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Statement by

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INTRODUCTION

Chairman Forbes, Representative Bordallo, and distinguished members of the Subcommittee: thank you for the opportunity to discuss the President's Fiscal Year (FY) 2013 budget request for the Department of Defense (DoD) programs to support the Office of the Assistant Secretary of Defense for Operational Energy Plans and Programs (OEPP).

For FY13, DoD anticipates spending over $16 billion on energy for military operations, which will provide more than 4 billion gallons of fuel for military operations and exercises. DoD will also invest $1.4 billion on initiatives to improve operational energy security, about 90% of which are aimed at reducing DoD's demand for operational energy.

President Obama initiated the OEPP in June 2010, both to reflect his commitment to national and energy security and to honor the intent of Congress in calling for the establishment of an operational energy office at DoD. By statute, the purpose of the office is to transform the way DoD uses energy through guidance, policy, oversight, and coordination, as well as to serve as the primary advisor to the Secretary and Deputy Secretary of Defense on operational energy.

The mission of OEPP is to improve military effectiveness while lowering risks and costs to warfighters. In its first two years of operation, OEPP has achieved considerable progress by:

- Promoting institutional change within DoD.
- Supporting current operations with energy innovations.
- Building operational energy considerations into the future force.

For FY13, the office will continue to focus on these priorities. In doing so, OEPP has the opportunity to help transform DoD's energy use from a vulnerability to a strategic advantage. By reducing the Armed Forces' reliance on fuel, we aim to improve warfighting capabilities, such as range, endurance, signature, and loiter time. We aim to reduce the risk to fielded forces as they move fuel through contested territory. In the process, we believe we will lower costs for the taxpayer, promote good stewardship of natural resources, and contribute to national energy goals.

THE DEFENSE ENERGY CHALLENGE

DoD is the single largest consumer of energy in the nation, accounting for approximately 1% of national demand. In FY11, that added up to a $20 billion bill, with 75% (approximately $15 billion) going to support military operations. Indeed, a steady and reliable supply of energy is essential to every military capability and every mission, and for today's U.S. forces, that means a steady and reliable supply of petroleum fuels. Petroleum is the fuel of choice for military operations because of its high energy density, fungibility, and global availability. At the same time, DoD's high demand for petroleum, given its volume, weight, and geostrategic constraints, is raising costs and risks for U.S. forces.

Until the FY 2009 National Defense Authorization Act (NDAA), which called on DoD to establish the OEPP, "operational energy" was not a commonly used term at DoD. The Act defined operational energy as the energy required to train, move, and sustain military operations. The 2010 Quadrennial Defense Review and FY 2011 NDAA augmented this definition, noting that defense energy security means having "assured access to reliable supplies of energy and the ability to protect and deliver sufficient energy to meet operational needs."

While the term "operational energy" may be new to U.S. armed forces, the concept is not new. From the extraordinary WWII-era Red Hill fuel storage facility in Hawaii to today's Northern Distribution Network in Central Asia, energy security has long been a priority for American military operations. Today's conflicts have brought new challenges to military energy security given our distributed operations and increased energy demand – mostly for liquid fuel, but also for batteries. Today, U.S. forces in Afghanistan are consuming about 1.8 million gallons of fuel every day, which is conveyed over poor and sometimes contested roads. The Army and Marine Corps have documented thousands of casualties related to fuel movements in Afghanistan and Iraq, with U.S. Transportation Command tracking a thousand attacks on logistics convoys in Afghanistan alone last year. U.S. forces are fully capable of protecting these supply lines, but the opportunity cost in lives, resources, and diverted combat force at the tactical level is higher than it should be.

Going forward, the 2012 Department of Defense Strategic Guidance calls for a military force that is "agile, flexible, and ready for the full range of contingencies," one that is prepared and postured for a complex, global security environment. This will require new and diverse capabilities and –with the current trends in major acquisitions–a large and growing supply of fuel. In an era of precision weapons, asymmetric threats, and area denial strategies, the volume of that energy requirement will continue to impose tactical, operational, and strategic challenges.

