Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Office of the Secretary Of Defense	Date: February 2016
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0604055D8Z / *Operational Energy Capability Improvement*

COST ($ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	99.115	45.060	41.420	37.329	-	37.329	37.403	39.873	40.304	41.090	Continuing	Continuing
P455: *Operational Energy Capability Improvement*	80.952	45.060	41.420	37.329	-	37.329	37.403	39.873	40.304	41.090	Continuing	Continuing
P456: *Hybrid Energy Storage Module (HESM)*	18.163	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-

A. Mission Description and Budget Item Justification

The basic mission of this program element is to fund innovation to improve the Department of Defense's (DoD) operational effectiveness via targeted operational energy science and technology (S&T) investments. It contains the two projects described below:

P455, the Operational Energy Capability Improvement Fund (OECIF), incentivizes S&T to promote long term change in DoD capabilities so they are better aligned with the Operational Energy Strategy. OECIF generally fosters innovation to improve operational energy performance and has two key mission aspects. First, to develop operational energy technologies and practices that will improve DoD military capabilities and possibly reduce costs. Second, to establish within the military Services institutional momentum to continue those innovations. OECIF funds serve as "seed money" to start or consolidate promising operational energy innovation to be sustained by the Services; accordingly, OECIF generally emphasizes supporting or establishing programs, rather than one-off projects.

P456, the Hybrid Energy Storage Module (HESM), co-sponsored by the Assistant Secretary of Defense for Research and Engineering (ASD(R&E)) and the Assistant Secretary of Defense for Energy, Installations and Environment (ASD(EIE)), develops advanced energy storage technologies to maximize performance and reliability, and enable future high power weapons and sensor systems on legacy and next generation vehicles, aircraft and ships. The goals of HESM are to (1) demonstrate energy storage systems with high power/energy densities, scalable to all power levels, that reduce total logistics demand, (2) increase platform ability to sustain operations during engagement, and (3) reduce maintenance. Once demonstration is complete, this technology will be sustained by the Services and will be used to extend the operational performance and safety for these applications beyond the hybrid storage module baseline design configuration. This program is closely coordinated with the Advanced Management and Protection of Energy-storage Devices (AMPED) program of the Department of Energy's (DOE) Advanced Research Projects Agency - Energy (ARPA-E).

Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Office of the Secretary Of Defense	Date: February 2016
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0604055D8Z *I Operational Energy Capability Improvement*

B. Program Change Summary ($ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	46.300	37.420	38.912	-	38.912
Current President's Budget	45.060	41.420	37.329	-	37.329
Total Adjustments	-1.240	4.000	-1.583	-	-1.583
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	4.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.018	-			
• SBIR/STTR Transfer	-1.222	-			
• Realignment of funds	-	-	-1.294	-	-1.294
• Economic Assumptions Adjustment	-	-	-0.289	-	-0.289

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2015	FY 2016
Project: P455: *Operational Energy Capability Improvement*		
Congressional Add: *OECI*	-	4.000
Congressional Add Subtotals for Project: P455	-	4.000
Congressional Add Totals for all Projects	-	4.000

Change Summary Explanation

FY 17: Baseline program was reduced to realign funds for higher priorities and achieve efficiencies within the Department of Defense.

Exhibit R-2A, RDT&E Project Justification: PB 2017 Office of the Secretary Of Defense			Date: February 2016
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0604055D8Z / *Operational Energy Capability Improvement*	Project (Number/Name) P455 / *Operational Energy Capability Improvement*	

COST ($ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
P455: *Operational Energy Capability Improvement*	80.952	45.060	41.420	37.329	-	37.329	37.403	39.873	40.304	41.090	Continuing	Continuing

A. Mission Description and Budget Item Justification

Operational Energy Capability Improvement Fund (OECIF)

