-device approach in the DoD development areas Aircraft and Large Power. The Aircraft development area will examine the utilization of HESM to improve More Electric Aircraft (MEA) electrical power quality, component lifespan, and overall system performance for all flight conditions, including possible weight and volume savings. The Large Power development area will examine continuous transient support and fuel efficient operation for megawatt scale grid operation with application for Navy shipboard and Air Force/Army Large FOB applications.

A third development area in the BAA will develop and demonstrate of a safe energy storage structure which is capable of not only buffering against life-reducing high operating temperatures due to aggressive cycling operations but will also prevent/limit thermal runaway conditions through the integrating novel thermal management methodologies and advanced materials. This structure has applicability across DoD applications.

Teaming on this upcoming BAA is highly encouraged in order to provide the complete skill set required to be brought to bear in these identified development areas. With a view toward speeding the incorporation of new science and technology into fielded systems, partnering among industry and those awarded under the ARPA-E AMPED program is also highly encouraged.

The purpose of the Industry Day is to discuss the BAA development areas as well as overall partnering opportunities with ARPA-E AMPED program. General and specific questions related to the pending BAA will not be accepted during the meeting for consideration but will be answered once the BAA is posted on the ONR contracts web site

The Industry Day will be held at Qinetiq-NA, 4100 North Fairfax Drive, Suite 800, Arlington, VA 22203 on Wednesday December 12, 2012. There will be two identical sessions in the morning and afternoon to accommodate additional attendance. Check in for the morning session will begin at 0845am Eastern Standard Time and the meeting will begin at 0930 Eastern Standard Time. Check in for the afternoon session will begin at 12:45pm Eastern Standard Time and the meeting will begin at 1:30PM Eastern Standard Time. Details concerning registration to attend this event are available at the following website:

AM Session: <https://secure.onr.navy.mil/events/regdetail.asp?cid=905>

PM Session: <https://secure.onr.navy.mil/events/regdetail.asp?cid=906>

Registration will close at 4:00 PM Eastern Standard Time on Friday, 7 December 2012. Pre-Registration is required. Walk-ins will not be permitted. Attendees must be US citizens. Registration is limited to two (2) representatives from each organization attending the Industry Day; however, if requested attendance exceeds the capacity of the conference room, it may be necessary to further limit attendance of personnel from each organization to just one (1). ONR will reply via e-mail with the registration confirmation. All expenses associated with attendance will be the responsibility of the participant(s).

Questions/comments resulting from the Hybrid Energy Storage Module (HESM) Industry Day will be accepted via email from 12 December through 31 December, 2012. The limited timeframe for questions/comments is to allow for potential feedback to be incorporated into any resulting BAA. Submit all questions/comments to the following e-mail addresses:

Technical Point of Contact: Mr. Donald Hoffman, Program Officer  
[donald.hoffman@navy.mil](mailto:donald.hoffman@navy.mil)

Business Point of Contact:  
Darnell Griffin, Contract Specialist  
[darnell.griffin@navy.mil](mailto:darnell.griffin@navy.mil)