At the same time, there will be geostrategic challenges for DoD's energy supplies, particularly when it comes to petroleum. Worldwide demand for petroleum continues to rise, even as supplies are concentrating into fewer nations. As long as the United States depends on oil, the price we all pay at the pump will be driven by a volatile, global market. For DoD, that means unpredictable fuel bills that crowd out other investment – every dollar hike in the price of oil per barrel raises our bill by $130 million. More to the point, DoD must take into account the destabilizing effects of global energy wealth and poverty, the resource competition resulting from rising demand in growing economies, and with 89% of oil exports moving by sea, the need to secure the global commons. The President's Blueprint for a Secure Energy Future seeks to change that calculus by taking steps to stabilize today's energy economy while investing in the innovation that will allow us to displace the primacy of oil in our national and military energy security.

PROMOTING INSTITUTIONAL CHANGE

DoD has a long history of excellence in managing energy use at fixed installations and supplying fuel to military operations. Until Congress created the OEPP, however, there was no dedicated effort or office for managing the demand for energy in military operations. My initial priority as the inaugural ASD (OEPP) was, therefore, to establish the institutional means to manage

operational energy, including by improving awareness of energy as a warfighting capability or enabler.

The first step was standing up OEPP itself, which is now fully staffed and working closely with operational energy offices or leads across the Office of the Secretary of Defense (OSD), Office of the Chairman of the Joint Chiefs of Staff (CJCS) and the Joint Staff, Combatant Commands, Military Departments, and Defense Agencies ("DoD Components"). The Chairman of the Joint Chiefs of Staff designated the Director of Logistics (J-4) as his lead on operational energy, and together we have initiated the Defense Operational Energy Board, an advisory council charged with overseeing DoD's execution of the Operational Energy Strategy and Implementation Plan, promoting coordination, and advising the ASD (OEPP) and J-4. OEPP is now represented in other key internal processes as well, such as the Defense Acquisition Board, the Joint Capabilities Integration and Development System, and the Energy and Power Community of Interest.

As required by law, DoD released "Energy for the Warfighter: The Department of Defense Operational Energy Strategy" in June 2011. 90 days later, OEPP internally distributed an implementation plan, which the DoD Components then reviewed and approved. Secretary of Defense Leon Panetta signed and released the plan to the public earlier this month.

The strategy sets the overall direction for operational energy security for DoD, with the goal of assuring reliable supplies of energy for 21st century military operations. The strategy outlines three principal ways to meet that goal: reducing the demand for energy, expanding and securing the supply of energy, and building energy security into the future force. The implementation plan includes seven targets:

- Measure operational energy consumption.
- Improve energy performance and efficiency in operations and training.
- Promote operational energy innovation.
- Improve operational energy security at fixed installations.
- Promote the development of alternative fuels.
- Incorporate energy security considerations into requirements and acquisition.
- Adapt policy, doctrine, professional military education, and Combatant Command activities.

Various offices will report their progress in meeting the targets to the Defense Operational Energy Board in FY12 and FY13. In addition, OEPP has already been working with our counterparts in DoD to meet these targets. The first target, measuring operational energy consumption, has been established as a DoD Priority Goal on Performance.gov.

Our chartering legislation calls on OEPP to review the DoD budget for adequacy in operational energy funding and programming. OEPP submitted its first budget certification report to the Secretary of Defense in March 2011 and is now finalizing its second – the FY13 certification. In keeping with an interim memo submitted to Secretary Panetta in January 2012, I expect to certify the DoD budget as adequate to implement the Operational Energy Strategy in FY13 and plan to make the certification report available to Congress and the public.