Description: The basic mission of the OECIF is to fund innovation that will improve DoD operational effectiveness via targeted S&T investments. As Defense-Wide funding, it incentivizes S&T to promote long term change in DoD capabilities so they are better aligned with the Operational Energy Strategy. OECIF generally fosters innovation to improve operational energy performance and has two key mission aspects. First, to develop operational energy technologies and practices that will improve DoD military capabilities and possibly reduce costs. Second, to establish within the military Services institutional momentum to continue those innovations. OECIF funds serve as "seed money" to start or consolidate promising operational energy innovations to be sustained by the Services; accordingly, OECIF generally emphasizes supporting or establishing programs, rather than one-off projects.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2015	FY 2016	FY 2017
Title: Operational Energy Capability Improvement Fund	45.060	37.420	37.329
FY 2015 Accomplishments: The expeditionary outpost energy load reduction and waste to energy (W2E) programs begun in FY12 generally reached their conclusion. The Advanced Energy Efficient Shelter Systems program completed cold weather testing, showing tents with 40% or greater energy efficiency over legacy baseline as well as hot weather testing showing over 80% decrease in energy required to cool a shelter over legacy baseline systems. The Super Energy Efficient Containerized Living Unit (SuperCLU) program replaced 1,000 split heating, ventilation, and air conditioning units at Camp Lemonier, reducing the energy load 40-50% per CLU, and finalized the design for a 40-foot Drop In Replacement SuperCLU. The Innovative Cooling Equipment program successfully demonstrated prototype environmental control units (ECUs) at the July 2015 Natick Base Camp Integration Lab Experiment, and the prototypes demonstrated a 14-56% efficiency improvement over baseline units. The Navy Expeditionary Technology Transition Program (NETTP) fabricated and tested a breadboard (TRL-4/5) prototype Stirling ECU and absorption waste heat driven ECU, and conducted design and performance validation of critical subcomponents for an adsorption waste heat driven ECU. The Transformative Reductions in Operational Energy Consumption program conducted field and lab assessments, transitioned to a 50/50 cost share model with DoD users, and established a knowledge management repository within the Defense Technical Information Center. The W2E program developed and tested four laboratory or pilot-scale W2E conversion technologies focusing on technologies that would be suitable for forward operating bases and overseas contingency operations.			

Exhibit R-2A, RDT&E Project Justification: PB 2017 Office of the Secretary Of Defense		Date: February 2016
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0604055D8Z / *Operational Energy Capability Improvement*	**Project (Number/Name)** P455 / *Operational Energy Capability Improvement*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2015	FY 2016	FY 2017
The operational energy consortia programs begun in FY13 continued. The Tactical Microgrid Standards Consortium (TMSC) completed an initial draft of the standards and made them available to DoD experts and industry for comment. The Energy Efficient Outpost Modeling Consortium (EEOMC) completed version 1.0 of the Energy Resource Planning Tool optimization model, finalized the Microgrid application programming interface along with a beta version of the Commander's Application, and began developing an initial course on energy efficiency in expeditionary operations. The Soldier and Small Unit Power consortium investigated the impact on total battery weight of utilizing projected energy harvesting devices, wireless technologies and new weapon sights with the desktop analysis tool, completed a low power tactical communications study, and measured baseline equipment with a test bed. The Engineered Surface Materials and Coatings Drag Reduction consortium continued maturing and testing designs for select drag reduction technologies and selected winners of a drag reduction "Challenge" to bring in new innovators. The analytical methods and tools programs started in FY14 have ramped up. The Synthetic Theater Operations Research Model-Energy (STORM-E) began creating a comprehensive campaign energy analysis roadmap, identified key information inject points to influence budget decisions, and conducted initial campaign studies to bound method/tool/data requirements. The Army's Operational Energy Analysis Task Force (OEATF) began developing a collaborative data sharing capability among the Army analytical agencies, initiated verification and validation (V&V) of three performance level models that will be relied upon to produce certifiable data, completed one of three scenario enhancements, and began making enhancements to four system and force level modeling and simulation (M&S) tools included in their toolkit. The Joint Deployment Energy Planning and Logistics Optimization Initiative (J-DEPLOI) program mapped current joint combatant command deliberate planning processes related to energy and determined areas in most need of decision support or automation and reviewed over 60 decision support tools for potential use. The Comprehensive Operational Energy (COE) Toolkit program completed the methodology to use existing tools to calculate the damage enemy attacks have on base fuel systems. The Navy's Mission Engineering Analytical Method for Operational Energy program (MEAM) successfully demonstrated a method for computing combat capability as a function of fuel usage, optimal delivery, and developed a set of prototype tools to calculate these metrics for a peacetime scenario. The Capability Assessment and Modeling for Energy Logistics (CAMEL) program completed analysis of counter operational energy impacts on the logistics chain, began preliminary analysis of these impacts within an anti-access/area-denial (A2AD) environment, began analysis of advanced combat air engine technology on future air operations, and initiated upgrade of modeling, simulation, and analysis (MS&A) tools. The major new program started in FY15 is called "Improving Fuel Economy for the Current Ground Tactical Fleet Program." This program will strive to achieve significant fuel efficiency increases in the existing tactical ground vehicle fleet through advancing technologies in four major areas: automation/smart cruise control, vehicle auxiliary electrification, more thermally efficient cylinders, and an M&S tool for investigating vehicle light-weighting. This program is led by the Army Tank Automotive Research,			

