“Art of the Long View”

Valuing Energy in Acquisition

RADM Matthew Klunder
Chief of Naval Research
S&T Strategic Plan

S&T Plan Focus Areas:

- Autonomy & Unmanned Systems
- Assure Access to Maritime Battlespace
- Information Dominance
- Platform Design & Survivability
- **Power & Energy**
- Strike & Integrated Defense
- Warfighter Performance
- Total Ownership Cost
- Expeditionary & Irregular Warfare

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Power & Energy S&T:
• Fuels
• Power Generation
• Energy Storage
• Efficient Distribution
• Energy Usage

ONR/TFE Naval Energy Forum
14-15 October 2009
Ground Renewable Expeditionary Energy System - GREENS

- Less than 2 years for concept development to demonstration and deployment
- NSWCCD developed the technology with support from ONR, PM Expeditionary Power Systems, and the USMC Expeditionary Energy Office
- Successfully transitioned to Marine Corps Systems Command
- Marines from India Company 3/5 deployed to OEF with GREENS, operated two patrol bases entirely on renewable energy, and reduced fuel consumption at a third patrol base by 90%
Silicon Carbide (SiC) Power Converters

3MW Power Converters, and Other Components

- Improved Power Quality
- 70% Volume Reduction
- 90% Weight Reduction

Switches

Transformers
• 10 Projects for Alternative Energy Systems Technology Demonstrations on Navy and Marine Bases

Evaluate technical approaches to cyber secure smart metering for data centers to reduce energy consumption
2012 ONR Naval S&T Partnership Conference

The 2012 S&T Partnership Conference will provide various avenues to access ONR leaders, program managers, and business operations staff. Don’t miss this great opportunity!

Save the Date:
October 22-24, 2012 · Hyatt Regency Crystal City · Arlington, Va.

www.onr.navy.mil