In addition to establishing institutions and key policies, OEPP leadership and staff have promoted Departmental awareness of the importance of operational energy to military mission effectiveness. These efforts have included collecting and analyzing data on operational energy and engaging in extensive outreach, such as meetings with key leaders, public speaking, publishing articles, and supporting a website and social media.

SUPPORTING CURRENT OPERATIONS

Secretary Panetta's top priority for DoD today is to support current operations. OEPP has, therefore, focused on identifying and promoting the technologies, techniques, tactics, and procedures that can best support deployed men and women, especially in Afghanistan.

OEPP engaged with representatives from DoD components and reviewed and commissioned studies on energy use in Afghanistan and Iraq in order to identify key areas for energy improvements in Afghanistan. The Marine Corps, in particular, has led the way for energy efforts in Afghanistan with the Experimental Forward Operating Base, which has resulted in fielded capabilities in the southwestern part of Afghanistan.

In May 2011, OEPP partnered with U.S. Central Command (CENTCOM) and DoD energy leaders to discuss the main lines of effort for rapid fielding, with the understanding that no effort could create a tactical distraction for deployed forces. In keeping with the Operational Energy Strategy, the summit identified the best near-term opportunities to reduce battlefield fuel demand, including improved power generation and distribution, improved shelter systems, and mature alternative energy technologies for the tactical edge, such as solar. Participants also identified key non-materiel improvements, such as leadership support, education and awareness, changes to contingency contracts, and management of air operations. Outcomes of the CENTCOM conference include the establishment of an Operational Energy Division at U.S. Forces-Afghanistan, clear statements on the importance of operational energy to all U.S. Forces in Afghanistan from Generals Petraeus and Allen, changes in Logistics Civil Augmentation Program (LOGCAP) contracts, accelerated deployment of the Army's centralized power and high-efficiency generators, accelerated deployment of improved shelter insulation by both the Army and Air Force, and support to the Army's Rapid Equipping Force Energy to the Edge program, which focuses on technical support and equipment to patrol bases at the tactical edge.

OEPP has also engaged with other Combatant Commands, including an Operational Energy Summit with U.S. Pacific Command (PACOM) earlier this month. For FY13, OEPP will continue to focus on supporting current operations, including by documenting lessons learned in Afghanistan. The office will also continue to support efforts at PACOM to integrate operational energy into command priorities, plans, and programs.

BUILDING THE FUTURE FORCE

In addition to promoting institutional change and support for current operations, OEPP has worked to build operational energy security into the future force. Main lines of effort have included promoting innovation and bringing new or improved tools to the requirements and

acquisition processes. OEPP will continue these efforts in FY13, including an emphasis on energy performance upgrades in reset or refit of legacy platforms and equipment.

OEPP's efforts to promote innovation include extensive collaboration with the office of Assistant Secretary of Defense for Research and Engineering, as well as with the Department of Energy (DOE). Moreover, DoD and DOE signed a Memorandum of Understanding (MOU) on energy security in July 2010, which has strengthened and broadened the already significant partnership between the two Agencies. Projects started under the MOU to date focus on improved energy efficiency, supply, and storage for dismounted troops, contingency bases, and platforms.

In addition, OEPP is promoting innovation through the Operational Energy Capabilities Improvement Fund. The fund incentivizes innovation that will support the Operational Energy Strategy. Our goal is twofold: to develop and rapidly transition technologies and practices that will improve capabilities and reduce costs, while establishing within the Services a sustainable capacity for such innovations. In its inaugural year, the fund focused on reducing the energy load or demand of expeditionary outposts. We encouraged joint programs, and as a result the Army and the Navy are working together on expeditionary air-conditioning, the Army and Air Force are working together on shelters, the Navy teamed up with DOE's Advanced Research Projects Agency – Energy on advanced heating and cooling, and PACOM and DOE are working together on energy efficient expeditionary outposts for tropical environments. We are also funding two complementary efforts, one to establish a quantitative baseline for energy use in Afghanistan and the other to develop efficient and deployable waste to energy systems.