Exhibit R-2A, RDT&E Project Justification: PB 2017 Office of the Secretary Of Defense		Date: February 2016
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0604055D8Z / *Operational Energy Capability Improvement*	**Project (Number/Name)** P455 / *Operational Energy Capability Improvement*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2015	FY 2016	FY 2017
Development & Engineering Center along with the Office of Naval Research and conducted in coordination with the Department of Energy's Vehicle Technology Office. This program conducted kick-off meetings and initiated technology development. Another new FY15 program, the Joint Infantry Company Prototype (JIC-P), is a joint Army and Marine Corps program, led by the Marine Corps Expeditionary Energy Office, combining power management, distribution, storage, and kinetic energy harvesting technology with operational testing at the company level. The intent of the program is to increase the self-sustainability of dismounted forces in austere environments and decrease the battery weight that they carry. This program obtained power management, distribution, storage and energy harvesting equipment and conducted initial integration, performance and safety tests. Using the additional FY15 funding provided by Congress, OECIF has started several shorter term projects to complement existing OECIF programs or explore new directions. This includes projects to: test and evaluate new Soldier power equipment and develop a light ultra-capacitor substitute for radio batteries; quantify the cyber security threat to energy industrial control systems and how DoD might protect itself; reduce ground-based fuel consumption in austere environments by leveraging modern behavior change insights; develop and test novel membrane based dehumidification systems to reduce the air conditioning energy consumption of ground forces and ships in dock; formulate waste heat recovery analysis tools based on steady-state thermodynamics and begin development of novel heat exchangers for turbine waste heat collection; demonstrate small tactical unmanned aerial vehicles (UAV) that use solar cells and thermal soaring to stay aloft; establish an instrumented maritime testbed program to demonstrate and speed adoption of emerging, maritime energy-saving technologies in a shipboard environment; explore the utility of configuring M&S federations to explore energy-related analytic questions relevant to DoD; and, support the Joint Deployable Waste to Energy (JDW2E) group, which develops concept of operations, requirements, and testing protocols for waste to energy systems. ***FY 2016 Plans:*** The NETTP will conduct a Technology Readiness Level 6 test of a Stirling ECU and waste heat driven ECUs. The consortia programs will generally enter their last year. TMSC will incorporate DoD and industry comments and finalize the draft Tactical Microgrid Standards. EEOMC will complete the V&V plan for the Energy Resource Planning Tool, update the Commander's Application to enhance mode prioritization and optimization of generators and demonstrate with hardware, and offer pilot courses on energy efficiency in expeditionary operations. The Soldier and Small Unit Power consortium will continue to develop the desktop analysis tool, finalize measuring baseline equipment and new prototype equipment within a test bed, conduct field demonstrations to validate a 30 percent savings on software modified tactical radios and develop an Operationally Wearable Measurement System. The Engineered Surface Materials and Coatings Drag Reduction consortium will conduct flight tests,			

Exhibit R-2A, RDT&E Project Justification: PB 2017 Office of the Secretary Of Defense		Date: February 2016
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0604055D8Z / *Operational Energy Capability Improvement*	**Project (Number/Name)** P455 / *Operational Energy Capability Improvement*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2015	FY 2016	FY 2017
as appropriate, review proposals and make Phase 1 technology maturation awards to the selected drag reduction "Challenge" winners. The analytical methods programs will continue. STORM-E will translate tool-based roadmap priorities into their spiral 1 build and shift scenario development to scenarios examined through the Marines Expeditionary Force 21 lens. OEATF will complete V&V of three performance level models, complete model enhancements of three system and force level M&S tools, complete scenario enhancements for the second of three scenarios, and begin transformation of the Logistics Battle Command (LBC) model into a decision support tool. J-DEPLOI will begin adaption of existing software code to address the new prioritized areas for fuel planning and work on an operational fuel planning Implementation Directive. The COE Toolkit program plans to complete the programming and graphical user interface for a comprehensive model to examine the impact of enemy OE-interdiction on aircraft sortie generation. MEAM will integrate and refine prototype tools with as much verified fuel consumption data as can be identified and develop a range of excursion assessments based upon wartime scenario(s), establish cost analysis methodology, and investigate the ability of the tool to support future surface combatant platform design and force structure. CAMEL will develop the methods and tools to explore airlift and aerial refueling effects within A2AD environments, explore the impact of counter operational energy threats and alternative basing strategies, complete analysis of advanced combat engine technology impacts, and begin analysis of costs incurred with flex basing. The FY15 vehicles program will continue. The autonomy project plans to complete single vehicle simulation, upgrade hardware, and conduct vehicle tests. The electrification project plans to initiate system lab testing, create M&S controls and software, and begin system integration testing. The project to produce more thermally efficient cylinders plans to continue development of a thermal barrier coating, complete advanced research on piston development, and initiate engine testing. The M&S tool project plans to develop the analytical framework for the model and examine subsystems baseline weight optimization. JIC-P will further develop the integrated system, perform small scale user evaluations with multiple units, conduct a human factors study on the kinetic harvesters, and continue to improve M&S data. Current units targeted for initial training and evaluation are the Army's 2nd BN-27th Infantry Regiment and 3rd Marine Regiment; both located in Hawaii. For the shorter term projects, plans for FY16 include: continue Operational Test and Evaluation of new Soldier power equipment, and advance the Soldier Power program to Milestone-C/Low-Rate Initial Production; investigate possible protections to cyber-security threats at defense fuel supply points and installations; implement a data collection plan to develop a set of behavior change strategies and design an experiment to verify the efficacy of those strategies; test novel membrane based dehumidification systems to reduce the air conditioning energy consumption of ground forces and ships in dock; improve analysis tools, analyze integration of a waste heat recovery system into a representative Naval platform, and begin fabrication of an exhaust gas heat exchanger for a 2017 demonstration with a gas turbine waste heat recovery system; integrate photovoltaic panels, power management and max power point tracking into the UAVs and conduct flight tests of up to five UAVs demonstrating			