Alternative fuels will be important for the future force, and DoD is currently engaging in a variety of research, development, testing, and evaluation efforts in this area. The FY 2012 NDAA gave ASD (OEPP), in consultation with the heads of the Military Departments and the Assistant Secretary of Defense for Research and Engineering, the authority to guide and oversee the alternative fuel activities of DoD. My office is in the process of drafting a DoD-wide alternative fuels policy, in collaboration with the relevant DoD Components, and will present the draft to the Defense Operational Energy Board for their revisions and recommendations. This policy will promote the development of alternative fuels as one element of a broad energy strategy to diversify our supply.

OEPP has focused considerable effort on integrating operational energy considerations into the requirements and acquisition processes, largely by supporting improvements in contracting and analysis and exercising oversight. One of the ways in which we are integrating energy considerations into the acquisition process is by including requirements for energy performance in contracts. OEPP is looking to more broadly apply the precedent set by the recent revisions to LOGCAP contracts and provisions in the KC-X tanker competition. The latter included energy in the life cycle cost calculations, assessing fuel usage against the aircraft's proposed missions. This methodology not only identified the cost of fuel usage for each offering, but also how that fuel usage would impact mission effectiveness. In FY12 and FY13, we also will look at how to ensure that improved energy performance will be incorporated into refit and upgrades of legacy platforms and equipment, whether through contracting or other methods.

OEPP has been working to help the DoD Components improve the energy analysis that informs requirements and acquisition decisions. For example, we are engaging the Army on modifying their scenario-based analysis for the Ground Combat Vehicle program to understand the increased fuel logistics demand and its impact on mission effectiveness. Our intent is that this work will serve as a model that can be used for most combat system development programs. The 2009 NDAA directed DoD to develop other analytical tools, specifically the energy efficiency key performance parameter (KPP) and the fully burdened cost of energy (FBCE). This past January, the Chairman of the Joint Chiefs of Staff Instruction elevated the energy KPP to the same level of consideration as other DoD KPPs. As a result, all programs under consideration by the Joint Requirements Oversight Council must explain how they will address the energy KPP or justify why the KPP is not applicable. OEPP is supporting the Joint Staff and Services in implementing this KPP by developing criteria that will be credible and focused on capabilities. Further, the Office of the Director of Cost Assessment and Program Evaluation and OEPP will soon release non-binding methodological guidance for calculating the Fully Burdened Cost of Fuel for acquisition programs in the Defense Acquisition Guidebook. The office is also engaged in the Defense Acquisition Board and the Overarching Integrated Product Teams, providing oversight on major defense acquisition programs. I have participated in both Defense Acquisition Board decision meetings as well as in-progress reviews.

In addition to our work in the acquisition and requirements processes, OEPP will also fulfill the other implementation plan targets for the future force. We will work to incorporate operational energy into modeling and simulation; policy, doctrine, and professional military education; and Combatant Command activities, including improving relationships with partner nations.

CONCLUSION

In June of 2011, General Petraeus released a memo to U.S. Forces in Afghanistan calling for better management of operational energy, which he called the “lifeblood” of warfighting capabilities. In December of 2011, General Allen renewed General Petraeus’s call for action, equating operational energy to operational capability in a follow-up memo. General Allen’s memo highlighted the nature of the challenge, noting: “Operational Energy in the battlespace is about improving combat effectiveness. It’s about increasing our forces’ endurance, being more lethal, and reducing the number of men and women risking their lives moving fuel.”

OEPP is committed to achieving the vision of these leaders. We have made good progress this past year and have aggressive goals for the way ahead. Ultimately, our intention is to successfully integrate operational energy considerations into existing policies, plans, programs and processes. This type of large-scale institutional change will require considerable time, effort, and persistence, so I deeply appreciate the Congress’s continued support for the mission and the Office of Operational Energy Plans and Programs.