Exhibit R-2A, RDT&E Project Justification: PB 2017 Office of the Secretary Of Defense		Date: February 2016
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2015	FY 2016	FY 2017
through-the-night and multiple day endurance with zero fuel; conduct at-sea tests of promising energy-saving technologies and establish an enduring process for companies to quickly try out their technologies at sea; and prepare for a W2E industry day, develop guidance for contingency base waste management, and demonstrate a medium-sized waste disposal system. New programs starting in FY16 will reflect a shift within OECIF from an emphasis on contingency bases to one on mobile platforms and the Pacific. The new program focus will be on improving the operational energy performance of unmanned air, sea and ground systems that could be used in the Pacific. This could cover such improved capabilities as increased unrefueled range/ endurance, greater payload and payload power, and improved prime mover reliability and fuel flexibility -- all while operating in contested operating environments over long distances. ***FY 2017 Plans:*** A few consortia programs will still be active. TMSC will validate and submit the draft Tactical Microgrid Standards for DoD concurrence. The Soldier and Small Unit Power consortium will finalize development of the Operationally Wearable Measurement System and participate in the JIC-P demonstration event. The analytical methods programs will continue. STORM-E plans to build spiral 2 based on FY16 lessons learned and conduct theater studies in order to identify energy-based risk to operations, examine mitigation solutions, and shape plans and programs. OEATF will complete V&V of the four system and force level M&S tools, complete scenario enhancements for the third of three scenarios, and complete the transformation of the LBC model into a decision support tool. J-DEPLOI plans to continue to develop the selected decision support tool for joint fuel logistics support and refine the Implementation Directive. MEAM plans to assess future force structure and logistics force implications, investigate incorporating Joint and Coalition operations, define warfighting operational effectiveness tactical decision aid requirements, and develop a production plan for resulting tools and methods. CAMEL will analyze concepts of operations associated with flex basing strategies and the impact to operational energy within airlift and aerial refueling missions, continue to explore overall costs associated with flex basing, and continue enhancements to the MS&A tool. The FY15 vehicles program will continue. The automation project will conduct convoy vehicle simulation. The electrification project will complete system integration lab testing, develop M&S controls and software, initiate vehicle integration and testing, and initiate procurement and testing of optimized components. The project to produce more thermal efficient cylinders will complete development of the thermal barrier coating and continue engine testing. The M&S tool project will incorporate novel material analytics and explore advanced technologies optimization. JIC-P will culminate in a dismounted company side-by-side user evaluation to quantify and qualify the sustainment of dismounted infantry using system prototype developed technology.			

Exhibit R-2A, RDT&E Project Justification: PB 2017 Office of the Secretary Of Defense		Date: February 2016
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2015	FY 2016	FY 2017
The membrane dehumidification program will test prototype membranes with 10-ton and 1-ton compressors to measure system performance of membrane based dehumidification systems. The programs begun in FY16 for more energy effective unmanned systems for the Pacific will continue to ramp up during this fiscal year. New programs starting in FY17 may continue the shift within OECIF toward a greater emphasis on fuel consuming mobile platforms and the Pacific. The focus of these new FY17 programs is likely to reflect input from the Services, various research Communities of Interest within DoD, such as Energy and Power, Ground and Sea Platforms, and Air Platforms and any developing gaps or opportunities identified by ODASD(OE).			
Accomplishments/Planned Programs Subtotals	45.060	37.420	37.329

	FY 2015	FY 2016
Congressional Add: OECI	-	4.000
FY 2016 Plans: For the shorter term projects, plans for FY16 include: continue Operational Test and Evaluation of new Soldier Power equipment, and advance the Soldier Power program to Milestone-C/Low-Rate Initial Production; investigate possible protections to cyber-security threats at defense fuel supply points and installations; implement a data collection plan to develop a set of behavior change strategies and design an experiment to verify the efficacy of those strategies; test novel membrane based dehumidification systems to reduce the air conditioning energy consumption of ground forces and ships in dock; improve analysis tools, analyze integration of a waste heat recovery system into a representative Naval platform, and begin fabrication of an exhaust gas heat exchanger for a 2017 demonstration with a gas turbine waste heat recovery system; integrate photovoltaic panels, power management and max power point tracking into the UAVs and conduct flight tests of up to five UAVs demonstrating through-the-night and multiple day endurance with zero fuel; conduct at-sea tests of promising energy-saving technologies and establish an enduring process for companies to quickly try out their technologies at sea; and prepare for a W2E industry day, develop guidance for contingency base waste management, and demonstrate a medium-sized waste disposal system.		
Congressional Adds Subtotals	-	4.000

C. Other Program Funding Summary ($ in Millions)

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2017 Office of the Secretary Of Defense		Date: February 2016
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C. Other Program Funding Summary ($ in Millions)

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

None

Exhibit R-2A, RDT&E Project Justification: PB 2017 Office of the Secretary Of Defense			Date: February 2016
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0604055D8Z / *Operational Energy Capability Improvement*	Project (Number/Name) P456 / *Hybrid Energy Storage Module (HESM)*	

COST ($ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
P456: *Hybrid Energy Storage Module (HESM)*	18.163	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-

A. Mission Description and Budget Item Justification

P456, the Hybrid Energy Storage Module (HESM), co-sponsored by the Assistant Secretary of Defense for Research and Engineering (ASD(R&E)) and the Assistant Secretary of Defense for Energy, Installations and Environment (ASD(EIE)), develops advanced energy storage technologies to maximize performance and reliability, and enable future high power weapons and sensor systems on legacy and next generation vehicles, aircraft and ships. The goals of HESM are to (1) demonstrate energy storage systems with high power/energy densities, scalable to all power levels, that reduce total logistics demand, (2) increase platform ability to sustain operations during engagement, and (3) reduce maintenance. Once demonstration is complete, this technology will be sustained by the Services and will be used to extend the operational performance and safety for these applications beyond the hybrid storage module baseline design configuration. This program is closely coordinated with the Advanced Management and Protection of Energy-storage Devices (AMPED) program of the Department of Energy's (DOE) Advanced Research Projects Agency - Energy (ARPA-E).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2015	FY 2016	FY 2017
Title: Hybrid Energy Storage Module (HESM)	0.000	-	-
Description: P456, the Hybrid Energy Storage Module (HESM), co-sponsored by the Assistant Secretary of Defense for Research and Engineering (ASD(R&E)) and the Assistant Secretary of Defense for Energy, Installations and Environment (ASD(EIE)), develops advanced energy storage technologies to maximize performance and reliability, and enable future high power weapons and sensor systems on legacy and next generation vehicles, aircraft and ships. The goals of HESM are to (1) demonstrate energy storage systems with high power and energy densities, scalable to all power levels that reduce total logistics demand, increase platform ability to sustain operations during engagement, and (2) reduce maintenance. Once demonstration is complete, this technology will be sustained by the Services and used to extend the operational performance and safety for these applications beyond the hybrid storage module baseline design configuration. This program is closely coordinated with the Advanced Management and Protection of Energy-storage Devices (AMPED) program of the Department of Energy's (DOE) Advanced Research Projects Agency - Energy (ARPA-E).			
FY 2015 Accomplishments: The hybrid energy storage module efforts initiated in FY12 were continued including hybrid energy storage research of application oriented model development, establishment of test-beds and device limitation characterization at the Service laboratories for military specific applications, design architecture for plug-and-play capabilities, definition of safety metrics, and V&V of advanced complex controls. Initial Navy ships energy storage HESM unit demonstrations were successfully completed and transitioned to the Services with a technology transition agreement signed by the Office of Naval Research, Naval Sea Systems Command, and the Office of Chief of Naval Operations. Prior successful HESM efforts associated with Army and USMC battlefield generators			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2015	FY 2016	FY 2017
were transitioned to the Services with a technology transition agreement signed by the Office of Naval Research and US Marine Corps Systems Command.			
Accomplishments/Planned Programs Subtotals	0.000	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

None

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